Supplemental Agenda
Attachments Updated for Item 3.A

TRACY CITY COUNCIL REGULAR MEETING AGENDA

Tuesday, August 15, 2023, 7:00 P.M.

Tracy City Hall Chambers, 333 Civic Center Plaza, Tracy
Web Site: www.cityoftracy.org

THIS MEETING WILL BE OPEN TO THE PUBLIC FOR IN-PERSON AND REMOTE PARTICIPATION PURSUANT TO GOVERNMENT CODE SECTION 54953(e).

MEMBERS OF THE PUBLIC MAY PARTICIPATE REMOTELY IN THE MEETING VIA THE FOLLOWING METHOD:

As always, the public may view the City Council meetings live on the City of Tracy's website at CityofTracy.org or on Comcast Channel 26/AT&T U-verse Channel 99. To view from the City's website, open the "Government" menu at the top of the City's homepage and select "City Council Meeting Videos" under the "City Council" section.

If you only wish to watch the meeting and do not wish to address the Council, the City requests that you stream the meeting through the City's website or watch on Channel 26.

***Remote Public Comment**:*

During the upcoming City Council meeting public comment will be accepted via the options listed below. If you would like to comment remotely, please follow the protocols below:

- *Comments via:*
  - **Online by visiting** https://cityoftracyevents.webex.com and using the following **Event Number: 2557 041 8822** and **Event Password**: TracyCC
  - ***If you would like to participate in the public comment anonymously***, you may submit your comment in WebEx by typing "Anonymous" when prompted to provide a First and Last Name and inserting Anonymous@example.com when prompted to provide an email address.
  - Join by phone by dialing +1-408-418-9388, enter 25570418822#8722922# Press *3 to raise the hand icon to speak on an item.

- *Protocols for commenting via WebEx:*
  - *If you wish to comment on the "Consent Calendar", "Items from the Audience/Public Comment" or "Regular Agenda" portions of the agenda:*
    - *Listen for the Mayor to open that portion of the agenda for discussion, then raise your hand to speak by clicking on the Hand icon on the Participants panel to the right of your screen.*
    - *If you no longer wish to comment, you may lower your hand by clicking on the Hand icon again.*
  - *Comments for the "Consent Calendar" "Items from the Agenda/Public Comment" or "Regular Agenda" portions of the agenda will be accepted until the public comment for that item is closed.*

Comments received on Webex outside of the comment periods outlined above will not be included in the record.

Date Posted: August 14, 2023

Americans With Disabilities Act - The City of Tracy complies with the Americans with Disabilities Act and makes all reasonable accommodations for the disabled to participate in Council meetings. Persons requiring assistance or auxiliary aids should call City Hall (209/831-6105) 24 hours prior to the meeting.

Addressing the Council on Items on the Agenda - The Brown Act provides that every regular Council meeting shall provide an opportunity for the public to address the Council on any item within its jurisdiction before or during the Council's consideration of the item, provided no action shall be taken on any item not on the agenda. To facilitate the orderly process of public comment and to assist the Council to conduct its business as efficiently as possible, members of the public wishing to address the Council are requested to, but not required to, hand a speaker card, which includes the speaker's name or other identifying designation and address to the City Clerk prior to the agenda item being called. Generally, once the City Council begins its consideration of an item, no more speaker cards will be accepted. An individual's failure to present a speaker card or state their name shall not preclude the individual from addressing the Council. Each citizen will be allowed a maximum of five minutes for input or testimony. In the event there are 15 or more individuals wishing to speak regarding any agenda item including the "Items from the Audience/Public Comment" portion of the agenda and regular items, the maximum amount of time allowed per speaker will be three minutes. When speaking under a specific agenda item, each speaker should avoid repetition of the remarks of the prior speakers. To promote time efficiency and an orderly meeting, the Presiding Officer may request that a spokesperson be designated to represent similar views. A designated spokesperson shall have 10 minutes to speak. At the Presiding Officer's discretion, additional time may be granted. The City Clerk shall be the timekeeper.

Consent Calendar - All items listed on the Consent Calendar are considered routine and/or consistent with previous City Council direction. One motion, a second, and a roll call vote may enact the items listed on the Consent Calendar. No separate discussion of Consent Calendar items shall take place unless a member of the City Council, City staff or the public request discussion on a specific item.

Addressing the Council on Items not on the Agenda – The Brown Act prohibits discussion or action on items not on the posted agenda. The City Council's Meeting Protocols and Rules of Procedure provide that in the interest of allowing Council to have adequate time to address the agendized items of business, "Items from the Audience/Public Comment" following the Consent Calendar will be limited to 15-minutes maximum period. "Items from the Audience/Public Comment" listed near the end of the agenda will not have a maximum time limit. A five-minute maximum time limit per speaker will apply to all individuals speaking during "Items from the Audience/Public Comment". For non-agendized items, Council Members may briefly respond to statements made or questions posed by individuals during public comment; ask questions for clarification; direct the individual to the appropriate staff member; or request that the matter be placed on a future agenda or that staff provide additional information to Council. When members of the public address the Council, they should be as specific as possible about their concerns. If several members of the public comment on the same issue an effort should be made to avoid repetition of views already expressed.

Notice - A 90 day limit is set by law for filing challenges in the Superior Court to certain City administrative decisions and orders when those decisions or orders require: (1) a hearing by law, (2) the receipt of evidence, and (3) the exercise of discretion. The 90 day limit begins on the date the decision is final (Code of Civil Procedure Section 1094.6). Further, if you challenge a City Council action in court, you may be limited, by California law, including but not limited to Government Code Section 65009, to raising only those issues you or someone else raised during the public hearing, or raised in written correspondence delivered to the City Council prior to or at the public hearing.

Full copies of the agenda are available on the City's website: *www.cityoftracy.org*

Date Posted: August 14, 2023

CALL TO ORDER

PLEDGE OF ALLEGIANCE

INVOCATION

ACTIONS, BY MOTION, OF CITY COUNCIL PURSUANT TO AB 2449, IF ANY

ROLL CALL

PRESENTATIONS

1. Employee of the Month
2. Certificates of Recognition - Planning Commission
3. Proclamation – American Muslim Appreciation and Awareness Month

1. CONSENT CALENDAR

1.A. Adoption of June 27, 2023 Closed Session Minutes and June 27, 2023 Special Meeting Minutes, July 5, 2023 Closed Session Minutes and July 5, 2023 Special Meeting Minutes, August 1, 2023 Special Meeting Minutes, and August 7, 2023 Closed Session Minutes.

1.B. The Tracy Homelessness Advisory Committee recommends that the City Council adopt a Resolution approving a two-year general services agreement with SC Commercial, LLC dba SC Fuels, in a not to exceed amount of $500,000, for on-demand mobile fueling of diesel fuel at 370 W. Arbor Avenue, Tracy, CA 95304.

1.C. Waive the second reading and adopt an Ordinance revising Section 6.04.310 of the Tracy Municipal Code to correct typographical errors regarding business tax categories.

1.D. Adopt a Resolution appointing eight students and two adults to fill vacancies on the Youth Advisory Commission, based upon the selection panel's recommendations.

1.E. Adopt separate resolutions approving a Professional Services Agreement, for an initial term of one year, with an administrative option to extend annually, for an additional two years, to provide on-call engineering support services related to the water and wastewater treatment plants, with the following consultants and not to exceed amounts: 1) Carollo Engineers, Inc. for a not to exceed amount of $300,000 annually (total not to exceed amount of $900,000); 2) Black Water Consulting Engineers, Inc. for a not to exceed amount of $300,000 annually (total not to exceed amount of $900,000)

1.F. Adopt a Resolution approving a one-year agreement with Jet Mulch, Inc. for playground wood fiber and mulch installation, with a not-to-exceed amount of $50,000 per fiscal year ($250,000 in total) and authorizing the City Manager to grant up to four, one-year extensions.

1.G. Adopt a resolution approving the execution of Amendment No. 1 to the Cooperative Agreement for Construction with the California Department of Transportation for the I-580/Patterson Pass Road Interchange Project (CIP 73147).

1.H. Approve the submission of a claim to the San Joaquin Council of Governments for Transportation Development Act funds in the amount of $11,651,948 for Fiscal Year 2022-2023 and authorize the City Manager or designee to execute the claim.

1.I. Staff recommends that the City Council authorize a Professional Services Agreement with West Coast Arborists, Inc. for the 2023-2024 Tree Maintenance Program, for an initial two years with authority for the City Manager to execute agreement extensions for an additional five years, with a not-to-exceed amount of $2,587,176 annually.

1.J. Adopt a resolution (1) rejecting all bids for the Temporary Emergency Housing Project on Arbor Road, Site Improvements Construction Package 2, CIP 71112, received October 19, 2022, and (2) authorizing staff to re-advertise the project.

1.K. Adopt a resolution to (1) accept the construction for the Improvements at Grant Line Road and MacArthur Drive Intersection Project, CIP 72121, for work completed by DV Electric, Co., of San Jose, California, (2) authorize the City Clerk to File the Notice of Completion with the San Joaquin County Recorder's Office, (3) authorize the City Engineer to release the bonds and retention payment, and (4) authorize the Finance Department to close the Project.

1.L. Adopt a resolution: (1) Accepting the Board of State of Community Corrections Officers Wellness and Mental Health Grant in the amount of $73,718; (2) Appropriating the grant funding of $73,718 to the Police Department's operational budget; (3) Approving a Professional Services Agreement (PSA) with Sigma Wellness, LLC (Sigma) for advanced preventative medical screenings for Tracy Police Department's first responders, for a term of 12 months, with a not-to-exceed amount of $105,000; and (4) Determining that waiving the competitive bidding process to award the PSA to Sigma is in the best interest of the City, pursuant to 2.20.140(b)(6) of the Tracy Municipal Code.

1.M. Adopt a resolution (1) awarding a construction contract to Tennyson Electric, LLC of Livermore, California in the amount of $436,168 for the Streetlight Installation Project (CIP 72125), (2) approving a project not-to-exceed budget of $528,402, (3) appropriating $38,150 from the Gas Tax Fund (F245) to fund the Project, and (4) authorizing the City Manager to approve change orders up to the contingency amount of $43,617, if needed, pursuant to Tracy Municipal Code Section 2.20.090(b).

1.N. Approve a Resolution adopting the Fiscal Year 2023-2024 and 2024-2025 City Council Strategic Priorities.

1.O. Adopt a Resolution authorizing the purchase of equipment from ABI Attachments, Inc. to maintain and operate Legacy Fields in the amount of $122,000.

1.P. Adopt a resolution approving the Offsite Improvement Agreement between the City and Lennar Homes of California, LLC, for public improvements required as part of the Conditions of Approval, for the Tracy Hills Phase 2 Zone 5 Water Main Improvements.

1.Q. Adopt six Resolutions approving General Services Agreements, each for two (2) year terms, with an administrative option to extend for an additional year, to supply and deliver certain chemicals necessary in the treatment process of water and wastewater, with the following vendors, for the specified amounts: (1) Hill Brothers Chemical Company (not to exceed amount of $250,000 annually); (2) Polydyne, Inc. (not to exceed amount of $1,500,000 annually); (3) Pioneer Americas, LLC (not to exceed amount of $2,500,000 annually); (4) HASA, Inc. (not to exceed amount of $100,000 annually); (5) Sterling Water Technologies, LLC (not to exceed amount of $250,000 annually); and (6) Thatcher Company of California, Inc. (not to exceed amount of $1,500,000 annually).

1.R. City Council 1) authorize the purchase of three (3) 29-foot low floor buses for Tracer fixed route service for a total of $2,175,000 from Gillig, LLC through the California Association for Coordinated Transportation/Morongo Basin Transit Authority Purchasing Cooperative Contract #18-01, pursuant to Tracy Municipal Code section 2.20.210; 2) approve a contingency amount of $75,000 for change orders necessary resulting during production; and 3) appropriate an additional $250,000 to Capital Improvement Project 77590 for the additional costs.

1.S. Adopt a resolution approving the First Amendment to the Subdivision Improvement Agreement for Western Park and Orchard Park (Parks) in the Ellis Specific Plan area to allocate credit and security amounts as between the Parks and reflect adjustments due to the voided Master Program Improvements and Reimbursement Agreement and authorize the City Clerk to file the First Amendment with the San Joaquin County Recorder's Office.

1.T. Adopt a resolution (1) accepting improvements for Western Park within Ellis Town and Country, Tract 4007 subdivision, constructed by LS-Tracy, LLC, and accepting future maintenance and repair; and (2) authorizing the City Clerk to file the Notice of Completion for Western Park and record said notice with the San Joaquin County Recorder's Office; and (3) authorizing the City Engineer to release the Western Park improvement security in accordance with the terms of the Subdivision Improvement Agreement, as amended.

1.U City Council (1) determine that waiving a competitive bidding process is in the best interest of the City, Pursuant to Tracy Municipal Code Section 2.20.140(B)(6); and (2) adopt a resolution approving (A) Amendment No. 1 to the Master Professional Services Agreement with West Yost & Associates for water pressure and capacity analyses and engineering services to extend the agreement, by an additional 18 months, through December 31, 2024, and increase compensation, from $200,000 per calendar year to a not-to-exceed amount of $300,000 per calendar year, and (B) Amendment No. 1 to the Master Professional Services Agreement with Wood Rodgers for storm drainage engineering services to extend the agreement, by an additional 18 months, through December 31, 2024, and increase compensation from $200,000 per calendar year to a not-to-exceed amount of $300,000 per calendar year.

2. ITEMS FROM THE AUDIENCE

3. REGULAR AGENDA

3.A. The Planning Commission recommends that the City Council conduct a public hearing and, upon conclusion, introduce an Ordinance: 1) Certifying an Environmental Impact Report, Adopting a Mitigation Monitoring and Reporting Program, and making findings of fact and a statement of overriding considerations for the annexation and future development of industrial buildings on the 191.18-acre property located at the northeast corner of Grant Line and Paradise Roads (Assessor's Parcel Numbers 213-170-14, -24, -25, -26, -27, And -48, collectively, the "Property") in accordance with the California Environmental Quality Act; 2) Amending the Northeast Industrial ("NEI") Specific Plan to add the Property to the NEI Specific Plan Area with a land use designation of light industrial (SPA22-0003); 3) Approving the prezoning of the Property to NEI Specific Plan Zone (AP20-0003); and 4)Approving the submittal of a petition to the San Joaquin County Local Agency Formation Commission for annexation of the Property to the City of Tracy.

3.B. City Council review and discuss the Wastewater Master Plan Update.

3.C. City Council review and discuss the Citywide Water System Master Plan Update.

3.D. City Council, by motion, designate a voting delegate and up to two alternate voting delegates for the League of California Cities (CalCities) 2023 Annual Conference Business Meeting.

3.E. City Council appoint, by motion, one member, to the Tracy Finance Committee to fulfill the remainder of the annual term, pursuant to the City Council's appointment procedures.

3.F. City Council, by motion, appoint five adult City residents to serve on the Environmental Sustainability Commission.

3.G. City Council appoint, by separate motions, subcommittees of two Councilmembers, and an alternate, to interview applicants to fill the following: 1) four vacancies on the Board of Appeals, 2) one vacancy on the Measure V Residents' Oversight Committee, 3) two vacancies of the Planning Commission, and 4) one vacancy on the Tracy Arts Commission.

4. ITEMS FROM THE AUDIENCE

5. STAFF ITEMS

6. COUNCIL ITEMS

7. ADJOURNMENT

TRACY CITY COUNCIL - SPECIAL MEETING MINUTES

June 27, 2023, 5:00 p.m.

Tracy City Hall, 333 Civic Center Plaza, Tracy, CA.

1. Mayor Young called the meeting to order at 5:04 p.m.

2. There was no action required pursuant to AB 2449.

3. Roll call found Council Members Bedolla, Evans, Mayor Pro Tem Davis and Mayor Young present.

   Council Member Arriola arrived at 5:12 p.m. after roll call.

4. ITEMS FROM THE AUDIENCE - Alice English asked that Council be mindful of public's time, referring to the June 20th meeting and shared dates of multiple examples when the meetings went over six to seven hours. Ms. English expressed her frustration on the issue that some speakers are being allowed to speak longer than others. Ms. English shared that the attorney for Surland had spoken out of turn on June 20th for a time that was longer than the allotted time and her disappointment with Council Member Arriola for failing the will of the residents and not accepting the land. Ms. English requested that the item regarding the land for the aquatic center come back as a special meeting.

5. REQUEST TO CONDUCT CLOSED SESSION

   5.A <u>Conference with Labor Negotiators (Gov. Code § 54957.6)</u>

   - <u>City Negotiators</u>
     Midori Lichtwardt, Interim City Manager
     Karin Schnaider, Assistant City Manager
     Kimberly Murdaugh, Human Resources Director
     JoAnn Weberg, Human Resources Manager
     Sara Cowell, Finance Director
     Bijal Patel, City Attorney
     Michal Jarvis, Labor Relations Consultant

   - <u>Employee Organizations</u>:
     Tracy Police Officers' Association

   5.B <u>Conference regarding Labor Negotiations involving Joint Powers Agency (JPA) pursuant to Gov. Code § 54956.96</u>

   - <u>Negotiators for South San Joaquin County Fire Authority (JPA):</u>
     Randall Bradley, Fire Chief
     Christopher Boucher, Legal Counsel
     Marc Zafferano, Legal Counsel

   - <u>Employee Organizations:</u>
     Tracy Firefighters Association
     South County Fire Authority Association

ACTION: Motion was made by Council Member Bedolla and seconded by Mayor Pro Tem Davis to recess to closed session. Roll call found all in favor; passed and so ordered. Time: 5:15 p.m.

6. Reconvene to Open Session – 7:04 p.m.

7. Report of Final Action, if Any – No reportable action.

8. Council Items and Comments – None

9. Adjournment – Time: 7:05 p.m.

ACTION: Motion was made by Council Member Arriola and seconded by Mayor Pro Tem Davis to adjourn. Roll call found all in favor; passed and so ordered.

The above agenda was posted at the Tracy City Hall on June 22, 2023. The above are action minutes. A recording is available at the office of the City Clerk.

_____
Mayor

ATTEST:

_____
City Clerk

TRACY CITY COUNCIL	SPECIAL MEETING MINUTES
June 27, 2023, 7:00 p.m.	
City Hall, 333 Civic Center Plaza, Tracy	*Web Site:* www.cityoftracy.org

1. Mayor Young called the meeting to order at 7:16 p.m.

2. There were no actions taken pursuant to AB 2449.

3. Roll call found Council Members Arriola, Bedolla, Evans, Mayor Pro Tem Davis and Mayor Young present.

4. ITEMS FROM THE AUDIENCE – Gabriela Rodriguez Machuca shared that she submitted her comments via email and clarified that it was intended for the City Council and City Manager, it was in response to documents that had been made public via an agenda publication by the Planning Commission.

   Daniel Helm apologized for a comment he made at a previous meeting that the Mayor should be muzzled stating it was never his intent to compare the Mayor to a canine. Mr. Helm also expressed his support for offering the Interim City Manager Midori Lichtwardt the job of City Manager since she has in numerous occasions stepped up and taken charge.

   Community Member expressed frustration that at the last Council meeting the attorney representing Surland produced conditions for the City to accept and how the Mayors behavior and favoritism to certain parties is exactly why the Mayor should be censured.

   Rosario Arulappan shared that the Tracy residents want item 3D from the June 20th agenda to come back and shared there were Council Members that received campaign funds and this is a direct conflict of interest, reminded Council Members that if they vote against the will of the people the people will not support their future political ambitions.

   Six Community Members expressed disappointment in the Council and requested that Council bring back agenda item 3D from the June 20th meeting and requested a special meeting to exclusively discuss the aquatic park and accept the 16 acres of land.

   Tim Silva expressed disappointment regarding the increase in wastewater rates stating constituents will feel the pain on this and not the City and was hoping that the City would take a hit on their rating and this increase should have been done in a more moderate way.

   Don Penning expressed that the collective leadership needs to be better managed starting with the Mayor and urged the Mayor to be the leader that group and community needs to be able to manage difficult situations.

   Fourteen Community Members expressed disappointment in the Council and requested that Council bring back agenda item 3D from the June 20th meeting and requested a special meeting to exclusively discuss the aquatic park and accept the 16 acres of land.

James Damasco expressed that the Mayor shamelessly attempted to play divisive race politics at both May Council meetings and stated that this censure was necessary to preserve the unity and integrity of the community and shared that the Mayor was elected by 10% of the City population and used her position to sow seeds of discord and exploit racial tension for political gain and such actions are unethical and the City deserves leaders who prioritize inclusivity, harmony and progress for all.

Two Community Members expressed disappointment in the Council and requested that Council bring back agenda item 3D from the June 20th meeting and requested a special meeting to exclusively discuss the aquatic park and accept the 16 acres of land.

Alice English expressed that Council broke the protocol, the Brown Act and the Code of Conduct and against the advice of the City Attorney the Mayor allowed the attorney from Surland to continue speaking on an item that was not on the agenda and that they are not acting on good faith, shared that those items relating to the aquatic center should be brought back.

Sandy Taylor shared that the City has created barriers and the City Attorney has ignored requests from Surland along with Council Members Bedolla and Evans to schedule meetings. Ms. Taylor shared that she has witnessed Council Members Bedolla, Evans and Mayor Pro Tem Davis create a toxic work environment for staff and that they have maligned the intentions of Mayor Young.

Council Member Bedolla clarified that he has met with Surland representatives on numerous occasions.

Sandy Taylor was allowed to continue with her comment and stated that Council Members Bedolla and Evans have slandered Mayor Young and Council Member Arriola publicly.

Council Member Evans called a point of order and stated that he disagrees with the disinformation and that Mayor Young selectively allows personal attacks. Council Member Evans stated to Mr. Serpa that he did not find it appropriate to meet with him until he complied with the court order and stands by that decision.

Michel Bazinet shared that he attended the Ellis event where Council Members Evans and Bedolla were present and stated that there are four items that are open for negotiations between the City and Surland. Mr. Bazinet urged the City to accept the vision for the aquatic center and the completed designs and not start over.

Council Member Evans called a point of order as a mischaracterization of facts as to what happened at the Ellis event.

Rahul Reddy expressed disappointment in the Council and requested that Council bring back agenda item 3D from the June 20th meeting and requested a special meeting to exclusively discuss the aquatic park and accept the 16 acres of land.

Steve DeBorba expressed that when he moved to Ellis that they were promised an aquatic park that was coming soon and requested that Council bring back agenda item

3D from the June 20th meeting and requested a special meeting to discuss the aquatic park.

5. DISCUSSION ITEMS

5.A Continuation of the public hearing to adopt a resolution approving service revisions to the Tracer bus service effective August 1, 2023.

Mayor Young opened public hearing.

Ed Lovell, Transit Manager provided the staff report.

Council comments and questions followed.

Community Member shared that he is excited about this bus service to Ellis especially since he is a commuter that utilizes the ACE train, thanked Rosario Arulappan for his work with the Council and City representatives to get this project.

Rosario Arulappan shared that the Tracer bus service will be a great benefit to Ellis homeowners and those that park at the ACE train station and that this is needed in the southern part of Tracy considering the growth that is taking place in that area.

Community Member shared his excitement for this pilot program considering that there is no public transport in that area currently and also requested that the service be extended to other schools in the community so that it makes it easier for the parents, asked questions about the fares and requested simplification of the fare schedule.

Community Member asked if additional road design expansion and stop signs and bike lanes have been considered.

Alice English expressed gratitude to staff and commissioners for their work on this project and urged Council to approve this plan.

Community Member expressed concerns regarding the stop sign near the ACE train and asked if there will be an additional extension and repairs to the road and requested that the new bus routes become permanent.

Tim Silva thanked City staff, Transportation Commission, and SJCOG for the diligent work on this project and would like to see this project expanded to more stops at Tracy Hills and Ellis become permanent and hopes that service quality is maintained.

Rahul Reddy expressed appreciation for those that worked on getting this done for the residents that live in south Tracy, also requested that Corral Hollow and Lammers Road extension be expedited to help ease the traffic burden.

Mayor Young closed the public hearing.

Council questions and comments continued.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Arriola to adopt **Resolution 2023-121** approving service revisions to the Tracer Bus System effective August 1, 2023. Roll call found all in favor; passed and so ordered.

5.B City Council 1) adopt an Urgency Ordinance, pursuant to Government Code, § 36937(d), revising Section 6.04.310 of the Tracy Municipal Code to correct typographical errors regarding business tax categories to take effect immediately upon adoption and 2) introduce an Ordinance revising Section 6.04.310 of the Tracy Municipal Code to correct typographical errors regarding business tax categories.

Karin Schnaider, Assistant City Manager provided the staff report.

Council questions and comments followed.

Necy Lopez, Deputy City Clerk reads the title of the urgency ordinance.

ACTION: Motion was made by Council Member Arriola and seconded by Mayor Pro Tem Davis to adopt an Urgency Ordinance revising Section 6.04.310 of the Tracy Municipal Code to correct typographical errors regarding Business Tax Categories. Roll call found all in favor; passed and so ordered.

Necy Lopez, Deputy City Clerk reads the title of the proposed ordinance.

ACTION: Motion was made by Council Member Bedolla and seconded by Mayor Pro Tem Davis to introduce an Ordinance revising Section 6.04.310 of the Tracy Municipal Code to correct typographical errors regarding Business Tax Categories. Roll call found all in favor; passed and so ordered.

5.C City Council (1) receive an informational report regarding the Fiscal Year 2023-2024 and 2024-2025 City Council Strategic Priorities, (2) provide feedback on strategic priority goals and objectives, and (3) by motion, accept the City Council Workshop Report as the February 4 and 5, 2023 Special Meeting Minutes.

Vanessa Carrera, Assistant to the City Manager provided the staff report.

Council questions and comments followed.

Tim Silva expressed that City of Tracy needs a better way to get information to the public especially when there are those that do not use technology and requested that there be non-digital platforms for the public to get their information.

Gabriela Rodriguez Machuca expressed her frustration regarding the business retention plan and as a business owner feels that the City is not doing a good job in that, regarding the TOD, when will that be coming back to Council, is Measure V for the aquatic center and it would be helpful if the Council could explain to the

community what is going on or preventing the Measure V amenities in becoming a reality. Requested that there be a booth at the farmers market so that community members can ask questions and learn more about what is happening in Tracy.

Council comments and questions continued.

ACTION: Motion was made by Council Member Arriola and seconded by Council Member Bedolla to receive the informational report regarding the Fiscal Year 2023-2024 and 2024-2025 City Council Strategic Priorities and accept the City Council Workshop Report as the February 4 and 5, 2023 Special Meeting Minutes. Roll call found all in favor; passed and so ordered.

6. COUNCIL ITEMS – Council Member Arriola thanked City Attorney Bijal Patel for the confidential memo regarding district elections and asked for support to agendize that the City voluntarily converting to election district to take effect for the 2024 elections, Mayor Young supported and wished everyone a happy and safe 4th of July.

Council Member Evans thanked Ellis residents that came forward in support of the aquatic center and congratulated them on how organized they were, shared that he will continue fighting for them because they deserve the aquatic center.

Council Member Evans stated that he will get the aquatic center built for the people of Ellis and that it was his intent to build in Ellis, is open to looking elsewhere in the City for other land options.

Council Member Bedolla shared that before exploring for other opportunities for the aquatic park requested support for the City Attorney bring to Council as the first item on the July 5th agenda, the resolution to accept the IOD from Surland Communities for the 16-acres of community parkland for an aquatic park, Council Member Evans supported as long as it comes back with discussion regarding other options.

Mayor Young requested further clarification. City Attorney Bijal Patel clarified the motion that Council Member Arriola had made at a prior meeting and clarified that since this is an item that is pending litigation, findings will be discussed in a closed session meeting. Ms. Patel restated and shared that the City does not believe that the acceptance of the land is not part of the pending litigation even though that was the proposal that was on the table and since there was a split vote, a motion can be made to bring the same item back for consideration.

Council Member Evans requested that Council Member Bedolla restate his request, Council Member Bedolla stated that it was to bring back the same resolution from the prior meeting.

Council Member Evans asked if the hope is to have a different outcome than before, shared that he misunderstood the request but continues to support Council Member Bedolla's request.

Mayor Young stated that the staff does not have the bandwidth to bring item back, City Attorney Bijal Patel clarified that it was not regarding the item that was already heard at

the previous meeting but that any additional analysis would require more time for staff to work on.

Council Member Arriola asked for clarification that the motion that he had made on the prior meeting will be coming back along with the item that Council Member Bedolla is requesting to come back.

Council Member Bedolla clarified that he is requesting support to consider accepting the IOD one last time before exploring the City's option on how to deliver the aquatic park for the community and finds appropriate that the closed session item that will be coming forth on July 5th will assist on making a better decision regarding the 16-acres.

Mayor Young stated that in scheduling these two items together will give the presumption that negotiations are going to fail. Council Member Bedolla disagreed and stated the closed session would be first and if Council has enough information to accept the 16-acres then it would be voted upon in a public meeting. Mayor Young continued to state that it would be perceived that there is not a good faith effort on the City's part.

City Attorney Bijal Patel clarified that the belief is that these are two separate items and that the developer has bundled them in a settlement proposal but that does not prevent Council from deciding to keep them unbundled and shared that it could be a lengthy negotiations process considering that the proposal presented by the developer is not easy to digest or negotiate.

Council Member Evans shared that his intent is to get this moving as quickly as possible and wants to start looking at options and is willing to look at options that will lead to success and the only option that he sees is Surland out of the equation.

Council Member Bedolla shared that he would like this item to come back in July. Mayor Young stated that this item can go until August since there is no urgency because in her opinion it is not showing good faith negotiations and that it is not taking into consideration the motion that was previously made. City Attorney Bijal Patel shared that she has been working with outside counsel regarding the item that was presented at the last meeting. Mayor Young expressed her concerns about the complexity of the item. Ms. Patel shared that the item can be agendized and then the item can be pulled if Council is not prepared to discuss the item. Mayor Young suggested that items be heard separately and stated that Council agrees that the aquatic park should be built the disagreement is how to proceed.

Assistant City Manager Karin Schnaider clarified that the item that Council Member Bedolla and Council Member Evans seconded, is requesting item 3D be republished as it was presented on June 20, 2023, with no other analysis added, Council Member Bedolla confirmed. Ms. Schnaider also confirmed with a motion that was made during a previous meeting by Mayor Pro Tem Davis and that was seconded by Council Member Evans, that there is another discussion coming back to discuss other locations with a goal date of potentially being August or September.

Ms. Schnaider verified with Mayor Pro Tem Davis as the motion maker if that timeframe was acceptable. Mayor Pro Tem Davis confirmed that the timeframe presented was acceptable but is dependent on the motions that will be coming first. Mayor Young asked

for clarification that Ellis is not part of the discussion. Ms. Schnaider confirmed that staff is gathering all City owned potential properties to bring back and that is how it was asked and that is what will be brought to Council.

Mayor Young asked if the motion previously made by Mayor Pro Tem Davis included Ellis, considering a potential conflict of interest. Mayor Pro Tem Davis clarified that her motion stated that it was looking for alternatives, not including Ellis considering that she is unable to speak on Ellis and that motion was made based on the letter that was sent and that is why the motion was made based on City owned properties. Parks and Recreation Director Brian MacDonald clarified that the motion from Mayor Pro Tem Davis stated was for staff to research alternative sites on City owned land to locate the aquatic center using a P3 model and on April 4 there was an additional motion made by Council Member Bedolla and seconded by Council Member Evans to include Legacy Fields and confirmed that Ellis would not be considered in that item.

Mayor Young stated that in the past Legacy Fields had been looked at and it was deemed that it was not a place to build and after a two-year diversion, wants to make sure that if there are any changes from the research that took place in the past, because staff should have that information already.

Parks and Recreation Director Brian MacDonald responded further analysis and engineering analysis would require further direction from Council. Mayor Young shared that this information should already be available and is unsure as to why it would need support since it should be something standard. Interim City Manager Midori Lichtwardt shared that Mr. MacDonald has a plan to bring an item back on August 15 and that the staff report will include historical information to give context and ask Council for direction.

Mayor Pro Tem Davis asked if workshops are recorded and if they are not can they be recorded in the future. Assistant City Manager Karin Schnaider clarified if Mayor Pro Tem was referring to the strategic workshop and shared that if they are offsite, they are not recorded. Interim City Manager Midori Lichtwardt shared that the workshops are not recorded via video or audio and that the workshop was presented by a consultant, the consultant provided a report that was adopted as minutes. Council Member Arriola verified that the report provided had been adopted earlier in this meeting as the minutes for the Strategic Workshop.

Mayor Pro Tem Davis requested that in the future Council consider holding those meetings in a space that can be recorded given the magnitude of information presented so that it is known what is said and by whom. Council Member Bedolla supported and requested that all workshops be done in chambers so that there is the ability to record.

Mayor Pro Tem Davis shared that by recording the meetings it would be important for Council to have the ability to go back and review. Interim City Manager Midori Lichtwardt shared that it would be a workshop rather than a retreat and expressed that although it is a public meeting, a retreat allows for more candid discussions but if it is the Council's desire to change that it can be discussed.

Mayor Young stated that if staff brings retreat discussion back to Council within a few weeks rather than months that it is easier for Council to remember what was discussed and that it should be codified much closer to date of retreat.

Mayor Young welcomed this year's City's 25 summer youth interns and shared that she would like to expand the Early Workforce Development Program to college students.

Interim City Manager, Midori Lichtwardt wished everyone a safe and sane 4th of July,

- Fireworks go on sale on June 28, please visit the City website or social media posts for details, fireworks booth locations and safety guidelines.
- Cooling Centers will be activated and open during business hours since temperatures are reported to be over 100 degrees. On Sunday, the Transit Station will be on standby, if temperatures are forecast to be 100 degrees and over, the Transit Station will be open from 12 p.m. to 6 p.m., the library will be open from 12 p.m. to 5 p.m. On July 4th the Transit station will be closed for the holiday unless temperatures are forecast to reach 100 degrees.
- There will be a 4th of July drone show at Tracy High School, instead of the traditional fireworks show, Chamber of Commerce is headlining this event. There will be breakfast in the park, balloon lift off, and a parade in the morning.

7. ADJOURNMENT – Time: 11:11 p.m.

ACTION: Motion was made by Council Member Arriola and seconded by Mayor Pro Tem Davis to adjourn. Roll call found all in favor; passed and so ordered.

The above agenda was posted at the Tracy City Hall on June 22, 2023. The above are action minutes. A recording is available at the office of the City Clerk.

_____
Mayor

ATTEST:

_____
City Clerk

TRACY CITY COUNCIL - SPECIAL MEETING MINUTES

July 5, 2023, 5:00 p.m.

Tracy City Hall, 333 Civic Center Plaza, Tracy, CA.

1. Mayor Young called the meeting to order at 5:00 p.m.

2. There was no action taken by Council pursuant to AB 2449.

3. Roll call found Council Member Evans, Mayor Pro Tem Davis and Mayor Young present. Council Members Arriola and Bedolla absent from roll call.

   Council Member Bedolla arrived at 5:07 p.m. Council Member Arriola arrived at 5:14 p.m.

4. ITEMS FROM THE AUDIENCE – Alice English spoke about freedom of speech being violated, the Mayor violating the Code of Conduct and Brown Act, referred to the June 20, 2023 Council meeting and Council Member Arriola deviating from the agenda, Mayor allowing Surland's attorney to speak about something not on the agenda, and also allowed Prologis to speak beyond their time in 2021 which is setting bad precedence. The Chair has rules and conduct to follow also.

   Mayor Young asked the Parliamentarian if she had violated any of the rules regarding public comment. Bijal Patel, City Attorney clarified the speaker was referring to the June 20 meeting and explained the process regarding public comment as proponent or group and comments on agendized and non-agendized items.

   Mayor Pro Tem Davis asked what supersedes, is it the Code of Conduct or constitutional law.

   Ms. Patel responded there is an order of hierarchy of laws and rules and the first order is the constitution and rights afforded to speakers through the first Amendment. There is a layer of language in the Brown Act and third layer is local rules. For California the best guiding rules is the Brown Act.

   Gabriela Machuca stated she had emailed Council and hoped that they all took time to look at the communication to be more familiar with their journey with the City of Tracy over the last year. Hoped Council directs management to make changes because something isn't working right. Ms. Machuca requested that Council look at the mobile food vendor ordinance.

5. REQUEST TO CONDUCT CLOSED SESSION

   <u>Real Property Negotiations (Gov. Code Section 54956.8)</u>

   5.A. Property Location: APN: 235-068-06
   729/741 N. Central Avenue, Tracy, CA (commonly known as Westside Market)

   Negotiators for the City: Karin Schnaider, Acting City Manager
   Brian MacDonald, Interim Assistant City Manager

Adriana Castaneda, Director of Mobility and Housing
Vanessa Carrera, Assistant to the City Manager
Bijal Patel, City Attorney

Negotiator for Developer: Jennifer Magud, Assistant Director of Development Delta Community Developers Corporation

Under Negotiation: Price & Terms of Payment

5.B CONFERENCE WITH LEGAL COUNSEL—EXISTING LITIGATION (Paragraph (1) of subdivision (d) of Section 54956.9)

MARY MITRACOS, v. CITY OF TRACY, and SURLAND COMMUNITIES, LLC, CASE NO. C093383; COURT OF APPEAL, STATE OF CALIFORNIA THIRD APPELLATE DISTRICT

5.C CONFERENCE WITH LEGAL COUNSEL—ANTICIPATED LITIGATION

Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9, and significant exposure to litigation pursuant to paragraph (2) of subdivision (d) of Section 54956.9.

Alice English referred to the June 6 meeting and spoke about the difference between comment and proposal and the proposal was not on the agenda. City Attorney did remind Council that the comments made by Surland's attorney was not on the agenda. It was about the proposal. Surland's attorney had over three months to come to Council with a proposal and all Council received a letter dated March 6 and the agenda was March 7 and Council Member Arriola and Mayor acted like they did not get the letter.

Mayor Pro Tem Davis recused herself from item 5.B and 5.C due to proximity of real property.

ACTION: Motion was made by Council Member Bedolla and seconded by Mayor Pro Tem Davis to recess to closed session. Roll call found all in favor; passed and so ordered. Time: 5:23 p.m.

6. Reconvened to Open Session – Time: 7:13 p.m.

7. Report of Final Action, if Any - None

8. Council Items and Comments – None

9. Adjournment – Time: 7:14 p.m.

ACTION: Motion was made by Council Member Arriola and seconded by Mayor Pro Tem Davis to adjourn. Roll call found all in favor; passed and so ordered.

The above agenda was posted at the Tracy City Hall on June 29, 2023. The above are action minutes. A recording is available at the office of the City Clerk.

_____
Mayor

ATTEST:

_____
City Clerk

TRACY CITY COUNCIL	SPECIAL MEETING MINUTES
July 5, 2023, 7:00 p.m.	
City Hall, 333 Civic Center Plaza, Tracy	*Web Site:* www.cityoftracy.org

Mayor Young called the meeting to order at 7:19 p.m.

Mayor Young led the Pledge of Allegiance.

Pastor Paul Brown, Victory Christian Church offered the invocation.

There were no actions taken pursuant to AB 2449.

Roll call found Council Members Arriola, Bedolla, Evans, Mayor Pro Tem Davis and Mayor Young present.

Karin Schnaider, Assistant City Manager presented Employee of the Month award for July to Heather Kooreman, Development Services Department.

Mayor Young presented a Proclamation for Parks and Recreation Month to Brian MacDonald, Interim Assistant City Manager.

1. CONSENT CALENDAR – Following the removal of consent items 1.D by Robert Tanner, 1.D, 1.F and 1.K by Gabriela Machuca and 1.D, 1.G, 1.H, 1.I, and 1.L by James Damasco motion was made by Council Member Arriola and seconded by Mayor Pro Tem Davis to adopt the Consent Calendar. Roll call found all in favor; passed and so ordered.

   1.A Adoption of June 20, 2023 Closed Session and Regular Meeting Minutes – **Minutes were adopted.**

   1.B. Adopt a Resolution approving the City of Tracy's Updated Transit Division Title VI Program.– **Resolution 2023-122** approved the Updated Transit Division Title VI Program.

   1.C. Adopt a resolution approving Amendment No. 1 to the Professional Services Agreement with AECOM Technical Services, Inc. to Extend the Term of the Agreement.– **Resolution 2023-123** approved Amendment No. 1 to the Professional Services Agreement with AECOM Technical Services, Inc.

   1.E. Adopt a Resolution approving the purchase of equipment to maintain Legacy Fields in the amount of $194,300.– **Resolution 2023-124** approved the purchase of equipment to maintain Legacy Fields.

   1.J Adopt a Resolution: 1) approving the MOU between City of Tracy and Tracy General Teamsters Local No. 439, IBT; 2) approving the MOU between City of Tracy and Tracy Technical and Support Services Employee Association; and 3) authorizing an amendment to the City's Master Salary Schedule to reflect the terms of the MOUs.– **Resolution 2023-125** approved the MOU with the General Teamsters Local No. 439, IBT, and the MOU with the Tracy

Technical Support Services Employee Association and authorized the amendment to the City's Master Salary Schedule.

1.M Adopt a resolution approving an Offsite Improvement Agreement between the City and Lennar Homes of California, LLC for the Lammers Road Undercrossing Improvements at Interstate 580 that are required as part of the Conditions of Approval for Tracy Hills Phase 1B Vesting Tentative Subdivision Map. – **Resolution 2023-126** approved the Offsite Improvement Agreement with Lennar Homes.

1.D. Adopt a resolution approving a Professional Services Agreement with Gilbane Building Company for construction management services for the new Tracy Multi-Generational Recreation Center and Park Improvements at El Pescadero Park (CIP 78178) for a total not-to-exceed amount of $3,433,900.

Robert Tanner, Gabriela Machuca and James Damasco pulled the item.

Richard Joaquin, Parks Planning and Development Manager provided the staff report and responded to questions.

Robert Tanner asked why the City is rushing ahead of the Aquatic Center, should delay at least a year and concentrate on the Aquatics Park.

Gabriela Machuca asked who will be the point person for the construction project as the City does not have a Development Director and hopes it will be Brian MacDonald.

James Damasco asked about the following: Who was the 4th firm that did not receive an invite to the interview, was a stamped engineer with experience with both inspection and construction management (CM) for California State Parks on the interview panel, what did the panel ask the candidate firms regarding QA and QC and distinction between QA and QC, what roles would the three onsite personnel have on a day-to-day basis, how important was it to select a Tracy resident, and do you think it is hypocritical to brag that the City is enlisting a consultant that lives in Tracy when the City recently fired a stamped engineer with both California State Parks Inspection and CM experience who lives in the City of Tracy.

Brian MacDonald, Interim Assistant City Manager and Karin Schnaider, Acting City Manager responded to Mr. Damasco's questions.

A resident shared concerns about where the homeless will go from the park when building the rec center.

Burnell Shull stated she has seen things she did not want to see at El Pescadero Park and no one seems to care. What is going to stop the people from going to the construction to take wood to keep warm. Why not get people out of there before commencing construction. Who is going to take care of the people who are going to our parks and setting up tents.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Arriola to adopt **Resolution 2023-127** approving a Professional Services Agreement with Gilbane Building Company for construction management services for the new Tracy Multi-Generational Recreation Center and Park Improvements at El Pescadero Park (CIP 78178) for a total not-to-exceed amount of $3,433,900. Roll call found all in favor; passed and so ordered.

1.F. Adopt a separate resolution approving a Professional Services Agreement, for an initial term of one year, with an administrative option to extend annually, for an additional three years, to provide On-call Landscape Architectural, Landscape Plan Check, Landscape Inspection and Project Management Services, with the following consultants and not to exceed amounts: 1) a Resolution Approving a Professional Services Agreement with Callander Associates for a not to exceed amount of $300,000 annually for an initial one-year term, with an administrative option to extend, annually, for three additional years (total not to exceed amount of $1,200,000) to provide on-call landscape architectural, plan check, inspection, and project management services; and 2) a Resolution Approving a Professional Services Agreement with O'Dell Engineering for a not to exceed amount of $600,000 annually for an initial one-year term, with an administrative option to extend, annually, for three additional years (total not to exceed amount of $2,400,000) to provide on-call landscape architectural, plan check, inspection, and project management services. –

Gabriela Machuca pulled the item to ask if Parks and Recs will be the point person and oversee the money. Don't have a Development Director.

Richard Joaquin, Parks Planning and Development Manager provided the staff report and responded to questions.

There were no Council comments.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Evans to adopt the following: **Resolution 2023-128** approving a Professional Services Agreement with Callander Associates for a not to exceed amount of $300,000 annually for an initial one year term, with an administrative option to extend, annually, for three additional years (total not to exceed amount of $1,200,000) to provide on-call landscape architectural, plan check, inspection and project management services. **Resolution 2023-129** approving a Professional Services Agreement with O'Dell Engineering for a not to exceed amount of $600,000 annually for an initial one year term, with an administrative option to extend, annually, for three additional years (total not to exceed amount of $2,400,000) to provide on-call landscape architectural, plan check, inspection, and project management services. Roll call found all in favor; passed and so ordered.

Consent Items 1.G, 1.H and 1.I were heard together.

1.G. The Tracy Homelessness Advisory Committee recommends that the City Council adopt a Resolution (1) awarding a construction contract to Arnaudo Construction, Inc., of Tracy, California in the amount of $1,359,560 for the 384 Arbor Road

Sewer Lift Station and Holding Tank, CIP 71112, (2) approving a project not-to-exceed budget of $1,699,450, and (3) authorizing the City Manager to approve change orders up to the contingency amount of $135,956, if needed, pursuant to Tracy Municipal Code Section 2.20.090(b). – **Resolution 2023-130**.

1.H The Tracy Homelessness Advisory Committee recommends that the City Council adopt a Resolution (1) awarding a construction contract to DV Electric Company, Inc., of San Jose, California (DV), in the amount of $373,745 for the 384 Arbor Road Main Power Supply, CIP 71112, (2) exercising, under Section 14 of the bid documents, City's right to waive, as immaterial bid irregularities, delays by DV in strictly meeting posted deadlines for requisite federal paperwork to document its Small Business Enterprise qualification, (3) approving a project not-to-exceed budget of $467,182, and (4) authorizing the City Manager to approve change orders up to the contingency amount of $37,375, if needed, pursuant to Tracy Municipal Code Section 2.20.090(b).– **Resolution 2023-131.**

1.I The Tracy Homelessness Advisory Committee recommends that the City Council adopt a Resolution (1) awarding a construction contract to DV Electric Company, Inc., of San Jose, California (DV) in the amount of $208,660 for the 370 Arbor Road Main Power Supply, CIP 71112, (2) exercising, under Section 14 of the bid documents, the City's right to waive, as immaterial bid irregularities, delays by DV in strictly meeting posted deadlines for requisite federal paperwork to document its Small Business Enterprise qualification, (3) approving a project not-to-exceed budget of $260,825, and (4) authorizing the City Manager to approve change orders up to the contingency amount of $20,866 if needed, pursuant to Tracy Municipal Code Section 2.20.090(b). – **Resolution 2023-132**.

James Damasco asked the following questions for Item 1.G - Why was there delay in the staff report in the background and legislative history section between April 19, 2022, and Summer 2023. The staff report stated that this allows the City to coordinate lead times for electrical and lift station project completion with overall Phase 2 project completion - why did Development Services chose to do it this way when it seems inefficient and poor allocation of staff's man hours. Why was this not bid until 28 of April. Was this problem not on Development Services radar back in December. Why was a staff report submitted to Council without an engineers estimate included. Is it because something is being hidden.

James Damasco asked the follow questions for Items 1.H and 1.I – What is the distinction between items 1.H and 1.I. Why were these not bid and awarded earlier. When was the first time it was known we would need to bring in this much electrical hardware.

Robert Tanner referred to items 1.H and 1.I and stated a vendor missed paperwork and due dates and vendor was dropped and another took over. Why do we want to do DV Electric Co. Inc., when they have missed some of the dates and deadlines for federal paperwork to be documented as a small business qualification. All our problems with the homeless issue have been with the Advisory Committee.

Ilene Macintire, Senior Civil Engineer responded to questions on Consent Items 1.G, 1.H and 1.I.

There were no Council comments.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Bedolla to adopt the following resolutions:

Consent Items 1.G – Adopt **Resolution 2023-130** awarding a construction Contract to Arnaudo Construction, Inc, of Tracy, California in the amount of $1,359,560 for the 384 Arbor Road Sewer Lift Station and Holding Tank, CIP 71112, approving a project not-to-exceed budget of $1,699,450, and authorizing the City Manager to approve change orders up to the contingency amount of $135,956, if needed, pursuant to Tracy Municipal Code Section 2.20.090(b).

Consent Item 1.H – Adopt **Resolution 2023-131** awarding a Construction Contract to DV Electric Company Inc., of San Jose, California in the amount of $373,745 for the 384 Arbor Road Main Power Supply, exercising, under Section 14 of the bid documents, City's right to waive as immaterial bid irregularities, delays by DV Electric Company in strictly meeting posted deadlines for requisite federal paperwork to document its Small Business Enterprise Qualification, approving a project not-to-exceed budget of $467,182, and authorizing the City Manager to approve change orders up to the contingency amount of $37,375, if needed, pursuant to Tracy Municipal Code Section 2.20.090(b).

Consent Item 1.I – Adopt **Resolution 2023-132** awarding a Construction Contract to DV Electric Company Inc., of San Jose, California in the amount of $208,660 for the 370 Arbor Road Main Power Supply, exercising, under Section 14 of the bid documents, the City's right to waive as immaterial bid irregularities, delays by DV Electric Company in strictly meeting posted deadlines for requisite federal paperwork to document its Small Business Enterprise Qualification, approving a project not-to-exceed budget of $260,825, and authorizing the City Manager to approve change orders up to the contingency amount of $20,866,if needed, pursuant to Tracy Municipal Code Section 2.20.090(b).

Roll call found all in favor; passed and so ordered.

1.K <u>Adopt a separate resolution approving a Professional Services Agreement, for an initial term of one year, with an administrative option to extend annually, for an additional two years, to provide On-Call Plan Check and Inspection Services, with the following consultants and not-to-exceed amounts: 1) Structech Engineering for a not-to-exceed amount of $350,000 annually (total not-to-exceed amount of $1,050,000); 2) 4leaf, Inc. for a not-to-exceed amount of $800,000 annually (total not-to-exceed amount of $2,400,000); 3) Bureau Veritas for a not-to-exceed amount of $600,000 annually (total not-to-exceed amount of $1,800,000); 4) True North Compliance Services for a not-to-exceed amount of $450,000 annually (total not-to-exceed amount of $1,350,000); and 5) NV5 for a not-to-exceed amount of $300,000 annually (total not-to-exceed amount of $900,000).</u>

Gabriela Machuca pulled the item to say there is no Development Director and it is a lot of money and asked who will be overseeing it, and asked why can't the City keep a Development Director employed.

Chris Morgan, City Building Official responded to questions.

There were no Council comments.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Arriola to adopt **Resolution 2023-133** approving a Professional Services Agreement with Structech Engineering for an initial term of one year, with an administrative option to extend annually, for an additional two years, to provide on-call plan check services, for a not-to-exceed amount of $350,000 annually (total not-to-exceed amount of $1,050,000). **Resolution 2023-134** approving a Professional Services Agreement with 4LEAF, Inc. for an initial term of one year, with an administrative option to extend annually, for an additional two years, to provide on-call plan check and inspection services, for a not-to-exceed amount of $800,000 annually (total not-to-exceed amount of $2,400,000). **Resolution 2023-135** approving a Professional Services Agreement with Bureau Veritas for an initial term of one year, with an administrative option to extend annually, for an additional two years, to provide on-call plan check and inspection services, for a not-to-exceed amount of $600,000 annually (total not-to-exceed amount of $1,800,000). **Resolution 2023-136** approving a Professional Services Agreement with True North Compliance Services for an initial term of one year, with an administrative option to extend annually, for an additional two years, to provide on-call plan check and inspection services, for a not-to-exceed amount of $450,000 annually (total not-to-exceed amount of $1,350,000). **Resolution 2023-137** approving a Professional Services Agreement with NV5 for an initial term of one year, with an administrative option to extend annually, for an additional two years, to provide on-call plan check and inspection services, for a not-to-exceed amount of $300,000 annually (total not-to-exceed amount of $900,000). Roll call found all in favor; passed and so ordered.

1.L <u>The Tracy Homelessness Advisory Committee recommends that the City Council adopt a Resolution ratifying, pursuant to Tracy Municipal Code Section 2.20.180(B)(1), various procurement contracts for goods and general services agreements executed by the City Manager to implement Emergency Interim Housing solutions for the unsheltered.</u>

James Damasco asked how much diesel per month is the City spending, how many generators are on site, how many fencing panels are being rented, how many non-panel fences rented, and how many times have you erected fence only to have it taken down later due to poor planning.

James Jackson, Operations and Utilities Director responded to the questions.

There were no Council comments.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Evans to adopt **Resolution 2023-138** ratifying, pursuant to Tracy Municipal Code Section 2.20.180(B)(1), various procurement contracts for goods and general services executed by the City Manager to implement interim housing solutions to address the declared shelter crisis. Roll call found all in favor; passed and so ordered.

2. ITEMS FROM THE AUDIENCE – Gabriela Machua requested Council bring back the Mobile Food Ordinance and amendments to the ordinance.

Diego Bedolla spoke about the 4th of July Parade stating Council Member Arriola ordered two of his associates to harass Council Member Bedolla as he was giving away baseball cards to children and they harassed several children. A report was filed with the Tracy Police along with witness statement the two were trying to deliver a piece of paper on behalf of Council Member Arriola and called for Council Member Arriola to resign from his role on Council.

Council Member Arriola objected to the characterization, was attempting to have legal service issued for a cease-and-desist order for legal action that Council Member Bedolla has made against him personally.

Yvonne Martell shared concerns regarding the many potholes that are damaging cars and asked what is being done about the potholes.

Marla, resident of Ellis asked when Western Park is going to happen. City officials did not show up for the required safety inspections and approval. Shared concerns regarding no mailboxes at Western Park and having to travel 15 miles round trip to collect their mail for last 1.5 years from USPS located at Commercial Drive. Why is the City allowing conception of new homes without having the basic amenities in the first place. The school at Ellis is supposed to be in June 2021 but do not know when it will happen.

Roheb stated the Western Park in Ellis was supposed to be open last September, what is the delay. City is being blamed for the delay and urged the City to take action and open park as soon as possible.

A resident of Ellis stated she is a parent of a special needs son, and there is nothing in Tracy for special needs and requested Council take into consideration the needs of the special needs kids while planning the Multi-Gen and asked for inclusion playground.

Rosario spoke about Council Member Arriola receiving campaign funds from the developer during the previous election, endorsing the petition that is going around currently and appears to be a conflict of interest, and asked City Attorney to provide a legal opinion whether there are grounds to prevent Council Member Arriola from voting on item 3.A due to conflict of interest because he got funds from the same company and endorse the petition.

Council Member Arriola objected to the characterization stating he did not endorse a petition and is in compliance with all donation requirements.

Robert Tanner stated Council does not care about seniors. Insisting that seniors who are only $10 outside that dollar amount that PG&E says are still seniors on fixed income and yet Council raised trash and sewer rates. Council did not care about cannabis stores downtown, ignored the Planning Commission rules, and went from four to eleven.

Ragu shared concerns regarding Western Park and mailboxes not being open at Ellis after 18 months. Requested Council look into this and get it done.

Alice English stated she was sorry about what happened to Council Member Bedolla adding it has happened to her in front of City Hall. Caution Democrats, if go along with what they say it is fine but if you don't, they violate your rights. Had to file a Police report.

Brent shared he resides at Emerson House in Transitional House for men and thanked Council, staff, TCCC and Emerson House for giving him an opportunity to be clean and sober. Brent asked while people remain at El Pescadero Park can the City put up a canopy or a carport, maybe three benches to supply a little more dignity to them and our town.

Mattie Quinney stated she was appalled and shared concerns regarding the posting of personal phone numbers of Mayor Young or Council Member Arriola on social media by Council Member Bedolla to call them at home to pressure them to change their votes. Spoke about joining forces on Council to keep our city in gridlock. Suggested all Council Members go under oath so the truth can come out. Needs to be investigated.

Council Member Bedolla responded he has everything documented and will be turning into court.

Council Member Arriola objected to the characterization.

Mayor Young objected also.

James Damasco shared light on the federal reserve, monetary policy, regulating banking sector, risky practices and local government bearing the brunt.

Venu Matta asked for an update on Ellis Town and Country Park. Website states it is ongoing. Will it be ready anytime soon.

Venkat Mantirraju spoke about the Aquatic Park, when is it going to start. More communities coming up. Being at the central location is vital and asked Council to consider the Aquatic Park.

Cynthia Camacho stated the money Council Member Arriola received from the developer is a conflict of interest for any Council Member. Wish none of our Council Members received money from developers because it looks bad. Regarding Council Member Bedolla giving the Mayor and Council Member Arriola's phone numbers, it says on the Mayor's number to call her personal number. Have left emails and messages and never gets a call back.

3. REGULAR AGENDA

Mayor Pro Tem Davis recused herself from Item 3.A due to proximity of real property.

3.A Adopt a Resolution Accepting the Irrevocable Offer of Dedication of Fee Interest for 16 Acres of Community Park Land for an Aquatic Park (Aquatic Center), generally located at the Intersection of Corral Hollow Road and Summit Drive (Property), from Ellis Village, LLC to the City of Tracy, a Municipal Corporation (City), and directing the City Manager to take Requisite Actions to Effectuate the Acceptance of the Property.

Brian MacDonald, Interim Assistant City Manager provided the staff report.

Council comments and questions followed.

Mandar Raje requested Council to vote yes on the item and spoke about misinformation on item out there.

Chris Long stated the community development plans which represent the design development package are ready to prepare construction docs and go to bid and that would advance the project faster than anything. Supports the community driven plan.

Rosario Arulappan, speaking on behalf of a group, requested Council accept the 16-acre land and $8 million and construct the water park at Ellis. Spoke about Council Members receiving campaign money from Surland being a conflict of interest. Back in 2005 a subcommittee was formed by City to work on water park project, was dissolved over time with only a few members continuing their involvement with Surland claiming to be original subcommittee. How is it possible for them to use the City formed subcommittee and mislead the community with inaccurate information. The land should be granted first. Strongly advocate for the land, and asked Surland to pay $9 million and donate land without any conditions. Spoke about delays with water park. The City has taken over the construction and 80% of cost is covered by our tax contribution. The City has every right to seek public input on design. Need to penalize Surland due to the delay. Form committee to investigate the so-called task force which was dissolved a long time ago. Who is financing the task force and why are they giving the public the wrong information.

Diego Bedolla supported trying to have the Aquatic Center built, spoke about Mayor Young and Council Member Arriola receiving funds from developer, put money where mouth is, we want this park, let's get it built.

Yvonne Martell stated she is a 37-year resident and asked is this water park going to be for all the citizens in Tracy, she is totally against this and does not trust them.

Robert Tanner stated there was a groundbreaking, but nothing was built. Council Member Arriola and Mayor Young said they can't be bought, but the

appearance is that they are taking money from Surland and they bought your vote. Vote yes and get it going. Been over 20 years of trying to get this built.

A resident from Ellis stated they want the Aquatic Park at Ellis. Council Members are saying no because it will delay, but saying no will delay and requested Council say yes to the land.

Malla supported Council saying yes to agenda item 3.A and accept the land.

A resident stated 16 acres of land and $10 million rightfully belong to City of Tracy and urged Council to accept the 16 acres of land and cease giving any more permits to the developer until they fulfil their promises to the City.

Prab stated staff recommends Council accept the 16-acre land and $8 million. Have taken a lot of input from the people for the past 16 years and asked Council to consider the recommendation. Show us why you would vote no. Vote yes and take land.

A resident stated people cannot be waiting, they elected Council to get services to them and not supposed to be working for the corporates. Vote yes and get the Aquatic Center to Tracy.

Ragu requested Council to vote yes on Item 3.A and accept the 16-acre land and the $8 million.

Ram requested Council vote yes for acquiring 16 acres of land and the amount from Surland, a promise that has been pending for more than a decade. Trust staff and attorney, that is why they are here and believe in the recommendation.

Suma urged Council to say yes and accept the land.

Arvin spoke about getting an Aquatic Park and getting amenities.

Brandon Kanner stated the goal for Council after decades of delay is to build an Aquatic Center quickly. Accept the land and the design and allow us to look forward to future.

Roy Hawkins stated past Council's have all blessed the community driven design plans and now it is this Council's chance to complete the offered package and build this beautiful facility that will put Tracy on the map.

A resident of Ellis urged the acceptance of land for the Aquatics Center at Ellis, and requested a yes vote in the best interest of Tracy residents and good faith.

Rahul requested Council accept the16-acre land as recommended by staff, have respect for their recommendations. Say yes and do not delay.

Ravi, Ellis resident requested Council vote yes on getting the Aquatic Park, a shame it has been discussed for 20 years and make sure there is no litigation.

A resident requested Council vote yes on item 3.A, accept 16 acres and $8 million.

Sarisha, Ellis resident requested all Council to accept land so Aquatic Park can be built as soon as possible. Tracy needs life and if it is water park that starts life, lets do that.

Molly Lowe stated her daughter attended the last meeting and she has seen 19- and 20-year-olds run things better than Council. Council's job to work together for citizens and not future aspirations. Need more options for Aquatic Center for all ages. Give City time to work with Surland to accept the Tracy conceptual plan at the same time.

Alice English stated Surland has gotten their RGA's and building permits for years but not fighting for Aquatic Center. The plans and design have nothing to do with accepting the land. Everyone wants the Aquatic Center. If you say no, tell them we are going somewhere else, we are still going to get an Aquatic Park. Stay with the plan, accept the 16 acres.

Sandy Taylor stated she can't believe that Council are unwilling to allow the City and Surland time to work out moving forward on the Aquatic Center. What difference will a couple of months make. Hard time understanding why Council would not want to accept and build what your community has designed.

Vinitha Narayanan, Ellis resident stated the community is divided due to recent conversations. Led to believe all Council Members are in favor of building an Aquatic Center, if so why are things not moving forward. Spoke about Council appointed Measure V Committee Member is advising against petition and pushing community members to pressure Council to vote yes.

Ragesh requested all Council Members unite, put differences aside, make things happen and continue work on getting an Aquatic Center at Ellis rather than moving to another location.

Raquel Fairfield requested Council accept the land and money and move forward. Everything is set for this current land. Surland continues to get what they want and nobody else is getting what they want.

Narendra requested voting yes on Aquatics Park. Lost trust with Surland.

Ajay requested Council vote yes to build Aquatic Park.

Venu Matta urged Council to accept land and get money from Surland. Been delayed for decades.

Senthil Kumar requested Council to vote yes on item 3.A, accept the land and get the Aquatic Park built and thanked staff for their recommendations.

Praveen requested Council work for the people and vote yes on item 3.A, accept the 16-acres and the $8 million.

Conrad Levoit stated valued citizens are pleading to Council to move forward. It doesn't look or feel good to have an indecisive decision-making leadership. Believe strongly that Council has heard the people.

Victoria requested Mayor Young and Council Member Arriola accept the land and vote yes. Council are the leaders chosen to represent, serve and listen to the people.

Maral asked Council to vote no. Contrary to neighbors in Ellis she believes opportunity to move forward faster. Everyone's sentiment is clear, we all want the Aquatic Park. Have not seen enough evidence or plan from the City to move this plan forward quicker than what is in place. Spoke about misinformation being spread that if City taking the land it will move at an accelerated rate.

A resident hoped the Council Members who voted no on the item at the June 20, 2023, meeting got all their questions answered and vote yes on item 3.A.

Glen Tony requested Council vote yes and accept the land and get the $8 million.

Michel Bazinet stated the design is completed with input from community and urged Council to reject IOD until there is a firm commitment to build the Aquatic Center as designed with community input.

A Tracy Hills resident urged Council to vote yes for obtaining the land.

Ritwick requested Council vote yes for 3.A and get the land and the money to move ahead.

Manish requested Council vote yes to accept 16-acres of land and $8 million and reminded Council they are working for community members and not developers.

Sunil requested Council put Tracy residents first and vote yes and build Aquatic Park in Ellis.

Luis stated there has been a heavy campaign from Tracy Hills and Ellis residents urging Council to vote yes. Wanted to bring light that Tracy doesn't necessarily have a good track record of bringing good recreation and amenities to the magnitude to what the water park would need. How soon thereafter if the Council vote yes will the Aquatic Park come to fruition.

Steve stated they use the Aquatic Park as a sales tool to get people to buy and like to know who is putting up the posters that the Aquatic Park is coming as it has been 20 years. Can understand why people are upset.

Satesh stated keep promise, do good for Tracy by getting the Aquatic Park.

Ragu stated the Aquatic Park is a must and asked Council to say yes and start building the park.

Naveen stated one of the reasons he purchased in Ellis is because the Aquatic Park was going to be built in 2023. Past is past and now is the time to make a difference and asked Council to say yes on the item.

Carlos requested Council vote in favor of the Aquatic Center. As a young person there is not a lot of things for us to do. The Aquatic Center will be good to bring us together and have a safe place to interact and be beneficial for Tracy.

Ramkumar requested Council vote yes to accept the land and the money without any delay.

Munesh stated they purchased a house here because an Aquatic Center is coming and urged Council to vote yes and accept the 16-acres of land and $8 million.

Amir spoke about Council Member Bedolla being victimized and harassed by Council Member Arriola. We must denounce violence, intimidation, mistreatment and stand together to support. Must hold Council accountable. Recommended Council vote yes on item 3.A.

Srikanth Ramaraju asked Council to vote yes and accept 16-acres of land and money.

Ramesh asked Council to vote yes on item 3.A and listen to the community.

Mayor Young called a break at 10:49 p.m.

Mayor Young reconvened the meeting at 11:01 p.m.

Council agreed to hear Items 3.C, 3.D and 3.F and move Items 3.B and 3.E to another date.

Council comments followed.

ACTION: Motion was made by Council Member Bedolla and seconded by Council Member Evans to adopt **Resolution 2023-139** accepting the Irrevocable Offer of Dedication of Fee Interest for 16 acres of Community Park Land for an Aquatics Park (Aquatic Center), generally located at the intersection of Corral Hollow Road and Summit Drive (Property), from Ellis Village, LLC to the City of Tracy, a Municipal Corporation (City), and directing the City Manager to take requisite actions to effectuate the acceptance of the property. Roll call found Council

Members Arriola, Bedolla, Evans and Mayor Young in favor; passed and so ordered. Mayor Pro Tem Davis absent.

3.B Staff recommends that City Council review and discuss the Citywide Water System Master Plan Update. **- Item was continued to the next possible time.**

There was no public comment.

3.E. City Council appoint, by motion, one member, to the Tracy Finance Committee to fulfill the remainder of the annual term, pursuant to the City Council's appointment procedures. - **Item 3.E was moved to August 15, 2023**.

There was no public comment.

ACTION: Motion was made by Council Member Arriola and seconded by Council Member Bedolla to move item 3.B to be continued to the next possible date and Item 3.E to the August 15, 2023, Council Meeting.

3.C. The Tracy Homelessness Advisory Committee recommends that the City Council 1) adopt a Resolution approving, pursuant to Tracy Municipal Code Section 2.20.180(B)(1), contracts for goods and general services agreements executed by the City Manager to implement Emergency Interim Housing solutions for the unsheltered with Link Equipment, LLC., and 2) adopt a Resolution approving a Purchase Agreement for Goods with Linked Equipment, LLC., for the purchase of eight pre-manufactured custom container structures in an amount not to exceed $682,440 to be installed as part of Phase 4 of the interim improvements at the Temporary Emergency Housing Facility Project at 370 W. Arbor Avenue.

Adriana Castaneda, Director of Mobility and Housing provided the staff report.

Cynthia Camacho asked about the life expectancy of the containers if the City were to purchase those containers. The $600,000 we lost from the first containers we received, the staff member or whoever was responsible for using that money should be made accountable. A lot of money will be utilized for the containers and if the containers don't have a life expectancy for more than 20 years the money could be utilized somewhere else in a better capacity.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Bedolla to adopt **Resolution 2023-140** approving, pursuant to Tracy Municipal Code Section 2.20.180(B)(1), various procurement contracts for goods and general services executed by the City Manager to implement interim housing solutions to address the declared shelter crisis and approving a purchase agreement for goods with Linked Equipment, LLC for the purchase of eight pre-manufactured custom container structures in an amount not-to-exceed $682,440 to be installed as part of Phase 4 of the interim improvements at the temporary emergency housing facility at 370 W. Arbor Avenue. Roll call found all in favor; passed and so ordered.

3.D The Tracy Homelessness Advisory Committee recommends that the City Council adopt a Resolution partially rescinding Resolution No. 2022-121, whereby authorization was given to the City Manager to take immediate and emergency actions to implement interim housing solutions for the City of Tracy's unsheltered, and waived procurement requirements for professional services under Tracy Municipal Code Section 2.20.140(b)(6).

Karin Schnaider, Assistant City Manager provided the staff report.

There was no public comment.

There were no comments from Council.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Bedolla to adopt **Resolution 2023-141** partially rescinding Resolution No. 2022-121, whereby authorization was given to the City Manager to take immediate and emergency actions to implement interim housing solutions for the City of Tracy's unsheltered, and waived procurement requirements for professional services under Tracy Municipal Code Section 2.20.140(B)(6). Roll call found all in favor; passed and so ordered.

3.F City Council appoint Wayne Templeton to serve on the San Joaquin County Commission on Aging.

Adrianne Richardson, City Clerk provided the staff report.

Council subcommittee members consisting of Council Member Evans and Mayor Young announced their selection to the San Joaquin County Commission on Aging.

ACTION: Motion was made by Council Member Evans and seconded by Mayor Young to reappoint Wayne Templeton to serve on the San Joaquin County Commission on Aging. Roll call found all in favor; passed and so ordered.

4. ITEMS FROM THE AUDIENCE – Diego Bedolla stated he appreciated today's action by Council as a whole. It is a special thing for the community that will benefit 100,000 residents. Thanked Council for listening and in particular Council Member Bedolla for rallying the community and advocating for transparency for our elected officials. Change happened.

5. STAFF ITEMS – Karin Schnaider, Assistant City Manager provided the following updates:
   - South County Fire responded to only eight more calls for service than their usual average of 30 per day. Nine of the 38 calls they responded to were small fires with limited property damage.
   - Tracy PD reported 236 calls regarding fireworks. Of those, 121 were from yesterday and early this morning. 97.87% of the 911 calls yesterday were answered in under 10 seconds. Will be a more comprehensive report usually comes out in September on citations and other issues.

- The drone show was this weekend and also the downtown parade.
- The Parks and Community Services Commission meeting scheduled for tomorrow night has been canceled, the next meeting is scheduled for Thursday, August 3rd.
- Invited the public to the 80's Block Party on July 7 at 6:00 p.m. featuring the band "Color Me Badd."
- The City's next free E-Waste Recycling event is this Saturday in the north parking lot of City Hall from 9:00 a.m. until 1:00 p.m.
- The Grand is featuring a "Traces in Time, Reflections on Memory and Identity" exhibit in the Grand gallery and the public is invited for the Artist's Gallery Talk this Saturday, July 8 from 12-1:30 p.m., with Pancho Jimenez.
- Rollin' Rec, our free, pop-up mobile recreation program, will be out at Lincoln Park on Monday from 9:00 a.m. to 12:00 p.m. Check our website calendar for all upcoming dates and locations: www.cityoftracy.org.
- Unfortunately, Joe Wilson Pool has been closed for unexpected emergency repairs. In the meantime, the Parks & Recreation Department will be hosting Recreational Swim at Kimball High School Pool (3200 Jaguar Run) this Friday through Sunday. Two Recreational Swim sessions will be offered: 12:30 p.m. to 3:00 p.m. and 3:15 p.m. to 5:45 p.m. There is a $3 entry fee, kids 0-2 years are free, and Recreational Swim passes are accepted.
- Please join us for a hybrid virtual/in-person public information meeting here at City Hall on Tuesday, July 11th at 6:00 p.m. about upcoming construction on Bessie Avenue between Lowell Avenue and Grant Line Road. The meeting will be recorded and made available after if you cannot participate live. Check our website calendar for details and updates!
- We are currently recruiting two vacancies on the Planning Commission, one vacancy on the Arts Commission, and four vacancies on the Building Board of Appeals - please visit our website: CityOfTracy.org, or contact the Clerk's office to learn more and apply: (209) 831-6101.
- We look forward to seeing everyone for National Night Out on August 1st, and our next regular City Council meeting will not be until August 15th!

6. COUNCIL ITEMS – Council Member Bedolla asked as there is no Tracy Homelessness Advisory Committee (THAC) meeting in July that Council direct the City Manager to bring to the August 15 Council meeting a resolution rejecting all bids received on October 2022 for site improvements for the Tracy Emergency Housing Facility and authorize staff to readvertise this project. Mayor Pro Tem Davis seconded the request.

   Mayor Pro Tem Davis thanked Council for working together in a civil way to get something major done for the Ellis community. Proud of Council Members Bedolla and Evans for advocating for the citizens of Tracy and making sure Ellis residents get the Aquatic Center that they have been promised for a long time and is happy to see this Council is going to move that forward. Very proud of this Council at this moment.

   Mayor Pro Tem Davis asked about the signal light at Valpico. Have been seeing a lot of near miss accidents there, know it is temporary signal, but how long is it supposed to be left flashing red, people do not know how to use a four way stop with flashing light. Almost got hit too. Scared someone will lose their life at the four way stop – urgent matter that we get it back to working so people know where to go or go to stop signs. Cannot let it linger like this.

Council Member Evans stated regarding the Aquatics Center at Ellis, he was very proud of the folks at Ellis, hoped they stay organized and continued doing good for your community. Enjoyed the 4th of July Parade and team Evans took 3rd place in the decorated vehicle. The illegal fireworks display was again out of control. Looking forward to receiving a report from PD on how many fines were levied, how much they were and would like the report to include week prior and week after – in two-week time frame. Asked when housing element is coming back to Council as we are running out of time to get this done.

Ms. Schnaider responded it is coming back on August 15, 2023.

Council Member Evans asked that the City do some outreach or survey regarding the drone show to see what the community thinks as a whole and if it should be continued. Have heard mixed things. Seen comments and pictures on social media.

Brian MacDonald, Interim Assistant City Manager responded staff will reach out to the Chamber. Thought the Chamber was going to reach out to the public. The City has a contract with the Chamber to do this event and in that contract, there is an annual evaluation of whether it is successful and if not, come up with something else next year.

Council Member Evans stated at the last meeting were discussing City priorities and talked with Mr. Dean about an annual compliance audit on Development Agreements that is required by the State pursuant to Section 65865.1 of the California Government Code. Was not aware of it until that meeting. Reading through the Code found it interesting that the code seeks to find if an applicant or successor has complied with the Developer Agreement, wasn't clear to him in the conversation whether we are doing that and this is the issue we often see in the City of Tracy where developers are not meeting their obligations. Council Member Evans asked for support to ask staff to give Council a report on how many times in the last 20 years this audit has been done and filed with the state for the City of Tracy. Would like City Council to provide direction on this. Mayor Pro Tem Davis supported the request.

Council Member Arriola wished everyone a happy legislative break and stay safe out there.

Mayor Young spoke about the following 4th of July events: Thanked TCCA for the parade downtown and Tracy Chamber for the hot air balloon. The first drone show was at Tracy High. It was interesting and different. Positive thing was it kept people focused and what they would create based on the song. Ravioli and Sparkles were there to entertain. Mayor Young asked when the food truck ordinance will be coming back. It goes back years and directly impacts someone now with the continuity of their business. Need to be more expeditious in following through.

Karin Schnaider, Assistant City Manager responded she is hearing from City Attorney it is a few months away. Can research and send an email to Council. Believe there is an existing ordinance and the need to get back to Council on the public outreach and what changes need to occur in that ordinance.

Mayor Young stated we need to revisit the new business tax. The costs are astoundingly high and agree with the many people who are writing in that it is unacceptable. Council has the opportunity to adjust what is reasonable. One business

license from a small business downtown went from $100 to over $800. One of the bigger businesses normal license is a little over $2,000 but their calculations came out to $400,000. Percentages are really high. Affecting small and large businesses. Would like Council to look at what we are charging our businesses.

Mayor Pro Tem Davis asked if it could be a mathematical error. Willing to support the request if there is real basis that we have made a mistake if the percentages are too high or a little more information if staff knows.

Ms. Schnaider referred to the two businesses and have been contacted by them and one is a retail location downtown and again retail is .01% and is based on their gross receipts. For it to be $800 they are bringing in $1.5 million dollars and Council defined small as businesses under $500,000 gross receipts. The larger one is a very large landowner and the rent they bring.

Mayor Young said some things have huge mark ups and some don't. Some are small businesses and if we are looking at gross, may have $800,000 but your cost of sales, your goods could be $600,000 and it is not really true, it is not apples to apples.

Ms. Schnaider responded under State California Law under the constitution municipalities can only do it based on gross receipts. We cannot consider net or expenses that they are doing so the categories that were produced in the business tax of the different categories and rate were based on businesses that typically have a higher gross margin than others. So those that are landowners typically have a higher gross receipt and have the highest tax. Council created a carve out for warehousing because the intent was to look at warehousing and the $2,000 before was a flat amount, it was the maximum the business was required to pay under the 1984 tax. The structure will have a bell curve and the majority of the businesses still receive a reduction or a lower tax under this tax structure. Until we see more data and start getting the data you will have the individual businesses to consider but those were the things that were discussed when we passed the tax with Council. Want to remind Council some of the discussions already took place and can share the FAQ on the website.

Mayor Pro Tem Davis stated she would prefer to wait for data.

Mayor Young stated as for a report that shows all that, even to go from $200 to $800 is 400% and don't think that is acceptable for any business and especially if it goes from $2,000 to $400,000 as far as doing business in Tracy especially if they have been here many years as that company has been. They are not just landowners, they produce a product that goes around the country. Mayor Young added she would be greatly disturbed if she was a business and had to pay $400,000 for business license renewal. If Council can get a detailed report to look at to be able to respond to our customers. It is not business friendly.

Ms. Schnaider suggested staff ask the Finance Committee and they can look at this as they are the ones that originally proposed the business tax. Will talk to Finance Director about bringing back to the Finance Committee to talk in detail and see if this is something they would like to elevate to the Council. Can't give you individual businesses but can give you the bell curve. Per the current bylaws it will go to Finance Committee and Finance Committee can have that item moved up and you can read it through the Finance Committee information. It will go first to the Finance Committee.

Mayor Young announced the next regular Council meeting is August 15, 2023, will be on legislative break during July. National Night Out is August 1 and is coordinated with Tracy Police Department and registration is still open if you wish to be included.

7. ADJOURNMENT – Time: 12:12 a.m. Thursday, July 6, 2023.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Arriola to adjourn. Roll call found all in favor; passed and so ordered.

The above agenda was posted at the Tracy City Hall on June 29, 2023. The above are action minutes. A recording is available at the office of the City Clerk.

_____
Mayor

ATTEST:

_____
City Clerk

TRACY CITY COUNCIL	SPECIAL MEETING MINUTES
August 1, 2023, 4:30 p.m.	
City Hall, 333 Civic Center Plaza, Tracy	*Web Site:* www.cityoftracy.org

1. Mayor Pro Tem Davis called the meeting to order at 4:37 p.m.

2. There were no actions taken pursuant to AB 2449.

3. Roll call found Council Members Arriola, Bedolla, Evans, and Mayor Pro Tem Davis present. Mayor Young arrived at 4:43 p.m.

4. Items from the Audience – Robert Tanner stated he had asked about the balance of funds given to the mall and a memo would be sent as requested by Nancy Young has not been sent and has not yet seen the balance. Mr. Tanner shared concerns about the City's program for repairing streets and potholes and referred to the pothole and sinking conditions on 10th Street from Tracy Blvd to A Street, stating this is not the only street in town where streets are getting lower and the City needs to start repairing streets now.

   Carmen Rodriguez, Tracy Hills homeowner shared concerns regarding an area behind her neighborhood which is allotted for commercial development. Lot of movement of earth and do not have any inside information about what is going to be there. Hope that it would be something beneficial to community.

5. CONSENT CALENDAR – Consent item 5.A was pulled by Robert Tanner.

   5.A <u>Adopt a Resolution: 1) approving the Memorandum of Understanding (MOU) between the City of Tracy and the Tracy Police Officers Association; 2) authorizing an amendment to the City's Master Salary Schedule to: (A) address clerical errors to the City's Master Salary Schedules previously approved by Resolutions 2023-116 and 2023-125 for the Police Captain, Police Lieutenant, and Executive Assistant to the City Manager classifications, and (B) reflect the terms of the MOU</u>

   Robert Tanner spoke about the City touting a lot of funds coming in but salaries for Police Department are low. Other cities have increased their salaries by 20% and believes some Police Officers will go back to their old Police agencies. Mr. Tanner asked about the substation, supported Police getting that substation and a hiring bonus.

   There were no comments from Council.

ACTION: Motion was made by Council Member Bedolla and seconded by Mayor Pro Tem Davis to adopt **Resolution 2023-142** 1) approving the Memorandum of Understanding (MOU) between the City of Tracy and the Tracy Police Officers Association; 2) authorizing an amendment to the City's Master Salary Schedule to: (A) address clerical errors to the City's Master Salary Schedules previously approved by Resolutions 2023-116 and 2023-125 for the Police Captain, Police Lieutenant, and Executive Assistant to the City Manager classifications, and (B) reflect the terms of the MOU. Roll call found all in favor; passed and so ordered.

DEVIATION

7. COUNCIL ITEMS – There were no Council comments.

Mayor Young called for a recess at 4:50 p.m. to allow staff to set up for Agenda Item 6.

Mayor Young reconvened the meeting at 5:00 p.m.

6. REGULAR ITEMS

6.A. Staff recommends that the City Council receive a briefing on and assignments for the National Night Out caravan groups.

Sekou Millington, Police Chief introduced the item.

Miguel Contreras, Police Lieutenant and Cherise Acosta, Crime Prevention Specialist provided the staff report.

There was no public comment.

There were no comments from Council.

Council received the briefing on and assignments for the National Night Out caravan groups.

8. ADJOURNMENT – Time: 5:15 p.m.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Arriola to adjourn. Roll call found all in favor; passed and so ordered.

The above agenda was posted at the Tracy City Hall on July 31, 2023. The above are action minutes. A recording is available at the office of the City Clerk.

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Mayor

ATTEST:

_____
City Clerk

TRACY CITY COUNCIL SPECIAL MEETING MINUTES

August 7, 2023, 5:00 p.m.

City Hall, 333 Civic Center Plaza, Tracy *Web Site: www.cityoftracy.org*
And one Council Member attended remotely
At the following location: Hilton Hawaiian Village
2005 Kālia Rd, Honolulu, HI 96815

1. Mayor Young called the meeting to order at 5:20 p.m.

2. There were no actions taken pursuant to AB 2449.

3. Roll call found Council Members Arriola, Bedolla, Evans, Mayor Pro Tem Davis, and Mayor Young present. Council Member Arriola participated remotely.

4. Items from the Audience – Tim Silva thanked City of Tracy, Council, Police and Fire Department for National Night Out and stated it is a great way for elected officials to get out in the community and participate in the event.

   Dotty Nygard stated she spoke to engineers regarding the Bessie Road project upgrading infrastructure, water and sewer and asked why the electric wiring is not being buried. That section of Bessie has older trees and every year or two PG&E takes away half that tree canopy and requested the City reach out to our local PG&E as their website states one of their main roles is to bury the lines.

   Rosario Arulappan shared his appreciation for National Night Out and thanked Police and City Officials and the Fire Department. Mr. Arulappan stated the aquatics park task force needs to be investigated as he received a flyer to save the date to discuss about the design of the water park in Ellis which they don't have any rights as they were already dissolved, and the land is acquired by City and the City have rights to talk about design. The City should take action as it is confusing people and giving wrong information.

   Manala, a resident of Ellis thanked the City for starting the Tracer bus going to Tracy Hills, Ellis and train station, and thanked Mayor Pro Tem Davis and Police and Fire staff that came out for National Night Out in Ellis. Manala stated the City approved the motion to accept the land from Surland to start work for the Aquatic Park, requested the City, City Manager and Parks and Recreation Director keep the City informed through general publications on progress being made as this has been going on for years.

   Jorge Gonzalez shared concerns regarding accidents due to people not stopping and speeding at 10th and Taft. Mr. Gonzalez spoke about the City sending staff to cut trees, has left multiple messages and came here to speak to Council. They destroyed his fence, which he fixed it twice, has sent pictures and cost of repairs and got a letter saying if he does anything, he would be responsible for this legal matter.

5. Request to Conduct Closed Session

5.A Personnel Matter (Gov. Code, § 54957)

Public Employee Appointment, Employment, Evaluation of Performance, Discipline, or Dismissal

Position Title: City Attorney

Steve Nicolaou stated attorneys have to take an oath, and quoted Cal. Bus. & Prof Section 6125. Mr. Nicolaou shared his concerns regarding unauthorized practice of law by the City Attorney and has filed a complaint with the State Bar of California against the City Attorney for the unauthorized practice of law and singled out the July meetings.

Robert Tanner stated warning letters are sent when an Attorney or a CPA is going to miss a timeframe for extended education. Mr. Tanner shared concerns regarding the City Attorney being out of balance as of February 1 because she did not complete the continued education and stated Council needs to review everything from February 1.

Robert Bivens stated the City Attorney did violate the law and quoted California Bus. & Prof Section 6126 and spoke about the law being violated, fines and being a punishable crime, and asked the City to go to San Joaquin District Attorney's Office and file a criminal complaint because a criminal act has been completed here. This person did not take the time to take the necessary classes.

Rosario Arulappan stated the incident related to the City Attorney is unfortunate, but it was resolved last week as it was an administrative matter involving updating a continuing education credit. Mr. Arulappan spoke about the Mayor's ongoing public confrontation with the City Attorney, involving the media, acceptance of funds from developer, the Attorney's role is to make sure they not given preferential treatment and felt it is a racist attack on the City Attorney.

Mayor Young disagreed with any connection that she was involved in all the things just said regarding the City Attorney.

Gary Cooper stated the last time the Council faced an issue of this magnitude, Council took upon itself by a simple 3/2 vote to change the rules by the way we manage two important employee positions in the City of Tracy and as result we lost a very capable City Manager. Citizens deserve full accountability from our Council and operate by own rules of behavior and policies. Council last time decided not to follow the rules they adopted. We are asking to make the City Attorney accountable to the rules Council has.

Midori Lichtwardt, Interim City Manager responded to Mayor Pro Tem Davis's question and clarified that vote has not changed, a super majority is required to terminate the City Manager and City Attorney.

Mayor Young confirmed there was no second reading and adoption of the ordinance so it did not go into effect.

Robin Cole stated three members of Council decide what to do in Tracy and it is appalling. Council set a precedent by having a public trial of a good man and now we do not see Ms. Patel in Chambers. If she did nothing wrong why is she not here. Her contract was clear, Council can kick her out for any reason. Ms. Cole shared concerns about having an Attorney without a renewed license and asked for the City Attorney to resign.

Ms. Lichtwardt confirmed there is outside Counsel, Todd Amspoker on the line.

Council Member Bedolla stated it should have been announced at the beginning of the meeting. Currently outside Counsel is presiding because of the subject matter of the meeting.

Prab stated this is very unfortunate it happened to City of Tracy and guessing it is an honest mistake, but a big mistake. Not sure if City has any checks for licenses that may be expiring. It is more responsible for the City to inform the person, and better to have checks in place by the City.

Dotty Nygard stated as a licensed nurse, for us who have licensure that is governed by the State there is an obligation on the licensee to make sure they are current and in an active state to practice. This is disappointing to see Tracy being in the limelight, it breaks trust. Still trying to understand why our city is governed by misinformation and mistruth. Please uphold trust and integrity of Tracy and do the right thing, she needs to be let go.

Tim Silva stated what matters is what is her standing with the California Bar at the present time and at the time that she was considered unethical. We are trying and convicting her in a court of public opinion. We always jump the gun before we know all the facts. Do not like our City being painted in a black light all the time. It gets blown up and media brought in. Let's wait for the facts to come out and what Council wants to do, then bring that forward to press. Reserve judgement and trust our City Council and Mayor to meet, take in all the facts do the right thing.

Mayor Young stated the news station informed the City about the deficiency from the State Bar.

Jorge Gonzalez stated if the people who should set examples applying the law as the City Attorney won't respect the law, who is going to do it. Don't have pleasure to know her, but she did something that was wrong. Wrong to fool us this way. Received letter signed by her. What moral does she have to send this. Is she above the law.

Sandy Taylor stated the City Attorney has practiced law for almost 27 years and as an officer of the court she knowingly failed to fill the obligation of the 25 hours of education within three years. Not a simple administrative error. Ms. Taylor shared her concerns regarding the City Attorney's failure to renew her license. When her license status became known last week, she should have been terminated immediately.

Roy Hawkins reminded Council that Ms. Patel's contract was terminated on July 1 of this year, the day her license to practice law became inactive. Mr. Hawkins shared his concerns regarding the City Attorney continuing to practice under an inactive license and asked why is she still there.

A resident from Ellis stated the incident related to City Attorney is unfortunate but was resolved last week.

Ann Langley stated we now have a City Attorney that broke the law and knew she broke it. Council needs to do something about it. It matters what kind of a precedent Council sets, a level of ethical way of living for this community.

A resident of Ellis felt this matter is more of a legal problem than a public opinion matter and requested the City take advice from their Counsel and put the legal opinion first. In the last month good decisions have been made by the Council and requested those decisions in the best interest of City be kept as they were.

Alice English stated the City Manager was not fired. Mayor brought media even then calling Council racist and corrupt, false narrative all the way across. The City Manager resigned. The false narratives are being posed and urged Council to do the right thing, the public is not privy to what happens behind closed doors and do not let this Mayor continue to put a black light on Tracy.

Mayor Young disagreed with the terminology and reference to her role as Mayor.

Vannie Dart stated all licensed professionals have to go through continuing education and the renewal process. If our systems are down the renewal process will be delayed causing a lapse and shared this happened to her husband during the pandemic who is a CPA. The City Attorney did not practice law without a license, she did and does have a license, it was lapsed. Ms. Dart spoke about the Mayor stating the City of Tracy being racist because of the former City Manager, calling the media and asked why is it that in this case it is ok. We finally have a City Attorney that stands up to Developers. Let her do her job if her license good enough today. Stop airing our dirty laundry to the world.

Mayor Young said she did not say the City of Tracy is racist.

Yolanda Bariel Knight stated as of Friday morning the State Bar of California had changed her status of Ms. Patel back to active. Her Attorney profile on the state bar website still shows her license as being inactive as of July 1 because of MCLE noncompliance. This is not something we said, it is something the State Bar said. People make mistakes and sometimes they have consequences. Her activity lapsed and she should not be allowed to practice. Our former City Manager sat in the chambers and took some of the worst statements about himself. Where is she.

Michel Bazinet shared concerns regarding Bijal Patel practicing law while her California State Bar Association law license was suspended and not alerting City Council about her suspended license. Her employment contract states her employment terminates immediately if she is found to have committed an act resulting in disbarment or suspension from the California State Bar Association.

If Council ignores a legal issue and allows Ms. Patel to continue working, then she will be working despite her terminated employment contract as City Attorney which opens up the City for legal sanctions which could include prison terms. The City Attorney has to be held accountable.

Karen Moore stated the City Attorney could of handled it and when there are other options and other attorneys, to continue to ignore the law when you are a lawyer, that is the one person that should not be breaking laws and she holds no hope this is a Council that will do the right thing.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Evans to recess to closed session. Roll call found all in favor; passed and so ordered. Time: 6:26 p.m.

6. Reconvened to Open Session – Time: 9:11 p.m.

7. Report of Final Action, if Any – Todd Amspoker serving as the City Attorney stated the Council met in closed session related to the City Attorney and there was no reportable Action at this time. Ms. Patel remains the City Attorney and direction has been provided to staff.

8. Council Items and Comments – There were no Council comments.

9. Adjournment – Time: 9:12 p.m.

ACTION: Motion was made by Mayor Pro Tem Davis and seconded by Council Member Evans to adjourn. Roll call found all in favor; passed and so ordered.

The above agenda was posted at the Tracy City Hall on August 4, 2023. The above are action minutes. A recording is available at the office of the City Clerk.

_____
Mayor

ATTEST:

_____
City Clerk

August 15, 2023

Agenda Item 1.B

RECOMMENDATION

The Tracy Homelessness Advisory Committee recommends that the City Council adopt a Resolution approving a two-year general services agreement with SC Commercial, LLC dba SC Fuels, in a not to exceed amount of $500,000, for on-demand mobile fueling of diesel fuel at 370 W. Arbor Avenue, Tracy, CA 95304.

EXECUTIVE SUMMARY

The City of Tracy purchases fuel to operate generators located at 370 W. Arbor Avenue, Tracy, CA 95304 to provide power to the Temporary Emergency Housing Facility site. This agenda item is to award the diesel fuel supply services to SC Commercial, LLC dba SC Fuels in the amount not to exceed $500,000.

The Tracy Homelessness Advisory Committee (THAC) heard this item on June 15, 2023 and recommended that the City Council adopt the proposed Resolution.

BACKGROUND AND LEGISLATIVE HISTORY

The City requires on-demand mobile fueling of diesel fuel for four generators with an estimated capacity of 400 gallons each with two generators active at all items. There are also an additional two backup generators for the daily operation of the Temporary Emergency Housing Facility. Fuel is delivered to 370 W. Arbor Avenue, Tracy, CA 95304.

On February 23, 2023, staff issued a Notice of Request for Bid (Request for Bid) for on-demand mobile services of diesel fuel to provide the City with a fuel supplier at 370 W. Arbor Avenue, Tracy, CA 95304. The Request For Bids proposed an agreement with an initial term of two years, with an option to extend in a not to exceed cumulative agreement term of six years. The bid shall cover the City's requirements for diesel fuel for the period of April 1, 2023 through April 1, 2025. If the City determines that the Bidder has satisfactorily performed all requirements in this agreement, and per recommendation from the Director of Operations & Utilities to the City Manager, the City Manager may extend the Agreement for an additional four (4) years in any combination not to exceed a total agreement length of six (6) years. If all extensions are applied, the ending date of the Agreement will be March 30, 2029.

On March 10, 2023, the City received three bid packages from three fuel suppliers. Staff reviewed and analyzed all the bids received based on the Oil Price Information Service (OPIS) of Stockton Daily Rack Average and their Mark-up for each fuel type requested. OPIS is a Dow Jones Company that provides pricing transparency to buy and sell oil and energy commodities with confidence. The selected fuel supplier was evaluated based on the lowest Mark-up.

There are three fuel grades the City can purchase: Dyed CARB Ultra Low Sulfur Diesel, CARB Ultra Low Sulfur Diesel, and Renewable Diesel (HDRD) provided by the three fuel suppliers. Additionally, the Mark-up price and Total Price Per Gallon is considered in this comparison to determine the lowest fuel supplier. Three bids were received, each with their own Mark-up over the OPIS indicator, as follows:

- Valley Pacific Petroleum Inc. 20¢ above OPIS ($3.451 + .20 = $3.651) per gallon
- Stockton Petroleum Co. Inc. $1.59 above OPIS ($3.4556 + $1.59 = $5.0456) per gallon
- SC Commercial, LLC dba SC Fuels $2.00 above OPIS ($3.4515 + $2.00 = $5.4515) per gallon

As a result, the lowest responsive bid was submitted by Valley Pacific Petroleum Services, Inc. based on meeting the bid requirements, and Mark-up over daily rack average, and current City fuel consumption. Valley Pacific Petroleum Services, Inc. was selected as the lowest bid; however, Valley Pacific Petroleum Services, Inc. rescinded their bid offer. Therefore, Stockton Petroleum Company, Inc. was then offered the service agreement as the second lowest responsive bid. On June 27, 2023, Stockton Petroleum Company, Inc. rescinded their bid offer. As a result, SC Commercial, LLC dba SC Fuels was then offered the service agreement as the third lowest responsive bid; which they accepted as the third lowest bid.

Upon approval, the initial term of the Agreement will be from July 1, 2023, through July 1, 2025, and not to exceed $500,000 for on-demand mobile fueling of diesel fuel at 370 W. Arbor Avenue, Tracy, CA 95304. The Request for Bid noticed that the City reserved the right to grant extensions to the initial term. Should staff recommend extensions be exercised by the City, staff will return to the City Council to get such authorization and requisite budget appropriation. The not to exceed amount is based on the average monthly fuel consumption cost times the OPIS per gallon plus the Mark-up. The table below reflects the monthly fuel consumption at the Temporary Emergency Housing Facility site.

370 W. Arbor Avenue, Tracy, CA 95304 Fuel Consumption						
	Jan-23	Feb-23	Mar-23	Apr-23	May-23	**Monthly Average**
Gallons consumed	2,006.20	2,817.10	3,992.80	3,087.10	3,821.20	**3,144.88**

Tracking began 1/16/2023

Therefore, SC Commercial, LLC dba SC Fuels OPIS plus Mark-up per gallon results in an average annual fuel consumption cost in the amount of $250,000, resulting in a not to exceed amount of $500,000 for the two-year general services agreement term for this contract.

STRATEGIC PLAN

This agenda item supports the Public Safety Strategic Priority, *Implement the adopted Homelessness Strategic Plan.*

FISCAL IMPACT

The City secured a one-time grant in the amount of $1.2 Million from Health Plan of San Joaquin for the costs of interim shelter site construction and operating expenses related to executing Phase 3 and Phase 4 of the shelter project. A portion of the grant funds will be used to cover the cost of the contract with Stockton Petroleum. In addition, the City has committed funding from ARPA for the operations costs at the Temporary Emergency Housing Facility. The remaining cost of the contract with SC Commercial, LLC dba SC Fuels will be covered by the

allocation of ARPA funds. Per City Council's approval of the $1.2 Million dollar grant, below is a breakdown of the funding allocation.

Revenue Sources	**Health Plan of San Joaquin**
Modulars (phase 3 first year)	$192,931
Custom Containers (phase 4)	$716,320
Operating (Supplies, Fuel) (phase 3 and 4 first year)	$290,749
Total Committed	**$1,200,000**

CEQA DETERMINATION

Government Code section 8698.4 exempts the application of the California Environmental Quality Act (CEQA) to various actions taken by public agencies to implement the construction of a homeless shelter in response to a declared shelter crisis. In addition, the interim solutions taken thus far are in furtherance of and related to the permanent solution that will be implemented, referred to as the Temporary Emergency Housing Project on Arbor Avenue (CIP 71112). A Notice of Exemption was issued on October 16, 2020, for the Temporary Emergency Housing site at 500 Arbor Avenue in accordance with Government Code sections 65660-65662 for Low Barrier Navigation Centers and Section 15269(c) of the CEQA Guidelines (14 Cal. Code Regs. 15269(c)) for (Emergency Projects.) No environmental impacts beyond those already analyzed for the CIP exist; accordingly, no further CEQA analysis is needed.

ACTION REQUESTED OF THE CITY COUNCIL

The Tracy Homelessness Advisory Committee recommends that the City Council adopt a Resolution approving a two-year general services agreement with SC Commercial, LLC dba SC Fuels, in a not to exceed amount of $500,000, for on-demand mobile fueling of diesel fuel at 370 W. Arbor Avenue, Tracy, CA 95304.

Prepared by: Virginia Carney, Homeless Services Manager

Reviewed by: Adriana Castaneda, Director of Mobility and Housing
Sara Cowell, Director of Finance
Karin Schnaider, Assistant City Manager
Bijal Patel, City Attorney

Approved by: Midori Lichtwardt, Interim City Manager

ATTACHMENTS

Attachment A – General Services Agreement with SC Commercial, LLC dba SC Fuels

DocuSign Envelope ID: 9666EECC-7F12-421A-A435-C40AA6D07EC6

Attachment A

CITY OF TRACY
GENERAL SERVICES AGREEMENT WITH
SC COMMERCIAL, LLC, DBA SC FUELS

This General Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and SC Commercial, LLC, DBA SC Fuels (**Contractor**). City and Contractor are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Contractor to provide diesel fuel at 370 W. Arbor Road, Tracy, CA 95376 for four generators with an estimated capacity of 300 gallons each with two active at all times and an additional two backups and spare fuel tank. This location is considered an on-demand mobile fueling operation; and

B. After negotiations between the City and Contractor, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

C. This Agreement is being executed pursuant to Resolution No. 2022-121 approved by Tracy City Council on August 16, 2022.

Now therefore, the Parties mutually agree as follows:

1. <u>Scope of Work</u>. Contractor shall perform the services described in Exhibit "A" attached and incorporated by reference. The services shall be performed by, or under the direct supervision of, Contractor's Authorized Representative: Jake Loveland, Business Development Manager**.** Contractor shall not replace its Authorized Representative, nor shall Contractor use or replace any subcontractors or subconsultants City's prior written consent. A failure to obtain the City's prior written consent for any change or replacement in personnel or subcontractor may result in the termination of this Agreement.

2. <u>Time of Performance</u>. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Contractor shall begin performance, and shall complete all required services no later than the dates set forth in Exhibit "A." Any services for which times for performance are not specified in this Agreement shall be started and completed by Contractor in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Contractor. Contractor shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The term of this Agreement shall begin on July 1, 2023, and end on July 1, 2025. If the City determines that the Contractor has satisfactorily performed all requirements in this agreement, and per recommendation from the Director of Operations & Utilities to the City Manager, the City Manager may extend the Agreement for an additional four (4) years in any combination not to exceed a total agreement length of six (6) years. If all extensions are applied, the ending date of the Agreement will be June 30, 2029.

3. <u>Compensation</u>. City shall pay Contractor on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Contractor's total compensation under this Agreement shall not exceed $500,000. Contractor's billing rates shall cover all costs and expenses for Contractor's performance of this Agreement. No work shall be performed by Contractor in excess of the total compensation amount provided in this section without the City's prior written approval.

3.2 Invoices. Contractor shall submit monthly invoices to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1. Contractor's failure to submit invoices in accordance with these requirements may result in the City rejecting said invoices and thereby delaying payment to Contractor.

3.3 Payment. Within 30 days after the City's receipt of invoice, City shall make payment to the Contractor based upon the services described on the invoice and approved by the City.

4. <u>Indemnification</u>. Contractor shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Contractor's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees and volunteers; "Contractor" means the Contractor, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

The provisions of this section survive completion of the services or the termination of this Agreement, and are not limited by the provisions of Section 5 relating to insurance.

5. <u>Insurance</u>. Contractor shall, throughout the duration of this Agreement, maintain insurance to cover Contractor, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Professional Liability "claims made" coverage shall be maintained to cover damages that may be the result of errors, omissions, or negligent acts of Contractor in an amount not less than $1,000,000 per claim.

5.5 Pollution Liability Insurance

5.5.1 Pollution Coverage shall be provided for liability arising out of sudden, accidental and gradual pollution and remediation. The policy limit shall be no less than two million dollars ($2,000,000) per claim. All activities contemplated in this agreement shall be specifically scheduled on the policy as "covered operations." The policy will be applicable to the work being performed and provide coverage for the delivery of diesel fuel.

5.5.2 The policy shall be endorsed to include the City, its officers, employees, and agents as insured.

5.6 Endorsements. Contractor shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.6.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.6.2 For any claims related to this Agreement, Contractor's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

5.7 Notice of Cancellation. Contractor shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Contractor shall immediately obtain a replacement policy.

5.8 Authorized Insurers. All insurance companies providing coverage to Contractor shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.9 Insurance Certificate. Contractor shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City, before the City signs this Agreement.

5.10 Substitute Certificates. Contractor shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.11 Contractor's Obligation. Maintenance of insurance by the Contractor as specified in this Agreement shall in no way be interpreted as relieving the Contractor of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Contractor may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. Termination. The City may terminate this Agreement by giving ten days' written notice to Contractor. Upon termination, Contractor shall give the City all original documents, including preliminary drafts and supporting documents, prepared by Contractor for this Agreement. The City shall pay Contractor for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. Dispute Resolution. If any dispute arises between the City and Contractor that cannot be settled after engaging in good faith negotiations, City and Contractor agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8 Labor Code Compliance. Contractor is aware of the requirements of Chapter 1 of Part 7 of Division 2 of the California Labor Code and applicable regulations which require the payment of prevailing wage rates (§1771, §1774, and §1775); employment of apprentices (§1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. The services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, Contractor agrees to fully comply with such Prevailing Wage Laws.

8.1 Rates. These prevailing wage rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Each Contractor and Subcontractor must pay no less than the specified rates to all workers employed to perform the services described herein. The schedule of per diem wages is based upon a working day of eight hours. The rate for holiday and overtime work must be at least time and one-half. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the City harmless from any and all claims made by the State of California, the Department of Industrial Relations, any subcontractor, any worker, or any other third party.

8.2 Registration with DIR. Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform the services consistent with Labor Code section 1725.5.

8.3 Monitoring. This Agreement will be subject to compliance monitoring and enforcement by the DIR, under Labor Code section 1771.4.

9. Ownership of Work. All original documents prepared by Contractor for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Contractor's services, or upon demand from the City. No such documents shall be revealed or made available by Contractor to any third party without the City's prior written consent.

10. Independent Contractor Status. Contractor is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Contractor is not City's employee and Contractor shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Contractor is free to work for other entities while under contract with the City. Contractor, and its agents or employees, are not entitled to City benefits.

11. Conflicts of Interest. Contractor (including its employees, agents, and subcontractors) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Contractor maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Contractor's conflicting interest.

12. Rebates, Kickbacks, or Other Unlawful Consideration. Contractor warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

13. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

Operations and Utilities Department
Attn: James Jackson
520 N. Tracy Blvd
Tracy, CA 95376

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Contractor:

SC Fuels
Attn: Shawn Shears
237 E. Whitmore Avenue
Modesto, CA 95358

14. Miscellaneous.

14.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Contractor's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

14.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

14.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

14.4 Assignment and Delegation. Contractor may not assign, transfer or delegate this Agreement or any portion of it without the City's written consent. Any attempt to do so will be void. City's consent to one assignment shall not be deemed to be a consent to any subsequent assignment.

14.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

14.6 Compliance with the Law. Contractor shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

14.6.1 Hazardous Materials. Contractor is responsible for all costs of clean up and/or removal of hazardous and toxic substances spilled as a result of performing their services.

14.6.2 Non-discrimination. Contractor represents and warrants that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Contractor shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

14.7 Business Entity Status. Contractor is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Contractor. By entering into this Agreement, Contractor represents that it is not a suspended corporation. If Contractor is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

14.8 Business License. Before the City signs this Agreement, Contractor shall obtain a City of Tracy Business License. Contractor shall maintain an active City of Tracy Business License during the term of this Agreement.

14.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

14.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

14.11. **Severability.** If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

14.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's proposal (if any), the Exhibits shall control.

14.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations or agreements. All exhibits attached hereto are incorporated by reference herein.

15. Signatures. The individuals executing this Agreement on behalf of Contractor represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of Contractor.

[SIGNATURES ON FOLLOWING PAGE]

DocuSign Envelope ID: 9666EECC-7F12-421A-A435-C40AA6D07EC6

The Parties agree to the full performance of the terms set forth here.

City of Tracy

_____
By: Nancy D. Young
Title: Mayor
Date: _____

Attest:

_____
Adrianne Richardson, City Clerk

Approved as to form:

_____
Bijal M. Patel, City Attorney

SC Commercial, LLC, DBA SC Fuels

DocuSigned by:
Robert W. Bollar
32E9022E64EE4B0...
By: Robert W. Bollar
Title: Corporate Secretary and Vice President
Date: 7/14/2023

Federal Employer Tax ID No. 83-0751205

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A – SCOPE OF SERVICES

FOR

DIESEL FUEL SUPPLIER FOR TEMPORARY EMERGENCY SHELTER

1. OVERVIEW:

The Contractor shall have a diesel fuel supply Agreement which shall assure the continuous supply of diesel fuel during the Agreement period. Contractor may be required to furnish information supporting their ability to supply, without major interruption, the products covered in this Scope of Services.

2. DELIVERY REQUIREMENTS:

2.1. Product shall be delivered as ordered by Director of Operations & Utilities or their designee.

2.2. The City reserves the right to add or remove delivery locations as required by its operations. Contractor shall not charge a zone price differential for delivery.

2.3. If an order is placed for a truck and trailer quantity to be delivered and the Contractor elects to make that delivery in a vehicle of lesser capacity, the Contractor shall not charge more than the truck and trailer prices.

2.4. All deliveries shall be made in a metered truck or temperature correction adjustments to 60º F shall be made.

2.5. All deliveries shall be made within 24 - 36 hours after order has been placed. Orders shall be placed by authorized e-mail or phone. If a phone order is placed, a follow-up email will be sent to Contractors Authorized Representative.

3. DELIVERY LOCATION & TIMES:

3.1. Location:

City of Tracy Temporary Emergency Shelter
370 W. Arbor Rd
Tracy, CA 95376

3.2. Times:
Fuel shall be delivered to the site Monday through Friday, between 7:00 AM to 4:00 PM of each week. The City reserves the right to place additional orders for fuel delivery at any time.

The City may require periodic fuel delivery at other locations that are to be determined as necessary.

4. FUEL:

4.1. Quantity:
There shall be no guarantee as to actual quantities required during the period of the Agreement. The City's annual diesel fuel usage is estimated to be 48,000 gallons.

4.2. Quality:
Diesel fuel shall be Dyed CARB Ultra Low Sulfur Diesel, if unavailable, CARB Ultra Low Sulfur Diesel No. 2, and then Renewable (R99) CARB Ultra Low Sulfur Diesel No. 2 is acceptable and shall comply with all CARB requirements. It shall meet or exceed the requirements of the latest edition of ASTM D975 and shall meet the sulfur content and the aromatic content in California Code of Regulation, Title 13, section 2281 and section 2282. Renewable diesel should be treated the same as conventional CARB diesel for all purposes, including storage in underground storage tanks (USTs).

Contractor shall be liable for any and all damages to facilities (including tank, fuel lines, pumps, and dispensers), vehicles, and fuel in storage, which may occur as the result of contaminated fuel or fuel not in compliance with specification.

4.3. Fuel Spills
Contractor shall be responsible for any damage or violations of law caused by any fuel spill during the delivery process. Drivers are to report any spill and the Contractor shall pay City for any costs incurred in the cleanup of any spill.

5. PRICE VERIFICATION:

During the Agreement period, the Contractor will be required to provide price verification. This may be supplied in the form of rack prices in effect at time of delivery and/or copy of Contractor's Rack Supplier invoices that show prices paid for product delivered. The Contractor agrees to make available at their office, at reasonable times during the period of the Agreement, any of the above records for inspection or audit by an authorized representative of the City.

6. SUBCONTRACTORS:

Contractor shall not use subcontractors without the prior written approval of the City of Tracy. Any contract resulting from this bid and any amendments or supplements thereto shall not be assignable by the Contractor either voluntarily or by operation of law without the written approval of the City and shall not become an asset in any bankruptcy receivership or guardianship proceeding. Such contract shall extend to and be binding upon and insure to the benefits of the heirs, executors, administrators, successors, and assign of the respective parties hereto.

7. PERMITS:

Contractor is required to obtain all applicable Federal, State, and local permits include but not limited to an On-Demand Mobile Fueling Operation.

EXHIBIT B - COMPENSATION

SCHEDULE OF PRICES
Based on Oil Price Information Service (OPIS) Stockton Daily Rack Average
Bid evaluated on lowest markup

Dyed CARB Ultra Low Sulfur Diesel

Price Per Gallon over OPIS Stockton Daily Rack Rate
$2.00

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

APPROVING A TWO-YEAR GENERAL SERVICE AGREEMENT WITH SC COMMERCIAL, LLC DBA SC FUELS, IN A NOT TO EXCEED AMOUNT OF $500,000, FOR ON-DEMAND MOBILE FUELING OF DIESEL FUEL AT 370 W. ARBOR AVENUE, TRACY, CA 95304

WHEREAS, the City of Tracy purchases fuel to operate generators located at 370 W. Arbor Avenue, Tracy, CA 95304 to provide power to the Temporary Emergency Housing Facility site; and

WHEREAS, the City requires on-demand mobile fueling of diesel fuel for four generators with an estimated capacity of 400 gallons each with two generators active at all items. There are also an additional two backup generators for the daily operation of the Temporary Emergency Housing Facility; and

WHEREAS, the City requires a vendor to provide fuel to the active generators for the daily operations of the Temporary Emergency Housing Facility; and

WHEREAS, the City issued a Notice Inviting Bids to perform such services and received three bid packages from three fuel suppliers. Staff reviewed and analyzed all the bids received based on the Oil Price Information Service (OPIS) of Stockton Daily Rack Average and their Mark-up for each fuel type requested. OPIS is a Dow Jones Company that provides pricing transparency to buy and sell oil and energy commodities with confidence. The selected fuel supplier was evaluated based on the lowest Mark-up. Three bids were received, each with their own Mark-up over the OPIS indicator, as follows:

- Valley Pacific Petroleum Inc. 20¢ above OPIS ($3.451 + .20 = $3.651) per gallon
- Stockton Petroleum Co. Inc. $1.59 above OPIS ($3.4556 + $1.59 = $5.0456) per gallon
- SC Commercial, LLC dba SC Fuels $2.00 above OPIS ($3.4515 + $2.00 = $5.4515) per gallon

; and

WHEREAS, the Notice Inviting Bids proposed an agreement with an initial term of two years, with an option to extend in a not to exceed cumulative agreement term of six years; and

WHEREAS, the lowest responsive bid was submitted by Valley Pacific Petroleum Services, Inc. based on meeting the bid requirements, and Mark-up over daily rack average, and current City fuel consumption. Valley Pacific Petroleum Services, Inc. was selected as the lowest bid; however, Valley Pacific Petroleum Services, Inc. rescinded their bid offer. Therefore, Stockton Petroleum Company, Inc. was then offered the service agreement as the second lowest responsive bid; and

WHEREAS, on June 27, 2023, Stockton Petroleum Company, Inc. rescinded their bid offer and as a result, SC Commercial, LLC dba SC Fuels was then offered the service agreement as the third lowest responsive bid; which they accepted as the third lowest bid; and

WHEREAS, the not to exceed amount is based on the average monthly fuel consumption cost times the OPIS per gallon plus the Mark-up. The table below reflects the monthly fuel consumption at the Temporary Emergency Housing Facility site;

370 W. Arbor Avenue, Tracy, CA 95304 Fuel Consumption						
	Jan-23	Feb-23	Mar-23	Apr-23	May-23	**Monthly Average**
Gallons consumed	2,006.20	2,817.10	3,992.80	3,087.10	3,821.20	**3,144.88**

Tracking began 1/16/2023

; and

WHEREAS, the City has reached an agreement with SC Commercial, LLC dba SC Fuels to perform such services, for an initial term of two (2) years, not to exceed amount of $500,000, and should staff recommend extensions of the agreement be exercised by the City, staff will return to the City Council to get such authorization and requisite budget appropriation; and

WHEREAS, SC Commercial, LLC dba SC Fuels OPIS plus Mark-up per gallon results in an average annual fuel consumption cost in the amount of $250,000, resulting in a not to exceed amount of $500,000 for the two-year general services agreement term for this contract; and

WHEREAS, The Tracy Homelessness Advisory Committee heard this item on June 15, 2023 and recommended that the City Council adopt the proposed Resolution; now, therefore, be it

RESOLVED: That the City Council hereby approves a General Services Agreement, in a form to be approved by the City Attorney, with SC Commercial, LLC dba SC Fuels to provide a two-year general services agreement with SC Commercial, LLC dba SC Fuels, in a not to exceed amount of $500,000, for on-demand mobile fueling of diesel fuel at 370 W. Arbor Avenue, Tracy, CA 95304; and be it

FURTHER RESOLVED: That should staff recommend extensions of the agreement be exercised by the City, staff will return to the City Council to get such authorization and requisite budget appropriation.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.C

RECOMMENDATION

Staff recommends that the City Council waive the second reading and adopt an Ordinance revising Section 6.04.310 of the Tracy Municipal Code to correct typographical errors regarding business tax categories.

EXECUTIVE SUMMARY

On November 8, 2022, the residents of the City of Tracy approved a ballot initiative to repeal and replace Chapter 6.04 (Business Taxes) of the Tracy Municipal Code and adopt a "gross receipt" based business tax structure. As part of the ballot initiative, City Council adopted an ordinance outlining the new Business Tax structure. After the voters approved Measure B, City staff discovered typographical errors in the measure's language that leave the categorizations described above ambiguous. The City recommends revisions to Section 6.04.310 to correct these errors and to give clear effect to what the voters intended when they passed Measure B.

BACKGROUND AND LEGISLATIVE HISTORY

Chapter 6.04 of the Tracy Municipal Code contains the City of Tracy's (City) Business Taxes structure (Business Taxes Structure), which applies to all persons engaged in the business activities in the City. The Business Tax Structure has not been critically re-examined in decades, which precipitated the City initiating a ballot initiative to the residents of Tracy to revamp the Business Taxes Structure.

The City's voters approved Measure B in the November 2022 general election. The City Council declared the results of the November 2022 general election on December 13, 2022, and Measure B therefore went into effect ten days later (Elec. Code, § 9217).

Per the impartial analysis submitted by the City Attorney: The maximum tax rates proposed by Measure B are:

- $50 base tax for the first $500,000 in gross receipts;
- Gross Receipts over $500,000 will have the following tax rates applied
- 0.1% of gross receipts for General Business;
- 0.15% of gross receipts for Manufacturing/Warehousing/Wholesaling;
- 0.2% of gross receipts for Contractor/Services; and
- 0.3% of gross receipts for Professional and Rental.

ANALYSIS

After the voters approved Measure B, City staff discovered typographical errors in the measure's language that leave the categorizations described above ambiguous. The City wishes to correct these errors in order to give clear effect to what the voters intended when they passed Measure B.

- The first correction includes removing "wholesale" to Category 1 of 6.04.310 (Determination of tax due based on gross receipts plus annual registration tax), subsection (d). As evident, "wholesaling" belongs in Category 2.

- The second correction is within the title of Category 2 of 6.04.310, subsection (d). The title of Category 2 has been amending to including “warehousing” in the title. As evident by all the marketing material and the City Attorney’s Impartial Analysis (Attachment B), the intention of the City has always been to include Manufacturing, Warehousing and Wholesaling in Category 2. Additionally, in this section the definitions of “warehousing” and “wholesaling” have been added.
- The third correction is in Category 3, 6.04.310, subsection (d), subsection (3), subsection (B), under the definition of “Service,” staff recommends, for clarifying purposes, to delete parts of definition that contradicts with Category 4 “Professional Service.”

The revisions provided above are declaratory of the voters’ expressed intent in passing Measure B in the November 2022 general election, as those revisions are consistent with what the City represented to voters about what this City-Council-proposed initiative would do. This Ordinance is not intended to, and does not, amend Measure B so as to change its scope and effect in any way the voters did not intend.

FISCAL IMPACT

The City currently collects approximately $900,000 annually in Business Taxes. It is estimated that the proposed revision to the Business Taxes structure will generate approximately $5M in annual tax review for the City’s General Fund. The Business Tax is renewed annually in July.

STRATEGIC PLAN

The agenda item supports Governance Strategic Goal 2: ensuring short- and long-term fiscal health.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council waive the second reading and adopt an Ordinance revising Section 6.04.310 of the Tracy Municipal Code to correct typographical errors regarding business tax categories.

Prepared by: Necy Lopez, Deputy City Clerk
Reviewed by: Brian MacDonald, Interim Assistant City Manager
Bijal M. Patel, City Attorney
Approved by: Midori Lichtwardt, Interim City Manager

Attachments: Ordinance to revising section 6.04.310 of the Tracy Municipal Code to correct typographical errors regarding business tax categories

ATTACHMENT A

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

ORDINANCE NO. _____

REVISING SECTION 6.04.310 OF THE TRACY MUNICIPAL CODE TO CORRECT TYPOGRAPHICAL ERRORS REGARDING BUSINESS TAX CATEGORIES

WHEREAS, on July 12, 2022, City Council passed a resolution to submit an initiative to the voters to amend Chapter 6 of the Tracy Municipal Code, which concerns the City's business tax; and

WHEREAS, the San Joaquin County elections official designated this initiative as Measure B; and

WHEREAS, Measure B applies four different tax rates to businesses within the City, according to four different categories of business operations; and

WHEREAS, whenever the City described Measure B to voters, including in staff reports, the City Attorney's Impartial Analysis, and other informational material, the City consistently represented that (i) wholesale businesses would be included in Measure B's Category 2, (ii) warehousing operations would also be included in Category 2, and (iii) general "Services" would be distinguished from "Professional" activities and taxed in different categories; and

WHEREAS, the City's voters approved Measure B in the November 2022 general election; and

WHEREAS, the City Council declared the results of the November 2022 general election on December 13, 2022, and Measure B therefore went into effect ten days later (Elec. Code, § 9217); and

WHEREAS, after the voters approved Measure B, City staff discovered typographical errors in the measure's language that leave the categorizations described above ambiguous; and

WHEREAS, the City Council wishes to correct these errors in order to give clear effect to what the voters intended when they passed Measure B.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF TRACY DOES ORDAIN AS FOLLOWS:

SECTION 1. Incorporation of Recitals/Findings. The City Council finds and determines the foregoing recitals are true and correct and are hereby incorporated herein as findings and determinations of the City.

SECTION 2. Revisions to Measure B. Section 6.04.310, subdivision (d) of the Tracy Municipal Code is revised to read as follows (with additions underlined, and deletions in ~~strikethrough~~):

(d) Categories of Businesses:

(1) CATEGORY 1: General retail, restaurants, hotels, and tour operators and any Business not otherwise classified (0.001 x Gross Receipts in excess of the Base Gross Receipts):

For example, if a Business has a Gross Receipt of $700,000 and is a Category 1 Business, the total amount of tax the Business would pay would be a $50 (for the first $500,000 [Base Gross Receipt]) + $200 ([$700,000 - $500,000] x .001) for a total of $250 in Business Tax.

(A) Any establishment or Business that conducts retail (the sale of goods to ultimate consumers, usually in small quantities), ~~or wholesale (the sale of goods in quantity, as to retailers or jobbers, for resale),~~ or restaurant (an establishment where meals, prepared food, and / or beverages are served to customers).

(B) "Tour operator" means a Business that provides tours in the City for Compensation.

(2) CATEGORY 2: Manufacturing, Warehousing and Wholesaling ~~Wholesale and Manufacturing~~ (0.0015 x Gross Receipt in excess of the Base Gross Receipts):

For example, if a Business has a Gross Receipt of $700,000 and is a Category 2 Business, the total amount of tax the Business would pay would be a $50 (for the first $500,000 [Base Gross Receipt]) + $300 ([$700,000 - $500,000] x .0015) for a total of $350 in Business Tax.

(A) "Manufacturing" includes every person conducting or carrying on a Business consisting of manufacturing, packing, or processing any goods, wares, merchandise, or commodities at a fixed place of Business within the City or conducting or carrying on a Business of cold storage or refrigeration.

(B) "Warehousing means every Business conducted solely for the purpose of maintaining or renting space for the storage of any kind of property.

(C) "Wholesaling" means every Business conducted solely for the purpose of selling goods, wares, or merchandise in wholesale lots for resale.

(3) CATEGORY 3: Contractors and Services (0.002 x Gross Receipt in excess of the Base Gross Receipt):

For example, if a Business has a Gross Receipt of $700,000 and is a Category 3 Business, the total amount of tax the Business would pay would

be a $50 (for the first $500,000 [Base Gross Receipt]) + $400 ([$700,000 - $500,000] x .002) for a total of $450 in Business Tax.

(A) Contractors: every person, firm, or corporation conducting, managing, or carrying on the Business of a contractor, subcontractor, or builder; or engaging in the construction or repair of any buildings; or engaged in any engineering, construction, operating, or advertising as such, or representing himself as such, and regularly employing help for building construction, sewer construction, plumbing construction or general construction.

(B) “Services” means any professional services, as that term is ordinarily and commonly used and understood, wherein individuals are engaged in the Business of offering ~~to the public professional or semiprofessional~~ services for compensation, and not specifically covered under any other part, chapter, or section of this chapter, and shall include those professions that may require a ~~government certification or~~ licensure, but not be limited to the services rendered by a person engaged in the practice or profession such as hairstylist, beautician or cosmetologist, aesthetician, or art instructor.

(4) CATEGORY 4: Professionals and Rental Units (Commercial and Residential) (0.003 x Gross Receipts in excess of the Base Gross Receipt):

For example, if a Business has a Gross Receipt of $700,000 and is a Category 4 Business, the total amount of tax the Business would pay would be a $50 (for the first $500,000 [Base Gross Receipt]) + $600 ([$700,000 - $500,000] x .003) for a total of $650 in Business Tax.

(A) “Professional services” means any professional services, as that term is ordinarily and commonly used and understood, wherein individuals are engaged in the Business of offering to the public professional or semiprofessional services for compensation, and not specifically covered under any other part, chapter or section of this chapter, and shall include those professions generally requiring governmental certification or a professional degree, but not be limited to the serves rendered by a person engaged in the practice or profession of law, medicine, surgery, dentistry, ophthalmologist, optometry, chiropractic, osteopathy, chiropody, dental technician, laboratory technician, physical therapist, mortician, undertaker, psychologist, psychotherapy, radiologist, speech therapist, veterinary, licensed financial planner, licensed investment counselor, real estate agent, real estate broker, stock / bond or security agent or broker, civil, mechanical, electrical, industrial, or other class of engineer, surveyor, geologist, appraiser, architect, accountant, real estate management, property management, income tax preparers, bookkeepers, income tax consultants, developer, or marriage counselors.

(B) Any Business, individual, or entity that leases, rents, or otherwise provides property to another individual or entity for compensation.

SECTION 3. Revisions Declaratory of Existing Law. The revisions provided in Section 2 above are declaratory of the voters' expressed intent by passing Measure B in the November 2022 general election, as those revisions are consistent with what the City represented to voters about what this City-Council-proposed initiative would do. This Ordinance is not intended to, and does not, amend Measure B so as to change its scope and effect in any way the voters did not intend.

SECTION 4. Repeal. Urgency Ordinance No. _____ is hereby repealed.

SECTION 5. CEQA Determination. The City Council finds that this Ordinance is categorically exempt from the California Environmental Quality Act (CEQA) in accordance with CEQA Guidelines Section 15061(b)(3), pertaining to actions that do not have the potential for causing a significant effect on the environment. This Ordinance is also not a "project" under CEQA Guidelines Section 15378, as it has no potential to result in either a direct or indirect physical change in the environment.

SECTION 6. Severability. If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the Chapter. The City Council hereby declares that it would have passed this Ordinance and each section, subsection, clause or phrase thereof irrespective of the fact that one or more other sections, subsections, clauses or phrases may be declared invalid or unconstitutional.

SECTION 7. Effective Date. This ordinance shall become effective upon the thirtieth (30th) day after final adoption.

SECTION 8. Publication. The City Clerk is directed to publish this ordinance in a manner required by law.

SECTION 9. Codification. This Ordinance shall be codified in the Tracy Municipal Code.

****

The foregoing Ordinance _____ was introduced at a regular meeting of the Tracy City Council on the 27th day of June 2023, and finally adopted on the _____ day of , 2023, by the following vote:

AYES: COUNCILI MEMBERS:S:
NOES:: COUNCIL MEMBERS:S:
ABSENT:: COUNCIL MEMBERS:S:
ABSTENTION:: COUNCIL MEMBERS:S:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

Date of Attestation: _____

August 15, 2023

Agenda Item 1.D

RECOMMENDATION

Staff recommends that the City Council adopt a Resolution appointing eight students and two adults to fill vacancies on the Youth Advisory Commission, based upon the selection panel's recommendations.

EXECUTIVE SUMMARY

The bylaws of the Youth Advisory Commission (YAC) set the minimum number of youth appointed Commissioners at eight, with a maximum limit at fourteen and a maximum of three adult Commissioners. Pursuant to the bylaws, a selection panel was established and made recommendations for eight youth and two adults to be appointed for a two-year term to fill the existing youth and adult vacancies on the Youth Advisory Commission.

BACKGROUND AND LEGISLATIVE HISTORY

The Youth Advisory Commission was established by City Council in 1998 with the purpose of providing youth with an opportunity to make a positive impact in their communities and advising the City Council, Parks and Community Services Commission and staff on matters relating to the welfare of youth in Tracy.

The YAC bylaws are crafted to include two youth representatives from each high school in the Tracy area (Kimball, Millennium, Tracy, West, Delta Charter, Duncan-Russell, Willow, and Stein) The bylaws require that adult commissioners reside within the jurisdiction of any school district within the City's Urban Management Plan Area and include one member of any school district and two members of the community who desire to work with youth. Currently the Commission has eight youth and three adult vacancies.

The bylaws of the Youth Advisory Commission call for a selection panel consisting of one member from the Parks and Community Services staff; one Adult Advisor and one Parks and Community Services Commissioner, to review new applications and make recommendations for appointment to the City Council. Recruitment for the youth and adult Commissioners began on January 6, 2023, with a deadline of April 28, 2023.

ANALYSIS

This year's interview panel consisted of Parks and Community Services Commissioner Steve Abercrombie, two Parks and Recreation staff; Recreation Services Supervisor Justin Geibig, and Recreation Coordinator DeAnna Pombo, as there was no Adult Advisor serving on the Commission.

The panel conducted interviews with nineteen students and two adults over two days, May 18, 2023, and May 22, 2023. Each of the candidates were rated on a scale of A through D and by school. The selection process is to have a diverse group of teens that reflect each of the Tracy area high schools, and who wish to have a voice in their community and be involved in the Commission. In accordance with Resolution No. 2011-120, the bylaws call for the selection panel to make their recommendation to the City Council to be considered annually in July or

throughout the year to fill vacant positions when they become available. The selection panel recommends the following eight youth for two-year terms, August 15, 2023 to July 31, 2025: Sarah Syed and Sam Tatari from Tracy High, Tanya Singh and Sashank Kala from West High, Alexis McAdams and Adam Su from Millennium High, Harleen Kaur from Kimball High, and Jasmyn Strickland from Tracy Charter High School. The panel also recommends the following two adults to serve two-year terms, August 15, 2023, to July 31, 2025, Beatrice Amezquita-Javier, and Navi Kahlon.

FISCAL IMPACT

This program is funded in the Parks and Recreation General Fund budget.

PUBLIC OUTREACH/INTEREST

The City recruits new Commissioners on an ongoing basis to fill any vacancies created by outgoing Commissioners. Marketing efforts include City website, social media, outreach to the various high schools, emails to the various community service clubs in the Tracy community, and any interest cards that have been completed with the City Clerk.

STRATEGIC PLAN

This agenda item is a routine operational item and does not relate to the Council's Strategic Plans.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council adopt a Resolution appointing eight students and two adults to fill vacancies on the Youth Advisory Commission, based upon the selection panel's recommendations.

Prepared By: Amanda Jensen, Recreation Program Coordinator

Reviewed By: Jolene Jauregui, Recreation Services Manager
Sara Cowell, Finance Director
Bijal Patel, City Attorney
Brian MacDonald, Interim Assistant City Manager

Approved By: Midori Lichtwardt, Interim City Manager

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

AUTHORIZING THE APPOINTMENT OF EIGHT YOUTH COMMISSIONERS AND TWO ADULT COMMISSIONERS TO THE YOUTH ADVISORY COMMISSION BASED UPON THE INTERVIEW AND SELECTION PANEL RECOMMENDATIONS

WHEREAS, the bylaws of the City of Tracy's Youth Advisory Commission (YAC) call for a minimum of eight to a maximum of fourteen youth Commissioners and a maximum of three adult Commissioners that may sit on the Commission, and

WHEREAS, the eligibility criteria and selection process of YAC Commissioners are established in accordance with Resolution No. 2011-120, and

WHEREAS, the City recruits new Commissioners on an ongoing basis to replace the outgoing Commissioners and existing vacancies, and has established a selection panel to recommend appointees to City Council; and

WHEREAS, the selection panel recommends the following eight youth for two-year terms, August 15, 2023, to July 31, 2025: Sarah Syed and Sam Tatari from Tracy High, Tanya Singh and Sashank Kala from West High, Alexis McAdams and Adam Su from Millennium High, Harleen Kaur from Kimball High, and Jasmyn Strickland from Tracy Charter High School: and the following two adults to serve two-year terms, August 15, 2023 to July 31, 2025, Beatrice Amezquita-Javier and Navi Kahlon; and now therefore, be it

RESOLVED, That the City Council of the City of Tracy hereby approves the appointment of the eight youth and two adult Commissioners to the Youth Advisory Commission recommended by the selection panel as identified above, and for all recommended terms.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was passed and adopted by the Tracy City Council on the 15th day of August 2023, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST: _____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.E

RECOMMENDATION

Staff recommends that the City Council adopt separate resolutions approving a Professional Services Agreement, for an initial term of one year, with an administrative option to extend annually, for an additional two years, to provide on-call engineering support services related to the water and wastewater treatment plants, with the following consultants and not to exceed amounts:

1) Carollo Engineers, Inc. for a not to exceed amount of $300,000 annually (total not to exceed amount of $900,000)

2) Black Water Consulting Engineers, Inc. for a not to exceed amount of $300,000 annually (total not to exceed amount of $900,000)

EXECUTIVE SUMMARY

Staff requests approval of Master Professional Service Agreements (MPSA) with two consultants: Carollo Engineers, Inc., and Black Water Consulting Engineers, Inc., to provide services on an as needed basis for various engineering studies and reports, design of small facility improvements related to maintenance, operations, and capital improvement projects associated with water and wastewater treatment facilities, water wells, pump stations, sewer lift stations, and water reservoirs managed by the Utilities Division of the Operations and Utilities Department. The agreements are for engineering services only and do not include any construction work. Each consultant was selected through a competitive process required under Tracy Municipal Code.

Each MPSA would have an initial term of one (1) year, with annual administrative options to extend the MPSA for an additional year (for a total contract length of 3 years). Each MPSA would have an annual Not-To-Exceed amount of $300,000 and a total Not-To-Exceed amount of $600,000. The funding for services to provide engineering support for small urgent design projects and necessary reports and documents will be funded by the ongoing operations and maintenance budgets appropriated by the City Council for Water and Wastewater. Each annual extension, if any, would be contingent upon the City Council's appropriation of sufficient funds. Staff is recommending that City Council adopt a resolution approving Master Professional Service Agreements with the following consultants: (1) Carollo Engineers, Inc., and (2) Black Water Consulting Engineers, Inc.

BACKGROUND AND LEGISLATIVE HISTORY

1. Background

   Due to the specialized and technical nature of the work, professional services are used to complete small urgent projects, design, and prepare other necessary reports and documents. Significant time delays occur during the standard request for proposal (RFP) process, and selection, award of Professional Services Agreement (PSA), and processing of agreements.

2. Project

The several small to midsize projects may be associated with maintenance, operations, and capital improvements of Water and Wastewater treatment plants, and associated remote facilities. Examples of such projects include upgrading the large chlorine contact chambers for improved functionality; improving as-builts and operational manuals for accessing systems; and ultraviolet upgrades. In addition, several studies, reports, and technical memoranda are needed to provide information requested by various regulatory agencies as it pertains to National Pollution Discharge Elimination System, Title 22 Drinking Water Standards, OSHA, and EPA. The scopes of the MPSAs are to provide engineering services only for these projects, not to perform construction work.

ANALYSIS

December 22, 2022 staff followed established procedures, in accordance with Tracy Municipal Code, Section 2.20.140, and conducted a Request For Proposals (RFP) to solicit experienced and qualified consultants to provide engineering services for various utility projects. On January 18, 2023, the City received three proposals, from Jacobs Engineering Group, Inc., Carollo Engineers, Inc., and Black Water Consulting Engineers, Inc. After carefully reviewing the proposals, all three consultants were determined to be qualified based upon their experience, education, certification, and personnel. Due to the contract changes and time restrictions, Jacobs Engineering Group, Inc. withdrew from the process and will not be utilized for on call services.

Pursuant to the MPSA procedures, staff will identify the services needed, develop the scope of work, request a proposal from one or more consultants, reach an agreement with the consultant on the identified scope of work and associated fees, then issue a Notice to Proceed, provided the dollar amounts do not exceed the provisions of the MPSA and availability of budgeted funds.

Tasks will be assigned to these consultants depending upon future project needs, availability of qualified staff, schedule of project completion, and availability of funding. The proposed MPSAs will be valid for a total period of three (3) years (with an initial one-year term and options held by the City to extend annually if the consultant meets certain performance standards). Each consultant's MPSA will not exceed $300,000 annually (with a total three year Not-To-Exceed amount of $600,000).

FISCAL IMPACT

Funding is available in the current and annual ongoing operations and maintenance budgets in both the Water Fund (511 and Wastewater Fund (521) for these on-call services in a not-to-exceed combined annual amount of $600,000 ($300,000 for each contract) annually over three (3) years, subject to City Council budget appropriations each year.

CEQA DETERMINATION

The proposed on-call agreements are for design and engineering work only and approval of these on-call agreements will not result in a physical change in the environment. Therefore, this action is not considered a project as defined by Section 21065 of the Public Resources Code. Each individual project will undergo separate evaluation, prior to relevant discretionary actions by the City, to comply adequately with California Environmental Quality Act.

STRATEGIC PLAN

This agenda item is consistent with the City's Quality of Life Strategy and meets the goals to ensure physical infrastructure and systems necessary for the health and safety of the Tracy community through improved water quality.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council of the City of Tracy adopt separate resolutions approving a Professional Services Agreement, for an initial term of one year, with an administrative option to extend annually, for an additional two years, to provide on-call engineering support services related to the water and wastewater treatment plants, with the following consultants and not to exceed amounts:

1) Carollo Engineers, Inc. for a not to exceed amount of $300,000 annually (total not to exceed amount of $900,000);

2) Black Water Consulting Engineers, Inc. for a not to exceed amount of $300,000 annually (total not to exceed amount of $900,000)

Prepared by: Ilene Macintire, Senior Civil Engineer

Reviewed by: Stephanie Reyna-Hiestand, Assistant Director of Utilities
James Jackson, Director of Operations & Utilities
Sara Cowell, Director of Finance
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

Attachments: A – MPSA Black Water Consulting Engineers, Inc.
B – MPSA Carollo Engineers, Inc.

CITY OF TRACY
MASTER PROFESSIONAL SERVICES AGREEMENT WITH
Black Water Consulting Engineers, Inc. for On Call Engineering Services related to the Water Treatment Plant and Wastewater Treatment Plant

This Master Professional Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and Black Water Consulting Engineers, Inc., a California Corporation (**Consultant**). City and Consultant are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Consultant to perform engineering services; and

B. On December 22, 2022, the City issued a Request for Proposals (RFP) for the On Call Engineering Support Services related to Water and Wastewater Treatment Plant . On January 18, 2023, Consultant submitted its proposal for the Project to the City. City has determined that Consultant possesses the skills, experience and certification required to provide the services.

C. City desires to retain Consultant to carry out the Project and to provide the Services (as defined below). After negotiations between the City and Consultant, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement. Consultant will perform such agreed upon services, only upon the City's issuance of a Notice to Proceed for each task order under the Agreement.

D. This Agreement is being executed pursuant to the authority granted in Resolution No.2023-_____ approved by Tracy City Council on August 15, 2023.

Now therefore, the Parties mutually agree as follows:

1. **Scope of Work.** Upon request from the City of its Operations and Utilities Director through a written Notice to Proceed, Consultant shall provide engineering support services, which includes performing the services generally described in Exhibit "A" attached and incorporated by reference (**Services**). Consultant shall not perform any Services until the City issues a Notice to Proceed for such services. The Services shall be performed by, or under the direct supervision of, Consultant's Authorized Representative: Aja Verburg**.** Consultant shall not replace its Authorized Representative, nor shall Consultant replace any of the personnel listed in Exhibit "A," nor shall Consultant use or replace any subcontractor or subconsultant, without City's prior written consent. The City may terminate this Agreement if Consultant makes any such change or replacement in personnel or subcontractor/subconsultant without such prior written consent.

1.1 Non-Exclusive Agreement. The City reserves the right to contract with other consultants providing the same or similar scope of services described above during the term of this Agreement. The City further reserves the right to assign work, at its sole discretion, to consultants other than Consultant based on City's budget, experience, and skills of consultants based on the City's specific needs.

2. **Time of Performance.** Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Consultant shall begin performance and shall complete all required services no later than the dates set forth in each individual Notice to Proceed. Any services for which times for performance are not specified in each individual Notice to Proceed shall be started and completed by Consultant in a reasonably prompt and timely manner based upon the circumstances

and direction communicated by the City to the Consultant. Consultant shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The initial term of this Agreement shall begin on August 17, 2023 and end one (1) year later, unless terminated for any reason, including a lack of appropriated funds to compensate services provided under this Agreement, in accordance with Section 6. Any such termination of this Agreement due to failure of the City of Tracy Council to appropriate funds for payment for services under this Agreement shall not be a breach of the Agreement.

2.1.1 Option to Extend. This Agreement may be extended in the City sole and absolute discretion, on an annual basis, for an additional 2 years by the City Manager following a written determination that Consultant has satisfactorily met all the requirements of this Agreement and subject to adequate budgetary authority from the City, as shall be determined by the Finance Director.

3. <u>Compensation</u>. City shall pay Consultant on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Consultant's total compensation under this Agreement for the Services shall not exceed $300,000 annually (with a total not-to-exceed amount of $900,000). It is understood and agreed that Consultant may not receive compensation up to this amount, and Consultant's total compensation under this Agreement will depend on the scope of Services approved by the City through Notices to Proceed. Consultant's billing rates shall cover all costs and expenses for Consultant's performance of this Agreement. No work shall be performed by Consultant in excess of the total compensation amount provided in this section without the City's prior written approval.

3.2 Invoices. Consultant shall submit monthly invoice(s) to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1 If Consultant is providing services in response to a development application, separate invoice(s) must be issued for each application and each invoice shall contain the City's designated development application number.

3.2.2 Consultant's failure to submit invoice(s) in accordance with these requirements may result in the City rejecting said invoice(s) and thereby delaying payment to Consultant.

3.3 Payment. Within 30 days after the City's receipt of invoice(s), City shall make payment to the Consultant based upon the services described on the invoice(s) and approved by the City.

3.4 The acceptance by Consultant of the final payment made under this Agreement shall constitute a release of City from all claims and liabilities for compensation to Consultant for anything completed, finished or relating to Consultant's services. Consultant agrees that payment by City shall not constitute nor be deemed a release of the responsibility and liability of Consultant or its employees, subcontractors, agents and subconsultants for the accuracy and competency of the information provided and/or services performed hereunder, nor shall such payment be deemed to be an assumption of responsibility or liability by City for any defect or error in the services performed by Consultant, its employees, subcontractors, agents and subconsultants.

3.5 Consultant agrees to maintain books, accounts, payroll records and other information relating to the performance of Consultant's obligations under the Agreement, which shall adequately and correctly reflect the expenses incurred by the Consultant in the performance of Consultant's work under the Agreement. Such books and records shall be open to inspection and audit by the City during regular business hours for three years after expiration or termination of this Agreement.

4. <u>Indemnification</u>. Consultant shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any

claims arising out of Consultant's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence, or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees, and volunteers; "Consultant" means the Consultant, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

(The duty of a "design professional" to indemnify and defend the City is limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the design professional, under Civ. Code § 2782.8.)

The provisions of this section survive completion of the services or the termination of this Agreement and are not limited by the provisions of Section 5 relating to insurance.

5. <u>Insurance</u>. Consultant shall, throughout the duration of this Agreement, maintain insurance to cover Consultant, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Professional Liability "claims made" coverage shall be maintained to cover damages that may be the result of errors, omissions, or negligent acts of Consultant in an amount not less than $1,000,000 per claim.

5.5 Endorsements. Consultant shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Consultant's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Consultant shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Consultant shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Consultant shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Consultant shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City, before the City signs this Agreement.

5.9 Substitute Certificates. Consultant shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Consultant's Obligation. Maintenance of insurance by the Consultant as specified in this Agreement shall in no way be interpreted as relieving the Consultant of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Consultant may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. Termination. The City may terminate this Agreement in its sole an absolute discretion by giving ten days' written notice to Consultant. Within five (5) days of such a termination, Consultant shall give the City all original documents relating to the Services in Consultant's possession or control, including, without limitation, contract documents, preliminary drafts, supporting documents, and any other documents prepared by Consultant pursuant to this Agreement. The City shall pay Consultant for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. Dispute Resolution. If any dispute arises between the City and Consultant that cannot be settled after engaging in good faith negotiations, City and Consultant agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person to serve as the mediator, shall be commenced within thirty (30) days of selection of a mediator and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8. Ownership of Work. All original documents prepared by Consultant for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Consultant's Services under this Agreement, or upon demand from the City. No such documents shall be revealed or made available by Consultant to any third party without the City's prior written consent.

9. Independent Contractor Status. Consultant is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Consultant is not City's employee and Consultant shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Consultant is free to work for other entities while under contract with the City. Consultant, and its agents or employees, are not entitled to City benefits. Consultant shall be solely responsible for, and shall save the City harmless from, all matters relating to the payment of Consultant's employees, agents, subcontractors and subconsultants, including compliance with social security requirements, federal and State income tax withholding and all other regulations governing employer-employee relations.

9.1 **Non-Exclusive Professional Services Agreement**. The City reserves the right to contract with other firms and/or consultants during the term of this Agreement to provide the City the same or similar services described in Exhibit A. Nothing contained in this Agreement guarantees Consultant a certain amount of work, and the City may, in its sole and absolute discretion, allocate and/or delegate work relating to the Project to other consultants.

10. Conflicts of Interest. Consultant (including its employees, agents, and subconsultants) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Consultant maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Consultant's conflicting interest.

11. Rebates, Kickbacks, or Other Unlawful Consideration. Consultant warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For any breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price the value of the rebate, kickback, or other unlawful consideration; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

12. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

Operations and Utilities Director
520 S. Tracy Blvd.
Tracy, CA 95376

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Consultant:

Black Water Consulting Engineers, Inc.
Aja Verburg
602 Lyell Drive
Modesto, CA 95356

13. Miscellaneous.

13.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Consultant's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

13.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

13.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement. No waiver shall be effective unless it is in writing and signed by the waiving party.

13.4 Assignment and Delegation. Consultant may not assign, transfer or delegate this Agreement or any portion of it without the City's prior written consent. Any attempt to do so will be void. City's consent to one assignment, transfer or delegation shall not be deemed to be a consent to any subsequent assignment, transfer or delegation.

13.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

13.6 Compliance with the Law. Consultant shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

13.6.1 Prevailing Wage Laws. Consultant is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates; employment of apprentices (§ 1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. If the services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, and if the total compensation is $1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. These prevailing rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Consultant shall defend, indemnify, and hold the City, its officials, officers, employees and agents, harmless from any and all claims, costs, penalties, or interests arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

13.6.2 Non-discrimination. Consultant represents and warrants that it is an equal opportunity employer and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Consultant shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

13.7 Business Entity Status. Consultant is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Consultant. By entering into this Agreement, Consultant represents that it is not a suspended entity and will, at all times during the term of this Agreement, remain in good standing in the state of California. If Consultant is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

13.8 Business License. Before the City signs this Agreement, Consultant shall obtain a City of Tracy Business License. Consultant shall maintain an active City of Tracy Business License during the term of this Agreement.

13.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

13.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

13.11 Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

13.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Consultant's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Consultant's proposal (if any), the Exhibits shall control.

13.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations or agreements. All exhibits attached hereto are incorporated by reference herein.

13.14 Counterparts. City and Consultant agree that this Agreement may be executed in two or more counterparts, each of which shall be deemed an original.

13.15 Expenses for Enforcement. Consultant and City agree that the prevailing party's reasonable costs, attorneys' fees and expenses, including investigation fees and expert witness fees, shall be paid by the non-prevailing party in any dispute involving the terms and conditions of this Agreement.

14. Signatures. The individuals executing this Agreement on behalf of Consultant represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of Consultant.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

By: Nancy D. Young
Title: Mayor
Date: _____

Attest:

Adrianne Richardson, City Clerk

Approved as to form:

Bijal M. Patel, City Attorney

Consultant
Black Water Consulting Engineers, Inc., a California Corporation

By: Aja Verburg
Title: Vice President
Date: June 29, 2023

Federal Employer Tax ID No. 46-1504431

By: Jeff Black
Title: Secretary
Date: June 29, 2023

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

The City's primary objective for this Agreement is to obtain professional support for assisting the Utilities Division for engineering support services that includes but is not limited to performing design and preparing improvement plans, specifications, estimates for preparation of bid documents and providing support during construction for various improvement projects.

These projects will relate to maintenance of existing equipment, reviewing existing operational elements, and studying alternatives for improvements to operations as needed at the Wastewater Treatment Plant and/or John Jones Water Treatment Plant.

The on-call needs may include conducting studies and preparing reports for various elements as necessary to satisfy the regulatory framework including reaching out to regional boards, permitting, and other documentation.

City staff will work with the Consultant to develop the detailed scope specific to the project or task needs. This proposed cost and scope will be negotiated before it is finalized. After the agreement of scope and cost between the Consultant and the City, the notice to proceed will be issued to the Consultant.

Key Personnel:

- Aja Verburg, P.E.
- Alison K. Furuya, P.E.
- Jeff M. Black, P.E.
- Edgar Torres, P.E.
- Bao Cha, E.I.T.
- Patrick J. Scott, E.I.T.
- Ulises Yepez
- Miguel Gonzalez

EXHIBIT B – Compensation

Compensation under this agreement shall not exceed $300,000 per year. Rates below will remain the same during the full term of the contract.

ENGINEERING:	40-150431
PRINCIPAL	$250.00
PROJECT MANAGER	$228.00
ASSOCIATE ENGINEER	$198.00
ASSISTANT ENGINEER	$160.00
ENGINEER TECHNICIAN	$150.00
TECHNICAL STAFF:	
SENIOR CAD TECHNICIAN	$155.00
CAD TECHNICIAN	$135.00
FIELD SERVICES:	
CONSTRUCTION MANAGER	$228.00
CONSTRUCTION INSPECTOR	$184.00
ADMINISTRATION:	
ADMINISTRATION	$98.00
EXPERT WITNESS:	$325.00
DIRECT COSTS:	COST PLUS 10 PERCENT
SUBCONSULTANTS:	COST PLUS 10 PERCENT
MILEAGE:	IRS RATE

CITY OF TRACY
MASTER PROFESSIONAL SERVICES AGREEMENT WITH
Carollo Engineers, Inc. for On Call Engineering Services related to the
Water and Wastewater Treatment Plants

This Master Professional Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and Carollo Engineers, Inc., a Delaware Corporation (**Consultant**). City and Consultant are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Consultant to perform on call engineering services for the Water and Wastewater Treatment Plants; and

B. On December 22, 2022, the City issued a Request for Proposals (RFP) for the On Call Engineering Support Services related to Water and Wastewater Treatment Plants. On January 18, 2023, Consultant submitted its proposal for the Project to the City. City has determined that Consultant possesses the skills, experience and certification required to provide the services.

C. City desires to retain Consultant to carry out the Project and to provide the Services (as defined below). After negotiations between the City and Consultant, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement. Consultant will perform such agreed upon services, only upon the City's issuance of a Notice to Proceed for each task order under the Agreement.

D. This Agreement is being executed pursuant to Resolution No. 2023-_____ approved by Tracy City Council on August 15, 2023.

Now therefore, the Parties mutually agree as follows:

1. **Scope of Work.** Upon request from the City of its Operations and Utilities Director through a written Notice to Proceed, Consultant shall provide engineering support services, which includes performing the services generally described in Exhibit "A" attached, and incorporated by reference (**Services**). Consultant shall not perform any Services until the City issues a Notice to Proceed for such services. The Services shall be performed by, or under the direct supervision of, Consultant's Authorized Representative: Tom Gillogly. Consultant shall not replace its Authorized Representative, nor shall Consultant replace any of the personnel listed in Exhibit "A," nor shall Consultant use or replace any subcontractor or subconsultant, without City's prior written consent. The City may terminate this Agreement if Consultant makes any such change or replacement in personnel or subcontractor/subconsultant without such prior written consent.

1.1 **Non-Exclusive Agreement.** The City reserves the right to contract with other consultants providing the same or similar scope of services described above during the term of this Agreement. The City further reserves the right to assign work, at its sole discretion, to consultants other than Consultant based on City's budget, experience, and skills of consultants based on the City's specific needs.

2. **Time of Performance.** Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Consultant shall begin performance and shall complete all required services no later than the dates set forth in each individual Notice to Proceed. Any services for which times for performance are not specified in each individual Notice to Proceed shall be started and completed by Consultant in a reasonably prompt and timely manner based upon the circumstances

and direction communicated by the City to the Consultant. Consultant shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The initial term of this Agreement shall begin on August 17, 2023 and end one (1) year later, unless terminated for any reason, including a lack of appropriated funds to compensate services provided under this Agreement, in accordance with Section 6. Any such termination of this Agreement due to failure of the City of Tracy Council to appropriate funds for payment for services under this Agreement shall not be a breach of the Agreement.

2.1.1 Option to Extend. This Agreement may be extended in the City sole and absolute discretion, on an annual basis, for an additional 2 years by the City Manager following a written determination that Consultant has satisfactorily met all the requirements of this Agreement and subject to adequate budgetary authority from the City, as shall be determined by the Finance Director.

3. <u>Compensation</u>. City shall pay Consultant on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Consultant's total compensation under this Agreement for the Services shall not exceed $300,000 annually (with a total not-to-exceed amount of $900,000). It is understood and agreed that Consultant may not receive compensation up to this amount, and Consultant's total compensation under this Agreement will depend on the scope of Services approved by the City through Notices to Proceed. Consultant's billing rates shall cover all costs and expenses for Consultant's performance of this Agreement. No work shall be performed by Consultant in excess of the total compensation amount provided in this section without the City's prior written approval. Consultant shall be entitled to update their billing rates in Exhibit B as it relates to extensions of the Agreement beyond the initial term delineated in Section 2.1 hereunder.

3.2 Invoices. Consultant shall submit monthly invoice(s) to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1 If Consultant is providing services in response to a development application, separate invoice(s) must be issued for each application and each invoice shall contain the City's designated development application number.

3.2.2 Consultant's failure to submit invoice(s) in accordance with these requirements may result in the City rejecting said invoice(s) and thereby delaying payment to Consultant.

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3.4 The acceptance by Consultant of the final payment made under this Agreement shall constitute a release of City from all claims and liabilities for compensation to Consultant for anything completed, finished or relating to Consultant's services. Consultant agrees that payment by City shall not constitute nor be deemed a release of the responsibility and liability of Consultant or its employees, subcontractors, agents and subconsultants for the accuracy and competency of the information provided and/or services performed hereunder, nor shall such payment be deemed to be an assumption of responsibility or liability by City for any defect or error in the services performed by Consultant, its employees, subcontractors, agents and subconsultants.

3.5 Consultant agrees to maintain books, accounts, payroll records and other information relating to the performance of Consultant's obligations under the Agreement, which shall adequately and correctly reflect the expenses incurred by the Consultant in the performance of Consultant's work under the Agreement. Such books and records shall be open to inspection and audit by the City during regular business hours for three years after expiration or termination of this Agreement.

4. <u>Indemnification</u>. Consultant shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any

claims arising out of Consultant's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence, or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees, and volunteers; "Consultant" means the Consultant, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

(The duty of a "design professional" to indemnify and defend the City is limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the design professional, under Civ. Code § 2782.8.). In no event shall the cost to defend charged to Consultant exceed Consultant's proportionate percentage of fault.

Consultant shall not be responsible for warranties, guarantees, fitness for a particular purpose, breach of fiduciary duty, loss of anticipated profits or for economic, incidental or consequential damages to the City or any third party arising out of breach of contract, termination, or for any other reason whatsoever. Additionally, Consultant shall not be responsible for acts and decisions of third parties, including governmental agencies, other than Consultant's subconsultants, that impact project completion and/or success.

The provisions of this section survive completion of the services or the termination of this Agreement and are not limited by the provisions of Section 5 relating to insurance.

5. <u>Insurance</u>. Consultant shall, throughout the duration of this Agreement, maintain insurance to cover Consultant, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Professional Liability "claims made" coverage shall be maintained to cover damages that may be the result of errors, omissions, or negligent acts of Consultant in an amount not less than $1,000,000 per claim.

5.5 Endorsements. Consultant shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Consultant's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Consultant shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any reduction in coverage in the policy prior to the expiration shall be considered a cancellation. Consultant shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Consultant shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Consultant shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City, before the City signs this Agreement.

5.9 Substitute Certificates. Consultant shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Consultant's Obligation. Maintenance of insurance by the Consultant as specified in this Agreement shall in no way be interpreted as relieving the Consultant of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Consultant may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. Termination. The City may terminate this Agreement in its sole an absolute discretion by giving ten days' written notice to Consultant. Within five (5) days of such a termination, Consultant shall give the City all original documents relating to the Services in Consultant's possession or control, including, without limitation, contract documents, preliminary drafts, supporting documents, and any other documents prepared by Consultant pursuant to this Agreement. The City shall pay Consultant for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. Dispute Resolution. If any dispute arises between the City and Consultant that cannot be settled after engaging in good faith negotiations, City and Consultant agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person to serve as the mediator, shall be commenced within thirty (30) days of selection of a mediator and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8. Ownership of Work. All original documents prepared by Consultant for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Consultant's services, or upon demand from the City. No such documents shall be revealed or made available by Consultant to any third party without the City's prior written consent.

9. Independent Contractor Status. Consultant is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Consultant is not City's employee and Consultant shall have no authority, express or implied, to act on

behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Consultant is free to work for other entities while under contract with the City. Consultant, and its agents or employees, are not entitled to City benefits. Consultant shall be solely responsible for, and shall save the City harmless from, all matters relating to the payment of Consultant's employees, agents, subcontractors and subconsultants, including compliance with social security requirements, federal and State income tax withholding and all other regulations governing employer-employee relations.

9.1 **Non-Exclusive Professional Services Agreement**. The City reserves the right to contract with other firms and/or consultants during the term of this Agreement to provide the City the same or similar services described in Exhibit A. Nothing contained in this Agreement guarantees Consultant a certain amount of work, and the City may, in its sole and absolute discretion, allocate and/or delegate work relating to the Project to other consultants.

10. Conflicts of Interest. Consultant (including its employees, agents, and subconsultants) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Consultant maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Consultant's conflicting interest.

11. Rebates, Kickbacks, or Other Unlawful Consideration. Consultant warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For any breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price the value of the rebate, kickback, or other unlawful consideration; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

12. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

Operations and Utilities Director
520 S. Tracy Blvd.
Tracy, CA 95376

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Consultant:

Carollo Engineers, Inc.
Tom Gillogly
2795 Mitchell Rd.
Walnut Creek, CA 94598

13. Miscellaneous.

13.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Consultant's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

13.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

13.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement. No waiver shall be effective unless it is in writing and signed by the waiving party.

13.4 Assignment and Delegation. Consultant may not assign, transfer or delegate this Agreement or any portion of it without the City's prior written consent. Any attempt to do so will be void. City's consent to one assignment, transfer or delegation shall not be deemed to be a consent to any subsequent assignment, transfer or delegation.

13.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

13.6 Compliance with the Law. Consultant shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

13.6.1 Prevailing Wage Laws. Consultant is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates; employment of apprentices (§ 1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. If the services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, and if the total compensation is $1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. These prevailing rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Consultant shall defend, indemnify and hold the City, its officials, officers, employees and agents, harmless from any and all claims, costs, penalties, or interests arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

13.6.2 Non-discrimination. Consultant represents and warrants that it is an equal opportunity employer, and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Consultant shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

13.7 Business Entity Status. Consultant is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Consultant. By entering into this Agreement, Consultant represents that it is not a suspended entity and will, at all times during the term of this Agreement, remain in good standing in the state of California. If Consultant is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

13.8 Business License. Before the City signs this Agreement, Consultant shall obtain a City of Tracy Business License. Consultant shall maintain an active City of Tracy Business License during the term of this Agreement.

13.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

13.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

13.11 Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

13.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Consultant's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Consultant's proposal (if any), the Exhibits shall control.

13.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations, or agreements. All exhibits attached hereto are incorporated by reference herein.

13.14 Counterparts. City and Consultant agree that this Agreement may be executed in two or more counterparts, each of which shall be deemed an original.

13.15 Expenses for Enforcement. Consultant and City agree that the prevailing party's reasonable costs, attorneys' fees and expenses, including investigation fees and expert witness fees, shall be paid by the non-prevailing party in any dispute involving the terms and conditions of this Agreement.

13.16 City-Provided Information and Services. The City shall furnish Consultant available studies, reports and other data pertinent to Consultant's services; obtain or authorize Consultant to obtain or provide additional reports and data as required; furnish to Consultant services of others required for the performance of Consultant's services hereunder, and Consultant shall be entitled to use and rely upon all such information and services provided by the City or others in performing Consultant's services under this Agreement.

13.17 Third Parties. The services to be performed by Consultant are intended solely for the benefit of the City. No person or entity not a signatory to this Agreement shall be entitled to rely on Consultant's performance of its services hereunder, and no right to assert a claim against Consultant by assignment of indemnity rights or otherwise shall accrue to a third party as a result of this Agreement or the performance of Consultant's services hereunder

14. <u>Signatures</u>. The individuals executing this Agreement on behalf of Consultant represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of Consultant.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

_____
By: Nancy D. Young
Title: Mayor
Date: _____

Attest:

_____
Adrianne Richardson, City Clerk

Approved as to form:

_____
Bijal M. Patel, City Attorney

Consultant
Carollo Engineers, Inc., a Delaware Corporation

_____
By: Peter von Bucher, P.E.
Title: Vice President
Date: 7/13/2023

Federal Employer Tax ID No. 86-0899222

_____
By: Thomas Gillogly
Title: Senior Vice President
Date: 7/13/2023

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

The City's primary objective for this Agreement is to obtain professional support for assisting the Utilities Division for engineering support services that includes but is not limited to performing design and preparing improvement plans, specifications, estimates for preparation of bid documents and providing support during construction for various improvement projects.

These projects will relate to maintenance of existing equipment, reviewing existing operational elements, and studying alternatives for improvements to operations as needed at the Wastewater Treatment Plant and/or John Jones Water Treatment Plant.

The on-call needs may include conducting studies and preparing reports for various elements as necessary to satisfy the regulatory framework including reaching out to regional boards, permitting, and other documentation.

The City will work with the Consultant to develop the detailed scope specific to the project or task needs. This proposed cost and scope will be negotiated before it is finalized. After the agreement of scope and cost between the Consultant and the City, the notice to proceed will be issued to the Consultant.

Key Personnel:

- Tom Gillogly
- Peter von Bucher
- Rich Chan
- Amos Branch
- Darren Baune
- Sam Hawkins

EXHIBIT B - Compensation

Compensation under this agreement shall not exceed $300,000 per year.

	Hourly Rate
Engineers/Scientists	
Assistant Professional	$214.00
Professional	263.00
Project Professional	311.00
Lead Project Professional	330.00
Senior Professional	349.00
Technicians	
Technicians	161.00
Senior Technicians	224.00
Support Staff	
Document Processing / Clerical	143.00
Project Equipment Communication Expense (PECE) Per DL Hour	**14.00**
Other Direct Expenses	
Travel and Subsistence	at cost
Mileage at IRS Reimbursement Rate Effective January 1, 2023	$.655 per mile
Subconsultant	cost + 10%
Other Direct Cost	cost + 10%
Expert Witness	Rate x 2.0

This fee schedule is subject to annual revisions due to labor adjustments.

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

RESOLUTION APPROVING A MASTER PROFESSIONAL SERVICES AGREEMENT (MPSA) WITH BLACK WATER CONSULTING ENGINEERS, INC., FOR AN INITIAL TERM OF ONE YEAR, WITH AN ADMINISTRATIVE OPTION TO EXTEND ANNUALLY, FOR AN ADDITIONAL TWO YEARS, TO PROVIDE ENGINEERING SUPPORT SERVICES RELATED TO THE WATER AND WASTEWATER TREATMENT PLANTS FOR A NOT TO EXCEED AMOUNT OF $300,000 ANNUALLY (TOTAL NOT TO EXCEED AMOUNT OF $900,000)

WHEREAS, The City desires to retain professional services of engineering consultants for specialized and technical work needed to complete small urgent design projects and necessary reports and documents for the Utilities Department Water and Wastewater treatment operations; and

WHEREAS, On December 22, 2022, the City issued a Request for Proposals (RFP) for the on-call engineering support services related to the water and wastewater treatment plant; and

WHEREAS, The City received a proposal from Black Water Consulting Engineers, Inc.; and

WHEREAS, Black Water Consulting Engineers, Inc. has the expertise and experience required to provide the necessary and desired services; and

WHEREAS, Staff recommends that the City Council authorize the execution of the MPSA to provide engineering support for small urgent design projects and necessary reports and documents and to provide staff flexibility to utilize the consultant on an as needed basis; and

WHEREAS, The MPSA will have an initial term of one year, with an administrative option to extend annually, for an additional two years. The MPSA not-to-exceed amount shall be $300,000 annually (with a total not to exceed amount of $900,000) subject to City Council budget appropriations each year; and

WHEREAS, The funding for services to provide engineering support for small urgent design projects and necessary reports and documents, will be funded by the ongoing operations and maintenance budgets for Water and Wastewater; and

WHEREAS, The proposed agreement is for design and engineering work only and approval of these on-call agreements will not result in a physical change in the environment; each individual CIP project will undergo separate evaluation, prior to relevant discretionary actions by the City, to comply adequately with California Environmental Quality Act; and

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it,

RESOLVED: That the City Council of the City of Tracy, hereby approves the Master Professional Services Agreements with Black Water Consulting Engineers, Inc., for on-call professional engineering services for specialized and technical work needed to complete small urgent design projects and necessary reports and documents for the Utilities Department Water and Wastewater treatment operations for an initial term of one year with an administrative option to extend, annually for an additional two years (total not to exceed amount of $900,000); and be it further

RESOLVED: That the MPSA shall allow the City to extend the initial term, on an annual basis, following a written determination that Black Water Consulting Engineers, Inc. has satisfactorily met all the requirements of the MPSA, and further, subject to annual budgetary appropriation by the City Council, through the budget approval process, supporting the funding for such annual extensions; and be it further

RESOLVED: That MPSA shall be approved as to form and legality, by the City Attorney; and be it further

FURTHER RESOLVED: This action is not considered a project as defined by Section 21065 of the Public Resources Code.

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023, by the following vote:

AYES:	COUNCIL MEMBERS:
NOES:	COUNCIL MEMBERS:
ABSENT:	COUNCIL MEMBERS:
ABSTENTION:	COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

RESOLUTION APPROVING A MASTER PROFESSIONAL SERVICES AGREEMENT (MPSA) WITH CAROLLO ENGINEERS, INC. FOR AN INITIAL TERM OF ONE YEAR, WITH AN ADMINISTRATIVE OPTION TO EXTEND ANNUALLY, FOR AN ADDITIONAL TWO YEARS, TO PROVIDE ON-CALL ENGINEERING SUPPORT SERVICES RELATED TO THE WATER AND WASTEWATER TREATMENT PLANTS FOR THE NOT-TO-EXCEED AMOUNT OF $300,000 ANNUALLY (TOTAL NOT TO EXCEED AMOUNT OF $900,000)

WHEREAS, The City desires to retain on-call professional services of engineering consultants for specialized and technical work needed to complete small urgent design projects and necessary reports and documents for the Utilities Department Water and Wastewater treatment operations; and

WHEREAS, On December 22, 2022, the City issued a Request for Proposals (RFP) for the on-call engineering support services related to the water and wastewater treatment plant; and

WHEREAS, The City received a proposal from Carollo Engineers, Inc.; and

WHEREAS, Staff recommends that the City Council authorize the execution of the MPSA to provide engineering support services and to provide staff flexibility to utilize the consultant on an as needed basis; and

WHEREAS, The MPSA will have an initial term of one year, with an administrative option to extend annually, for an additional two years. The MPSA not-to-exceed amount shall be $300,000 annually (with a total not to exceed amount of $900,000) subject to City Council budget appropriations each year; and

WHEREAS, The services to provide engineering support for small urgent design projects and necessary reports and documents will be funded by the ongoing operations and maintenance budgets for Water and Wastewater; and

WHEREAS, The proposed agreement is for design and engineering work only and approval of these on-call agreements will not result in a physical change in the environment; each individual CIP project will undergo separate evaluation, prior to relevant discretionary actions by the City, to comply adequately with California Environmental Quality Act; and

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it further

RESOLVED: That the City Council of the City of Tracy, hereby approves the Master Professional Services Agreement with Carollo Engineers, Inc. for on-call professional engineering services for specialized and technical work needed to complete small urgent design projects and necessary reports and documents for the Utilities Department Water and Wastewater treatment operations for an initial term of one year with an administrative option to extend, annually for an additional two years (total not to exceed amount of $900,000); and be it further

RESOLVED: That the MPSA shall allow the City to extend the initial term, on an annual basis, following a written determination that Carollo Engineers, Inc. has satisfactorily met all the requirements of the MPSA, and further, subject to annual budgetary appropriation by the City Council, through the budget approval process, supporting the funding for such annual extensions; and be it further

RESOLVED: That MPSA shall be approved as to form and legality, by the City Attorney; and be it further

FURTHER RESOLVED: This action is not considered a project as defined by Section 21065 of the Public Resources Code.

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.F

RECOMMENDATION

Staff recommends that the City Council adopt a Resolution approving a one-year agreement with Jet Mulch, Inc. for playground wood fiber and mulch installation, with a not-to-exceed amount of $50,000 per fiscal year ($250,000 in total) and authorizing the City Manager to grant up to four, one-year extensions.

EXECUTIVE SUMMARY

This item is to consider authorizing a one-year agreement (August 15, 2023 – June 30, 2024) with Jet Mulch, Inc. for playground wood fiber and mulch installation. The proposed General Services Agreement is a not-to-exceed in the amount of $50,000 per fiscal year and authorizes the City Manager to grant up to four, one-year extensions if the contractor satisfactorily meets its obligations under the agreement. The total not-to-exceed amount would be $250,000 for the cumulative five years.

BACKGROUND AND LEGISLATIVE HISTORY

The Parks and Recreation Department is responsible for the maintenance of City playgrounds and planting areas. Staff monitors all City playgrounds and planting areas and installs material as needed.

The City manages over 70 playgrounds and has an obligation to ensure all areas are safe and accessible. The City has been utilizing American Society for Testing and Materials (ASTM) engineered wood fiber in playgrounds for several years to meet safety and the Americans with Disability Act (ADA) requirements. Certified engineered wood fiber is widely used by many cities to cover the surface area of playgrounds. The material is soft and absorbent so that if someone inadvertently falls, the engineered wood fiber would absorb much of the impact, reducing the risk of severe harm. The City contracts out the supply and installation of engineered wood fiber for playground surface areas. A specialized truck blows material into the designated area(s) to distribute the material efficiently and evenly.

The City also has several planting areas throughout the City that have mulch as a topdressing. Mulch not only improves the overall aesthetics, but utilizing mulch reduces the amount of water needed and supports weed control. Mulch lays on top and insulates the soil, reducing the overall water evaporation. In addition, mulch supports the overall soil health by breaking up clay and allowing better water and air movement.

ANALYSIS

A Notice Inviting Bids for playground engineered wood fiber and mulch installation at various locations was published on April 12, 2023. Two bids were received by the submittal date/time. The bid from Applied Landscape Materials Inc. did not provide samples of material as required, therefore their bid was not considered. As a result, staff recommends Jet Mulch, Inc. be awarded the agreement as their bid was comprehensive and complied with bid specifications.

The recommended agreement is for a one-year term, with a not-to-exceed amount of $50,000 per fiscal year. In addition, the agreement also authorizes the City Manager to grant up to four, one-year extensions if the City Manager determines that the contractor satisfactorily met all agreement requirements. If extended for all allowable four, one-year terms, the total not-to-exceed amount would be $250,000 for the cumulative five years.

FISCAL IMPACT

Funding for the contract with Jet Mulch, Inc. is included in the FY2023-24 Parks Maintenance Division operating budgets, (Funds 101, 271, 272, and 273).

PUBLIC OUTREACH/ INTEREST

N/A

COORDINATION

The Parks and Recreation Department coordinated with the Finance Department.

CEQA DETERMINATION

This is an operational item and CEQA does not apply.

STRATEGIC PLAN

This agenda item is consistent with the City Council's adopted Quality of Life strategies.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council adopt a Resolution approving a one-year agreement with Jet Mulch, Inc. for playground wood fiber and mulch installation, with a not-to-exceed amount of $50,000 per fiscal year ($250,000) and authorizing the City Manager to grant up to four, one-year extensions.

Prepared by: Nilo Velazquez, Management Analyst II
Todd Rocha, Public Works Superintendent

Reviewed by: Jolene Jauregui-Correll, Recreation Services Manager
Sara Cowell, Director of Finance
Bijal Patel, City Attorney
Brian MacDonald, Interim Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

Attachments:

Attachment A: General Services Agreement – Jet Mulch, Inc.

CITY OF TRACY
PARKS AND RECREATION DEPARTMENT
GENERAL SERVICES AGREEMENT WITH
JET MULCH, INC.

This General Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and Jet Mulch, Inc. a California corporation (**Contractor**). City and Contractor are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Contractor to install playground wood fiber at designated play areas and walk-on bark at designated planting areas (Services of Project); and

B. On April 12, 2023, the City issued a Notice Inviting Bids for the Project. On May 3, 2023, Contractor submitted its bid for the Project to the City. City has determined that Contractor possesses the skills, experience and certification required to provide the services.

C. Two bids were received by the submittal date/time. City staffed reviewed the bids and the bid from Applied Landscape Materials Inc. did not include samples of material as required, therefore their bid was not considered.

D. Funding for this Project is budgeted in the Park Maintenance Division operating budgets.

E. After negotiations between the City and Contractor, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

F. This Agreement is being executed pursuant to Resolution No. 2023-____ approved by Tracy City Council on August 15, 2023.

Now therefore, the Parties mutually agree as follows:

1. <u>Scope of Work</u>. Upon request from the City (including by way of a Task Order), Contractor shall promptly perform the Services, including, without limitation, those described in Exhibit "A" attached hereto and incorporated herein by this reference. The services shall be performed by, or under the direct supervision of, Contractor's Authorized Representative: Ryan Gamboa**.** Contractor shall not replace its Authorized Representative, nor shall Contractor use or replace any subcontractors or subconsultants, without City's prior written consent. The City may terminate this Agreement if Consultant makes any such change or replacement, or uses any unapproved subcontractor or subconsultant..

2. <u>Time of Performance</u>. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Any services for which times for performance are not specified in this Agreement shall be started and completed by Contractor in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Contractor. Contractor shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City may grant or deny such requests in its sole and absolute discretion.

2.1 Term. The term of this Agreement shall begin on August 15, 2023 and end on June 30, 2024, unless terminated in accordance with Section 6. Contractor shall begin work on the Project within five (5) of the beginning of the term established in the preceding sentence of this Agreement.

2.2 OPTION TO EXTEND. This Agreement may be extended for up to an additional four, one-year extension terms (a total of four years in one (1) year increments) if the City Manager determines in writing that Contractor has satisfactorily met all the requirements of this Agreement.

3. Compensation. City shall pay Contractor on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Contractor's total compensation under this Agreement shall not exceed $50,000 per fiscal year. It is understood and agreed that Consultant may not receive compensation up to this, and Consultant's total compensation under this Agreement will depend on the scope of the Services approved by the City. Contractor's billing rates shall cover all costs and expenses for Contractor's performance of this Agreement. No work shall be performed by Contractor in excess of the total compensation amount provided in this section without the City's prior written approval. On each anniversary of the execution of this Agreement by both the City and Contractor (each a **Billing Rate Adjustment Date)**, , Contractor may increase the billing rates set forth in Exhibit B by the lesser of (a) 3% or (b) the annual increase in the Cost-of-Living Index – All Items, for the Sacramento Metropolitan Region. Contractor shall provide the City with written notice of its election to increase its billing rates pursuant to this Section 3.1, if at all, at least 30 days prior to any Billing Rate Adjustment Date. If Contractor fails to provide such notice, the billing rates shall remain unchanged until the following Billing Rate Adjustment Date. Notwithstanding anything contained herein to the contrary, the payment of any funds under this Agreement shall be subject to the City of Tracy's appropriation of funds for the Services. This Agreement shall terminate in the event that such funds are not appropriated.

3.2 Invoices. Contractor shall submit monthly invoices to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1. Contractor's failure to submit invoices in accordance with these requirements may result in the City rejecting said invoices and thereby delaying payment to Contractor.

3.3 Payment. Subject to the City acceptance of the Services as discussed in Exhibit A attached hereto, within 30 days after the City's receipt of invoice, City shall make payment to the Contractor based upon the services described on the invoice and approved by the City.

3.4 The acceptance by Consultant of the final payment made under this Agreement shall constitute a release of City from all claims and liabilities for compensation to Consultant for anything completed, finished or relating to Consultant's services. Consultant agrees that payment by City shall not constitute nor be deemed a release of the responsibility and liability of Consultant or its employees, subcontractors, agents and subconsultants for the accuracy and competency of the information provided and/or services performed hereunder, nor shall such payment be deemed to be an assumption of responsibility or liability by City for any defect or error in the Services performed by Consultant, its employees, subcontractors, agents and subconsultants.

3.5 Consultant agrees to maintain books, accounts, payroll records and other information relating to the performance of Consultant's obligations under the Agreement, which shall adequately and correctly reflect the expenses incurred by the Consultant in the performance of Consultant's work under the Agreement. Such books and records shall be open to inspection and audit by the City during regular business hours for three years after expiration or termination of this Agreement.

4. Indemnification. Contractor shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Contractor's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence or willful misconduct of the City.

In the event there is a finding and/or determination that Consultant is not an independent contractor and/or is an employee of City, including but not limited to any such finding and/or determination made by the California Public Employees' Retirement System (CalPERS), the Department of Industrial Relations (DIR), or the Internal Revenue Service (IRS), Consultant shall, to the fullest extent permitted by law, indemnify, defend, and hold harmless the City from and against any all claims relating to or in connection with such a finding and/or determination.

In this section, "City" means the City, its officials, officers, agents, employees and volunteers; "Contractor" means the Contractor, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

Consultant and City mutually waive consequential damages for claims, disputes, or other matters in question, arising out of or relating to this Agreement. This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination of this Agreement.

The provisions of this section survive completion of the services or the termination of this Agreement, and are not limited by the provisions of Section 5 relating to insurance.

5. <u>Insurance</u>. Contractor shall, throughout the duration of this Agreement, maintain insurance to cover Contractor, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Professional Liability "claims made" coverage shall be maintained to cover damages that may be the result of errors, omissions, or negligent acts of Contractor in an amount not less than $1,000,000 per claim.

5.5 Endorsements. Contractor shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Contractor's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Contractor shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Contractor shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Contractor shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Contractor shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City, before the City signs this Agreement.

5.9 Substitute Certificates. Contractor shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Contractor's Obligation. Maintenance of insurance by the Contractor as specified in this Agreement shall in no way be interpreted as relieving the Contractor of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Contractor may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. Termination. The City may terminate this Agreement in its sole and absolute discretion by giving ten (10) days' written notice to Contractor. Within five (5) days of such a termination, Contractor shall give the City all original documents relating to the Services in Consultant's possession or control, including, without limitation, preliminary drafts and supporting documents, and any other documents prepared by Consultant pursuant to this Agreement. The City shall pay Contractor for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. Dispute Resolution. If any dispute arises between the City and Contractor that cannot be settled after engaging in good faith negotiations, City and Contractor agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person to serve as the mediator, shall be commenced within thirty (30) days of selection of a mediator, and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party mediator in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8 Labor Code Compliance. Contractor is aware of the requirements of Chapter 1 of Part 7 of Division 2 of the California Labor Code and applicable regulations which require the payment of prevailing wage rates (§1771, §1774, and §1775); employment of apprentices (§1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. The Services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, Contractor agrees to fully comply with such Prevailing Wage Laws.

8.1 Rates. These prevailing wage rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Each Contractor and Subcontractor must pay no less than the specified rates to all workers employed to perform the services described herein. The schedule of per diem

wages is based upon a working day of eight hours. The rate for holiday and overtime work must be at least time and one-half. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the City harmless from any and all claims made by the State of California, the Department of Industrial Relations, any subcontractor, any worker, or any other third party.

8.2 Registration with DIR. Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform the services consistent with Labor Code section 1725.5.

8.3 Monitoring. This Agreement will be subject to compliance monitoring and enforcement by the DIR, under Labor Code section 1771.4.

9. Ownership of Work. All original documents prepared by Contractor for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Contractor's Services, upon termination of this Agreement, or upon demand from the City. No such documents shall be revealed or made available by Contractor to any third party without the City's prior written consent.

10. Independent Contractor Status. Contractor is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Contractor is not City's employee and Contractor shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Contractor is free to work for other entities while under contract with the City. Contractor, and its agents or employees, are not entitled to City benefits. Consultant shall be solely responsible for, and shall save the City harmless from, all matters relating to the payment of Consultant's employees, agents, subcontractors and subconsultants, including compliance with social security requirements, federal and State income tax withholding and all other regulations governing employer-employee relations. The City reserves the right to contract with other firms and/or consultants during the term of this Agreement to provide the City the same or similar services that Consultant is providing to the City under this Agreement. Nothing contained in this Agreement guarantees Consultant a certain amount of work, and the City may, in its sole and absolute discretion, allocate and/or delegate work to Consultant so as to satisfy the City's needs.

11. Conflicts of Interest. Contractor (including its employees, agents, and subcontractors) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Contractor maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Contractor's conflicting interest.

12. Rebates, Kickbacks, or Other Unlawful Consideration. Contractor warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For any breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; to deduct from the contract price the value of the rebate, kickback, or other unlawful consideration; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

13. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

City of Tracy
Attn: Parks and Recreation
333 Civic Center Plaza
Tracy, CA 95376

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Contractor:

Jet Mulch, Inc.
Attn: Ryan Gamboa
P.O. Box 1667
Capitola, CA 95010

14. Miscellaneous.

14.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Contractor's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

14.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

14.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement. No waiver shall be effective unless it is in writing and signed by the waiving party.

14.4 Assignment and Delegation. Contractor may not assign, transfer or delegate this Agreement or any portion of it without the City's prior written consent. Any attempt to do so will be void. City's consent to one assignment, transfer or delegation shall not be deemed to be a consent to any subsequent assignment, transfer or delegation.

14.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

14.6 Compliance with the Law. Contractor shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

14.6.1 Hazardous Materials. Contractor is responsible for all costs of clean up and/or removal of hazardous and toxic substances spilled as a result of performing their services.

14.6.2 Non-discrimination. Contractor represents and warrants that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Contractor shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

14.7 Business Entity Status. Contractor is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Contractor. By entering into this Agreement, Contractor represents that it is not a suspended corporation. If Contractor is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

14.8 Business License. Before the City signs this Agreement, Contractor shall obtain a City of Tracy Business License. Contractor shall maintain an active City of Tracy Business License during the term of this Agreement.

14.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

14.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

14.11. **Severability.** If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the r**e**mainder of this Agreement shall remain in effect.

14.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's proposal (if any), the Exhibits shall control.

14.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations or agreements. All exhibits attached hereto are incorporated by reference herein.

14.14 **Counterparts**. City and Consultant agree that this Agreement may be executed in two or more counterparts, each of which shall be deemed an original.

14.15 **Expenses for Enforcement**. Consultant and City agree that the prevailing party's reasonable costs, attorneys' fees and expenses, including investigation fees and expert witness fees, shall be paid by the non-prevailing party in any dispute involving the terms and conditions of this Agreement.

15. <u>Signatures</u>. The individuals executing this Agreement on behalf of Contractor represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of Contractor.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy
Municipal Corporation

By: Nancy D. Young
Title: Mayor
Date: _____

Attest:

Adrianne Richardson, City Clerk

Approved as to form:

Bijal M. Patel, City Attorney

Jet Mulch, Inc.
California Corporation

DocuSigned by:
Mario Gamboa
E13F622359E61A4...

By: Mario Gamboa
President
Date: 7/21/2023 | 2:46 PM PDT

Federal Employer Tax ID No. 680394810

DocuSigned by:
Ryan Gamboa
86363020D4DB461...

By: Ryan K. Gamboa/VP/CFO
Treasurer
Date: 7/21/2023 | 2:47 PM PDT

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

Scope of Work
Work shall include all labor, equipment, and materials necessary to furnish and install ASTM engineered wood playground fiber at designated play areas or walk-on bark at designated planting areas throughout the City. City staff may enlist the assistance of Contractor to help specify quantities of material to refurbish area(s). Contractor shall spread material in a smooth even layer throughout the designated areas. At play area entrance and handicap access areas, material shall be raked so that the top is flush with adjacent access surface to create a smooth and even transition between the hard surface and the newly installed material.

Material Applied
The playground fiber used shall be composed of engineered wood fiber designed for installation in playgrounds. It shall be clean, blunt-end, virgin wood material, meeting ASTM standards F1292 for impact absorption, F2075 material purity, F1951 for handicap/wheelchair access, and C136-14. All mulch shall be walk-on bark.

Time of Completion
The Contractor shall begin work after issuance of a Task Order from the Public Works Superintendent in the Parks and Recreation Department. The Contractor shall immediately schedule and diligently prosecute the work to completion. The Contractor shall be obligated to complete all work within ninety days of start date.

The Contractor shall notify the Public Works Superintendent (or designee) responsible for material application a minimum of five days in advance of the location and date work is to begin and provide a schedule indicating when work will be performed and completed in all areas. Schedule may have to be modified depending on use and recommended install dates.

Methods of Application
Prior to start of work and if requested, Contractor is to provide documentation that the material to be used meets the required ASTM standards and a sample for City approval. Contractor shall be equipped with a blower truck that can quickly and efficiently apply ASTM engineered wood playground fiber.

Inspection and Acceptance
Upon completion of the installation, the Public Works Superintendent (or designee) shall make the final inspection and acceptance. Until that acceptance is complete, City shall have no obligation to tender payment to Contractor for the work performed.

EXHIBIT B - Compensation

Cost Price Sheet

	Engineered Wood Fiber	Walk-on bark
Cost of Material (per cubic yard)	$12.00	$18.00
Labor Rate	$17.87	$26.70
Total Cost (per cubic yard)	**$29.87**	**$44.70**

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

APPROVING A ONE-YEAR AGREEMENT WITH JET MULCH, INC. FOR PLAYGROUND WOOD FIBER AND MULCH INSTALLATION, WITH A NOT-TO-EXCEED AMOUNT OF $50,000 PER FISCAL YEAR ($250,000 IN TOTAL), AND AUTHORIZING THE CITY MANAGER TO GRANT UP TO FOUR, ONE-YEAR EXTENSIONS

WHEREAS, The City's Parks and Recreation Department is responsible for the maintenance of City playgrounds and planting areas. Staff monitors all City playgrounds and planting areas and installs material, such as wood fiber and mulch, as needed; and

WHEREAS, A Notice Inviting Bids for playground wood fiber and mulch installation at various locations in the City ("Services") was published by the City on April 12, 2023; and

WHEREAS, Two bids were received by the submittal date/time for the Services, including the bid by Jet Mulch, Inc. ("Consultant"), which was the only bid that complied with all the specifications outlined in the Notice Inviting Bids. The City determined that a General Services Agreement ("Agreement") should be awarded to Consultant and that the Agreement should include a not-to-exceed amount of $50,000 per fiscal year ($250,000 total) and extension options in the City's favor; and

WHEREAS, Funding for the Services and the Agreement is from the Parks Maintenance Division operating budgets for such materials; and

WHEREAS, The City seeks to enter into the Agreement with Consultant.

NOW, THEREFORE, Be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it,

FURTHER RESOLVED: That the City Council hereby approves the Agreement with Consultant for the Services . After review and approval by the City Attorney's Office, the City authorizes the execution of the Agreement and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution; and be it

FURTHER RESOLVED: That the City authorizes the City Manager to grant up to four, one-year extensions consistent with the terms of the Agreement if Consultant satisfactorily meets its obligations under the Agreement.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.G

RECOMMENDATION

Staff recommends that the City Council adopt a resolution approving the execution of Amendment No. 1 to the Cooperative Agreement for Construction with the California Department of Transportation for the I-580/Patterson Pass Road Interchange Project (CIP 73147).

EXECUTIVE SUMMARY

The City of Tracy (City) entered into a Cooperative Agreement (Agreement) with the California Department of Transportation (Caltrans) for the I-580/Patterson Pass Road Interchange Project (Project) (CIP 73147) on April 19, 2023. An amendment to the Agreement is required to update the funding summary, reflecting the recent reprogramming of the federal funding source.

BACKGROUND AND LEGISLATIVE HISTORY

The Project is an approved Capital Improvement Project (CIP 73147). It reconstructs the existing interchange from a tight diamond configuration to a Diverging Diamond Interchange (DDI). The Project is essential to the region as it will increase access to growing fulfillment and distribution centers, improve freight operations along a federal Primary Freight Network (PFN) Route, enhance safety, and benefit the regional and national economy.

The Project is complete in design. The City had received $24.9 million SB1 TCEP (Trade Corridor Enhancement Program) grant funding for Project, which needed to be obligated by the California Transportation Commission (CTC) at their meeting on June 28th and 29th, 2023. In order to secure the TCEP grant, the Project required to obtain the Ready to List (RTL) status with Caltrans prior to the CTC meeting. As part of obtaining the RTL, the City adopted Resolution Nos. 2023-035, 2023-036, 2023-037, and 2023-038 on February 21, 2023 to file Eminent Domain proceedings for the acquisition of certain property interests for the Project, Resolution No. 2023-043 on March 7, 2023 approving Utility Agreements related to the relocation of existing utilities, and Resolution No. 2023-044 on March 7, 2023 for the Right-of-Way Certification and execution of the Agreement.

Due to the collaborative efforts with Caltrans, the City obtained RTL status and CTC approved the allocation of the TCEP grant at the June 28th and 29th Commission meetings. Subsequently, the grant was reprogrammed as Federal National Highway Freight Program (FNHFP) grant without any alterations to the original grant amount.

ANALYSIS

On April 9, 2023, the City and Caltrans entered into the Agreement pursuant to Resolution No. 2023-044. Since the TCEP grant in the Agreement was recently reprogrammed as an FNHFP fund, the City needs to make necessary amendments to the funding section of the Agreement to accurately reflect this recent update. This amendment will ensure transparency and effective financial management as the City moves forward with construction of the Project.

FISCAL IMPACT

The total project costs (including construction, right of way, and support) are approximately $52.4 Million and will be funded through a combination of City TIMP, City RTIF, Measure K, and FNHFP funds.

PUBLIC OUTREACH / INTEREST

Caltrans and the City circulated the draft Initial Study/Mitigated Negative Declaration (IS/MND) of the Project for public comment and review on July 1, 2020. An opportunity for a public meeting was offered, but none was requested. All written comments received were addressed in the final IS/MND and in the Categorical Exclusion, a National Environmental Protection Act (NEPA), the federal requirement. The Resolutions of Necessity (RONs) hearing for the required property acquisitions for the Project was conducted by City Council on February 21, 2023.

COORDINATION

The City's Engineering Division coordinated with several stakeholders including Caltrans, San Joaquin County, SJCOG, FHWA, California Public Utility Commission, and public and private utility companies.

CEQA DETERMINATION

The Final IS/MND (CEQA Approval) and CE (NEPA Approval) for the Project were adopted on February 25, 2021.

STRATEGIC PLAN

This agenda item supports the City of Tracy's Quality of Life Strategic Priority, which is to provide an outstanding quality of life by enhancing the City's amenities, business mix and services, and cultivating connections to promote positive change and progress in our community.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council adopt a resolution approving the execution of Amendment No.1 to the Cooperative Agreement for Construction with the California Department of Transportation for the I-580/Patterson Pass Road Interchange Project (CIP 73147).

Prepared by: Anju Pillai, PE, Senior Civil Engineer

Reviewed by: Koosun Kim, PE, City Engineer / Assistant Director of Development Services
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

ATTACHMENTS

Attachment A – Amendment No. 1 to the Cooperative Agreement with Caltrans for the I-580/ Patterson Pass Road Interchange Project, CIP 73147

COOPERATIVE AGREEMENT COVER SHEET

Funding Summary Amendment – Funding Summary No. 02

Agreement Amendment No. 01

Work Description

THE CITY OF TRACY PROPOSES TO IMPROVE THE INTERCHANGE AT I-580/INTERNATIONAL PARKWAY/PATTERSON PASS ROAD.

Contact Information

CALTRANS

Dina El-Nakhal, Project Manager

1976 E. Dr. Martin Luther King Jr. Way

Stockton, CA 95209

Office Phone:

Mobile Phone: (209) 351-4431

Email: dina.el.nakhal@dot,ca.gov

CITY OF TRACY

Anju Pillai, Senior Civil Engineer – Engineering Division

333 Civic Center Plaza

Tracy, CA 95376

Office Phone: (209) 831-6455

Email: Anju.Pillai@cityoftracy.org

Table of Contents

AMENDMENT NO. 01…….

FUNDING SUMMARY NO. 02……...

FUNDING TABLE……

SPENDING SUMMARY…….

Funding…….

Invoicing and Payment…….

CONSTRUCTION Support……...

CONSTRUCTION Capital……

Department Furnished Materials (DFM) …….……

Signatures……...……

AMENDMENT NO. 01

FUNDING SUMMARY NO. 02

1. PARTIES, in accordance with the provisions of this AGREEMENT, hereby amend this AGREEMENT by replacing Funding Summary No. 01 in its entirety with Funding Summary No. 02.

2. Funding Summary No. 2:
    - To replace SB1 funds with FNHFP fund
    - To add City RTIF and City TIMF funds as the Developer Fees (locally generated funds).
    - To remove Local fund
    - To pay Caltrans DFM of $165,000 from City TIMF fund as shown in the Spending Summary.

FUNDING TABLE					
IMPLEMENTING AGENCY→			CITY		
Source	Party	Fund Type	CONST. SUPPORT	CONST. CAPITAL	Totals
FEDERAL	CITY	FNHFP	0	24,884,000	24,884,000
LOCAL	CITY	SJ County Measure K	0	1,725,000	1,725,000
LOCAL	CITY	City RTIF	0	15,021,000	15,021,000
LOCAL	CITY	City TIMF	0	8,541,000	8,541,000
Totals			0	50,171,000	50,171,000

FNHFP – Federal National Highway Freight Program

SJ County Measure K – San Joaquin County Measure K

RTIF – Regional Transportation Impact Fee

TIMF – Traffic Impact Mitigation Fee

SPENDING SUMMARY

Fund Type	CONST. SUPPORT		CONST. CAPITAL		Totals
	CALTRANS	CITY	CITY	DFM CALTRANS	
FNFHP	0	0	24,884,000	0	24,884,000
SJ County Measure K	0	0	1,725,000	0	1,725,000
City RTIF	0	0	15,021,000	0	15,021,000
City TIMF	0	0	8,376,000	165,000	8,541,000
Totals	0	0	50,006,000	165,000	50,171,000

Funding

3. If there are insufficient funds available in this AGREEMENT to place the PROJECT right-of-way in a safe and operable condition, the appropriate IMPLEMENTING AGENCY will fund these activities until such time as PARTIES amend this AGREEMENT.

   That IMPLEMENTING AGENCY may request reimbursement for these costs during the amendment process.

4. If there are insufficient funds in this AGREEMENT to implement the obligations and responsibilities of this AGREEMENT, including the applicable commitments and conditions included in the PROJECT environmental documentation, permits, agreements, and/or approvals that are in effect at a time that WORK stops, each PARTY accepts responsibility to fund their respective WORK until such time as PARTIES amend this AGREEMENT.

   Each PARTY may request reimbursement for these costs during the amendment process.

5. The cost of any engineering support performed by CALTRANS includes all direct and applicable indirect costs. CALTRANS calculates indirect costs based solely on the type of funds used to pay support costs. State and federal funds administered by CALTRANS are subject to the current Program Functional Rate. All other funds are subject to the current Program Functional Rate and the current Administration Rate. The Program Functional Rate and Administration Rate are adjusted periodically.

6. If the WORK is funded with state or federal funds, any PARTY seeking CALTRANS reimbursement of indirect costs must submit an indirect cost rate proposal and central service cost allocation plan (if any) in accordance with Local Assistance Procedures Manual, 2 CFR, Part 200 and Chapter 5. These documents are to be submitted annually to CALTRANS' Audits and Investigations for review and acceptance prior to CALTRANS' reimbursement of indirect costs.

7. Travel, per diem, and third-party contract reimbursements for WORK are to be paid from the funds in this AGREEMENT only after the contractor performs the work and incurs said costs.

Payments for travel and per diem will not exceed the rates paid rank and file state employees under current California Department of Human Resources (CalHR) rules current at the effective date of this AGREEMENT.

If CITY invoices for rates in excess of CalHR rates, CITY will fund the cost difference and reimburse CALTRANS for any overpayment.

8. Notwithstanding the terms of this AGREEMENT, PARTIES agree to abide by the funding guidelines for all contributed funds that are programmed and allocated by the CTC.

Invoicing and Payment

9. PARTIES will invoice for funds where the SPENDING SUMMARY shows that one PARTY provides funds for use by another PARTY. PARTIES will pay invoices within forty-five (45) calendar days of receipt of invoice when not paying with Electronic Funds Transfer (EFT). When paying with EFT, CITY will pay invoices within five (5) calendar days of receipt of invoice.

10. If CITY has received EFT certification from CALTRANS, then CITY will use the EFT mechanism and follow all EFT procedures to pay all invoices issued from CALTRANS.

11. When a PARTY is reimbursed for actual cost, invoices will be submitted each month for the prior month's expenditures. After all PROJECT COMPONENT WORK is complete, PARTIES will submit a final accounting of all PROJECT COMPONENT costs. Based on the final accounting, PARTIES will invoice or refund as necessary to satisfy the financial commitments of this AGREEMENT.

12. If an executed Program Supplement Agreement (PSA) or STIP Planning, Programming, and Monitoring Program Fund Transfer Agreement (PPM) exists for this PROJECT then CITY will abide by the billing and payment conditions detailed for the fund types identified in the PSA or PPM.

13. If CALTRANS reimburses CITY for any costs later determined to be unallowable, CITY will reimburse those funds.

CONSTRUCTION Support

14. No invoicing or reimbursement will occur for the CONSTRUCTION SUPPORT PROJECT COMPONENT.

CONSTRUCTION Capital

15. CITY will invoice and CALTRANS will reimburse for actual costs incurred and paid.

Department Furnished Materials (DFM)

16. CALTRANS will invoice CITY for a lump sum payment of $165,000 after execution of this AGREEMENT.

Signatures

PARTIES are authorized to enter into this AGREEMENT and have delegated to the undersigned the authority to execute this AGREEMENT on behalf of the respective agencies and hereby covenants to have followed all the necessary legal requirements to validly execute this AGREEMENT. By signing below, the PARTIES each expressly agree to execute this AGREEMENT electronically.

The PARTIES acknowledge that executed copies of this AGREEMENT may be exchanged by facsimile or email, and that such copies shall be deemed to be effective as originals.

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

Dennis T. Agar
District Director

Michelle Ishaya
District Budget Manager

Lai Saephan
HQ Accounting Supervisor

CITY OF TRACY

Bijal Patel
City Attorney

Nancy Young
Mayor

Adrianne Richardson
City Clerk

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION 2023-_____

APPROVING THE EXECUTION OF AMENDMENT NO. 1 TO THE COOPERATIVE AGREEMENT FOR CONSTRUCTION WITH THE CALIFORNIA DEPARTMENT OF TRANSPORTATION FOR THE I-580/PATTERSON PASS ROAD INTERCHANGE PROJECT (CIP 73147)

WHEREAS, on or about April 19, 2023, the City and the California Department of Transportation (Caltrans) entered into a Cooperative Agreement (Agreement) for the I-580/Patterson Pass Road interchange project, which is an approved Capital Improvement Project (CIP 73147) (Project). The Project is completely designed and will reconstruct the existing interchange from a tight diamond configuration to a diverging diamond interchange; and

WHEREAS, the Final IS/MND (CEQA Approval) and CE (NEPA Approval) for the Project were adopted on February 25, 2021; and

WHEREAS, the City had received $24.9 Million SB1 Trade Corridor Enhancement Program grant funding (TCEP) for this Project; and

WHEREAS, subsequently, the TCEP grant for the Project was "reprogrammed" as a Federal National Highway Freight Program (FNHFP) grant without any alterations to the original grant amount; and

WHEREAS, since the TCEP grant for the Agreement and Project was reprogrammed as an FNHFP grant, the City seeks to amend the Agreement via Amendment No. 1 (Amendment) to make the necessary amendments to the funding section of the Agreement to accurately reflect this recent update; and

WHEREAS, the Amendment will ensure transparency and effective financial management as the City moves forward with construction of the Project; now, therefore, be it

RESOLVED: That the above recitals are true and correct; and be it,

FURTHER RESOLVED: That the City Council of the City of Tracy, by this resolution, hereby approves the Amendment. After review and approval by the City Attorney's office, the City Council authorizes the execution of the Amendment to the Agreement and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on the 15th day of August 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.H

REQUEST

Staff recommend that the City Council approve the submission of a claim to the San Joaquin Council of Governments for Transportation Development Act funds in the amount of $11,651,948 for Fiscal Year 2022-2023 and authorize the City Manager or designee to execute the claim.

EXECUTIVE SUMMARY

The City of Tracy (City) receives funds from the Transportation Development Act (TDA) that allow the City to provide transportation services throughout the community. The annual claim is necessary for the City to continue to receive TDA funding from the State through the San Joaquin Council of Governments (SJCOG). The amount the City will claim for FY 2022-2023 from the Local Transportation Fund (LTF) and the State Transit Assistance Fund (STA) is $11,651,948.

TDA funds are used for City TRACER operations and capital acquisitions, and pedestrian and bike paths. Staff recommends that the City Council approve the claim for TDA funds for FY 2022-2023 and authorize the City Manager or designee to execute the claim.

BACKGROUND AND LEGISLATIVE HISTORY

The Mills-Alquist-Deddeh Act (SB 325) was enacted by the California Legislature to improve existing public transportation services and encourage regional transportation coordination. Known as the Transportation Development Act (TDA) of 1971, this law provides funding to be allocated to transit and non-transit related purposes that comply with regional transportation plans.

Under the provisions of the TDA, the City is required to make an annual claim for funds apportioned to the City under the LTF and the STA. This claim is made to the State through the San Joaquin Council of Governments.

TDA funds are used to support the operations of the City's TRACER bus system, streets and road maintenance, and pedestrian and bike paths. Money for this claim is primarily being used for operational expenses that are not covered by Federal grants, as a funding source for the purchase of new buses, to fund the completion of a Bikeways Master Plan, and to fund bikeways maintenance in various parts of Tracy.

ANALYSIS

The total claim for FY 2022-2023 for LTF is $11,635,580 which includes $234,490 of unexpended carryover from the previous year's claim. The total claim for FY 2022-2023 for STA is $16,368. The available TDA funding for FY 2022-23 for the City of Tracy to claim under the LTF and STA is $12,936,378. After subtracting out the previous year's unexpended carryover of $234,490, a total of $11,417,458 will be disbursed to the City

of Tracy. The remaining balance of $1,284,430 will be available to claim in future years for additional transit projects.

The following table illustrates a breakdown of the various TDA claim amounts and purposes for this year's claim. Submission of this claim is needed in order to receive the necessary funding for continued public transit operations within the City of Tracy.

CITY OF TRACY FISCAL YEAR 2022-2023 TDA CLAIM AMOUNTS AND PURPOSES		
Fund	Amount	Purpose
LTF	$3,306,721	Article 8 Contractor Operating (PUC 99400(c))
LTF	$6,500,000	Article 8 Contractor Operating (PUC 99400(c)) Previous Year's Unclaimed
LTF	$3,021,439	Article 8 Contractor Operating (PUC 99400(c)) Previous Year's Unclaimed. (Transit Set-Aside)
LTF	$0	Article 8 Contractor Operating (PUC 99400(c)) Unexpended Carryover
LTF	$2,930,737	Article 8 Contractor Capital (99400(e))
LTF	$0	Article 8 Contractor Capital (99400(e)) Unexpended Carryover
LTF	$142,193	Pedestrian and Bicycle: Article 3 (PUC 99234)
LTF	$234,490	Pedestrian and Bicycle: Article 3 (PUC 99234) Unexpended Carryover
LTF	$2,000,000	Roads & Streets: Article 8 (99400 (a))
LTF	$0	Roads & Streets: Article 8 (99400 (a)) Unexpended Carryover
STA	$16,368	CCR Section 6730 (a)
STA	$0	CCR Section 6730 (a) Previous Year's Unclaimed
Total: Less:	$11,651,948 ($234,490) $11,417,458	Total LTF/STA claimed. Unexpended Carryover Net LTF funds to be disbursed to City of Tracy

FISCAL IMPACT

Authorization to submit the claim is necessary for the city to continue to receive TDA funding. Such funding is budgeted for FY 2022-2023 for the transit program and to support various bike/ped and street programs.

STRATEGIC PLAN

This agenda item is a routine operational item and does not relate to the Council's Strategic Plans.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that City Council adopt a resolution approving the submission of a claim to SJCOG for TDA funds in the amount of $11,651,948 for FY 2022-2023 and authorizing the City Manager or designee to execute the claim.

Prepared by: Ed Lovell, Transit Manager

Reviewed by: Adriana Castaneda, Mobility & Housing Director
Sara Cowell, Finance Director
Bijal Patel, City Attorney
Brian MacDonald, Interim Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

APPROVING THE SUBMISSION OF A CLAIM TO THE SAN JOAQUIN COUNCIL OF GOVERNMENTS FOR TRANSPORTATION DEVELOPMENT ACT FUNDS IN THE AMOUNT OF $11,651,948 FOR FISCAL YEAR 2022-2023 AND AUTHORIZING THE CITY MANAGER OR DESIGNEE TO EXECUTE THE CLAIM

WHEREAS, under the provisions of the Transportation Development Act (TDA), the City of Tracy is required to make an annual claim to the San Joaquin Council of Governments (SJCOG) for funds apportioned to the City under the Local Transportation Fund and the State Transit Assistance Fund; and

WHEREAS, unclaimed amounts are carried forward to the next fiscal year for reimbursement in that time period; and

WHEREAS, as set forth in the chart below, the City's FY 2022-2023 claim under the Local Transportation Fund and the State Transit Assistance Fund totals $11,651,948 but will be reduced by $234,490 (unexpended carryover). The total disbursement will be $11,417,458.

CITY OF TRACY FISCAL YEAR 2022-2023 TDA CLAIM AMOUNTS AND PURPOSES		
Fund	Amount	Purpose
LTF	$3,306,721	Article 8 Contractor Operating (PUC 99400(c))
LTF	$6,500,000	Article 8 Contractor Operating (PUC 99400(c)) Previous Year's Unclaimed
LTF	$3,021,439	Article 8 Contractor Operating (PUC 99400(c)) Previous Year's Unclaimed. (Transit Set-Aside)
LTF	$0	Article 8 Contractor Operating (PUC 99400(c)) Unexpended Carryover
LTF	$2,930,737	Article 8 Contractor Capital (99400(e))
LTF	$0	Article 8 Contractor Capital (99400(e)) Unexpended Carryover
LTF	$142,193	Pedestrian and Bicycle: Article 3 (PUC 99234)
LTF	$234,490	Pedestrian and Bicycle: Article 3 (PUC 99234) Unexpended Carryover
LTF	$2,000,000	Roads & Streets: Article 8 (99400 (a))

LTF	$0	Roads & Streets: Article 8 (99400 (a)) Unexpended Carryover
STA	$16,368	CCR Section 6730 (a)
STA	$0	CCR Section 6730 (a) Previous Year's Unclaimed
Total: Less:	$11,651,948 ($234,490) $11,417,458	Total LTF/STA claimed. Unexpended Carryover Net LTF funds to be disbursed to City of Tracy

WHEREAS, such funds will be used to support the operations of the City's TRACER bus system, streets and road maintenance, and pedestrian and bike paths. Money for this claim will primarily be used for operational expenses that are not covered by Federal grants, as a funding source for the purchase of new buses, to fund the completion of a Bikeways Master Plan, and to fund bikeways maintenance in various parts of the City.

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it,

FURTHER RESOLVED: That the City Council approves the submission of a claim to SJCOG for TDA funds in the amount of $11,651,948 for FY 2022-2023; and be it

FURTHER RESOLVED: That the City Council authorizes the City Manager or designee to execute the claim and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.I

RECOMMENDATION

Staff recommends that the City Council authorize a Professional Services Agreement with West Coast Arborists, Inc. for the 2023-2024 Tree Maintenance Program, for an initial two years with authority for the City Manager to execute agreement extensions for an additional five years, with a not-to-exceed amount of $2,587,176 annually.

EXECUTIVE SUMMARY

Staff recommends that the City Council authorize the execution of a Professional Services Agreement with West Coast Arborists ("WCA") for Tree Maintenance Services ("Agreement"). The Agreement would cover an initial period of two years and allow for extensions by the City Manager for up to an additional five (5) years (in any combination of lengths). Staff requests that the City Manager execute any minor changes to the contract and amendments based on the recommendation of satisfactory performance for the Operations & Utilities Director. The total cost of the contract will not exceed $2,587,176 annually.

BACKGROUND AND LEGISLATIVE HISTORY

The Tracy Consolidated Landscape Maintenance District ("LMD"), Community Facilities District ("CFD"), and General Funded areas have approximately 47,283 trees and plantable sites. These trees require regular maintenance to ensure they remain healthy and do not pose a safety risk to the community. WCA is the current contractor for tree maintenance services, and the company has provided excellent service. WCA is a reputable company that has been in business for over 50 years. They have extensive experience providing tree maintenance services to municipalities and employ certified arborists knowledgeable about the best practices for tree care.

A Request for Proposal ("RFP") was released on April 5, 2023. RFP were received on May 11, 2023 with one proposal.

ANALYSIS

The proposed agreement with WCA includes all necessary maintenance services for the trees, including removal, replants, and any additional services needed to care for the City's Urban Forest. The proposed agreement provides significant environmental benefits. Proper tree maintenance services will help to preserve the health and vitality of the urban forest, which will, in turn, improve air quality and reduce energy costs.

On May 11, 2023, the City received one proposal. A panel of three City staff members, including two certified arborists, reviewed the proposal and determined that the WCA demonstrated the competence and professional qualifications necessary for the satisfactory performance of the required services and possessed the skills, experience, and certifications required to provide the services.

FISCAL IMPACT

The proposed Professional Services Agreement with WCA is for a not-to-exceed amount of $2,587,176 annually. The not-to-exceed amount is based on services needed at the end of a possible seven-year contract.

Funding for the agreement with WCA exists in the FY2023-24 operating budget of the following funds: LMD (271), CFD (272, 273) and GF (101). Staff will incorporate the annual amount of funding needed each fiscal year for this agreement in the annual operating budget adopted by City Council based on the Urban Forest's health and goals established by the Urban Forestry Management Plan (pending adoption).

STRATEGIC PLAN

This agenda item supports the Quality of Life Initiative, Goal #1: To advance green and roadway infrastructure projects that improve connectivity, including bike lanes.

CEQA

The project is exempt pursuant to categorical exemptions per CEQA Guidelines §15301(a), Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council of the City of Tracy authorize a Professional Services Agreement with West Coast Arborists, Inc. for the 2023-2024 Tree Maintenance Program for an initial two years with authority for the City Manager to execute agreement extensions for an additional five years, with a not-to-exceed amount of $2,587,176 annually.

Prepared by: David Murphy, Assistant Director of Operations

Reviewed by: James A. Jackson, Director of Operations & Utilities
Sara Cowell, Director of Finance
Karin Schnaider, Assistant City Manager
Bijal M. Patel, City Attorney

Approved by: Midori Lichtwardt, Interim City Manager

Attachment A – PSA with West Coast Arborists, Inc.

CITY OF TRACY
PROFESSIONAL SERVICES AGREEMENT WITH
West Coast Arborist Inc for 2023-2024 Tree Maintenance Program

This Professional Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and West Coast Arborist, Inc., a California Corporation (**Contractor**). City and Contractor are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain a Contractor to provide Citywide tree services for the trimming, removal, replanting of the City's 47,283 tree sites, and to carry out the services set forth in Exhibit A, which is attached hereto and incorporated herein by this reference (as further defined elsewhere in this Agreement, **Services or Project**); and

B. Per TMC Section 2.20.140, on April 5, 2023, the City issued a Request for Proposals (RFP) for the City's 2023-2024 Tree Maintenance Program (**Project**). On May 11, 2023, the Contractor was the only proposal submitted for the Project to the City. City has determined that the Contractor demonstrated the competence and professional qualifications necessary for the satisfactory performance of the required services and possesses the skills, experience and certification required to provide the services.

C. After negotiations between the City and Contractor, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

D. This Agreement is being executed pursuant to Resolution No. _____, which was adopted by the City of Tracy's City Council on _____, 2023.

Now therefore, the Parties mutually agree as follows:

1. **Scope of Work.** Upon request from the City, Contractor shall timely perform the Services, including those described in Exhibit "A". The services shall be performed by, or under the direct supervision of, Contractor's Authorized Representative: Tim Patterson, Area Manager. Contractor shall not replace its Authorized Representative, Contractor shall Contractor use or replace any subcontractor or subconsultant, without City's prior written consent. The City may terminate this Agreement if Consultant makes any such change or replacement or uses any such subcontractor or subconsultant.

2. **Time of Performance.** Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Any Services for which times for performance are not specified in this Agreement shall be started and completed by Contractor in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Contractor. Contractor shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City may grant or deny such requests in its sole and absolute discretion.

2.1 Term. The term of this Agreement shall begin on August 16, 2023, and end on July 31, 2025, unless terminated in accordance with Section 6.

2.1.A OPTION TO EXTEND: This Agreement may be extended for up to an additional five years, in any combination of length, by the City Manager following a written determination that Contractor has satisfactorily met all the requirements of this Agreement.

3. Compensation. City shall pay Contractor on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Contractor's total compensation under this Agreement shall not exceed $2,587,176.00. Contractor's billing rates shall cover all costs and expenses for Contractor's performance of this Agreement. It is understood and agreed that Consultant may not receive compensation up to this amount, and Consultant's total compensation under this Agreement will depend on the scope of the Services approved by the City. Starting on Aug 1, 2025, and on each successive Aug 1 during the term of this Agreement, the billing rates set forth in Exhibit B may be increased upon Contractor request, and approved by the City, by the lesser of (i) 6% or (ii) the percentage change in the U.S. Bureau of Labor and Statistics CPI increase for San Francisco-Oakland-Hayward, All Items between the June of the immediately preceding year and June in the year in which the increase is to be effective.

No work shall be performed by Contractor in excess of the total compensation amount provided in this section without the City's prior written approval. Notwithstanding the foregoing provision, the payment of any funds under this Agreement shall be subject to the City of Tracy's appropriation of funds for the Services. This Agreement shall terminate in the event that such funds are not appropriated.

3.2 Invoices. Contractor shall submit monthly invoice(s) to the City that describe the services performed, including locations, zone, times, dates, and names of persons performing the services.

3.2.1 Contractor's failure to submit invoice(s) in accordance with these requirements may result in the City rejecting said invoice(s) and thereby delaying payment to Contractor.

3.3 Payment. Within 30 days after the City's receipt of invoice(s), City shall make payment to the Contractor based upon the services described on the invoice(s) and approved by the City.

3.4 The acceptance by Consultant of the final payment made under this Agreement shall constitute a release of City from all claims and liabilities for compensation to Consultant for anything completed, finished or relating to Consultant's services. Consultant agrees that payment by City shall not constitute nor be deemed a release of the responsibility and liability of Consultant or its employees, subcontractors, agents and subconsultants for the accuracy and competency of the information provided and/or services performed hereunder, nor shall such payment be deemed to be an assumption of responsibility or liability by City for any defect or error in the Services performed by Consultant, its employees, subcontractors, agents and subconsultants.

3.5 Consultant agrees to maintain books, accounts, payroll records and other information relating to the performance of Consultant's obligations under the Agreement, which shall adequately and correctly reflect the expenses incurred by the Consultant in the performance of Consultant's work under the Agreement. Such books and records shall be open to inspection and audit by the City during regular business hours for three years after expiration or termination of this Agreement.

4. Indemnification. Contractor shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Contractor's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence or willful misconduct of the City.

In the event there is a finding and/or determination that Consultant is not an independent contractor and/or is an employee of City, including but not limited to any such finding and/or determination made by the California Public Employees' Retirement System (CalPERS), the Department of Industrial

Relations (DIR), or the Internal Revenue Service (IRS), Consultant shall, to the fullest extent permitted by law, indemnify, defend, and hold harmless the City from and against any all claims relating to or in connection with such a finding and/or determination.

In this section, "City" means the City, its officials, officers, agents, employees and volunteers; "Contractor" means the Contractor, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

(The duty of a "design professional" to indemnify and defend the City is limited to claims that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of the design professional, under Civ. Code § 2782.8.)

Consultant and City mutually waive consequential damages for claims, disputes, or other matters in question, arising out of or relating to this Agreement. This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination of this Agreement.

The provisions of this section survive completion of the services or the termination of this Agreement, and are not limited by the provisions of Section 5 relating to insurance.

5. **Insurance.** Contractor shall, throughout the duration of this Agreement, maintain insurance to cover Contractor, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 **Commercial General Liability** (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 **Automobile Liability** (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 **Workers' Compensation** coverage shall be maintained as required by the State of California.

5.4 **Professional Liability** "claims made" coverage shall be maintained to cover damages that may be the result of errors, omissions, or negligent acts of Contractor in an amount not less than $1,000,000 per claim.

5.5 **Endorsements.** Contractor shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Contractor's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

5.6 **Notice of Cancellation.** Contractor shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Contractor shall immediately obtain a replacement policy.

5.7 **Authorized Insurers.** All insurance companies providing coverage to Contractor shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Contractor shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City, before the City signs this Agreement.

5.9 Substitute Certificates. Contractor shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Contractor's Obligation. Maintenance of insurance by the Contractor as specified in this Agreement shall in no way be interpreted as relieving the Contractor of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Contractor may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. Termination. The City may terminate this Agreement in its sole and absolute discretion by giving ten (10) days' written notice to Contractor. Within five (5) days of such a termination, Contractor shall give the City all original documents relating to the Services in Consultant's possession or control, including, without limitation, preliminary drafts and supporting documents, and any other documents prepared by Consultant pursuant to this Agreement. The City shall pay Contractor for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. Dispute Resolution. If any dispute arises between the City and Contractor that cannot be settled after engaging in good faith negotiations, City and Contractor agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person to serve as the mediator, shall be commenced within thirty (30) days of selection of a mediator, and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party mediator in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8. Ownership of Work. All original documents prepared by Contractor for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Contractor's Services, upon termination of this Agreement, or upon demand from the City. No such documents shall be revealed or made available by Contractor to any third party without the City's prior written consent.

9. Independent Contractor Status. Contractor is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Contractor is not City's employee and Contractor shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Contractor is free to work for other entities while under contract with the City.

Contractor, and its agents or employees, are not entitled to City benefits. Consultant shall be solely responsible for, and shall save the City harmless from, all matters relating to the payment of Consultant's employees, agents, subcontractors and subconsultants, including compliance with social security requirements, federal and State income tax withholding and all other regulations governing employer-employee relations.

9.1 **Non-Exclusive Professional Services Agreement**. The City reserves the right to contract with other firms and/or consultants during the term of this Agreement to provide the City the same or similar services that Consultant is providing to the City under this Agreement. Nothing contained in this Agreement guarantees Consultant a certain amount of work, and the City may, in its sole and absolute discretion, allocate and/or delegate work to Consultant so as to satisfy the City's needs.

10. Conflicts of Interest. Contractor (including its employees, agents, and subcontractors) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Contractor maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Contractor's conflicting interest.

11. Rebates, Kickbacks, or Other Unlawful Consideration. Contractor warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For any breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; to deduct from the contract price the value of the rebate, kickback, or other unlawful consideration; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

12. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

City of Tracy
Office of Director for Operations & Utilities
520 S. Tracy Blvd
Tracy, CA 95376
Publicworks@cityoftracy.org

To Contractor:

Victor M. Gonzales
West Coast Arborist, Inc.
2200 East Via Burton Street
Anaheim, CA 92806

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

13. Miscellaneous.

13.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Contractor's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

13.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

13.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement. No waiver shall be effective unless it is in writing and signed by the waiving party.

13.4 Assignment and Delegation. Contractor may not assign, transfer or delegate this Agreement or any portion of it without the City's prior written consent. Any attempt to do so will be void. City's consent to one assignment, transfer or delegation shall not be deemed to be a consent to any subsequent assignment, transfer or delegation.

13.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

13.6 Compliance with the Law. Contractor shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

13.6.1 Prevailing Wage Laws. Contractor is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates; employment of apprentices (§ 1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. If the services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, and if the total compensation is $1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. These prevailing rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and agents, harmless from any and all claims, costs, penalties, or interests arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

13.6.2 Non-discrimination. Contractor represents and warrants that it is an equal opportunity employer and it shall not discriminate against any subContractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Contractor shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

13.7 Business Entity Status. Contractor is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Contractor. By entering into this Agreement, Contractor represents that it is not a suspended entity and that it is in good standing. If Contractor is suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

13.8 Business License. Before the City signs this Agreement, Contractor shall obtain a City of Tracy Business License. Contractor shall maintain an active City of Tracy Business License during the term of this Agreement.

13.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

13.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

13.11 Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

13.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's proposal (if any), the Exhibits shall control.

13.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations or agreements. All exhibits attached hereto are incorporated by reference herein.

13.14 **Counterparts**. City and Consultant agree that this Agreement may be executed in two or more counterparts, each of which shall be deemed an original.

13.15 **Expenses for Enforcement**. Consultant and City agree that the prevailing party's reasonable costs, attorneys' fees and expenses, including investigation fees and expert witness fees, shall be paid by the non-prevailing party in any dispute involving the terms and conditions of this Agreement.

14. Signatures. The individuals executing this Agreement on behalf of Contractor represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of Contractor.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

By: _____
Title: _____
Date: _____

Attest:

_____
Adrianne Richardson, City Clerk

Approved as to form:

_____
Bijal M. Patel, City Attorney

West Coast Arborist, Inc.

DocuSigned by:
324C79F8EE1F4FC...

By: Patrick Mahoney
Title: President
Date: 7/18/2023 | 9:32 AM PDT

Federal Employer Tax ID No. 95-3250682

_____
By: _____
Title: _____
Date: _____

Exhibits:

A Scope of Work
B Compensation

EXHIBIT A - Scope of Work

1) PROJECT SPECIFICATIONS

i) Contractor shall perform and complete the landscape and/or tree maintenance work and Services in a thorough and professional manner, and shall provide all labor, tools, equipment, materials, and supplies that are necessary to complete all the Services in a timely manner to meet the City's requirements and needs. Contractor may be required to perform and the Services may include, but are not limited to, the following tree maintenance activities at various sites throughout the City:

- Tree pruning
- Tree removal
- Tree planting
- Crew rental
- Emergency response
- Line clearance pruning
- Clearance pruning
- Grid pruning program
- Tree watering
- Small tree care
- Palm trunk skinning
- Palm tree trimming
- Palm tree removal
- Root pruning
- Arborist services/inspection
- Foliar and pesticide treatments
- Data entry
- GPS tree inventory

ii) Contractor shall process the City's work requests on a City designated online program. Currently, the City uses "Government Outreach."

iii) Contractor shall use provide access to an Urban Forestry Management tool that allows for work order tracking, the ability to send work requests including, but not limited to, pruning, planting, and removal, access to reports for tree inventory, the value of the urban forest, job balance and GPS accessibility (if applicable)

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2) REQUIRED CREDENTIALS

i) Contractor must hold a valid State California C-27 and a C-61/D49 Contractor's License. Both licenses must be in good standing and must have been in good standing for the previous seven consecutive years without any official unresolved record of complaints registered or filed with the State Contractor's Licensing Board or California Department of Consumer Affairs.

ii) Contractor must have OSHA certification for aerial equipment to be used throughout the Project.

iii) All of Contractor's agents, contractors, subcontractors, and personnel must be qualified and trained in the tree maintenance industry. This includes, but is not limited to, the staffing of a manager who is an ISA Certified Arborist and fluent in the English language. At all times during to term of the Agreement, the Contractor shall have work crews on site that are represented by an English-speaking supervisor or foreman who can receive and carry out instructions given by proper authorities.

iv) Contractor must, at all times during the term of this Agreement, employ personnel that are Certified Crane Operator(s), as recognized by the National Commission for the Certification of Crane Operators (NCCCO).

v) Contractor will have a Quality Control Plan that includes an effective and efficient means of identifying and correcting problems throughout the entire scope of operations. Contractor will be required to comply with this quality control throughout the term of the Agreement. Contractor must have a current Safety Manual that meets SB 198 requirements for injury and illness prevention.

3) PRUNING PROGRAM

a) Annual Grid Trim

i) Contractor shall carry out and complete tree pruning in all pre-designed districts, grids, or prune routes established by the City on a set cycle established by the City to include all trees. Pruning will include structural pruning, crown raising, clearance trimming, and crown cleaning in accordance with the standards set forth by the International Society of Arboriculture Pruning Standards (Best Management Practices), the ANSI A300 Standards, and the Section 9 - Standards. Trees in channelway will be included in the grid trim list. All tree canopies will have a minimum vertical clearance of fourteen feet (14') from the street and ten feet (10') over the sidewalk. Contractor will also maintain two feet (2') minimum clearance around streetlights.

ii) Contractor will be required to furnish all supervision, labor, equipment and materials necessary to accomplish the work in accordance with the Agreement.

Projects that are difficult to access and require special equipment (e.g., a 75-foot tower) will fall under Crew Rental rate. The City must prior written approval for any jobs that will require a Crew Rental rate.

4) INSPECTION OF HAZARDOUS CONDITIONS

i) All City trees will receive routine maintenance and periodic inspections by either City staff and the Contractor. The Contractor will have an ISA Certified Arborist on site for a regularly scheduled minimum of eight hours per month. Contractor shall report to the City tree problems

that are clearly visible by the inspection, but not considered hazardous by ISA standards will be reported to the City for direction and/or further evaluation. Also, the crew performing maintenance must properly notify the City of any tree-related problems that are clearly visible in writing by email to City's designate supervisor. This shall be in written form regardless of whether the problem is considered hazardous and shall occur within 24 hours if deemed hazardous. Contractor shall immediately upon discovery take action to correct tree problems prior to reaching crisis levels and to correct any hazards before injury or damage to property occurs.

5) TREE INVENTORY

i) The Contractor will provide the City access to a record-keeping system consisting of an Internet-based software program that allows the City to maintain information about its tree population, including the description of each tree by species, height, diameter, work history, and tree and planting site location. The tree inventory software program must be an Internet-driven tracking program. The program will have the capability to produce detailed listings of tree and site information, work histories, service requests, summary reports, and pictures of City tree species. The Contractor will provide software support to the City for the entire term of the Agreement.

ii) The Contractor will provide the City with recommendations for tree maintenance, recommended planting locations, and recommended removals. Attributes to be collected by field personnel may include address, street, facility, species, diameter, crown, height, recommended maintenance, overhead utilities, and parkway size and type.

iii) GPS Tree Inventory

(1) At the request of the City, Contractor shall provide the City with Global Positioning System (GPS) coordinates for all trees in public spaces. This includes, but is not limited to, all publicly owned trees on street right-of-ways, parks, City facilities, and open spaces such as medians, greenscapes, etc. The address information contained in the inventory should be linked directly to a Geographical Information System (GIS) program, such as ArcView.

(2) The City currently has an inventory. Contractor is required to keep inventory updated as it trims assigned trees. Updates should include any work history, site recommendation, DBH and height, GPS coordinates, etc.

(3) A GPS tree inventory must be maintained with a database using the City's standardized addressing system for all parks and open space areas. Contractor will be required to use and create an ESRI ArcView/ArcGIS compatible "shape file". The inventory must be capable of showing the location of every existing tree site and vacancies on the City's existing GIS base maps (streets, parcels, addresses, right-of-way and hardscape, etc.) Minimum accuracy will be not more than one meter. Any proposed system must be compatible with, and able to accurately and completely import, all existing City tree inventory data.

(4) Mobile Access – Contractor must be able to provide a mobile application for field use. All dates must reflect live data as it exists in the tree inventory. The functionality of the mobile application shall include the following minimum requirements:

- Apple or Android compatible

- Precise mobility view as user moves through canopied areas
- Multiple features, including aerial imagery and street name
- Ability to update and inventory urban forest
- Ability to add work history

(5) Technical Support and Maintenance

(i) The Contractor will provide routine maintenance, archive, backup, restore, and disaster recovery procedures as may be requested by the City. The Contractor will provide complete support rapidly with experienced staff available to the City during the hours of 7:00 A.M. to 5:00 P.M. Monday through Friday. The Contractor must be readily available by telephone, e-mail or may respond to the City's location within a timely manner.

6) PROJECT SPECIAL PROVISIONS

i) At the request of the City, projects may consist of tree pruning, traffic clearance pruning, and palm pruning as specified that may not be part of routine maintenance. All pruning methods must comply with the International Society of Arboriculture Pruning Standards (Best Management Practices), the ANSI A300 Standards, and Section 9 - Standards. Quote rates should be based on Crew Rental or other pre-determined rates.

7) DEFINITIONS

i) All capitalized terms used in this Exhibit A, but not defined, shall have the same meaning as ascribed to it elsewhere in the Agreement. Where "as directed," "as required," "as permitted," "approve," "acceptance," or words of similar import are used in this Exhibit A, it is understood that the direction, requirement, permission, approval, or acceptance by the City of Tracy is required in writing unless otherwise stated. As used in this Exhibit A, "provide" will be understood to mean "provide complete, in total". The word "site" as used in this Exhibit A shall mean the location receiving the Service. The use of the word "Contractor" will be held to mean the Contractor and/or any person employed by the firm or working at the Contractor's direction.

8) WORK QUALITY

i) All tree pruning must comply with good arboreal practices for the particular species of trees being trimmed and must be consistent with the Pruning Standards and Best Management Practices as adopted by the International Society of Arboriculture. All tree canopies will have a minimum vertical clearance of fourteen feet (14') from the street. Contractor will also maintain two feet (2') minimum clearance around street lights. The Contractor will also meet the requirements of the American National Standards, Z133-1-2006, entitled "Safety Requirements for Arboricultural Operation," published by the American National Standard Institute, Inc., 1430 Broadway, New York, New York 10018.

ii) The City Operations Superintendent or designee will determine, in its sole discretion, if the Contractor has met all pruning requirements and payment will not be made for services that are not in accordance with the standards contained in the Agreement. The Contractor will be deemed in Agreement default, if the Contractor consistently fails to comply with the standards set forth in this Agreement.

9) STANDARDS

i) Prior to beginning the work, the Contractor will review with City Operations Superintendent or designee various methods, tools, and work scheduling to be used on the project. Unless otherwise indicated, tree pruning will include, but is not limited to, industry standards.

ii) Daily tree pruning operations will commence no earlier than 7:00 A.M. and will be completed each day no later than 5:00 P.M., unless the City provides approval to commence earlier or end later.

iii) All debris resulting from tree pruning operations shall be removed from the work site on a daily basis.

iv) Limbs one inch in diameter or greater must be precut to prevent splitting. When there is a chance of bark tearing at the crotch, remove large limbs with three cuts. Make the first cut on the underside of the branch, one foot to two feet from the crotch. The undercut should be at least one-third of the diameter. Make the second cut one-inch to three inches further from the crotch than the first. The final cut is made at the crotch in a manner to favor the earliest possible covering of the wound by callus growth. Cuts must not be made so large that they will prevent sap flow. All cut branches three and one-half inches or larger in diameter must be lowered by proper ropes to the ground. Any damage caused by dropping limbs must be repaired or caused to be repaired by Contractor within three days at the Contractor's expense and to the satisfaction of the City Operations Superintendent or designee. All debris resulting from tree pruning operations must be removed from the work site on a daily basis.

v) **Tool Sanitation**

(1) On all trees, including palms, known or suspected to be diseased, pruning tools and cut surfaces must be disinfected with a ten percent chlorine bleach solution after each cut and between trees where there is danger of transmitting the disease on tools. Fresh solution must be mixed daily.

vi) **Tree Pruning**

(1) Pruning will include structural pruning, crown raising, and crown cleaning, crown reduction in accordance with the standards set forth by the International Society of Arboriculture Pruning Standards (Best Management Practices) and the ANSI A300 Standards.

(2) Contractor must comply with Standards of CAL OSHA and the American National Standard Institute, Z133 Safety Requirements.

(3) Contractor will endeavor to maintain good public relations at all times. This includes, but is not limited to, conducting work in a manner that will cause the least possible interference and annoyance to the public. Work will be performed by competent employees and supervised by an experienced, English speaking, supervisor in tree maintenance operations. The Contractor will be responsible for advance notification to the residents at each work location of the intended tree operations a minimum of 24 hours if no "NO Parking" signs are not needed. The Contractor will be responsible to see that private property and vehicles at work locations are not endangered or damaged during the course of work.

(4) Contractor will exercise precautions as necessary when working adjacent to aerial and subterranean utilities. In the event that aerial utility wires present a hazard to the Contractor's personnel or others near the work site, work is to cease immediately and the appropriate utility company notified. Work will then commence in accordance with instructions from the utility company. In the event that work causes excavation, the City or Contractor will properly mark the location and the Contractor is responsible for appropriate notification of Underground Service Alert (USANorth811).

(5) No hooks, gaffs, spurs or climbers will be used for anything other than removals.

(6) Final pruning cuts will be made without leaving stubs. Cuts will be made in a manner to promote fast callous growth.

(7) When pruning fungus, disease, or fire blight-infected limbs or fronds, all pruning tools must be cleaned after each cut with the appropriate solution (e.g. alcohol or bleach).

(8) Topping will not be done unless specifically requested by the City in writing.

(9) The specific techniques employed will be consistent with industry practice for the size and species of tree being trimmed. The goal will be a safe, healthy, clear, balanced and aesthetically pleasing structure for the tree. All dead, broken, damaged, diseased or insect-infested limbs must be removed at the trunk or main branch. All cuts will be made sufficiently close, without leaving a stub, to the parent stem so that compartmentalization and callous development can readily start under normal conditions. All limbs two inches or greater will be undercut to prevent splitting. The remaining limbs and branches will not be split or broken at the cut. All crossed or rubbing limbs will be removed unless removal will result in large gaps in the general outline of the tree.

(10) Cut laterals to preserve the natural form of the tree, leaving the head open enough for the branching system to show and permitting the dead material to be easily cleaned out and light to show through the head. Tree foliage will be reduced by at least 15% but no more than 25%.

(11) Trim to remove dead wood or weak, diseased, insect-infested, broken, low, or crossing limbs. Branches with an extremely narrow-angle of attachment should normally be removed.

(12) Small limbs, including suckers and waterspouts, will be cut close to the trunk or branch from which they arise.

(13) Heading cuts and/or topping will not be allowed under any circumstances. Heading, rounding over, or stubbing will not be an accepted practice for reducing the size or the framework of any tree unless otherwise directed in writing by the City Operations Superintendent to reduce failure potential.

vii) **Pruning for Traffic Clearances**

(1) Tree pruning for traffic clearances must provide clearances of at least fourteen (14) feet and no greater than (16) feet above finish grade for moving vehicles within the traveled roadway, for pedestrians on sidewalks in accordance with standards set forth by the International Society of Arboriculture Pruning Standards (Best Management Practices)

and the ANSI A300 Standards under "Pruning to Raise." Clearance trims are performed on a grid system or on a street-by-street basis. Clearances for adjacent structures and their connecting utility lines (service drops), will be determined by the City Parks, Sports Fields & Trees Superintendent or designee and conform to the following:

(a) The minimum clearance under trees within the street right-of-way shall be 14 feet over the traveled road, and ten feet over the curb line and the sidewalk side of the tree. When pruning the bottom branches, care will be given to obtain a balanced appearance when viewed from across the street immediately opposite the tree.

(b) Cut to laterals to preserve the natural form of the tree. Remove lateral branches at their point of origin or shorten the length of a branch by cutting to a lateral, which is large enough to assume leadership.

(c) When cutting back, avoid cutting back to small suckers. Remove smaller limbs and twigs in such a manner as to leave the foliage pattern evenly distributed.

viii) **Pruning Palm Trees**

(1) Palm tree pruning will consist of the removal of loose dead fronds, fruit clusters and other vegetation from the trunks of all palms in a manner selected by the Contractor and approved by the City Operations Superintendent or designee, and in accordance with the following:

(a) The use of climbing spurs or spike shoes for the purpose of climbing palm trees is prohibited, unless specifically approved by the City Operations Superintendent or designee. The Contractor will be required to use an aerial tower with sufficient height to reach the crown for the purpose of pruning City Palm trees.

(b) Palm Skinning will remove dead fronds, and parts thereof, including stubs, can be removed along the entire length of the trunk of each palm, leaving a clean unsheathed appearance slicked from the ground to approximately 24 inches to 36 inches from the base of the green fronds at the top of the tree. The frond stubs (cut close to trunk) can be left in place within a span of at least 18 inches but no greater than 36 inches. This is performed at the request of the City.

ix) **Service Request Tree Pruning**

(1) Trees that need service prior to their scheduled grid trim for safety, clearance, or aesthetic purposes must be trimmed within two weeks of notification by the City to the Contractor unless City determines the work to be of a more urgent nature.

(2) All trimming should be completed to the guidelines set forth in Section 9 – Specifications.

x) **Tree Removals**

(1) City prepares list of trees to be removed or assigns work requests, marks trees, notifies homeowners, and submits the list or work request to the Contractor.

(2) Contractor calls Underground Service Alert (USANorth811) and prepares internal work order. Crew removes tree and hauls all debris. Crew grinds stumps to a depth of 18 inches, including visible surface roots to three feet from stump. All holes will be backfilled with soil, as well as all debris cleaned up and hauled away.

(3) Projects that are difficult to access with equipment, or require the need for a crane or an aerial tower over 75 feet would fall under Crew Rental rates. The City Operations

Superintendent or designee will make the final determination if a Crew Rental rate is allowable.

(4) All wood from removed trees is the property of the City and will be disposed of at the direction of the City Operations Superintendent or designee. No wood will be left along public right-of-way unless approved by the City Operations Superintendent or designee.

(5) The Contractor is responsible for marking trees so that they are easily identifiable by Underground Service Alert (USANorth811) and the Contractor. The Contractor will be required to call Underground Service Alert (USANorth811) at least two days before stumps are to be ground out.

(6) Stumps should be cut low enough to the ground where routing can be done safely. This may be accomplished by cutting the stump at the time of grinding, or at the time of tree removal, except for infrastructure conflicts. Holes created by stump and root grinding must be filled the same day. All excess stump grinding chip debris will be removed and loaded into transport vehicle for disposal. Any damaged paved surfaces or irrigation systems must be restored to their original condition by the Contractor.

xi) **Tree Planting**

(1) Planting includes the tree, stakes, ties and complete installation. The City will supply the planting list to the Contractor on an as-needed basis. Contractor will guarantee the quality of the tree stock and the workmanship.

(2) Contractor must provide all equipment, labor, and materials necessary for the planting of trees throughout the City in accordance with the specifications herein.

(3) The City will be responsible for marking locations and the Contractor will notify Underground Service Alert (USANorth811) prior to planting.

(4) All City tree will be planted according the most recent City Standard for Streetscapes and Landscaping

(5) All trees must be of good nursery stock that adheres to the American Standard for Nursery Stock as described in the ANSI Z60.1-1996 Standards. Trees must be free from pests, disease, and structural defects.

xii) **Crew Rental**

The standard crew is three workers, one chipper truck, one chipper, one aerial tower, and all necessary hand tools, equipment, and materials to complete the Services. The crew and equipment can be modified to complete any type of miscellaneous tasks including special projects that may consist of extraordinary work such as hanging flags, changing light bulbs, or trimming specific trees requiring immediate attention prior to their scheduled trim.

xiii) **Emergency Response**

(1) The Contractor will be required to provide emergency on-call response for damaged trees as a result of storms or other reasons. Emergency calls may occur at any given time. The Contractor will be provided with locations and the work to be done at each location via telephone or in writing from a City authorized representative. The Contractor's crew will do what is necessary to remove/secure the hazardous tree or render the tree-related condition safe until the following workday. Emergency work must begin within two hours of the initial telephone call.

(2) Contractor is required to provide a 24 hour emergency phone number and the names of at least five contact individuals. Should the contact persons or their phone numbers change during the course of the Agreement, those changes must be submitted to the City within two working days.

(3) Contractor is required to provide all necessary traffic control during the course of emergency work. Should the work involve any high voltage power lines or any utility lines, the Contractor will be required to notify the responsible utility company.

xiv) **Line Clearance Pruning**

During the term of this Agreement, the Contractor may be required to perform utility line clearance in conjunction with routine or non-routine pruning activities. The Contractor will be required to furnish all supervision, labor, equipment and materials necessary to accomplish the work in accordance with the Agreement. The Contractor has the responsibility for compliance with safety and health standards of the California Occupational Safety and Health Act (OSHA) and all applicable rules, regulations, and orders. The supervisor overseeing the project should be an ISA Certified Arborist Utility Specialist and the persons completing the work should be Line Clearance Treeworkers. The competency of the Contractor's personnel must be maintained through regular training. All persons performing tree work on City trees in or around primary electrical lines must be trained to do so in accordance with the "Electrical Safety Orders" of the State of California.

xv) **Arborist Services**

On occasion, the City requires tree evaluations, including written reports and presentations to stakeholders. The Contractor will provide an hourly rate for an International Society of Arborculture Certified Arborist with a Tree Risk Assessment Qualification (TRAQ) that can respond to the City's request(s) for the preparation of detailed Arborist's reports, tree evaluations, site inspections and updates to an approved City Urban Forestry Management plan or other guiding documents.

10) TRAFFIC CONTROL

a) Contractor must conform to all City Traffic Safety requirements and operating rules at all times while this Agreement is in effect. The Contractor must employ staff certified as Traffic Control Design Specialists and Traffic Control Technicians in accordance with the American Traffic Safety Services Association (ATSSA).

b) Contractor will be responsible for supplying and using all safety equipment necessary to close or delineate traffic lanes to through traffic. This is to include a high visibility arrow/message board(s) as necessary. The City, prior to use, must approve all traffic safety equipment for use.

c) Illuminated arrow/message boards, sign stands, delineators and/or cones must be used to identify the work site for vehicular and pedestrian safety.

11) PUBLIC NOTICING OF TREE PRUNING OPERATIONS

a) Contractor will be required to notify residents and/or businesses of scheduled tree pruning operations at least 24 hours prior to the work being performed. Notifications will be made in the form of door hangers.

b) City-approved "No Parking" signs must be posted on individual trees scheduled for pruning a minimum of 24 hours prior to work being performed.

12) CLEAN UP & REPAIRS

a) Contractor must clean all job sites when work is completed daily, including the raking of leaves, twigs, etc., from the lawns and parkways and the sweeping of streets. Every effort will be made by the Contractor to prevent debris or materials from tree work to be allowed to enter the City's storm drainage system. The Contractor must comply with all local, state, and federal stormwater runoff regulations.

b) The City Operations Superintendent or designee will be the sole judge as to the adequacy of the clean-up.

c) Any damage sustained to the property will be restored to the same or newer condition within one week of harm occurring, by Contractor. All damages must be reported to the City using their service request system. Pictures must be included pre and post repair work.

13) DISPOSAL OF DEBRIS

a) All tree branches, trunks, chips, etc. produced as a result of the Contractor's operations under this Agreement will be reduced, reused, recycled, and/or transformed. The City will receive access to their Greenwaste Recycling report detailing the amount of debris recycled and the location. This report is to be used for compliance with Assembly Bill 939.

b) **Greenwaste Recycling Report**

i) Greenwaste that is transported to an off-site facility for grinding into mulch must be documented and available to the City Operations Superintendent or designee on a monthly basis.

c) **Wood Chips**

i) Chips generated from pruning operations within the City of Tracy may first be dumped at a City designated site for possible reuse as landscaping mulch.

ii) At the direction of the City Operations Superintendent or designee, wood waste generated from tree removals will be chipped into pure wood chips with an even uniform size.

14) PARKING

a) The City of Tracy will make every attempt to identify a suitable space for parking of vehicles and equipment for the purpose of this Agreement. The Contractor shall hold the City of Tracy harmless and release the City of any and all liability as a result of theft or vandalism.

15) SERVICE REQUEST

a) Using the City's current service request system, Contractor must submit a request stating the location, description and picture of any issues not related to regular tree work, this includes damages caused by Contractor.

b) Service requests may be directly assigned to Contractor. Contractor is responsible for completing service requests in a timely manner and submitting to Operations Superintendent or designee for closure.

16) INVOICE

a) Contractor will be required to submit invoices to the City on a monthly basis. Invoice format shall include, but is not be limited to: the Services performed, the district or LMD zone where tree maintenance operations took place, a list of each street where the tree work occurred, the address of each individual tree, the species, and its height and trunk diameter of each individual tree. Failure to submit invoices in this format may result in non-payment until these requirements are met.

17) INSPECTIONS

a) The City Operations Superintendent or designee, will at all times have access to the work and will be furnished with every reasonable facility for ascertaining full knowledge respecting the staffing, progress, workmanship, and character of materials and equipment used and employed in the work.

18) WITHHOLDING PAYMENT

a) The City may withhold payment to such extent as may be reasonably necessary to protect the City from loss, including, but not limited to, the following:

   i) Defective or inadequate or incomplete work not corrected.

   ii) Work performed on incorrect trees.

19) MINOR MODIFICATIONS AND/OR ADDITIONAL WORK

a) Any modifications to the standards and specifications set forth in this Exhibit A shall be in writing and jointly approved by the City and Contractor.
b) In the event that the City of Tracy should require additional work beyond the requirements of this Exhibit A, the Contractor will perform all work at a competitive price.
c) Additional work may be added to the Agreement work as the need arises. The Contractor will perform all specified and approved additional work at the unit prices listed in Exhibit "B."
d) The Contractor must be willing to provide a competitive price for additional work that may be added to the Agreement. Contractor will be required to demonstrate the ability to properly execute the expanded workload with the necessary increase in labor, materials, and equipment needed to complete the additional work in a timely manner.
e) The Contractor must have the ability to receive and respond to emergencies and must respond to emergency call-outs within two hours of receipt of the call.
f) No sub-Contractors will be allowed to be added to this Agreement without the prior written consent of the City.

20) COOPERATIVE PURCHASING

a) If requested, Contractor shall offer to other agencies that provide services and/or otherwise operate within the City's jurisdiction (including, without limitation, the County of San Joaquin and school districts serving the City) (**City Affiliate**) to provide the same Services Contractor is providing to the City under this Agreement on substantively the same terms and conditions (including, without limitation, the same rate schedule) as contained in this Agreement. In such event, Contractor and the City Affiliate shall enter into an agreement separate and apart from this Agreement. The City shall incur no financial or legal responsibility relating to Contractor's provision of services to a City Affiliate, and Contractor shall, to the maximum extent permitted by law, indemnify, release and hold the City harmless from any liability relating to or in connection with a purchase order from a City Affiliate, Contractor's provision of services to a City Affiliate, or any agreement between Contractor and a City Affiliate.

EXHIBIT B - Compensation

DESCRIPTION	**Type**	**Amount**
Annual Grid Tree Trimming	per tree	$ 169.00
SERVICE REQUEST		
0-6" dbh	per tree	$ 75.00
7-12" dbh	per tree	$ 150.00
13-18" dbh	per tree	$ 250.00
19-24" dbh	per tree	$ 375.00
25-30" dbh	per tree	$ 500.00
31" + dbh	per tree	$ 850.00
PALM TREE		
Skinning	per tree	$ 25.00
Trimming		
Fan Palm	per tree	$ 150.00
Date Palm	per tree	$ 400.00
Tree and stump removal 0-36"		
Fan Palm	per DBH	$ 69.00
Date Palm	per DBH	$ 69.00
Tree and stump removal over 36"		
Fan Palm	per DBH	$ 69.00
Date Palm	per DBH	$ 69.00
Tree only		
Fan Palm	per DBH	$ 50.00
Date Palm	per DBH	$ 50.00
Stump only	per DBH inch	$ 28.00
TREE REMOVAL		
Tree and stump removal 0-36"	per DBH	$ 48.00
Tree and stump removal over 36"	per DBH	$ 78.00
Tree only	per DBH	$ 58.00
Stump only	per DBH	$ 28.00
PLANTING		
15 gallon tree	Per tree	$ 275.00
24 inch box tree	Per tree	$ 495.00
36 inch box tree	Per tree	$ 1,250.00

CREW RENTAL	per crew hour	$ 360.00
Per Man Hour (call-out) Emergency	per hour	$ 140.00
EMERGENCY RESPONSE	per crew hour	$ 420.00
GPS INVENTORY UPDATES (new areas)	per tree site	$ 70.00
ARBORIST SERVICES	per hour	$ 178.00
Equipment Rental #1 20 ton crane, 95' aerial tower, roll off	per hour	$ 175.00
Equipment Rental #2 40 ton crane	per hour	$ 250.00

CERTIFICATE OF CORPORATE AUTHORITY

I, Rose Epperson, being the Assistant Secretary of West Coast Arborists, Incorporated, do hereby affirm and represent as follows:

I. That **PATRICK MAHONEY** is President of West Coast Arborists, Incorporated, and as President, is authorized to execute all documents, deeds, and contracts on behalf of West Coast Arborists, Incorporated. Furthermore, Patrick Mahoney is authorized to sign on behalf of this corporation on all contracts, bids and legally binding contracts.

II. That **RICHARD MAHONEY** is Vice-President of West Coast Arborists, Incorporated, and as Vice-President, is authorized to execute all documents, deeds, and contracts on behalf of West Coast Arborists, Incorporated. Furthermore, Richard Mahoney is authorized to sign on behalf of this corporation on all contracts, bids and legally binding contracts.

III. That **RANDY THOMPSON** is Vice-President of West Coast Arborists, Incorporated, and as Vice-President, is authorized to execute all documents, deeds, and contracts on behalf of West Coast Arborists, Incorporated. Furthermore, Randy Thompson is authorized to sign on behalf of this corporation on all contracts, bids and legally binding contracts.

IV. That **ANDREW TROTTER** is Vice-President of West Coast Arborists, Incorporated, and as Vice-President, is authorized to execute all documents, deeds, and contracts on behalf of West Coast Arborists, Incorporated. Furthermore, Andrew Trotter is authorized to sign on behalf of this corporation on all contracts, bids and legally binding contracts.

Executed this 21st day of December, 2009 at Anaheim, California.

Patrick Mahoney
President
West Coast Arborists, Inc.

Rose Epperson
Asst. Secretary/Treasurer
West Coast Arborists, Inc.

Sworn and subscribed before me this 21st day of December, 2009.

VICTOR M. GONZALEZ
Commission # 1721287
Notary Public - California
Orange County
My Comm. Expires Jan 27, 2011

Notary Public

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

AUTHORIZING A PROFESSIONAL SERVICES AGREEMENT WITH WEST COAST ARBORISTS, INC., FOR THE 2023-2024 TREE MAINTENANCE PROGRAM, FOR AN INITIAL TWO YEARS WITH AUTHORITY FOR THE CITY MANAGER TO EXECUTE AGREEMENT EXTENSIONS FOR AN ADDITIONAL FIVE YEARS, WITH A NOT-TO-EXCEED AMOUNT OF $2,587,176 ANNUALLY

WHEREAS, The Tracy Consolidated Landscape Maintenance District ("LMD"), Community Facilities District ("CFD"), and General Funded areas have approximately 47,283 trees and plantable sites. These trees require regular maintenance to ensure they remain healthy and do not pose a safety risk to the community; and

WHEREAS, The City seeks to enter into a professional services agreement ("Agreement") with West Coast Arborists, Inc. ("WCA") to provide a variety of tree maintenance and emergency response services throughout the CFD; and

WHEREAS, A Request for Proposal ("RFP") was released on April 5, 2023. RFP were received on May 11, 2023 with one proposal. A panel of three City staff members, including two certified arborists, reviewed the proposal and determined that the WCA demonstrated the competence and professional qualifications necessary for the satisfactory performance of the required services and possessed the skills, experience, and certifications required to provide the services; and

WHEREAS, The Agreement includes all necessary maintenance services for the trees, removal, replants, and any additional services needed to care for the City's urban forest. Proper tree maintenance services will help to preserve the health and vitality of the urban forest, which will, in turn, improve air quality and reduce energy costs; and

NOW, THEREFORE, Be it resolved as follows:

RESOLVED: That the foregoing recitals are true and correct; and be it

FURTHER RESOLVED: That City hereby approves the Agreement for the 2023-2024 Tree Maintenance Program, which includes a not-to-exceed amount of $2,587,176 annually and an initial term of two years. After review and approval by the City Attorney's Office, the City authorizes the execution of the Agreement and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution; and be it further

RESOLVED: The City authorizes the City Manager to execute Agreement extensions for up to an additional five years, pursuant to the terms of the Agreement and minor amendments, and be it further,

RESOLVED: The project is exempt pursuant to categorical exemptions per CEQA Guidelines §15301(a), Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures; and be it further

RESOLVED: This Resolution is effective immediately upon adoption.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on the 15th day of August 2023, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.J

RECOMMENDATION

Staff recommends that the City Council adopt a resolution (1) rejecting all bids for the Temporary Emergency Housing Project on Arbor Road, Site Improvements Construction Package 2, CIP 71112, received October 19, 2022, and (2) authorizing staff to re-advertise the project.

EXECUTIVE SUMMARY

Staff recommends that City Council adopt a resolution rejecting all bids for the Temporary Emergency Housing Project on Arbor Road, Site Improvements Construction Package 2, CIP 71112, received on October 19, 2022, and authorizing staff to re-advertise the project.

BACKGROUND AND LEGISLATIVE HISTORY

On September 1, 2020, Council authorized the creation of a Capital Improvement Project for the Temporary Emergency Housing Project on Arbor Avenue, CIP 71112, to create a safe and dignified facility for residents experiencing homelessness.

The project was divided into a Site Preparation phase (Phase 1) of demolition, rough grading and installation of underground utilities, and a Site Improvements phase (Construction Package 2) of full site construction and development that required the work of the design consultant, The KPA Group, LLC (Consultant).

The Site Preparation Work (Phase 1) has been completed.

The second construction contract for Site Improvements (Construction Package 2) was advertised for competitive bids on June 8, 2022, June 10, 2022, and June 15, 2022. Bids were received and publicly opened in Room 203 and online via video conference call at 2:00 p.m. on Wednesday, July 20, 2022. Only one bid from Gowan Construction, Inc., of Tracy, California was received. Upon conducting a bid analysis, City staff determined that the bid was nonresponsive.

As a result, Resolution No. 2022-120 was adopted by Council on August 16, 2022, thereby (1) rejecting the sole, nonresponsive bid, and (2) authorizing City staff to re-advertise the project.

The Site Improvements (Construction Package 2) was re-advertised for bids on September 12th, 16th, and 23rd of 2022. The Construction Package 2 Bid documents were restructured to include a Base Bid plus four (4) Additive Bid Items (ABIs). The Base Bid + ABI 1 was determined to provide the minimum elements necessary for a safe facility. The low bidder was determined by the lowest combined bid for the Base Bid + ABI 1. Bids were received and publicly opened via online video conference call at 2:00 p.m. on Wednesday, October 19, 2022, with the following results:

Contractor	**Base Bid + ABI-1**
GradeTech, Inc.	$ 6,868,531
Diede Construction, Inc.	$ 8,348,822
DL Falk Construction	$ 8,570,378
Gowan Construction	$ 8,586,700

ANALYSIS

The bids received exceeded the Engineer's Estimate, for both the Base Bid + ABI 1 (used to determine the low bidder) and the Base Bid + All AB I's. The low bidder was 16% higher than the Engineer's Estimate, and the three other bids were 35-45% higher. The City did not award a construction contract because the bids exceed available funding.

Staff and the design team have been evaluating revisions to the contract requirements, bid items, unit price formats, and Engineer's Estimate so that readvertisement of the project will produce bid submittals that are within the appropriated funding. Additional research about current material delivery times and impacted supply chains has been conducted, and some long lead time electrical items have been contracted out separately, removing some of the risk that Contractors relayed to staff that they felt was present in the previous construction package.

FISCAL IMPACT

The bids received exceeded available funding for the Temporary Emergency Housing Project, CIP 71112. Rejection of the bids will allow staff and the design team to make revisions that will allow future readvertisement of the project to produce results that stay within the funds available.

CEQA DETERMINATION

A Notice of Exemption was issued on October 16, 2020, for the Temporary Emergency Housing site at 500 Arbor Avenue in accordance with Government Code sections 65660-65662 for Low Barrier Navigation Centers and Section 15269c) of the CEQA Guidelines (14 Cal Code Regs. 15269(c) for (Emergency Projects).

STRATEGIC PLAN

This agenda item supports the City of Tracy's Public Safety Strategic Priority and aids in Goal 2, "Implement the Adopted Homelessness Strategic Plan."

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council adopt a resolution (1) rejecting all bids for the Temporary Emergency Housing Project on Arbor Road, Site Improvements Construction Package 2, CIP 71112, received October 19, 2022, and (2) authorizing staff to re-advertise the project.

Prepared by: Ilene Macintire, PE, Senior Civil Engineer

Reviewed by: Koosun Kim, PE, City Engineer / Assistant Director of Development Services
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION 2023-_____

REJECTING ALL BIDS FOR THE TEMPORARY EMERGENCY HOUSING PROJECT ON ARBOR AVENUE, SITE IMPROVEMENTS CONSTRUCTION PACKAGE 2, CIP 71112, RECEIVED ON OCTOBER 19, 2022, AND AUTHORIZING STAFF TO RE-ADVERTISE THE PROJECT

WHEREAS, the Temporary Emergency Housing Facility, CIP 71112 is an approved project; and

WHEREAS, in September of 2022, Temporary Emergency Housing Project on Arbor Road, Site Improvements Construction Package 2, CIP 71112, was re-advertised for bids; and

WHEREAS, bids were received on October 19, 2022 with the following results; and

WHEREAS, Engineering staff prepared the plans and specifications and re-advertised the Temporary Emergency Housing Project on Arbor Road, Site Improvements Construction Package 2, CIP 71112, for competitive bids on September 12th, 16th and 23rd of 2022, and bids were received and publicly opened in City Hall Room 203/Teleconference at 2:00 p.m. on October 19, 2022, with the following results:

Contractor	**Base Bid + ABI-1**
GradeTech, Inc.	$ 6,868,531
Diede Construction, Inc.	$ 8,348,822
DL Falk Construction	$ 8,570,378
Gowan Construction	$ 8,586,700; and

WHEREAS, all bids exceeded the Engineer's Estimate and available project funds; now, therefore, be it

RESOLVED: That the above recitals are true and correct; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy hereby rejects all bids for the Temporary Emergency Housing Project on Arbor Road, Site Improvements Construction Package 2, CIP 71112, received on October 19, 2022; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy authorizes staff to re-advertise the project.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on the 15th day of August 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.K

RECOMMENDATION

Staff recommends that the City Council adopt a resolution to (1) accept the construction for the Improvements at Grant Line Road and MacArthur Drive Intersection Project, CIP 72121, for work completed by DV Electric, Co., of San Jose, California, (2) authorize the City Clerk to File the Notice of Completion with the San Joaquin County Recorder's Office, (3) authorize the City Engineer to release the bonds and retention payment, and (4) authorize the Finance Department to close the Project.

EXECUTIVE SUMMARY

City staff requests that the City Council accept the construction for the Improvements at Grant Line Road and MacArthur Drive (Project), CIP 72121, as complete. Project costs are within the available budget and work was completed in a timely manner and in accordance with plans and specifications as provided. Staff recommends that the City Council accept the Project as complete to enable the City Engineer to release the contractor's bonds and retention payment.

BACKGROUND AND LEGISLATIVE HISTORY

Leprino Foods Company is located at the corner of Grant Line Road and MacArthur Drive, adjacent to the Project. They have great concern for pedestrian safety when crossing the intersection into oncoming traffic without proper traffic control. Due to these safety concerns, the City of Tracy Traffic Engineering staff studied the traffic and pedestrian traffic and came up with a design for the intersection that would resolve the safety issue. The studies resulted in the need to install pedestrian-only traffic control on the traffic signal heads along with a fence that would restrict crossing the road in places other than at the intersection.

City staff worked with a consultant, Advanced Mobility Group, to prepare the plans, specifications, and estimates. The Project was advertised for competitive bids on January 21, 2022, and January 28, 2022. Bids were received and publicly opened at 2:00 p.m. on Wednesday, February 16, 2022. The City Manager approved and awarded a construction contract on June 15, 2022, to DV Electric, Inc., of San Jose, California in a not-to-exceed amount of $127,650, for the construction of the Improvements for the Project. No change orders were issued for this project.

ANALYSIS

The Project work included the installation of activated LED blank-out signs on traffic signals, the installation of fencing along the median, and the installation of signage and striping at the intersection of Grant Line Road and MacArthur Drive.

The Contractor has completed all the work required to be done in accordance with the plans and specifications and has requested acceptance of the Project. The City Engineer has inspected the completed work and confirmed that all work conforms to the contract plans and specifications. The Project was completed within the time frame of the original contract.

FISCAL IMPACT

CIP 72121, Grant Line Road and MacArthur Drive Intersection Improvements Project, is an approved Capital Improvement Project with a budget of $160,715. This project was funded with an approved funding agreement with Leprino Foods Company. The total completed project cost is $143,755 and the remaining funds are to be returned within 45 days to Leprino Foods Company upon completion and acceptance of the improvements.

Final project costs were within budget as follows:

A.	Construction Contract Amount	$ 127,650
B.	Approved Change orders	$ 0
C.	Design, construction management, inspection, Testing & miscellaneous project management Expenses	$ 15,825
	Total Project Costs	$ 143,475
	Total Budget Amount	$ 160,715
	Budget Remaining	$ 17,240

The remaining funds in the project will be returned as follows:

	Budget	Cost	Balance
Leprino Foods Company	$ 160,715	$ 143,475	$ 17,240
Totals			$ 17,240

PUBLIC OUTREACH / INTEREST

Multiple meetings were held between Leprino Foods Company and staff to understand the issue concerning pedestrians crossing.

COORDINATION

Coordination between Transit, Police Department, Engineering and Operations, and the Street Maintenance Division occurred on multiple occasions to coordinate and establish this project as complete.

CEQA DETERMINATION

Ministerial Exemption, Code Section #15303 (d), New Construction.

This project is exempt pursuant to categorical exemptions per CEQA guidelines Section 15303 (d), New Construction. Water main, sewage, electrical, gas, and other utility extensions, including street improvements of reasonable length to serve such construction.

STRATEGIC PLAN

This agenda item is consistent with the City Council's adopted Quality of Life Strategy and meets the goal of enhancing the City's amenities.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council, by resolution, (1) accept the construction for the Improvements at Grant Line Road and MacArthur Drive, CIP 72121, in Tracy, California, for work completed by DV Electric, Inc., of San Jose, California, (2) authorize the City Clerk to File the Notice of Completion with the San Joaquin County Recorder's Office, (3) authorize the City Engineer to release the bonds and retention payment, and (4) authorize the Finance Department to close the Project.

Prepared by: Leisser Mazariegos, Associate Engineer

Reviewed by: Koosun Kim, PE, City Engineer / Assistant Director of Development Services
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION 2023-_____

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(1) ACCEPTING THE CONSTRUCTION FOR THE IMPROVEMENTS AT THE GRANT LINE ROAD AND MACARTHUR DRIVE INTERSECTION PROJECT, CIP 72121, FOR WORK COMPLETED BY D.V. ELECTRIC, CO., OF SAN JOSE, CALIFORNIA;
(2) AUTHORIZING THE CITY CLERK TO FILE THE NOTICE OF COMPLETION WITH THE SAN JOAQUIN COUNTY RECORDER'S OFFICE;
(3) AUTHORIZING THE CITY ENGINEER TO RELEASE THE BONDS AND RETENTION PAYMENT; AND
(4) AUTHORIZING THE FINANCE DEPARTMENT TO CLOSE THE PROJECT.

WHEREAS, on March 4, 2022, the City Manager approved and awarded a construction contract to D.V. Electric, Co., of San Jose, California (Contractor) for the Improvements at Grant Line Road and MacArthur Drive Intersection Project, in Tracy, California, CIP 72121 (Project); and

WHEREAS, the Contractor has completed all the work required to be done in accordance with the plans and specifications and has requested acceptance of the Project; and

WHEREAS, the City Engineer has inspected the completed work and confirmed that all work conforms to the contract plans and specifications; and

WHEREAS, no change orders were issued as part of this Project; and

WHEREAS, the Project work included the installation of activated LED blank-out signs on traffic signals, the installation of fencing along the median, and the installation of signage and striping at the intersection of Grant Line Road and MacArthur Drive; and

WHEREAS, the Project has been completed with the available budget, within the agreed upon time frame, per plans, specifications, and City of Tracy Standards; and

WHEREAS, the Project budget is $160,715, the project was completed under the budget for a total cost of $143,475. The Project was Developer funded by Leprino Foods Company. Any remaining funds will be returned when the project is closed by the Finance Department; now, therefore, be it

RESOLVED: That the City Council of the City of Tracy hereby accepts the construction for the Improvements at Grant Line Road and MacArthur Drive Intersection Project, CIP 72121, for work completed by D.V. Electric, Co., of San Jose, California; and be it

FURTHER RESOLVED: That the City Council authorizes the City Clerk to file the Notice of Completion with the San Joaquin County Recorder's Office; and be it

FURTHER RESOLVED: That the City Council authorizes the City Engineer to release the bonds and retention payment; and be it

FURTHER RESOLVED: That the City Council authorizes the Finance Department to close the Project, and to take all such actions necessary to effectuate the intent of this Resolution.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on the 15th day of August 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST: _____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of
the City of Tracy, California

August 15, 2023

Agenda Item 1.L

RECOMMENDATION

Staff recommends that the City Council adopt a resolution: (1) Accepting the Board of State of Community Corrections Officers Wellness and Mental Health Grant in the amount of $73,718; (2) Appropriating the grant funding of $73,718 to the Police Department's operational budget; (3) Approving a Professional Services Agreement (PSA) with Sigma Wellness, LLC (Sigma) for advanced preventative medical screenings for Tracy Police Department's first responders, for a term of 12 months, with a not-to-exceed amount of $105,000; and (4) Determining that waiving the competitive bidding process to award the PSA to Sigma is in the best interest of the City, pursuant to 2.20.140(b)(6) of the Tracy Municipal Code.

EXECUTIVE SUMMARY

This staff report is to provide background information supporting a Professional Services Agreement (PSA) with Sigma Wellness, LLC (Sigma) for advanced preventative medical screenings for the Tracy Police Department's first responders, including sworn personnel and public safety dispatchers. The City received a grant from the Board of State of Community Corrections Officers Wellness and Mental Health in the amount of $73,718. Staff requests this funding be appropriated to the Police Department's operational budget, and this funding will partially cover the cost of the proposed PSA with Sigma.

BACKGROUND AND LEGISLATIVE HISTORY

In accordance with Assembly Bill 178, Chapter 45, Statues of 2022, Item 5227-121-0001, funding is available to all city and county law enforcement agencies employing officers described in 830.1 of the Penal Code. The funding was directly distributed to California cities for this purpose and not the result of a competitive process for improving officer wellness and expanding mental health sources to include, establishing officer wellness units or expanding existing officer wellness units, establishing peer support units or expanding peer support units, services provided by licensed mental health professional, counselor, or other professional that works with law enforcement, expanding multiagency mutual aid programs focused on officer wellness and mental health, and other programs or services that are evidence based or have successful track record of enhancing officer wellness.

As a result of the passage of Assembly Bill 178 Chapter 45, Statues of 2022, Item 5227-121-0001, the State of California distributed funds to each city based on a predetermined formula. The City of Tracy Police Department was granted $73,718.

In keeping in alignment with the President's Task Force on 21st Century Policing, published in 2015, the Tracy Police Department has placed significant emphasis on recognizing and maintaining the health and wellness of its employees. The department's strategic priorities include advanced training, technology, and wellness, with a specific focus on the physical and psychological wellness of its first responders.

A PSA with Sigma will provide cardiovascular and metabolic screening to Tracy Police

Department's Sworn Police Officers and Public Safety Dispatchers at a rate of $799 per person and includes:

- Active 12-Lead Electrocardiogram (EKG) – Conducted on-site, elucidates any abnormal electrical activity in cardiac tissue which could be specific to heart disease.
- Cardiometabolic Test includes report, follow up clinician consult, and dietary companion.
- Limited carotid artery ultrasound of intima media thickness (CIMT).
- Comprehensive clinician consult - 20 minute consult that ties together 12-Lead EKG, CIMT Ultrasound and advanced lipid profile.
- Advanced lipid profile – Comprehensive panel including, complete blood count, cardio-inflammatory markers, comprehensive metabolic panel, thyroid assay, PSA where appropriate.
- On Site Phlebotomy – On site team of professional phlebotomists will conduct blood draws in a safe, comfortable, and professional environment to ensure the highest quality and patient confidentiality.
- Exercise and Dietary consultation.

The term of the PSA is 12 months, for a not to exceed amount of $105,000, to provide sufficient time for Sigma to conduct the screening of approximately 130 sworn police officers and public safety dispatchers, and for the department to perform progress checks with participating employees to determine if services assisted with their health and wellbeing.

ANALYSIS

The Tracy Police Department learned of Sigma from a neighboring law enforcement agency (Livermore PD). In speaking with staff at Sigma, staff learned that police officers and police dispatchers are inherently at a higher risk for heart attacks and strokes compared to the general public. The average age for a police officer to have a heart attack is 46 years old. Also, police officers suffer from obesity, diabetes and hypertension at rates much higher than the general public. For example, the obesity rate for a police officer is 28% higher than the general public.

In learning the above health risks for police officers and dispatchers, the police department understood the importance of plugging into a comprehensive cardiac screening evaluation along with an individualized nutritional and exercise program. Sigma would provide every police officer and dispatcher with the cardiac screening and individual nutritional and exercise program.

Sigma provides onsite screening and individual meetings with the police officers and dispatchers. The process is as follows: on-site bloodwork collection, carotid ultrasound, review of individual's medical history and vital signs, cardio-metabolic stress test (exercise test on a stationary bike) followed up with exercise/dietary consultation and medical consultation (review of medical diagnostics, lab data, ECG interpretation and carotid ultrasound evaluation) with a medical professional.

The process is one hundred percent voluntary and confidential for every police officer and dispatcher.

The police department would like to partner with Sigma as they support the Department's efforts to improve wellness through comprehensive health screening and because of their long-standing relationship with public safety and their ability to bring their program directly to Tracy PD. In other similar programs, police officers and dispatchers have to go to a hospital or clinic for this type of medical screening. Also, the medical screening process provided by Sigma is more comprehensive than the standard physical a police officer or dispatcher receives annually from their primary doctor.

The President's Task Force on 21st Century Policing, published in 2015, reports that law enforcement agencies should promote safety and wellness at every level of the organization.

The report's recommendations related to Officer Wellness and Safety state that agencies should focus on strategies in several areas including physical, mental, and emotional health. According to the report, "the most important factor to consider when discussing wellness and safety is the culture of law enforcement, which needs to be transformed. Support for wellness and safety should permeate all practices and be expressed through changes in procedures, requirements, attitudes, and behaviors. An agency work environment in which officers do not feel they are respected, supported, or treated fairly is one of the most common sources of stress. And research indicates that officers who feel respected by their supervisors are more likely to accept and voluntarily comply with departmental policies. This transformation should also overturn the tradition of silence on psychological problems, encouraging officers to seek help without concern about negative consequences."

The main benefit to this Sigma program is better long-term health for police officers and dispatchers. A second benefit is a reduction in police officers and dispatchers suffering heart attacks, diabetes or strokes that could lead to a shorter career or a medical retirement compared to a full-service retirement. The third benefit is the cost savings to the City of Tracy. According to the Commission on Accreditation for Law Enforcement Agencies, the average cost for an on or off-duty heart attack for a police officer ranges between $400,000 to $750,000 since a heart attack is a presumptive medical condition.

If Sigma and the Tracy Police Department can partner together through medical screening and identify police officers and dispatchers who are at-risk for these medical issues, these individuals can immediately address these health risks. In turn, police officers and dispatchers will be healthier, complete a full career and employer costs will decrease.

As Sigma is offering a comprehensive program uniquely geared for police departments, other cities have successfully utilized Sigma's services and these services meet the grant requirements, staff is recommending that the City Council determine that waiving the competitive bidding process to award the PSA to Sigma is in the best interest of the City, pursuant to 2.20.140 (b)(6) of the Tracy Municipal Code.

FISCAL IMPACT

The PSA is for a not to exceed amount of $105,000. The funding will be provided through the Police Department's Board of State of Community Corrections (BSCC) Officers Wellness and Mental Health grant funding and supplemented with the Police Department's Asset Forfeiture fund.

BSCC Officer Wellness funding: $73,718
Asset Forfeiture fund: $ 31,282
Total: $105,000

PUBLIC OUTREACH/ INTEREST

This item is for internal police department first responders. No public outreach was conducted.

COORDINATION

Tracy Police Department has received officer wellness grant funding from the Board of State of Community Corrections for initiatives that improve overall officer wellness.

This project supplements other wellness activities implemented by the Tracy Police Department and supported through the President's Task Force on 21st Century Policing – Pillar 6 – Officer Wellness and Safety and the Bureau of Justice programs including Edward Byrne Memorial Justice Assistance Grant and Community Oriented Policing Services (COPS) Law Enforcement Mental Health and Wellness Act.

CEQA DETERMINATION

The approval of this PSA does not constitute a "project" under CEQA.

STRATEGIC PLAN

This agenda item is related to Council's strategic priority for Public Safety.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council adopt a resolution: (1) Accepting the Board of State of Community Corrections Officers Wellness and Mental Health Grant in the amount of $73,718; (2) Appropriating the grant funding of $73,718 to the Police Department's operational budget; (3) Approving a Professional Services Agreement (PSA) with Sigma Wellness, LLC (Sigma) for advanced preventative medical screenings for Tracy Police Department's first responders, for a term of 12 months, with a not-to-exceed amount of $105,000; and (4) Determining that waiving the competitive bidding process to award the PSA to Sigma is in the best interest of the City, pursuant to 2.20.140(b)(6) of the Tracy Municipal Code.

Prepared by: Tim Bauer, Police Lieutenant
Beth Lyons-McCarthy, Support Division Manager

Reviewed by: Sekou Millington, Chief of Police
Bijal Patel, City Attorney
Sara Cowell, Director of Finance
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

ATTACHMENTS:
Attachment A - Professional Services Agreement - Sigma Wellness, LLC

ATTACHMENT A

CITY OF TRACY
PROFESSIONAL SERVICES AGREEMENT WITH
Sigma Wellness, LLC

This Professional Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and Sigma Wellness, LLC., a limited liability company (**Consultant**). City and Consultant are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Consultant to provide cardiovascular and metabolic screening to Tracy Police Department's Sworn Police Officers and Public Safety Dispatchers.

B. At the City's request, Consultant provided a proposal to perform the services described in this Agreement.

C. Pursuant to Tracy Municipal Code 2.20.140(b)(2) the formal request for proposals process is not required because Consultant is sole source vendor providing cardiac/metabolic screening correlating known risk factors, genetics, and occupational stressors that are characteristic of law enforcement.

D. On August 15, 2023, the City Council authorizes the execution of this agreement, pursuant to Resolution 2023-_____.

Now therefore, the Parties mutually agree as follows:

1. <u>Scope of Work</u>. Consultant shall perform the Services, which includes those described in Exhibit "A," which is attached hereto and incorporated herein by reference. The services shall be performed by Sigma Wellness, LLC. Consultant shall not use or replace any subcontractor or subconsultant without City's prior written consent. The City may terminate this Agreement if Consultant makes any such change or replacement, or uses any unapproved subcontractor or subconsultant.

2. <u>Time of Performance</u>. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. All payable encounters will be scheduled by the Consultant. Any services for which times for performance are not specified in this Agreement shall be started and completed by Consultant Any services for which times for performance are not specified in this Agreement shall be started and completed by Consultant in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Consultant. Consultant shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City may grant or deny such requests in its sole and absolute discretion.

2.1 Term. The term of this Agreement shall begin September 1, 2023 and automatically end on August 31, 2024, unless terminated in accordance with Section 6.

3. <u>Compensation</u>. City shall pay Consultant on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Consultant's total compensation under this Agreement shall not exceed $105,000. It is understood and agreed that Consultant may not receive compensation up to

this amount, and Consultant's total compensation under this Agreement will depend on the scope of services approved by the City. Consultant's billing rates shall cover all costs and expenses for Consultant's performance of this Agreement and includes 40 hours of onsite services. No work shall be performed by Consultant in excess of the total compensation amount provided in this section without the City's prior written approval. Notwithstanding anything contained in this Agreement to the contrary, the payment of any funds under this Agreement shall be subject to the City of Tracy's appropriation of funds for Services. This Agreement shall terminate in the event such funds are not appropriated.

3.2 Invoices. Despite any prepayment for Services, Consultant shall submit monthly invoice(s) to the City that describe the Services performed, including time and date of services provided.

3.2.1 Consultant's failure to submit invoice(s) in accordance with these requirements may result in the City rejecting said invoice(s) and thereby delaying payment to Consultant.

3.3 Payment. City will prepay Consultant for the number of scheduled or reasonably anticipated Payable Encounters (as defined in Exhibit B attached hereto and incorporated herein) the City expects during the term of this Agreement. All other invoices outside the prepayment will be paid within 30 days after the City's receipt of invoice(s), City shall make payment to the Consultant based upon services described on the invoice(s) and approved by the City.

3.3.1 Within seven (7) days of any such demand, but in any event promptly upon the termination of this Agreement, Consultant shall refund City for any amounts prepaid by City for any overpayment based on or anticipated, but unperformed, Payable Encounters and/or any Payable Encounters that, after the completion of the Services, do not qualify as a Payable Encounter.

3.4 The acceptance by Consultant of the final payment made under this Agreement shall constitute a release of City from all claims and liabilities for compensation to Consultant for anything completed, finished or relating to Consultant's services. Consultant agrees that payment by City shall not constitute nor be deemed a release of the responsibility and liability of Consultant or its employees, subcontractors, agents and subconsultants for the accuracy and competency of the information provided and/or services performed hereunder, nor shall such payment be deemed to be an assumption of responsibility or liability by City for any defect or error in the Services performed by Consultant, its employees, subcontractors, agents and subconsultants.

3.5 Consultant agrees to maintain books, accounts, payroll records and other information relating to the performance of Consultant's obligations under the Agreement, which shall adequately and correctly reflect the expenses incurred by the Consultant in the performance of Consultant's work under the Agreement. Such books and records shall be open to inspection and audit by the City during regular business hours for three years after expiration or termination of this Agreement.

4. <u>Indemnification</u>. Consultant shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Consultant's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees and volunteers; "Consultant" means the Consultant, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

In the event there is a finding and/or determination that Consultant is not an independent contractor and/or is an employee of City, including but not limited to any such finding and/or determination made by the California Public Employees' Retirement System (CalPERS), the Department of Industrial Relations (DIR), or the Internal Revenue Service (IRS), Consultant shall, to the fullest extent permitted by law, indemnify, defend, and hold harmless the City from and against any all claims relating to or in connection with such a finding and/or determination.

(The duty of a "design professional" to indemnify and defend the City is limited to claims that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of the design professional, under Civ. Code § 2782.8.)

Consultant and City mutually waive consequential damages for claims, disputes, or other matters in question, arising out of or relating to this Agreement. This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination of this Agreement.

The provisions of this section survive completion of the services or the termination of this Agreement, and are not limited by the provisions of Section 5 relating to insurance.

5. <u>Insurance</u>. Consultant shall, throughout the duration of this Agreement, maintain insurance to cover Consultant, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Professional Liability "claims made" coverage shall be maintained to cover damages that may be the result of errors, omissions, or negligent acts of Consultant in an amount not less than $1,000,000 per claim.

5.5 Endorsements. Consultant shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Consultant's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Consultant shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Consultant shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Consultant shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Consultant shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City, before the City signs this Agreement.

5.9 Substitute Certificates. Consultant shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Consultant's Obligation. Maintenance of insurance by the Consultant as specified in this Agreement shall in no way be interpreted as relieving the Consultant of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Consultant may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. <u>Termination</u>. The City may terminate this Agreement in their sole and absolute discretion by giving the other party sixty (60) days' prior written notice. The City shall pay Consultant for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. <u>Dispute Resolution</u>. If any dispute arises between the City and Consultant that cannot be settled after engaging in good faith negotiations, City and Consultant agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person to serve as the mediator, shall be commenced within thirty (30) days of selection of mediator and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8. <u>Ownership of Work</u>. City employees that undergo cardiovascular and metabolic screening or similar Payable Encounters may request from Consultant copies of any reports and medical records that relate specifically to that employee generated by Consultant based on Payable Encounters. Consultant shall provide said employee with the requested records promptly upon the request

9. <u>Independent Contractor Status</u>. Consultant is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Consultant is not City's employee and Consultant shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Consultant is free to work for other entities while under contract with the City. Consultant, and its agents or employees, are not entitled to City benefits. Consultant shall be solely responsible for, and shall save the City harmless from, all matters relating to the payment of Consultant's employees, agents, subcontractors and subconsultants, including compliance with social security requirements, federal and State income tax withholding and all other regulations governing employer-employee relations.

9.1 **Non-Exclusive Professional Services Agreement**. The City reserves the right to contract with other firms and/or consultants during the term of this Agreement to provide the City the

same or similar services that Consultant is providing to the City under this Agreement. Nothing contained in this Agreement guarantees Consultant a certain amount of work, and the City may, in its sole and absolute discretion, allocate and/or delegate work to Consultant so as to satisfy the City's needs.

10. Conflicts of Interest. Consultant (including its employees, agents, and subconsultants) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Consultant maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Consultant's conflicting interest.

11. Rebates, Kickbacks, or Other Unlawful Consideration. Consultant warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For any breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; the value of the rebate, kickback, or other unlawful consideration; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

12. Notices. All notices, demands, of other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:
Tracy Police Department
Attn: Accounts Payable
1000 Civic Center
Tracy, CA 95376

To Consultant:
Sigma Wellness, LLC
Dr. Benjamin Stone
4285 CR 3270
Kempner, TX 76539

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

13. Miscellaneous.

13.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Consultant's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

13.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

13.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement. No waiver shall be effective unless it is in writing and signed by the waiving party.

13.4 Assignment and Delegation. Consultant may not assign, transfer or delegate this Agreement or any portion of it without the City's prior written consent. Any attempt to do so will be void.

City's consent to one assignment , transfer or delegation shall not be deemed to be a consent to any subsequent assignment, transfer or delegation..

13.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

13.6 Compliance with the Law. Consultant shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

13.6.1 Prevailing Wage Laws. Consultant is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates; employment of apprentices (§ 1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. If the services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, and if the total compensation is $1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. These prevailing rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Consultant shall defend, indemnify and hold the City, its officials, officers, employees and agents, harmless from any and all claims, costs, penalties, or interests arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

13.6.2 Non-discrimination. Consultant represents and warrants that it is an equal opportunity employer and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Consultant shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

13.7 Business Entity Status. Consultant is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Consultant. By entering into this Agreement, Consultant represents that it is not a suspended corporation. If Consultant is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

13.8 Business License. Before the City signs this Agreement, Consultant shall obtain a City of Tracy Business License. Consultant shall maintain an active City of Tracy Business License during the term of this Agreement.

13.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

13.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

13.11 Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

13.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Consultant's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Consultant's proposal (if any), the Exhibits shall control.

13.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations or agreements. All exhibits attached hereto are incorporated by reference herein.

13.14 Counterparts. City and Consultant agree that this Agreement may be executed in two or more counterparts, each of which shall be deemed an original.

13.15 Expenses for Enforcement. Consultant and City agree that the prevailing party's reasonable costs, attorneys' fees and expenses, including investigation fees and expert witness fees, shall be paid by the non-prevailing party in any dispute involving the terms and conditions of this Agreement.

14. Signatures. The individuals executing this Agreement on behalf of Consultant represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of Consultant.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

_____
By: Nancy Young
Title: Mayor
Date: _____

Attest:

_____
Adrianne Richardson, City Clerk

Approved as to form:

_____
Bijal M. Patel, City Attorney

Consultant

_____
By: Dr. Benjamin Stone
Title: Founder/CEO
Date: July 27th, 2023

Federal Employer Tax ID No.82-2044802

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

The following shall constitute the “Services” for purposes of this Agreement:

The provision of cardiovascular and metabolic screening to Tracy Police Department’s Sworn Police Officers and Public Safety Dispatchers

Screening to include:

Active 12-Lead Electrocardiogram (EKG) – Conducted on-site, elucidates any abnormal electrical activity in cardiac tissue which could be specific to heart disease.

Cardiometabolic Test includes report, follow up clinician consult, and dietary companion.

Limited carotid artery ultrasound of intima media thickness (CIMT)

Comprehensive clinician consult - 20 minute consult that ties together 12-Lead EKG, CIMT Ultrasound and advanced lipid profile.

Advanced lipid profile – Comprehensive panel including, complete blood count, cardio-inflammatory markers, comprehensive metabolic panel, thyroid assay, PSA where appropriate.

On Site Phlebotomy – On site team of professional phlebotomists will conduct blood draws in a safe, comfortable, and professional environment to ensure the highest quality and patient confidentiality.

Exercise and Dietary consultation.

EXHIBIT B - Compensation

$799.00 for each cardiovascular and metabolic screening that is:

- Fully rendered by Sigma;
- Initiated, but not fully rendered at the request or demand of CITY or the workforce member/beneficiary; or
- Not fully rendered by Sigma due to the health condition of the workforce member/beneficiary at the time of presenting for the screening.
- Not rendered by Sigma due to being canceled by CITY, or the workforce member/beneficiary, within 24 hours of the date and time the screening was scheduled by Sigma to be provided; or
- Lab draw completed on individual and no show or appointment cancelled less than 24hrs prior to screening appointment.

Each of the above shall be deemed a “Payable Encounter” for purposes of this Agreement.

Labs drawn at a Patient Service Center (PSC), outside of pre scheduled department lab draws will incur an additional fee of $25 per participant.

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

---

(1) ACCEPTING THE BOARD OF STATE OF COMMUNITY CORRECTIONS OFFICERS WELLNESS AND MENTAL HEALTH GRANT IN THE AMOUNT OF $73,718; (2) APPROPRIATING THE GRANT FUNDING OF $73,718 TO THE POLICE DEPARTMENT'S OPERATIONAL BUDGET; (3) APPROVING A PROFESSIONAL SERVICES AGREEMENT (PSA) WITH SIGMA WELLNESS, LLC (SIGMA) FOR ADVANCED PREVENTATIVE MEDICAL SCREENINGS FOR TRACY POLICE DEPARTMENT'S FIRST RESPONDERS, FOR A TERM OF 12 MONTHS, WITH A NOT-TO-EXCEED AMOUNT OF $105,000; AND (4) DETERMINING THAT WAIVING THE COMPETITIVE BIDDING PROCESS TO AWARD THE PSA TO SIGMA IS IN THE BEST INTEREST OF THE CITY, PURSUANT TO 2.20.140(B)(6) OF THE TRACY MUNICIPAL CODE.

WHEREAS, In accordance with Assembly Bill 178, Chapter 45, Statues of 2022, Item 5227-121-0001, funding is available to all city and county law enforcement agencies employing officers described in 830.1 of the Penal Code) for improving officer wellness and expanding mental health sources, establishing officer wellness units or expanding existing officer wellness units, establishing peer support units or expanding peer support units, services provided by licensed mental health professional, counselor, or other professional that works with law enforcement, expanding multiagency mutual aid programs focused on officer wellness and mental health, and other programs or services that are evidence based or have successful track record of enhancing officer wellness; and

WHEREAS, As a result of the passage of Assembly Bill 178 Chapter 45, Statues of 2022, Item 5227-121-0001, the State of California distributed funds to each city based on a predetermined formula. The City of Tracy Police Department was granted $73,718; and

WHEREAS, The Tracy Police Department strategic priorities include advanced training, technology, and wellness, with a specific focus on the physical and psychological wellness of first responders; and

WHEREAS, Sigma Wellness, LLC (Sigma Wellness) and the Tracy Police Department intend to partner together to enable Sigma Wellness to provide medical screening for certain City employees and identify police officers and dispatchers who are at-risk for medical issues; and

WHEREAS, The President's Task Force on 21st Century Policing, published in 2015, reports that law enforcement agencies should promote safety and wellness at every level of the organization; and

WHEREAS, The funding will be provided through the Police Department's Board of State of Community Corrections (BSCC)Officers Wellness and Mental Health grant funding and supplemented with the Police Department's Asset Forfeiture fund.

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it,

RESOLVED: That the City Council hereby 1) Accepts the Board of State of Community Corrections Officers Wellness and Mental Health Grant in the amount of $73,718; (2) Approves the appropriation of the grant funding of $73,718 to the Police Department's operational budget; (3) Approves a Professional Services Agreement (PSA) with Sigma Wellness, LLC (Sigma) for advanced preventative medical screenings for Tracy Police Department's first responders, for a term of 12 months, with a not-to-exceed amount of $105,000. After review and approval by the City Attorney's Office, the City authorizes the execution of the Agreement and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution; and be it

FURTHER RESOLVED: As Sigma Wellness, LLC is offering a comprehensive program uniquely geared for police departments, other cities have successfully utilized Sigma's services and these services meet the grant requirements, the City Council determined that waiving the competitive bidding process to award the PSA to Sigma is in the best interest of the City, pursuant to 2.20.140 (b)(6) of the Tracy Municipal Code.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.M

RECOMMENDATION

Staff recommends that City Council adopt a resolution (1) awarding a construction contract to Tennyson Electric, LLC of Livermore, California in the amount of $436,168 for the Streetlight Installation Project (CIP 72125), (2) approving a project not-to-exceed budget of $528,402, (3) appropriating $38,150 from the Gas Tax Fund (F245) to fund the Project, and (4) authorizing the City Manager to approve change orders up to the contingency amount of $43,617, if needed, pursuant to Tracy Municipal Code Section 2.20.090(b).

EXECUTIVE SUMMARY

This item is to consider the award of a construction contract with Tennyson Electric, LLC, of Livermore, California, for the Street Light Installation Project (Project). Staff further requests that Council appropriate $38,150 from the Gas Tax Fund to fully fund the Project.

BACKGROUND AND LEGISLATIVE HISTORY

Engineering Division receives requests from residents for the installation of new streetlights at locations where there is no existing street lighting. Utilities Division also maintains a list of locations where the existing streetlights have been damaged and requires replacement. This Project involves the installation of streetlights at 25 locations within the City, which includes locations requested from residents and locations recommended by Utilities Division.

Engineering staff prepared the plans and specifications and pursuant to the Tracy Municipal Code, advertised the Project for competitive bids on May 26, 2023, and June 2, 2023.

Bids were received and publicly opened in City Hall Conference Room 203 and via Teleconference at 2:00 p.m. on Wednesday, June 21, 2023, with the following results:

Contractor	**Base Bid**
Tennyson Electric, LLC	$436,168
Bockmon & Woody Electric Co., Inc.	$503,904
Bear Electrical Solutions, Inc.	$804,900

Staff's subsequent bid analysis indicates that the lowest monetary bid is responsive and the bidder, Tennyson Electric, LLC, of Livermore, California, is responsible. The bidder has the appropriate contractor's license in active standing with the State of California and has completed similar projects for other public agencies.

ANALYSIS

The total estimated cost of this Project, if awarded to the lowest bidder, is as follows:

Construction Bid	$436,168
Construction Management (10%)	$43,617

Design Support During Construction	$5,000
Contingency @ 10%	$43,617
Total Project Cost	**$528,402**

Tracy Municipal Code Section 2.20.090(b) authorizes the City Manager, or his designee, to approve change orders up to the contingency amount approved by Council. City staff recommends the contingency amount for this project to be $43,617, which is 10% of the construction contract cost.

FISCAL IMPACT

The total estimated Project cost is $528,402 and will be funded by CIP 72125, Street Light Installation Project. An appropriation of $38,150 is needed from Gas Tax (F245) to complete the Project. CIP 72125 has a current available budget of $490,254 as follows:

	Budget	Expenses	Available
245 - Gas Tax	$ 499,482	$ 9,230	$ 490,252
Totals	**$ 499,482**	**$ 9,230**	**$ 490,252**
		Estimated Project Cost	*$ 528,402*
		Additional Funding Request	**$ 38,150**

PUBLIC OUTREACH / INTEREST

This item does not require public outreach.

COORDINATION

The City's Engineering Division coordinated with Operations and Utilities Department.

CEQA DETERMINATION

The Project is categorically exempt, per the following CEQA Guidelines Section:

§ 15303 – New Construction or Conversion of Small Structures Class 3 category, which consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing structures from one use to another where only minor modifications are made in the exterior of the structure.

STRATEGIC PLAN

This agenda item supports the City of Tracy's Quality of Life Strategic Priority, and specifically implements the following goal:

Goal 1: Advance green and roadway infrastructure project that improve connectivity, including bike lanes.

ACTION REQUESTED OF THE CITY COUNCIL

That City Council, by resolution, (1) award a construction contract to Tennyson Electric, LLC, of Livermore, California in the amount of $436,168 for the Streetlight Installation Project (CIP 72125), (2) approve a project not-to-exceed budget of $528,402, (3) appropriate $38,150 from Gas Tax Fund (F245) to complete the Project, and (4) authorize the City Manager to approve change orders up to the contingency amount of $43,617 if needed, pursuant to Tracy Municipal Code Section 2.20.090(b).

Prepared by: Anju Pillai, PE, Senior Civil Engineer

Reviewed by: Koosun Kim, PE, City Engineer / Assistant Director of Development Services
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

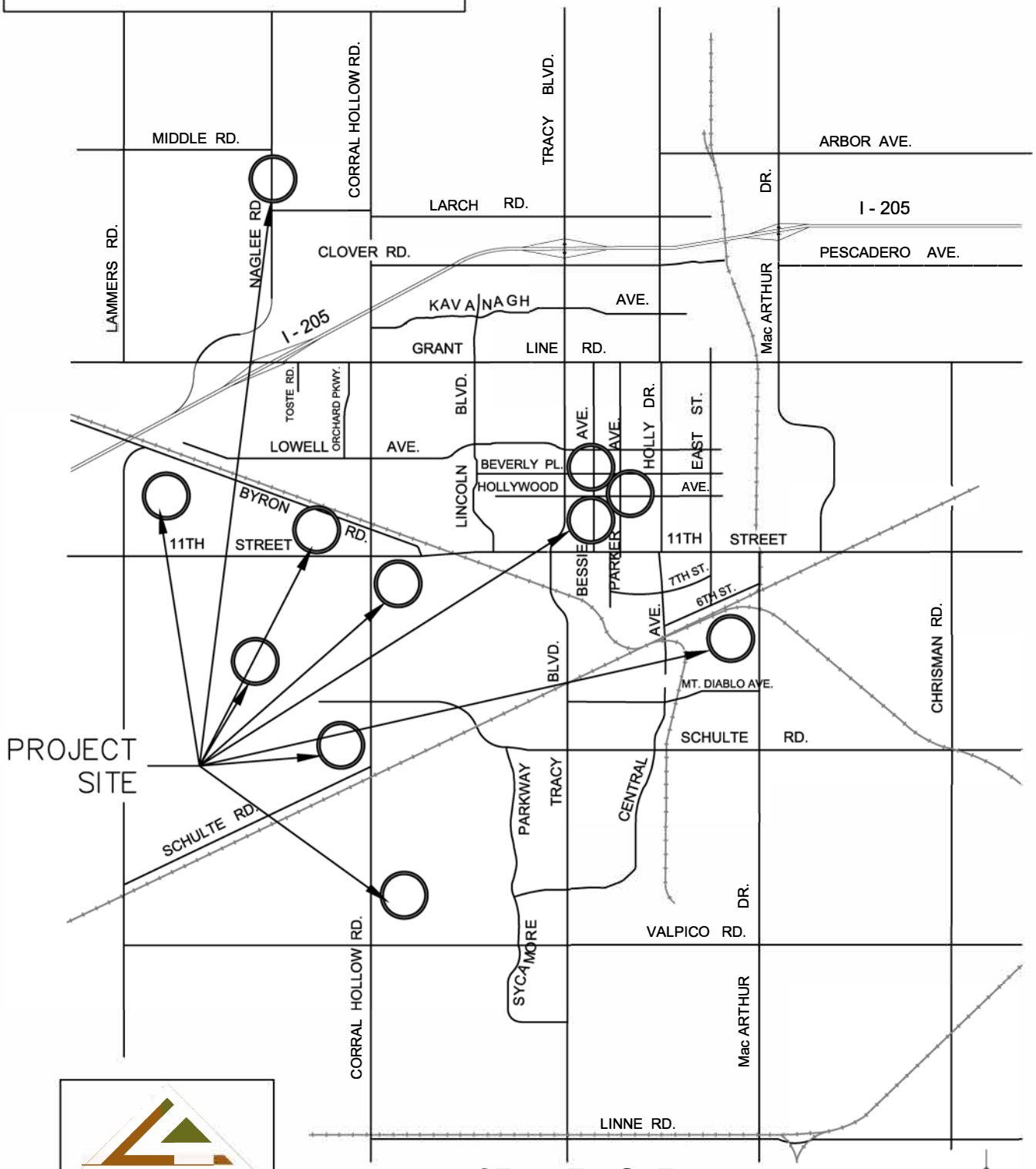
Approved by: Midori Lichtwardt, Interim City Manager

ATTACHMENTS

Attachment A – Location Map

CITY OF TRACY

Attachment A



STREET LIGHT
INSTALLATION PROJECT
CIP 72125
LOCATION MAP

NOT TO SCALE

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION 2023-_____

AWARDING A CONSTRUCTION CONTRACT TO TENNYSON ELECTRIC, LLC OF LIVERMORE, CALIFORNIA IN THE AMOUNT OF $436,168 FOR THE STREETLIGHT INSTALLATION PROJECT (CIP 72125), APPROVING A PROJECT NOT-TO-EXCEED BUDGET OF $528,402, APPROPRIATING $38,150 FROM THE GAS TAX FUND (F245) TO FUND THE PROJECT, AND AUTHORIZING THE CITY MANAGER TO APPROVE CHANGE ORDERS UP TO THE CONTINGENCY AMOUNT OF $43,617 IF NEEDED, PURSUANT TO TRACY MUNICIPAL CODE SECTION 2.20.090(B)

WHEREAS, the City seeks to install streetlights at 25 locations within the City as part of the City's Street Light Installation Project (CIP 72125) (Project), which includes locations requested from residents and locations recommended by the City's Utilities Division; and

WHEREAS, Engineering staff prepared the plans and specifications for the Project and, pursuant to the Tracy Municipal Code, advertised the Project for competitive bids on May 26, 2023, and June 2, 2023; and

WHEREAS, the bids were received and publicly opened in City Hall Conference Room 203 and via Teleconference at 2:00 p.m. on Wednesday, June 21, 2023. The following bids were received:

Contractor	Base Bid
Tennyson Electric, LLC	$436,168
Bockmon & Woody Electric Co., Inc.	$503,904
Bear Electrical Solutions, Inc.	$804,900

WHEREAS, Tennyson Electric, LLC, of Livermore, California (Contractor) was the lowest bidder; and

WHEREAS, the City determined that Contractor's bid is "responsive" and the Contractor is "responsible;" and

WHEREAS, Tracy Municipal Code Section 2.20.090(b) authorizes the City Manager to approve change orders up to the contingency amount approved by City Council. The City seeks to have contingency amount for this Project as $43,617; and

WHEREAS, the Project will be funded by Capital Improvement Project (CIP) 72125 and Gas Tax Fund (F245); now, therefore, be it

RESOLVED: That the above recitals are true and correct; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy, by this resolution, awards a construction contract to the Contractor in the amount of $436,168 for the Streetlight Installation Project (CIP 72125) in the form approved by the City Attorney; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy approves a project not-to-exceed budget of $528,402; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy, by this resolution, appropriates $38,150 from the Gas Tax Fund (F245) to fund the Project; and be it

FURTHER RESOLVED: That the City Manager, or his designee, is authorized to approve change orders up to the contingency amount of $43,617, if needed, pursuant to Tracy Municipal Code Section 2.20.090(b).

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on the 15th of August 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.N

RECOMMENDATION

Staff recommends that the City Council approve a Resolution adopting the Fiscal Year 2023-2024 and 2024-2025 City Council Strategic Priorities.

EXECUTIVE SUMMARY

The item for consideration requests that the City Council approve a Resolution to adopt the Fiscal Year 2023-2024 and 2024-2025 City Council Strategic Priorities (Strategic Priorities). On June 27, 2023, staff presented the draft Strategic Priorities to Council for consideration. Council affirmed the four Strategic Priority areas and requested amendments to specific Strategic Priority goals and objectives. Staff incorporated the Council's feedback, which is reflected in Attachments A – D of the staff report.

BACKGROUND AND LEGISLATIVE HISTORY

In February 2023, the Tracy City Council held a two-day workshop to discuss the principles of good governance, the City Council's Code of Conduct and Meeting Protocols and Rules of Procedure, and Strategic Priorities. On June 27, 2023, staff presented the draft Strategic Priorities to the City Council for review and input. The Council agreed to prioritize the same four Strategic Priority categories used previously and requested amendments to specific Strategic Priority goals and objectives, which are outlined in Attachments A – D of the staff report. The Council also recommended that staff condense the Strategic Priority goals and objectives where possible. The Strategic Priorities also include items requested by the City Council during public meetings, as noted in Attachment E (Council Follow-Up Requests).

The four Strategic Priority areas include:

- Economic Development
  - To enhance the competitiveness of the City while further developing a strong and diverse economic base.
- Governance
  - To enhance fiscal stability, retain and attract new talent, improve the use of technology, and enhance transparency for the betterment of the Tracy community.
- Public Safety
  - To enhance community safety by promoting a responsive public safety system that includes civic engagement and partnerships, community involvement, public education, and prevention, intervention, and suppression services that meet the needs of Tracy residents.
- Quality of Life
  - To provide an outstanding quality of life by enhancing the City's amenities, business mix and services, and cultivating connections to promote positive change and progress in our community.

The Strategic Priorities represent the multi-year goals expressed by the City Council together

with short-term priorities that will receive time and attention over the next 12 to 24 months. The short-term priorities, or objectives, are a combination of new and continuing priorities discussed during the workshop, as well as other key projects and initiatives identified by staff.

The Strategic Priorities serve as a roadmap for the City Council and staff to focus on the most pressing projects and initiatives within the City of Tracy over the next two fiscal years. To ensure each priority area is advanced, goals and objectives are assigned department leads and estimated completion timeframes. Staff is also working on procuring a digital strategic planning and performance management solution to record, track, and report out on the progress of the Strategic Priorities, and other projects of interest, via a publicly accessible platform.

FISCAL IMPACT

There is no fiscal impact associated with the approval of this item.

STRATEGIC PLAN

This agenda item supports the development of the City Council's FY 2023-2024 and 2024-2025 Strategic Priorities.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council approve a Resolution adopting the Fiscal Year 2023-2024 and 2024-2025 City Council Strategic Priorities.

Prepared by: Vanessa Carrera, Assistant to the City Manager

Reviewed by: Karin Schnaider, Assistant City Manager
Bijal Patel, City Attorney
Sara Cowell, Finance Director

Approved by: Midori Lichtwardt, Interim City Manager

Attachments:

A – FY 24-25 Governance Council Strategic Priority

B – FY 24-25 Public Safety Council Strategic Priority

C – FY 24-25 Economic Development Council Strategic Priority

D – FY 24-25 Quality of Life Council Strategic Priority

E – Council Follow Up Requests

	GOVERNANCE			
	FY 2023-2024 & FY 2024-2025 COUNCIL STRATEGIC PRIORITIES			
	PURPOSE: To enhance fiscal stability, retain and attract new talent, improve the use of technology, and enhance engagement and transparency for the betterment of the Tracy community.			
Multi-Year Priorities (Goals)	**Short-Term Priorities (Objectives)**	**Lead Department**	**Council Follow Up Item**	**Est. Completion of Short-Term Priorities**
1. Model good governance, teamwork, and transparency.	1.a. Update City Council Code of Conduct and Meeting Protocols and Procedures.	City Attorney's Office	#538 - revisit regular City Council meeting start time, frequency, and virtual participation.	Q4 2023
	1.b. Conduct City Council and City Commission Code of Conduct training.	City Attorney's Office		Q1 2024 and continue on annual basis
	1.c. ~~Discuss the formation of Council districts.~~ Provide legal analysis on the formation of Council districts.	City Attorney's Office	#556 - assess viability of Council districts and term limits.	Q3 2023
	1.d. Conduct Council discussion on expanding term limits for the Mayor.	City Manager's Office	#556 - assess viability of Council districts and term limits.	Q1 2024
2. Ensure short and long-term fiscal health.	2.a. Conduct workshops on the five-year Fiscal Forecast and Capital Improvement Plan (CIP) for FY 23-24 and FY 24-25.	Finance Department		Q1 of each Fiscal Year
	2.b. Adopt a balanced Operating and Capital Improvement Plan budget for FY 23-24 and FY 24-25.	Finance Department		Q2 of each Fiscal Year
	2.c. Continue the implementation of the City's Financial Sustainability Plan to address long-term fiscal challenges and opportunities.	Finance Department		Ongoing
	2.d. Advocate at the State level to support local control of e-commerce sales tax revenue.	Finance Department		Ongoing

	2.e. Update the City's Purchasing Ordinance.	Finance Department		Q4 2023
	2.f. Complete Water and Wastewater rate and fee studies.	Finance Department Operations & Utilities Department		Q2 2024 (Water), Q2 2023 (Wastewater)
	2.g. Complete Cost Allocation Study to assess how indirect/ central costs can be shared equitably across the organization.	Finance Department		Q4 2024
3. Enhance community outreach and engagement to all Tracy residents.	3.a. Ensure Citywide communication is inclusive and accessible through traditional and digital channels.	City Manager's Office and Innovation & Technology Department	#460 - Request to make closed captioning possible for Channel 26.	Q4 2023
	~~3.b. Provide closed-captioning services for Channel 26.~~ Moved to 3.a.	~~Innovation & Technology Department~~	~~#460 - Request to make closed captioning possible for Channel 26.~~	~~Q4 2023~~
	3.b. Produce public service announcements and promotional videos within available budget.	City Manager's Office		Ongoing
4. Foster a culture of innovation and efficiency to improve service delivery to the public.	4.a. Explore new technologies and customer service applications to better serve and communicate with residents.	Innovation & Technology Department		Q4 2023
	4.b. Leverage technology to measure service delivery and Council Strategic Plan goals, and to capture important data analytics that track progress, anticipate future trends, and help the City make informed decisions.	Innovation & Technology Department	#500 - explore online tools for residents to see what work is being done on their road and surrounding areas. #520 - look into making GoRequest application more accessible on the City's digital platforms.	Q1 2024

	~~4.c. Actively inform residents of innovation and efficiency efforts through the City's communication channels and media.~~ Ongoing operational item.	~~City Manager's Office~~		~~Ongoing~~
	~~4.d. Convert City processes to enable the use of e-signatures and electronic documentation management to improve workflow efficiency and service delivery.~~ Ongoing operational item.	~~Innovation & Technology Department~~		~~Q1 2024~~
	4.c. Complete an IT Strategic Plan.	Innovation & Technology Department		Q4 2023
5. Recruit, develop, and retain a high performing and inclusive workforce.	5.a. Invest in employee development programs that support leadership growth and succession planning efforts.	Human Resources Department		Q4 2023
	~~5.b. Successfully negotiate Memorandum of Understandings (MOUs) with City bargaining units in FY 2023-2024.~~ Completed/ underway.	~~Human Resources Department~~		~~Q3 2023~~
	5.b. Create programs that provide opportunities for local youth to learn about and participate in local government.	Human Resources Department		Q1 2024
	5.c. Present update to City Council on Tracy Equity and Empowerment Initiative history and implementation status.	Human Resources Department and City Manager's Office	#23-06 - Discuss Diversity, Equity, and Inclusion (DEI) and Tracy Equity and Empowerment Initiative.	Q2 2024
	5.d. Provide Diversity, Equity, and Inclusion (DEI) and unconscious bias training to staff.	Human Resources Department		Q1 2024

TRACY	**PUBLIC SAFETY**			
	FY 2023-2024 & FY 2024-2025 COUNCIL STRATEGIC PRIORITIES			
	PURPOSE: To enhance community safety by promoting a responsive public safety system that includes civic engagement and partnerships, community involvement, public education, and prevention, intervention, and suppression services that meet the needs of Tracy residents.			
Multi-Year Priorities (Goals)	**Short-Term Priorities (Objectives)**	**Lead Department**	**Council Follow Up Item**	**Est. Completion of Short-Term Priorities**
1. Support emergency operations preparedness, response, and recovery.	1.a. Implement the Citywide Emergency Operations Plan and provide training to the City Council and staff.	Police Department		Q4 2025
	~~1.b. Continue to provide disaster response support in coordination with local and county agencies.~~ Ongoing operational item.	~~Police Department~~		~~Ongoing~~
	1.b. Develop a plan to update the City's Emergency Operations Center (EOC) with contemporary resources and equipment.	Police Department		Q4 2024
	1.c. Complete South San Joaquin County Fire Authority (SSJCFA) Training Tower project.	SSJCFA and Development Services Department		Q3 2024
	1.d. Secure funding to update the Tracy Police Department's Mobile Command Vehicle to enhance emergency response efforts.	Police Department		Q4 2024
2. Strengthen community safety through crime prevention, intervention, and enforcement activities.	2.a. Stand up a Real Time Information Center (RTIC) to reduce crime and provide timely services to better manage resources and response.	Police Department		Q2 2025

	2.b. Perform an annual evaluation of police staffing to meet the growing needs of the community.	Police Department	#553 - re-evaluate law enforcement staffing based on population size.	Q1 2024
	2.c. Reduce fatal injury collisions through enforcement, education, roadway engineering, and use of technology.	Police Department and Development Services Department	#23-17 - explore illuminated crosswalks and other pedestrian safety measures.	Q4 2024
	2.d. Draft and implement a Sideshow Ordinance.	Police Department		Q4 2023
	2.e. Provide best practices officer training related to de-escalation, force response, and unmanned aircraft systems.	Police Department		Q2 2024
3. Implement initiatives to reduce blight and nuisances in the community.	3.a. Amend and implement Fireworks Ordinance to establish fines for discharge of dangerous fireworks and increase the fines for administrative citations.	Police Department		Q3 2023
	3.b. Address public blight through partnerships with Code Enforcement, Familiar Faces Program, and the Homeless Services Division.	Police Department		Ongoing
	3.c. Hire parking enforcement staff to address vehicle abatement issues.	Police Department		Q1 2024
4. Expand public safety facilities to reflect population growth and community demand.	4.a. Adopt and implement the Public Safety Master Plan.	Police Department	#23-12 - develop a new CIP for a Police Substation.	Q1 2024
	4.b. Award contract for the Tracy Multipurpose Training Facility.	Police Department		Q3 2023
	4.c. Complete construction of the Police Shooting Range project.	Police Department		Q4 2024
	4.d. Include a satellite office of the Tracy Police Department in the Multi-Generational Recreation Center.	Police Department and Parks and Recreation Department		Q4 2025

	4.e. Develop plan for the construction of Fire Stations 94, 97 and 98.	SSJCFA, Finance Department, and Development Services Department		Q1 2024
5. Continue to build relationships with community members to enhance communication, collaboration, and trust.	5.a. Provide accurate and timely information to the public on TPD activities, response, and crime prevention strategies.	Police Department		Ongoing
	5.b. Host at least five (5) annual public safety community outreach events.	Police Department and SSJCFA		Q2 2025
	~~5.c. Complete TPD website and announce to the public.~~ Completed.	~~Police Department~~		~~Q3 2023~~
	5.c. Host TPD Citizen's Academy in 2023 and 2024.	Police Department		Q4 2024
	5.d. Engage local youth through the Police Activities League (PAL) Program.	Police Department		Ongoing

	ECONOMIC DEVELOPMENT			
	FY 2023-2024 & FY 2024-2025 COUNCIL STRATEGIC PRIORITIES			
	PURPOSE: To enhance the competitiveness of the City while further developing a strong and diverse economic base.			
Multi-Year Priorities (Goals)	**Short-Term Priorities (Objectives)**	**Lead Department**	**Council Follow Up Item**	**Est. Completion of Short-Term Priorities**
1. Support business attraction and retention activities.	1.a. Support local businesses by streamlining the process for new businesses to successfully open and communicate improvements to the public.	Development Services Department		Q1 2024
	1.b. Implement the San Joaquin County Tourism Grant in collaboration with the Tracy Chamber of Commerce and Tracy City Center Association (TCCA)	Mobility & Housing Department		Q4 2023
	1.c. Coordinate roundtable discussions with the Tracy Chamber of Commerce and local industrial businesses in response to industry needs.	Mobility & Housing Department		Q4 2023
	1.d. Research and evaluate policies to address vacant commercial and industrial buildings.	Development Services Department and Mobility & Housing Department	#504 and #541 - research policies and approaches to address vacant commercial and industrial buildings.	Q4 2023 ~~Q1 2024~~
	1.e. Explore opportunities to reinvigorate the mall property to increase customer traffic, retail options, and entertainment experiences.	Mobility & Housing Department		Q2 2024
	1.f. Revisit the City's Mobile Food Vendors Ordinance to expand dining options in the community.	Development Services Department	#542 - revisit Mobile Food Vendors Ordinance.	Q3 2023 ~~Q1 2024~~
	1.g. Facilitate the development of parklets in Downtown Tracy.	Mobility & Housing Department	#23-05 - revisit downtown parklets.	Q3 2023; ongoing

	~~1.h. Attend industry trade shows to seek out and attract highly sought-after businesses to Tracy.~~ This is a routine operational item.	~~Mobility & Housing Department~~		~~Annually~~
	1.h. Conduct four business retention visits per year in partnership with the Tracy Chamber of Commerce.	Mobility & Housing Department		Q4 2024
2. Support policies and funding to enhance and expedite the development of multimodal transportation systems, including rail, transit, and airport projects.	2.a. Continue lobbying efforts at the state and federal level in support of Valley Link.	Mobility & Housing Department		Annually
	2.b. Draft the proposal for approval by the Federal Aviation Administration for the funding of a Master Plan for New Jerusalem Airport.	Mobility & Housing Department		Q2 2025
	~~2.c. Update the Short-Range Transit Plan to maximize access and ridership.~~ This effort was recently completed in the summer of 2023.	~~Mobility & Housing Department~~		~~Q1 2025~~
	2.c. Promote TRACER ~~On-Demand~~ Bus Services to increase awareness and ridership.	Mobility & Housing Department		Q3 2024
3. Advance Downtown Specific Plan including provisions for a Transit Oriented Development (TOD) Plan.	3.a. Complete the TOD market and fiscal analysis.	Development Services Department		Q4 2023
	3.b. Conduct Downtown Specific Plan stakeholder and community outreach.	Development Services Department		Q4 2023
	3.c. Draft the Downtown Specific Plan and Environmental Impact Report (EIR).	Development Services Department		Q1 2024
4. Attract businesses and jobs that meet the needs and desires of the community.	4.a. Complete the Economic Development Strategic Plan and present the results to the City Council.	Mobility & Housing Department		Q3 2023
	~~4.b. Implement new Customer Relationship Management software to update the City's retail and industrial business attraction list.~~ This is an operational item underway.	~~Mobility & Housing Department~~		~~Q4 2023~~

	4.b. Develop and implement a marketing campaign to attract specific businesses and industries to Tracy.	Mobility & Housing Department		Q1 2024
	4.c. Revisit and update the City's Business Incentive Program.	Mobility & Housing Department		Q4 2024
	4.d. Partner with regional agencies and local industry to provide workforce training opportunities.	Mobility & Housing Department		Q4 2024
	4.e. Explore opportunities to prepare vacant sites for medical and healthcare facility development.	Development Services Department and Mobility & Housing Department	#465 - consider developing a strategic plan for critical resources and infrastructure. #555 and #23-02 - explore how the City can bring a trauma hospital to Tracy.	Q2 2025
5. Develop policies to target new jobs in innovation industries (e.g. - cannabis, high-tech, health care, higher education, logistics and manufacturing, ~~manufacturing~~, trade/ invocational, green energy).	5.a. Address barriers to cannabis businesses and facilitate the issuance of business permits.	Development Services Department	#23-07 - address or eliminate any barriers to cannabis businesses opening.	Q3 2023
	5.b. Revisit zoning and locational requirements on commercial cannabis activity in Tracy.	Development Services Department	#534 - explore incentives for cannabis businesses to move to other locations.	Q3 2023
	5.c. Support pilot programs in innovation and technology.	Mobility & Housing Department	#498 - conduct conversation on what P3 could mean for our City.	Q1 2024
	5.d. Rezone and complete environmental review for the Chrisman Road property to attract innovation and industry tenants.	Development Services Department		Q1 2024

6. Pursue smart growth strategies for balanced growth in the City of Tracy.	6.a. Conduct City Council workshop on residential Growth Management Ordinance.	Development Services Department	#291, #413, and #424 - discussion on residential Growth Management Ordinance.	Q1 2024
	6.b. Conduct City Council workshop on General Plan Land Use and Circulation Elements.	Development Services Department	#548 - General Plan update.	Q4 2023
	6.c. Pursue zoning ordinance amendments to increase residential densities.	Development Services Department		Q2 2024
	6.d. Streamline multi-family permitting process by removing requirements for Conditional Use Permits and implement Council directed affordable housing tools.	Development Services Department		Q4 2024
	6.e. Amend Accessory Dwelling Unit (ADU) ordinance and develop "off the shelf" ADU design examples.	Development Services Department		Q4 2023
	6.f. Amend parking requirements for multi-family developments.	Development Services Department		Q4 2023
	6.g. Identify vacant City owned property and propose for reuse, restoration, or surplus.	Mobility & Housing Department		Q2 2024
	6.h. Assess local food deserts and develop strategies to attract grocers to underserved areas.	Mobility & Housing Department		Q3 2024

TRACY	**QUALITY OF LIFE**			
	FY 2023-2024 & FY 2024-2025 COUNCIL STRATEGIC PRIORITIES			
	PURPOSE: To provide an outstanding quality of life by enhancing the City's amenities, business mix and services, and cultivating connections to promote positive change and progress in our community.			
Multi-Year Priorities (Goals)	**Short-Term Priorities (Objectives)**	**Lead Department**	**Council Follow Up Item**	**Est. Completion of Short-Term Priorities**
1. Advance green and roadway infrastructure projects that improve connectivity, reduce climate impacts, and improve the appearance of the City.	~~1.a. Conduct a Pavement Management Plan (PMP) workshop with the City Council.~~ Completed in Q2 2023.	~~Development Services Department and Operations & Utilities Department~~	~~#531 - present results of pavement study and timeline for improvements.~~	~~Q2 2023~~
	1.a. Secure funding to address local transportation and roadway needs including street, sidewalk, bicycle, and pedestrian walkway improvements.	Development Services Department, Operations & Utilities Department, Mobility & Housing Department		Q4 2024
	1.b. Complete the Valpico Road and Corral Hollow Road intersection project.	Development Services Department	#549 - accelerate the expansion of Valpico Road.	Q4 2024
	1.c. Update the 2020 Urban Water Management Plan to align with the Water System Master Plan updates.	Operations & Utilities Department		Q2 2025
	1.d. Update the City's Urban Forest Management Plan	Parks & Recreation Department	#550 - update the Urban Forest Management plan and return to Council.	Q3 2023
	1.e. Revisit Engineering Design Standards to ensure design consistencies and enhance aesthetics with new development.	Development Services Department and Operations & Utilities Department	#529 - review Engineering Design Standards.	Q4 2024

	~~1.f. Complete Citywide Infrastructure Master Plans: Sewer, Storm, Water, Transportation, Parks, Public Safety, and Public Facilities.~~ (Moved to Quality of Life Goal 7)	~~Development Services Department and Operations & Utilities Department~~	~~#394, #395, #421, #440 - update various master plans.~~	~~Q2 2024~~
	1.f. Explore the inclusion of green technologies in infrastructure solutions (e.g. - roundabouts, traffic calming, storm drains, traffic signal coordination).	Development Services Department	#546 - explore what Smart Cities are doing to improve traffic flow.	Q1 2025
	1.g. Ensure parks, streets, channel ways, and medians are regularly cleaned and maintained.	Operations & Utilities Department	#516 and #545 - actively maintain streets, sidewalks, landscaping, and storm drains.	Ongoing
	1.h. Provide timely and regular updates on the Corral Hollow Road Widening Project.	Development Services Department	#562 - provide updates on Corral Hollow Road Widening Project.	Ongoing
	1.i. Analyze conditions of sidewalks and make ADA improvements within available budget.	Development Services Department	#551 - improve conditions of sidewalks to align with ADA requirements.	Q1 2025
	~~1.k. Continue to seek grant funding for I-580 Interchange Project and provide status updates on the project to the public.~~ Ongoing operational item.	~~Development Services Department~~		~~Ongoing~~

2. Facilitate the completion of Measure V amenities.	2.a. Complete design and construction bid for the Multi-Generational Recreation Center.	Parks & Recreation Department		Q2 2024
	2.b. Complete construction of Legacy Fields Phase 1E.	Parks & Recreation Department		Q3 2023
	2.c. Begin design of Aquatics Center.	Parks & Recreation Department	#23-08, #23-13, #23-14 - completion of future of the Aquatics Center.	Q4 2023
	2.d. Begin Design of Tracy Nature Park.	Parks & Recreation Department		Q3 2023
	2.e. Incorporate opportunities to improve park amenities in an innovative and inclusion way to align with the Parks, Recreation, and Trails Master Plan.	Parks & Recreation Department		Ongoing
3. Provide Recreation and Cultural Arts programming and events that bolster quality of life.	3.a. Update and adopt the City's Civic Arts Plan.	City Manager's Office	#501 - update public arts policy.	Q4 2023
	3.b. Explore opportunities to diversify the use of the Grand Theatre.	City Manager's Office		Q3 2024
	3.c. Research opportunities to activate City alleyways.	City Manager's Office		Q4 2024
	3.d. Explore opportunities to construct an outdoor amphitheater or pavilion based on available funding.	Parks & Recreation Department		Q4 2025
	3.e. Continually promote City sponsored and co-sponsored events on the City website and social media channels.	City Manager's Office	#547 - share information on City sponsored and co-sponsored special events.	Ongoing
	~~3.f. Implement the poet laureate program within the Cultural Arts Division.~~ Ongoing operational item.	~~City Manager's Office~~		~~Q4 2023~~

4. Increase local affordable housing supply.	4.a. Facilitate the development of affordable housing via affordable housing-focused policies, fees, and initiatives to support Regional Housing Needs Assessment (RHNA) requirements.	Development Services Department	#380, #420, #423, #468 - support the development of affordable housing in Tracy.	Q4 2024
	4.b. Pursue, encourage, and incentivize nonprofit affordable housing developers to build in Tracy.	Development Services Department and Mobility & Housing Department	#413 and #423 - discussion on RHNA and RGA allocation, explore incentives for affordable housing development.	Q4 2024
	4.c. Discuss policy to establish affordable housing component for all future development.	Development Services Department	#380 - discussion regarding a citywide policy to have an affordable housing component for any future developments.	Q3 2024
	4.d. Evaluate potential amendments to the Growth Management Ordinance (GMO) to accommodate affordable housing development.	Development Services Department	#424 - discussion on amending GMO to support infrastructure expansion.	Q3 2024
5. Continue to implement the Council adopted Homelessness Strategic Plan.	5.a. Explore opportunities to create permanent supportive housing through public-private partnerships.	Mobility & Housing Department	#468 - seek proposals from property owners and operators who are interested in selling a property to the City or a development partner to develop permanent supportive housing.	Q2 2024
	~~5.b. Connect unsheltered individuals at local encampments with local and regional emergency and supportive housing opportunities~~. This is an ongoing operational item.	~~Mobility & Housing Department~~		~~Ongoing~~

	5.b. Complete final site design improvements for Phase III and Phase IV of the Interim Shelter site.	Mobility & Housing Department	#496 - consider tiny homes at interim shelter site. #23-04 - open additional rooms at Interim Shelter site.	Q3 2023
6. Support climate initiatives to reduce Tracy's carbon footprint and preserve its natural resources.	~~6.a. Form an Environmental Sustainability Committee and adopt bylaws.~~ This is completed.	~~Operations & Utilities Department~~		~~Q3 2023~~
	6.a. Update the City's Climate Action plan in collaboration with residents and the Environmental Sustainability Comission.	Operations & Utilities Department		Q1 2025
	6.b. Develop an ordinance to address environmental impacts on warehouse expansion.	Development Services Department	#23-11 - develop ordinance to address environmental impacts on warehouse expansion.	Q2 2024
	~~6.d. Offer and promote sustainability programs and events such as recycling, water conservation, and composting.~~ This is an ongoing operational item.	~~Operations & Utilities Department~~		~~Ongoing~~
	6.c. Assess opportunities to reduce the City's carbon footprint in partnership with the City's residential power supply provider - East Bay Community Energy.	Operations & Utilities Department and Mobilty & Housing Department	#492 - discuss option to switch to East Bay Community Energy's Brilliant 100 program to reduce carbon emissions.	Q1 2024
	6.d. Support efforts to provide refueling/ recharging infrastructure for alternative fuel or zero emissions vehicles.	Development Services		Q1 2025
	6.e. Ensure surface, groundwater, and recycled water sources can be maximized for long-term sustainability to reduce drought vulnerability.	Operations & Utilities Department		Q1 2024

	~~6.h. Update the City's short-range transit plan to promote the use of public transportation options.~~ This was recently completed in 2023 and is an ongoing operational item.	~~Mobility & Housing Department~~		~~Q1 2025~~
	~~6.i. Pursue grant opportunities to continue free TRACER bus rides for students.~~ This is an ongoing operational item.	~~Mobility & Housing Department~~		~~Q3 2024~~
7. Develop a strategic plan to fund critical resources and infrastructure in the community.	7.a. Evaluate how the City may fund critical resources without heavy reliance on private development.	Development Services Department and Finance Department	#465 - consider creating and implementing a critical resources and infrastructural strategic plan.	Q3 2024
	7.b. Review annual compliance report for existing development agreements.	Development Services Department		Q2 2024
	7.c. Revisit development agreement policies to align with Council Strategic Priorities and vision for the community.	City Manager's Office and Development Services Department		Q4 2024
	7.d. Complete Citywide Infrastructure Master Plans: Sewer, Storm, Water, Transportation, Parks, Public Safety, and Public Facilities.	Development Services Department and Operations & Utilities Department	#394, #395, #421, #440 - update various master plans.	Q2 2024

ATTACHMENT E

COUNCIL FOLLOW-UP REQUESTS
(Updated 05-02-2023)

	Requestor	Council Meeting Date	Item Requested Under	Action Requested	Assigned To	Due Date	Status
291	Council Direction	04/3/18	Regular	Staff to explore and bring back the following: GMO, Fees and zoning.	CM/DS	April 2023	Part of Council Strategic Priorities
380	Vargas/ Arriola	7/28/20	Council Items	Agendize discussion regarding a citywide policy to have an affordable housing component for any future developments to apply to have a percentage of affordable housing.(Inclusionary Housing) To include recommendations from 2/14/20 Workforce and Affordable Housing Agenda Item. Such as GMO, Impact Fees, and Zoning	Bill Dean	April 2023	Consultant scope of work approved on June 7, 2022. Consultant working with staff to bring item to Council to discuss parameters of inclusionary zoning.
413	Vargas/ Arriola	2/2/21	Workshop	Bring back discussion about priority areas of development and see the opportunities of changing or amending those areas, add the TOD to the list of priority projects for RHNA and RGA allocation, see about starting allocation or creating a bank to develop the TOD area on leftover RGA's or do an amendment to our GMO.	Bill Dean	April 2023	RHNA priority discussion to be brought back to Council with discussion of RHNA sites inventory. Items below will be included in discussion. 1. Streamline Multi-Family Permit Process by Removing Requirements for Conditional Use Permits 2. Amend Accessory Dwelling Unit (ADU) Ordinance and Develop "Off-the Shelf" ADU Example Designs **3.** Amend Parking Requirements for Multi-Family Developments
	Arriola/ Vargas/ Davis	2/2/21	Workshop	Include incentives for affordable housing.			
	Bedolla/ Vargas	2/2/21	Workshop	When staff brings up opportunities to change the City system or guidelines, include options to modify the proportion of reserved RGA's for allocation			
420	Davis/ Arriola	5/4/21	Council Items	Agenda item regarding creating and implementing inclusionary housing in City of Tracy.			
423	Bedolla/ Vargas	5/18/21	Council Items	Next affordable housing discussion to include options for adjustments to city residential development fees. Including to adjust fees on affordable projects and below market rate projects; to set charges on the square footage of a project;			

Last updated on 5/8/2023 12:06 PM

				and to develop or refine best practices overall and if a project changes during the development process.			**4.** Amend Zoning Ordinance Development Standards
424	Bedolla/ Young	5/18/21	Council Items	Next affordable housing or growth management discussion to include amending a portion of the growth management ordinance to reflect when Council has a discretionary item before them and there is a request to move into the secondary residential area that a community benefit or community benefit funds be considered to help with expansion of roadways, water and sewer infrastructure, fire stations, parks and schools.	DS	June 2023	
509	Young/ Vargas	4/19/22	Council Items	Discussion on the Structured Fees for affordable housing projects.	Memo	June 2023	
309	Ransom / Vargas	02/05/19	Council Items	Provide details of all Memorandum of Understandings with non-employee related organizations (not developer) the City has and what is entailed. What is financial commitment, staff time, what are we giving to all various organizations.	Brian	Feb 1	Memo sent to Council in April 2020. Staff Report
493	Vargas/ Young	02/01/22	Closed Session	Requesting discussion on setting policies to have equitable representation with how MOU's and JPA are being negotiated to make sure that the governance of how the terms and conditions as we move forward. This item was brought forward by Council Member Ransom in Feb 2019 who originally expressed the agency would like better service to make sure we have equitable representation. Typically the Council authorizes the Mayor or City Manager to sign an agreement but there is no bringing it back to Council to say this is what we understand.		Jan 2023	
389	Vargas/ Arriola	11/10/20	Council Items	Civil Search Program – Community Emergency Response Team. Item to create an adhoc committee to educate people about disasters.	Fire JPA	2022 Summer	Staff Report – Chris Martin will provide status update
394	Vargas/ Arriola	12/01/20	Council Items	Create policy to adopt open spaces when it comes to storm drains and parks	DS	Spring 2023	Staff Report – Will be analyzed as part of Storm Drain Master

							Plan update currently underway. Pending CEQA Review. Storm Drain Master Plan tentatively scheduled for Fall 2022 Council meeting.
395	Vargas/ Arriola	12/01/20	Council Items	Policy to adopt water tanks and water towers to have uniformity on how they are built and consistency throughout the entire City.	DS	Spring 2023	Staff Report – Will be analyzed and reviewed as part of the Water Master Plan update currently underway. Included in Draft Water Master Plan (MP). Engineering working on CEQA now. MP EPA March 2022. Water Master Plan Fall 2022 Council meeting. Awaiting Nexus Study.
529	Young/ Vargas	7/5/22	Council Items	Review of Engineering Design Standards	DS	January	Staff Report (Memo?)
421	Vargas/ Bedolla	5/18/21	Council Items	Discussion with the Master Plan update on bike and trails regarding waiving any permit fees, insurance for the bike group.	DS	Fall 2022	Memo sent to Council on June 10, 2021. (Will come with Transportation Master Plan discussion)
440	Vargas/ Bedolla	8/31/21	Council Items	Would like to have discussion regarding park maintenance, budget, overall upkeep and how that works. Would like this to be a separate request from master plan and would like taken care of as soon as possible.	FIN	Dec 2022	Staff Report Related to Master Plan

460	Arriola/ Bedolla	10/5/21	Council Items	Requested to have closed captioning for Channel 26 in the future.	IT	March	Memo FY 22-23 Budget augmentation was submitted for funding.
464	Vargas/ Arriola	10/19/21	Council Items	See if land uses around industrial areas are being designated for truck staging, truck fueling and a discussion about assigning areas for the development of truck stops and truck uses.	DS/ED	Spring 2022	Staff Report Was pulled from 6/7 Agenda. Can take to CC as info item or go to PC as info item and discussion first. 11/17/2022 – Item went before Planning Commission (PC) on 8/24/22. PC Commission requested additional info which will be brought before the PC in March 2023 after a consultant has assisted with analysis.
465	Davis/ Arriola	10/19/21	Council Items	A discussion to consider creating and implementing a critical resources and infrastructural strategic plan to look at prioritizing support for public safety, hospitals, libraries and things of that nature. Developers are our community partners but not necessarily the saving grace for every single infrastructural need we have, and the City should be able to do some of those things without relying on the development of housing.	M&H	Spring 2022	Consider during Council Goal Setting
468	Bedolla/ Young Bedolla/ Young	11/2/21 2/1/22	Special Meeting – Council Items Council Item	Requested information to seek proposals from property owners and operators who are interested in selling a property to the City or a development partner to develop permanent supportive housing. City Attorney clarified the request was seeking an agenda item to talk about issuing a request for interest to see who is interested. Regarding Council item #468 about a proposal for permanent support of housing to see if there are property	M&H	TBD	Staff Report Include with updates on affordable housing.

496	Bedolla/ Vargas	2/22/22		owners who are interested in selling to the City or to a development partner. If it gets approved by Council, could one of the respondents to that be the City (city owned land). From what he read the answer is yes, could tiny homes count as permanent supportive housing. Is that Council item wide enough to include the City responding if there is opportunities and if it could be tiny homes. City to work with those interested in providing aluminum framed tiny homes at the shelter site in time for Fall 2022 opening.			Memo to Advisory Committee and update to Council regarding tiny homes.
485	Vargas/ Arriola	1/18/22	Council Items	Regarding impact fees, discussion about deferred programs for disasters or hardships.	DS	Fall 2022	Tied to Master Plan Memo
489	Vargas/ Young	2/1/22	Council Items	Agendize a review of options to regulate groups attempting to influence legislation in the City of Tracy. This covers our employee and how they could be affected by statements made on social media that are not true and an influence on how people can do their work.	CAO		Staff Report
492	Bedolla/ Arriola	2/1/22	Council Items	Agendize a discussion for the City's residential power supplier to the City of Tracy switched to Brilliant 100 program with a grace period for businesses. Council Member Arriola clarified there are multiple options the City can do for public properties. Right now we are set at the lowest one that has more renewable energy than PG&E. There is a higher option that costs a few dollars more and it provides all carbon free energy. It is an option for cities, commercial and residential and confirmed with Council Member Bedolla that was what he wanted	UT/OPS		
498	Davis/ Vargas	3/22/22	Council Items	Conversation about what P3 could mean for our City.	Vanessa & CAO		On hold until vetted with vendors Memo
500	Bedolla/ Arriola	3/22/22	Council Items	Online tool for residents to see what work is being done on their road and surrounding areas.	IT		Developing a GIS portal – Ongoing Memo
501	Davis/ Vargas/	3/22/22	Agenda Item 5.B	Public Arts Policy	Cultural Arts/DS	Sept. 2023	In progress

	Arriola						
504 541	Davis/ Arriola Davis/ Arriola	3/29/22 10/4/22	Council Items Council Items	Look into what other cities are doing regarding vacant commercial buildings specifically what kind of ordinances and policies they have in place. Concerned about Save Mart, Osh and Rite Aid buildings. Memo regarding what policies are being used by neighboring cities regarding empty industrial buildings.	M&H	Sept. 2023	Part of ED Strategic Plan
512	Young/ Vargas?	5/17/22	Item 3.A	Memo with dates and times Council agreed on background check regulations and allowable locations/zoning for cannabis businesses.	DS	April 18 2023	Memo sent to Council on 2/22/2022
520 516	Bedolla/ Arriola Davis/ Arriola	6/24/22 6/7/22	Council Items Council Items	Requested staff look into making the Go Request App more accessible via website/text/email not just the mobile app and also transparent on the City's website with a search feature. Discussion regarding decline and appearance of the city and approaching cleanliness. (Comment made by a member of the public regarding trash on sidewalks, dead grass etc.). Not only trash but benches and sidewalks.	Karin/ Carissa PW/Parks		Memo Connected to Item 500
529	Young/ Vargas	7/5/22	Council Items	Review of Engineering Design Standards	DS	January	Staff Report (Memo?)
531	Bedolla/ Vargas	8/2/22	Council Items	When Street Re-pavement Study is completed have a townhall meeting to present results and timeline of repairs to residents outside of a formal Council meeting.	DS	May 2 2023	Public Town Hall meeting
534	Arriola/ Vargas	9/6/22		Take a second look at incentives for cannabis applicants to move to another location.	M&H		Memo
536	Arriola/ Vargas	9/20/22	Council Items	Private memo on a legal assessment of some of the allegations, we heard related to any alleged impropriety about the issuance of cannabis permits by the Planning Commission.	CAO		Memo
538	Bedolla/ Davis	10/4/22	Council Items	Look at Council policy to start regular meetings at 6 p.m. and the possibly have a third regular meeting date added in the month.	CCO/ CMO		May go on strategic priorities retreat agenda.

542	Davis/ Bedolla	10/18/22	Council Items	Revisit Ordinance (TMC 10.08.3193 – Mobile Food Vendors) and work with Gabriela Machuca to modify that ordinance so we can be more business friendly with our mobile food truck businesses. Item also supported by Vargas and Young under Items from the Audience.	DS	June 2023	Staff Report
543 561 562 23-03	Davis/ Arriola Davis/ Bedolla Davis/ Bedolla Davis/ Bedolla	11/01/22 12/21/22 1/17/23 2/21/23	Council items	Update by memo on the timeline for infrastructural improvements for widening of Lammers and the freeway overpass. Requested a memo about Prologis' responsibility to do the roadway and overpass repairs. Asked again about Prologis road improvements and when they are going to be done and also Corral Hollow widening. Have asked four times and would like an updated sooner than later. Asked repeatedly for memo regarding when the Corral Hollow Road widening in South Tracy from aqueduct to 580 will be completed. Still have not received that information and also have not received the information regarding Prologis's responsibility to construct a roadway. Council Member Bedolla asked to include south of Linne.	DS	April 2023	Memo
545	Davis/ Bedolla	11/01/22	Council Items	Still getting complaints regarding storm drains being trashy, and overgrown, trees and brushes have been cut down but has not been properly. City to look into properly maintaining the storm drains especially in a residential area.	OPS/PW	July 2023	Memo
546	Bedolla/ Arriola	11/01/22	Council Items	Comprehensive explanation on street signal timing, what we can do currently and what smart cities are doing to improve traffic flow.	DS	June 2023	Memo
548	Davis/ Vargas	11/15/22	Council Items	Update regarding when the General Plan will be coming back to Council.	DS		Memo

549	Davis/ Arriola	11/15/22	Council Items	Staff to look at how to accelerate the expansion of Valpico Road.	DS		
550	Davis/ Vargas	11/15/22	Council Items	When will Tracy Urban Forestry Management Plan will be coming back before Council.	OPS	June 2023	Staff Report
551	Davis/ Vargas/ Bedolla	11/15/22	Council Items	Requested staff to look at a way of taking a proactive approach on analyzing the conditions of our sidewalks in an effort to be more ADA compliant and friendly.	DS	Dec	Memo
553	Davis/ Arriola	12/6/22	Council Items	Re-evaluate what the City considers fully staffed sworn-in Police officers. There has been a lot of crimes and we need to re-evaluate if we have enough officers on the streets, was told there are only six Police Officers at night and need more. Need to increase Police Force.	CMO		Staff Report (Discussed as part of budget process)
554	Davis/ Arriola	12/6/22	Council Items	A caller mentioned the community prioritized a Library in the past and asked where we are with the Library and an update from the County on what is being done on existing library.	Brian		Memo
555	Davis/ Vargas	12/6/22	Council Items	Where are we with a future hospital, is interested in what that looks like, if we are still doing that, who are we talking to about it and if not, can we start the conversation about bringing a trauma ready hospital to the City of Tracy.	H&M	May 16	Part of ED Strategic Plan Update Workshop
23-02	Davis/ Bedolla	2/21/23	Council Items	City is growing and needs a trauma ready hospital. Staff to look into how to get a hospital in Tracy.			
23-10	Davis/ Arriola	3/7/23	Council Items	Requested staff provide a memo regarding Sutter's plans with their obligation to build a hospital			
556	Arriola/ Vargas	12/6/22	Council Items	Bring back an item to assess the viability of the restructuring of Council and essentially looking at Council districts and the viability of a two versus four-year term for mayoral term and viability of a full time Mayor.	CAO	Jan/Feb	Staff Report (RFP in process)
558	Bedolla/ Davis	12/6/22	Council Items	Memo informing Council of the impacts to the City should Valley Link decide to start implementing the results from the supplemental EIR. Understanding is a stop at Mountain House and Tracy would get solely get an operation facility.	DS		Schedule Workshop

559	Bedolla/ Davis	12/21/22	Council Items	Request that staff bring a resolution on or before the February 7th meeting to accept the irrevocable offer of dedication of fee interest for 16-acres of community park land for an aquatics park from Ellis Village LLC. To City of Tracy so that the land can be accepted.	DS	June 2023	Staff Report
	Bedolla/ Evans	01/30/23	Council Items	Amended previous motion and requested item to be moved to the first meeting before the Case Management Conference on April 12, 2023.		April 4	
	Bedolla/ Arriola	03/21/23	Council Items	Amended his prior motion in regard to scheduling of the acceptance of the irrevocable offer of dedication from Surland Communities for 16 acres of land. Prior motion asked for the proposed acceptance be scheduled for April 4, 2023. Propose the proposed acceptance be moved to a meeting on or before June 20, 2023.			
23-05	Young/ Davis	2/21/23	Council Items	Update on downtown parklets.	H&M	June 2023	
23-06	Young/ Arriola	2/21/23	Council Items	Discussion on Diversity, Equity and Inclusion. Look at Implementation Plan and where we go from there so Council is all on the same page.	CMO/HR Vanessa/ Kimberly	Summer 2023	Staff Report
23-07	Arriola/ Young	3/2/23	Council Items	Action item to address or eliminate any barriers to cannabis opening	DS		
23-08	Davis/ Evans	3/2/23	Council Items	Staff to start researching alternative sites on city owned land to locate a community aquatics center and research the use of the P3 model	Parks	June 20 2023	
23-14	Bedolla/ Evans/ Davis	4/4/23	Item 3.B	Include Legacy Fields as a potential site for the Aquatics Center			
23-09	Davis/ Evans	3/2/23	Council Items	Rescind the resolution authorizing the City Manager to take any directly related and immediate action required by the shelter emergency without giving notice for bids to let contracts pursuant to PCC Section 22050 and TMC section 2.20.270 because there is no longer an emergency regarding interim housing.	CMO/ H&M	April 18 2023	

23-11	Davis/ Arriola	3/2/23	Council Items	Requests an ordinance to address environmental sustainability policy to address warehouse expansion, would like a conversation to address particulates.	DS		
23-12	Arriola/ Young	4/4/23	Item 3.B	A new CIP for a Police substation and increased funding for the Nature Park.			
23-13	Young/ Arriola	4/4/23	Item 3.B	Specific discussion of the complete future of the Aquatics Center.			
23-15	Bedolla/ Young	4/4/23	Council Items	Bring back to Council as soon as possible an informational item about a joint use agreement with Tracy Unified School District for the construction and maintenance and use of sports facilities including but not limited to gyms, fields, tracks and outdoor courts.	Parks		
23-16	Young/ Evans/ Davis	4/4/23	Council Items	Get our census tracking updated and current because right now to show we do not have any disadvantaged communities is bad for our community because we are not taking advantage of the different opportunities to show we have a need in our community.	Karin/ Carissa		Memo
23-17	Bedolla/ Davis/ Arriola	5/2/23	Council Items	Concerning crosswalks safety, that staff look into illuminated crosswalks or work that staff can do to implement those best practices into our crosswalks.			

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

ADOPTING THE FISCAL YEAR 2023-2024 AND 2024-2025 CITY COUNCIL STRATEGIC PRIORITIES

WHEREAS, in February 2023, the Tracy City Council held a two-day workshop to discuss the principles of good governance, the City Council's Code of Conduct and Meeting Protocols and Rules of Procedure, and Strategic Priorities; and

WHEREAS, on June 27, 2023, staff presented the draft FY 2023-2024 and 2024-2025 Council Strategic Priorities (Strategic Priorities) to the City Council for review and input, attached hereto as Attachments A-D; and

WHEREAS, the Council agreed to prioritize the same four Strategic Priority categories used previously and requested amendments to specific Strategic Priority goals and objectives, and to condense the Strategic Priorities where possible; and

WHEREAS, the four Strategic Priority areas include 1) Economic Development, 2) Governance, 3) Public Safety, and 4) Quality of Life; and

WHEREAS, the Strategic Priorities represent the multi-year goals expressed by the City Council together with short-term priorities that will receive time and attention over the next 12 to 24 months; and

WHEREAS, the Strategic Priorities serve as a roadmap for the City Council and staff to focus on the most pressing projects and initiatives within the City of Tracy over the next two fiscal years; and

WHEREAS, To ensure each priority area is advanced, goals and objectives are assigned department leads and estimated completion timeframes; now therefore it be

RESOLVED: That the City Council of the City of Tracy hereby adopts the Fiscal Year 2023-2024 and 2024-2025 Strategic Priorities, as set forth in Attachments A-D.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on the 15th day of August 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.O

RECOMMENDATION

Staff recommends that the City Council adopt a Resolution authorizing the purchase of equipment from ABI Attachments, Inc. to maintain and operate Legacy Fields in the amount of $122,000.

EXECUTIVE SUMMARY

Staff recommends the City Council approve the purchase of new field equipment for the Parks and Recreation Department to maintain Legacy Fields. The total for the equipment is expected to be $122,000, with purchasing through the sole vendor who submitted a bid in response to the City's Notice of Inviting Bids for infield / turf machinery. This purchase is essential to ensure Legacy Fields is maintained as a premier sports venue for local league use and tournament play.

BACKGROUND AND LEGISLATIVE HISTORY

The Parks and Recreation Department is responsible for the maintenance of all City parks and sports complexes. In 2022, the City Council, through Resolution 2022-150, approved the update to the Citywide Parks, Recreation, and Trails Master Plan (Master Plan). The Master Plan is intended to serve as a roadmap to help guide staff. The Master Plan identified improving and maintaining existing parks as the top priority for residents. In addition, athletic fields were identified as one of the most utilized amenities within the park system, requiring additional care and maintenance. Construction of Legacy Fields Phase 1E is expected to be complete by October 2023. By procuring the necessary equipment to maintain Legacy Fields, the City will be taking a proactive approach ensuring staff have the resources needed to preserve the integrity of the facility.

At the April 18, 2023, regular City Council meeting, through Resolution 2023-067, the City Council approved one-time funding in the amount of $600,000 from Measure V (Fund 107) for the purchase of equipment to maintain and operate Legacy Fields. Subsequently, the City Council approved through Resolution 2023-091 and 2023-124, the purchase of eight (8) pieces of equipment for a total amount of $436,300. $163,700 remain in the original approved amount and staff is requesting the City Council authorize the use of $122,000 of the remaining funds for the equipment.

ANALYSIS

Pursuant to the Tracy Municipal Code, 2.20.180, a Notice Inviting Bids for infield / turf machinery (Notice) was published on June 13, 2023. The bid specifications identified the item the City needs to purchase to ensure Legacy Fields has the necessary equipment to maintain the facility as a premier sports venue. One bid was received by the expiration of the Notice submittal period.

Staff recommends ABI Attachments, Inc. be awarded for the purchase of the respective equipment:

Vendor	Equipment	Price	Qty	Description
ABI Attachments, Inc.	ABI Force Zero Turn	$61,000	2	Infield and turf grooming machinery
ESTIMATED TOTAL				**$122,000**

FISCAL IMPACT

At the April 18, 2023, regular City Council meeting, the Council approved, through Resolution 2023-067, one-time funding in the amount of $600,000 from Measure V (Fund 107) for Fiscal Year, 2022-2023. Subsequently, the City Council approved through Resolution 2023-091 and 2023-124, the purchase of eight (8) pieces of equipment for a total amount of $436,300, leaving an available balance of $163,700. If the purchase with ABI Attachments, Inc. is approved, there will be approximately $41,700 remaining.

PUBLIC OUTREACH/ INTEREST

N/A

COORDINATION

The Parks and Recreation Department coordinated with Finance and Utilities & Operations (Fleet Division).

CEQA DETERMINATION

Potential impacts of the construction and operation of Legacy Fields was reviewed pursuant to the California Environmental Quality Act (CEQA). The City Council certified, through Resolution 2010-107, the Environmental Impact Report which followed CEQA and the State CEQA guidelines. This equipment is to maintain the park as was original reviewed under CEQA and additional review under CEQA is not needed.

STRATEGIC PLAN

This agenda item is consistent with the City Council's adopted Quality of Life strategies.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council adopt a Resolution authorizing the purchase of equipment from ABI Attachments, Inc. to maintain and operate Legacy Fields in the amount of $122,000.

Prepared by: Nilo Velazquez, Management Analyst II
Todd Rocha, Public Works Superintendent

Reviewed by: Jolene Jauregui-Correll, Recreation Services Manager
Sara Cowell, Director of Finance
Bijal Patel, City Attorney
Brian MacDonald, Interim Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

Attachments:

Attachment A: ABI Attachments, Inc. Quote – ABI Force Zero Turn

ABI Attachments, Inc.
520 S Byrkit St.
Mishawaka IN 46544
United States
877-788-7253
www.ABIattachments.com

Quote #QO413553

ID #: 95437 City of Tracy
Quote Date: 6/13/2023

Bill To

City of Tracy
209-831-4477
520 N Tracy Blvd
Tracy CA 95376-4917
United States

Ship To

City of Tracy
209-831-4477
520 N Tracy Blvd
Tracy CA 95376-4917
United States

Quote Details

Expires - End Of Month Quoted
Terms -
Quoted By - Cory Stoneburner

Notes:

Quantity	Items	Weight	Price	Amount
1	**10-99116 ABI Force z23sl EFI - Laser Ready (Kohler ECH740)** ABI Force zero-turn vehicle (ZTV) - Model z23sl "Laser Ready": The patented ABI Force is a new class of outdoor work vehicle. This industry-first commercial-grade zero-turn vehicle, when optionally equipped, is built for world-class ballfield maintenance and renovation, turf care and installation, and precision laser grading work. The drivetrain features a powerful and fuel-efficient commercial-grade 23 hp (747cc) Kohler Command PRO EFI engine (eliminates carburetor), 2-stage cyclonic canister air filter (protects engine), and a commercial hydrostatic drive system that directly couples the drive pumps to the engine (eliminates belts). This machine additionally enables fingertip hydraulic command of the patented spring mid-mount pitch-&-lift system and rear-mount swivel-lift system. Both mid and rear systems are ready to be configured with a range of optional ABI designed attachments to meet specific requirements (multifunction rake included). The advanced hydraulics system additionally enables complete automated control of mid-mount attachments for zero-turn laser grading and grooming. Just add optional laser electronics and mounts! Ensure consistent world-class results with the z23slt speed-lock and depth-lock features. The z23slt is built upon a rugged tubular steel frame with removable, easy access service panels, large rear air tires, and 13" front air-filled casters. Commercial 24-Month Limited Chassis Warranty and 36-Month Unlimited Hour Engine Warranty | (Customer assembly & uncrating required - Required attachments sold separately - EPA & CARB Compliant) Laser System Note: Electronic machine control, laser receiver, mounts, laser transmitter, and tripod sold separately. (Laser system additionally requires items: 10-90403, 10-10424, & 10-10422 plus ground-engaging attachments.)	1,500	$29,999.00	$29,999.00
1	**10-99029 Mini-Box Blade for ABI Force (Solid Edge)** ABI's Mini Box Blade attachment provides earth-moving muscle to quickly and effectively carry material, grade, and level with precision! The mini box blade mounts at the underbelly midpoint of the machine enabling mini motor grader type leveling consistency. With the available laser system and the mini box blade attachment, the ABI Force transforms into the world's most accurate agile laser grading machine. (Solid Edge / 60" Mid-mount Attachment / Customer Assembly Required)	90	$599.00	$599.00
1	**10-90337 Angle and Center Plate for Solid Mini Box Blade** Angle and Center Plate for Solid Mini Box Blade			
1	**10-90341 Left & Right Ends, Wheel Guide and Hardware for Force Mini B** Left & Right Ends, Wheel Guide and Hardware for Force Mini Box Blade. Note: if ordering for Z18, must order 10-90144 seperately.			
1	**10-99149 Stealth Blades for ABI Force (Set of 7, complete)** Stealth Blades provide subsurface compaction relief without creating ridges in the soil. They are commonly used during the manual or laser grading process to loosen the soil ahead of the mini box blade. The Stealth Blades are designed with a flat bottom profile and offer less resistance to cut through rooted vegetation with ease. Also, great for weeding and vegetation removal off an infield skin.	46	$649.00	$649.00
1	**10-90165 VibraFlex 5' Infield Drag (Model 3800)** The Vibraflex Infield Drag, model 3800, is an innovative attachment that prepares recreational level baseball and softball infields with four rows of evenly staggered U-pins that groom any infield material. Unlike conventional nail boards, VibraFlex pins are easy to replace, and ABI's technology positively controls ground-engagement depth regardless of material moisture or compaction. Change out pins based upon application and desired results. 60 wide | 3/4" spacing | Includes 1/4" and 3/8" pins | 1/4" pins are preinstalled. MODEL 3800	75	$799.00	$799.00
1	**10-99136 Pro Edger System w/Cleanup Blade (For z23)** Renovate the baseball or softball infield lip with this patented edger system. The edger mounts to the hydraulic RVF mid-mount system for complete finger-tip control. The 18" disk cuts a vertical slit to create a turf edge while the sub-surface "clean up" blade cuts the roots horizontally for easy removal. A sight gauge on the front of the ABI Force assists in cutting clean lines, and it features a radius offset to cut a clean outfield ark with ease. (Customer Assembly Required)	112	$1,299.00	$1,299.00
1	**10-90410 1/2 Ton Roller (Requires 10-90449 200lb Weight Kit)** The 1/2 Ton underbelly mid-mount roller has a 58" working width & an 8" diameter. Used for compacting turf and soil. Requires 10-90449 200lb Weight Kit for model z23 to reach ~1/2 ton of pressure. No weight kit is available for the z18 model, compaction will be limited.	187	$1,699.00	$1,699.00
1	**10-99181 46" Plug Aerator System w/100 lbs. For z23 ABI Force (72 tines)** The 46" plug aerator, mounted to the hydraulic lift system, enables over 115,000 sq.ft. per hour of aerating production. With hydraulic down-pressure and optional 200 lbs of additional weight (100 lbs included), this machine outperforms dedicated aerators while achieving plug depths up to 3 ½" in a 4" x 8" pattern with 3/4" round plugs. Additionally, the aerator head floats, allowing the operator to follow landscape curves or ballfield infields without disengaging from the ground. Zero turns are quick with a sub-three-second hydraulic lift or lower. Requires a 15-minute tool-less swap-out of the RVF mid-mount system to install aerator. 12 Wheels w/6 Tines Each (Requires 10-90449 200lb Weight Kit)	475	$4,299.00	$4,299.00
1	**10-99140 7' Pro Finisher (For z23s)** The Pro Finisher Drag provides a beautiful seamless finish on "Pro" infield conditioners. This steel lattice evenly floats over the infield surface material to level and redistribute conditioner. Flared sides seamlessly feather edges, leaving no trails even on sharp turns. This finish is as good as it gets in the sports turf market. Mounts to the ABI Force z23s hydraulic articulating system. It also includes an adjustment linkage to set desired results. (Customer Assembly Required)	68	$1,699.00	$1,699.00
1	**10-90449 200lb Saddle-Mount Weight Kit - (Qty 4 50lb) ABI Force z23** 200lb Saddle-Mount Weight Kit - (Qty 4 50lb) ABI Force z23	250	$899.00	$899.00
1	**10-90403 Laser Electronics & Pole - Machine Side (For z23sl / z23slt)** This kit includes the electronics (Receiver & Control Box) required to control the ABI Force's z23sl or z23slt "Laser Ready" hydraulics system. This kit also includes a center-mounted receiver-pole and mounting hardware. The control panel mounts to the dash and the laser receiver mounts to the top of the pole. NOTE: ABI Force z23sl or z23slt machine, laser transmitter, tripod, and ground engaging attachments are sold separately. (Additionally Requires Items: 10-99116 or 10-99144, 10-10424, & 10-10422, plus ground engaging attachments needed to complete the laser system)	25	$3,799.00	$3,799.00

QO413553

ABI Attachments, Inc.
520 S Byrkit St.
Mishawaka IN 46544
United States
877-788-7253
www.ABIattachments.com

Quote #QO413553

ID #: 95437 City of Tracy
Quote Date: 6/13/2023

Quantity	Items	Weight	Price	Amount
1	**10-10424 Dual Slope Transmitter for Laser System** Dual Slope Laser Transmitter w/Detector & Detector Bracket. This transmitter is designed for use for flatwork, single or dual slope applications. Slopes up to ±15 degrees can be used in either the X or Y-axis. Accuracy: ±1/16" at 100'. Rotation speed: 300, 600 rpm, Self-leveling, Self-leveling range ±5°, 2,600' (diameter) operating range. Horizontal, Multi-Slope & Vertical Applications. Extra Long Battery Life (120 hours). Tough IP66 Construction Rating. Comparable with phone app for remote control. Rotary laser 5-year limited warranty. (Receiver, Electronics, & Hydraulics Machine Side Controls NOT Included) Hard carrying case included. IP66 dustproof & powerful water jet resistant, 5/8-11 tripod thread (RL-SV2S/PS)	14	$2,899.00	$2,899.00
1	**10-10422 XD Tripod for Laser Transmitter (33" - 119")** The Xtreme-Duty Aluminum Elevating tripod (transmitter stand) features a reinforced, indirect gear crank unit for easy height adjustments. It has metric, inches, 10ths, 100ths. During use, the circle bubble assures that the tripod stays in the right alignment, while the break-proof quick release allows easy adjustments. This elevating tripod extends up to 119 inches high and retracts to 33 inches. (210683-185)	30	$799.00	$799.00
1	**10-10425 13' Fiberglass Grade Rod for Laser System** 13' Fiberglass Grade Rod for Laser System	6	$149.00	$149.00
1	**10-90451 ASM: 46" SLIT AERATOR WITH NO WEIGHTS: FORCE Z-23** ASM: 46" SLIT AERATOR WITH NO WEIGHTS: FORCE Z-23		$4,199.99	$4,199.99

Subtotal	**$53,786.99**
Shipping Cost	$1,812.40
Tax Total (%)	$4,437.58
Total	**$60,036.97**

Freight Carrier: SAIA STANDARD

Freight Accessorials Ordered: - Residential with Notify - - Liftgate - - Limited Access -

Customer Support: Phone Support 877-788-7253, Mon-Fri, 9am-5pm EST or **ABIsupport.com** for product manuals, parts, and self-help.

Return Policy: Product(s) sold with limited product warranty, standard return policy (shown here), and (when eligible) a conditional AttachMatch money-back guarantee. Review Details: https://www.abiattachments.com/abi-company/policies/return-policy/ ABI's Standard 30-Day Return Policy: ABI will consider a refund on returns initiated within thirty (30) days of delivery of UNUSED products. ABI encourages customers to use caution when placing an order, as once shipped, the item may only be returned or exchanged if ABI expressly consents. Refunds are for the product's purchase price only; shipping and handling charges are not refundable. The customer is responsible for all shipping expenses associated with the transaction; these expenses include those incurred to deliver the product to the customer by ABI and shipping expenses incurred to return the product to ABI from the customer. If the product(s) has been used or otherwise reduced in resale value, up to a twenty-five percent (25%) restocking fee may be applied to items returned. If the customer utilized financing or otherwise has not paid ABI monies sufficient enough to cover the aforementioned expenses, the customer will be asked to pay these expenses before a return will be issued. When the purchaser receives the product(s), please keep the shipping pallet and packing material, as it will be required to return the product. Refunds are not made until all products are returned to ABI's procession. The customer shall not be responsible for damage caused by the shipping company delivering the product, provided such damage is noted on the delivery receipt at the time of delivery, or the shipment is refused. Applicable warranties cover defects in material and workmanship. ABI retains the exclusive and sole right to determine if an item is eligible for a return, exchange, or cancellation once shipped. ABI must approve in writing to obtain a return, refund, or exchange.

Critical Delivery Responsibilities:

If your order is not a parcel being shipped via UPS or FedEx, please consider the following to avoid additional charges. **Critical Inspection Process:** Upon delivery, you will need to thoroughly inspect your purchase for any damages or shortages. ABI nor the carrier will be responsible for damages or shortages if they are not indicated on the delivery document the driver asks you to sign. **Unloading The Truck:** Most ABI equipment requires the assistance of a forklift, tractor with front-end loader, or a lift gate to offload. We have already discussed an offloading plan with you and ordered the frieght accessorials listed above at your direction. If this offloading plan is not clear to you, please contact us immediately. **Terminal Or Customer Pick Up:** If selected, the carrier or ABI will contact you with additional instructions when the unit is available for pickup.

Thank you for your purchase. All payments must be received in US dollars. Payment in full before shipment is required unless otherwise approved for financing through one of our partners or approved for corporate/government terms with ABI. If state and local sales or use taxes are not included in your quote or sales order, you may still be responsible for paying taxes on this purchase. Please consult with your tax advisor or the Department of Revenue for any tax liabilities. All orders sold by ABI Attachments, Inc. Orders subject to management approval. Product(s) sold with the condition of stated limited warranties, standard return policy, and (when applicable) conditional money-back guarantee. Return Policy: abiattachments.com/policy/return/ By you placing this order, whether ABI does or does not deliver this order as expected, ABI shall not be liable in any event for incidental or consequential or other special damages under any theory of strict liability or negligence or expenses of any kind, including, but not limited to, personal injury, damage to property, cost of equipment rentals, loss of profit, loss of time, loss of wages, or cost of hiring services to perform tasks normally performed by this product. If sold in Alabama: Seller has collected the simplified sellers use tax on taxable transactions delivered into Alabama, and the tax will be remitted on the customer's behalf to the Alabama Department of Revenue. The seller's program account number is SSU-R010220629.

QO413553

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

AUTHORIZING THE PURCHASE OF EQUIPMENT FROM ABI ATTACHMENTS, INC. TO MAINTAIN AND OPERATE LEGACY FIELDS IN THE AMOUNT OF $122,000

WHEREAS, At the April 18, 2023, regular City Council meeting, the Council approved one-time funding in the amount of $600,000 from Measure V (Fund 107) for the purchase of equipment to maintain and operate Legacy Fields; and

WHEREAS, The Construction of Legacy Fields Phase 1E is expected to be complete in the Summer of 2023; and

WHEREAS, Certain equipment, including the equipment listed in the table below (Equipment), is necessary to maintain Legacy Fields as a premier sports venue and will perform a specific function. The Equipment may be deployed to other parks as a back-up equipment, if needed. The City seeks to take a proactive approach to ensure City staff have the resources needed to preserve the integrity of the facility by procuring the Equipment now, as utilization is expected to increase facility wide; and

WHEREAS, Pursuant to Tracy Municipal Code, section 2.20.180, a Notice Inviting Bids for infield / turf machinery was published and issued on June 13, 2023. The bid specifications identified the equipment that the City intended to purchase; and

WHEREAS, One (1) bid was received by the expiration of the Notice submittal period; and

WHEREAS, As set forth in the table below, the estimated cost for the Equipment is $122,000 and the City seeks to purchase said Equipment from ABI Attachments, Inc.

Vendor	Equipment	Price	Qty	Description
ABI Attachments, Inc.	ABI Force Zero Turn	$61,000	2	Infield and turf machinery
ESTIMATED TOTAL				**$122,000**

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it further

RESOLVED: That the City Council of the City of Tracy approves the purchase of the Equipment from ABI Attachments, Inc. at the estimated price of $122,000; and be it further

RESOLVED: Potential impacts of the construction and operation of Legacy Fields was reviewed pursuant to the California Environmental Quality Act (CEQA). The City Council certified, through Resolution 2010-107, the Environmental Impact Report which followed CEQA and the State CEQA guidelines. This equipment is to maintain the park as was original reviewed under CEQA and additional review under CEQA is not needed.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.P

RECOMMENDATION

Staff recommends that City Council adopt a resolution approving the Offsite Improvement Agreement between the City and Lennar Homes of California, LLC, for public improvements required as part of the Conditions of Approval, for the Tracy Hills Phase 2 Zone 5 Water Main Improvements.

EXECUTIVE SUMMARY

This item involves the approval of the Offsite Improvement Agreement (OIA) for the Tracy Hills Phase 2 Zone 5 Water Main Improvements which will allow Lennar Homes of California, LLC (Developer) to proceed with the construction of a portion of the Zone 5 potable water system infrastructure improvements necessary to provide water service initially to the Tracy Hills Phase 2A development and ultimately to future phases of development within the Tracy Hills Specific Plan Area.

BACKGROUND AND LEGISLATIVE HISTORY

On October 19, 2021, City Council adopted the Tracy Hills Specific Plan Amendment for Tracy Hills Phase 2 and approved various related land use entitlements, including that certain Vesting Tentative Subdivision Map for Tracy Hills Phase 2, Tract 4057, processed under Application No. TSM20-0003 and approved by Resolution No. 2021-154 (Tentative Map). The Tracy Hills Phase 2 project is generally bordered by Interstate 580 to the north and Corral Hollow Road to the east.

ANALYSIS

The Conditions of Approval for the Tentative Map and the Citywide Water System Master Plan require the Developer to design and construct the Zone 5 water transmission main from the John Jones Water Treatment Plant to the new Zone 5/6 water tanks, also being constructed by the Developer. The goal is to provide water service to Tracy Hills Phase 2A and ultimately to future phases of development within the Tracy Hills Specific Plan Area.

The subject Phase 2 Zone 5 Water Main Improvements will construct the portion of the Zone 5 water transmission main located within the Tracy Hills Phase 2 development, generally extending between the I-580 Freeway and the Tracy Hills Zone 5/6 water tanks. Offsite Improvement Agreements for other portions of the Zone 5 water transmission main and for the Zone 5/6 water tanks have previously been approved by the City Council.

The Project will be partly located within public street rights-of-way and other parcels to be dedicated by Developer to City on the various Final Maps comprising the Tracy Hills Phase 2A development and partly within an Access and Water Line Easement to be dedicated by Developer to City across future phases of the Tracy Hills development.

Improvement plans and specifications, which describe in more detail the improvements which are required under the subject OIA, were prepared on behalf of the Developer and have been approved by the City Engineer.

The Developer has executed the OIA and has submitted the required security to guarantee completion of the subject improvements. The OIA and associated Improvement Plans are on file with the City Engineer.

FISCAL IMPACT

There will be no fiscal impact associated with this action. Developer will pay for the cost of plan checking, engineering inspection and processing of the OIA. There are no fee credits associated with the OIA.

PUBLIC OUTREACH / INTEREST

All public outreach for the Tracy Hills Phase 2 development (notifications, public hearings, etc.) was conducted for the Planning Commission and City Council hearings that were held in October 2021 to consider the General Plan Amendment, Specific Plan Amendment and Vesting Tentative Subdivision Map for the overall project. Additional public outreach specifically for Offsite Improvement Agreement for the Tracy Hills Phase 2 Zone 5 Water Main Improvements is not required.

COORDINATION

This staff report was prepared by the Development Services' Engineering Division. No coordination was required with other departments, etc., for the preparation of this report.

CEQA DETERMINATION

An Environmental Impact Report (EIR) for the Tracy Hills Specific Plan was certified by the City Council on April 5, 2016. The Tracy Hills Phase 2 Zone 5 Water Main Improvements are within the scope of the development evaluated by the existing EIR and therefore no further environmental review is required for the project under CEQA.

STRATEGIC PLAN

This item is consistent with the City Council's approved Economic Development Strategy to ensure that physical infrastructure necessary for development is constructed.

ACTION REQUESTED OF THE CITY COUNCIL

That City Council, by resolution, approve the Offsite Improvement Agreement between the City and Lennar Homes of California, LLC, for public improvements required as part of the Conditions of Approval, for the Tracy Hills Phase 2 Zone 5 Water Main Improvements.

Prepared by: Al Gali, Associate Engineer

Reviewed by: Koosun Kim, PE, City Engineer / Assistant Director of Development Services
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

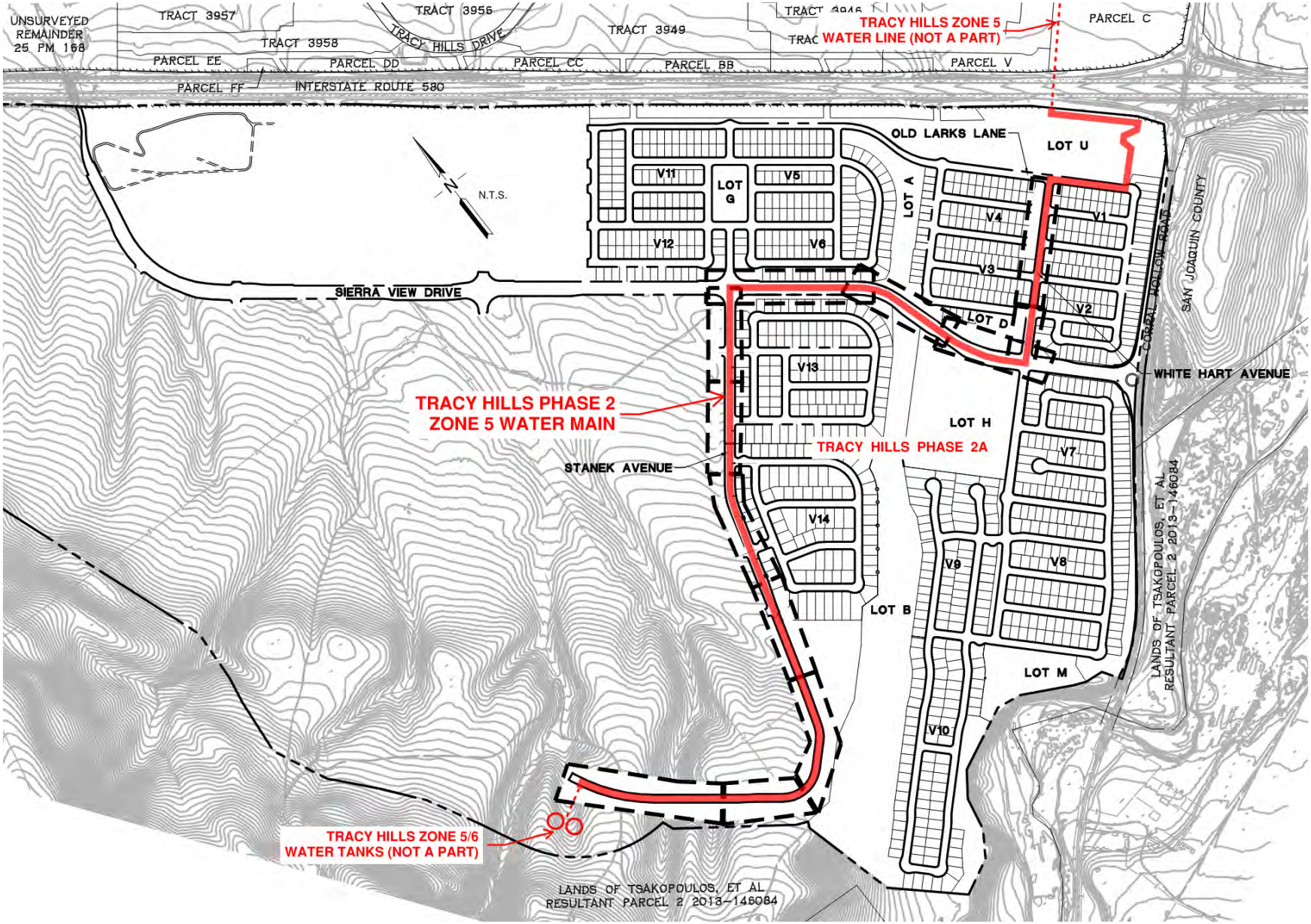
Approved by: Midori Lichtwardt, Interim City Manager

ATTACHMENTS

Attachment A – Location Map Tracy Hills Phase 2 Zone 5 Water Main
Attachment B – Offsite Improvement Agreement Tracy Hills Phase 2 Zone 5 Water Main

Attachment A

Project Location Map



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Attachment B

CITY OF TRACY
OFF-SITE IMPROVEMENT AGREEMENT FOR
TRACY HILLS PHASE 2 ZONE 5 WATER MAIN IMPROVEMENTS

This **OFF-SITE IMPROVEMENT AGREEMENT** ("**Agreement**") is made and entered into by and between the **CITY OF TRACY** a municipal corporation ("**City**"), and **LENNAR HOMES OF CALIFORNIA, LLC, a California limited liability company** ("**Developer**").

Recitals

A. Developer is the party responsible for the construction of the public water line improvements known as the **Tracy Hills Phase 2 Zone 5 Water Main Improvements** that are to be constructed within the Tracy Hills Phase 2 development, generally extending between the I-580 Freeway and the Tracy Hills Zone 5/6 water tanks, as more particularly depicted in Exhibit "**A**" attached hereto and incorporated herein by reference (hereinafter "**Project**").

B. On October 19, 2021, the Tracy City Council ("City Council") adopted the Tracy Hills Specific Plan Amendment for Tracy Hills Phase 2 and approved various related land use entitlements, including that certain Vesting Tentative Subdivision Map for Tracy Hills Phase 2, Tract 4057, processed under Application No. TSM20-0003 and approved by Resolution No. 2021-154 ("**Tentative Map**").

C. The approval of the Tentative Map by the City Council was subject to specified conditions of approval ("**Conditions**"). The Conditions, attached hereto as Exhibit "**B**", describe, among other things, improvements that are required for approval of the Final Subdivision Map(s) pursuant to the Subdivision Map Act, the Subdivision Ordinance, and applicable City Standards.

D. The Project is part of the Zone 5 potable water system infrastructure improvements required by the Conditions of Approval and the Citywide Water System Master Plan, extending from the John Jones Water Treatment Plant to the new Tracy Hills Zone 5/6 water tanks, to provide water service initially to the Tracy Hills Phase 2A development and ultimately to future phases of development within the Tracy Hills Specific Plan Area.

E. The Project will be partly located within public street rights-of-way and other parcels to be dedicated by Developer to City on the various Final Maps comprising the Tracy Hills Phase 2A development and partly within an Access and Water Line Easement to be dedicated by Developer to City across future phases of the Tracy Hills development.

F. The Project is more specifically described in those certain Improvement Plans and Specifications submitted by Developer and approved by the City Engineer consisting of nineteen (19) sheets of improvement plans titled "Phase 2 Zone 5

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Water Main Improvement Plans, Tracy Hills Phase 2A", Sheets C-0.01 through C-3.15, prepared by Ruggeri-Jensen-Azar (the "**Work**"). The Plans and Specifications comprising the Work are on file with the City Engineer under Tracking No. ENG21-0032 and incorporated herein by reference.

G. Because the Work described above and in the Plans and Specifications has not been completed, Developer is required to execute this Agreement as authorized by Government Code Section 66462.

H. NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. Scope of Work; Location. Developer shall perform, or cause to be performed, the Work to the satisfaction of the City Engineer. The Work shall be performed, and all materials and labor shall be provided, at Developer's expense, in the manner described in the Plans and Specifications. No change shall be made to the Work unless authorized in writing by the City Engineer. Developer may submit a written request to the City Engineer for a change in the scope of Work, as authorized by Tracy Municipal Code section 12.36.060(f). To the extent applicable, all of the Work shall be performed by Developer in accordance with the requirements of the State prevailing wage laws.

Developer shall perform all Work at the locations and grades shown on the Plans and Specifications. Developer (a) has acquired any necessary easements or rights-of-way, or (b) has entered into a separate Agreement with the City to acquire the necessary easements or rights-of-way, at Developer's expense.

2. Time of Performance. Time is of the essence in the performance of the Work, and the timing requirements set forth here shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Work shall begin within 60 days after the Effective Date of this Agreement, in compliance with the requirements in Section 2.1. Developer shall submit all requests for extensions of time to the City, in writing, no later than ten (10) days after the start of the condition that purportedly caused the delay, and not later than the date on which performance is due.

2.1. Commencement of Work. No later than fifteen (15) days before the beginning of Work, Developer shall provide written notice to the City Engineer of the date on which Developer will begin Work. Developer shall not begin Work until after the notice required by this section is properly provided, and Developer shall not begin Work before the date specified in the written notice.

2.2. Schedule of Work. Concurrently with the written notice of beginning of Work, Developer shall provide the City with a written schedule of Work, which shall be updated in writing as necessary to accurately reflect Developer's prosecution of the Work.

2.3. Completion of Work. Developer shall complete all Work by no later than 365 days after Developer's submittal of its notice of commencement of Work pursuant to Section 2.1 above. If the Work is not completed by this date, City Engineer may grant an extension of time if (a) Developer submits a written

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request for extension at least ten (10) days prior to expiring date of completion, (b) the City Engineer determines that Work is progressing satisfactorily and an extension is warranted, and (c) Developer pays all processing fees for such time extension.

3. Improvement Security. Concurrently with Developer's execution of this Agreement, and before beginning any Work, Developer shall furnish contract security, in a form authorized by the Subdivision Map Act (including Government Code sections 66499 et seq.) and Tracy Municipal Code section 12.36.080, in the following amounts:

3.1. Faithful Performance security in the amount of **$1,135,112.00** to secure faithful performance of this Agreement (until the date on which the City Council accepts the Work as complete) under Government Code sections 66499.1, 66499.4, and 66499.9.

3.2. Labor and Material security in the amount of $ of **$1,135,112.00** to secure payment by Developer to laborers and materialmen under Government Code sections 66499.2, 66499.3, and 66499.4.

3.3. Warranty security in the amount of **$113,511.00** to guarantee improvements against any defective work or labor done or defective materials used in performance of Work for one year from the date on which the City Council accepts the Work as complete, under Government Code sections 66499.1, 66499.4, and 66499.9.

4. Indemnification. Developer shall indemnify, defend, and hold harmless City (including its elected officials, officers, agents and employees) from and against any and all claims, demands, damages, liabilities, costs, and expenses (including court costs and attorney's fees) resulting from the performance of the Work by Developer or Developer's agents, representatives, contractors, subcontractors, or employees, except when caused by the active negligence or willful misconduct of City, until such time as all of the following have occurred: (1) the City Council accepts all of the improvements comprising the Work, (2) the City becomes responsible for the maintenance, operation and repair of all of the improvements comprising the Work, and (3) the one year warranty period set forth in Section 12, below, has expired, at which time the indemnification obligations under this Section 4 shall automatically terminate, with regard to any cause of action arising after such date. For avoidance of doubt, Developer's obligations under this Section 4 are in addition to all other Developer's obligations set forth in this Agreement, and shall not affect Developer's warranty obligations set forth in Section 12, below.

5. Insurance. Concurrently with the execution of this Agreement by Developer, and before beginning any Work, Developer shall furnish evidence to the City that the following insurance requirements have been satisfied. The insurance requirements contained in this Section 5 are material terms of this Agreement. These insurance coverage requirements below may be satisfied by umbrella or excess liability policies upon City approval.

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5.1. General. Developer shall, throughout the duration of this Agreement, maintain insurance to cover Developer, its agents, representatives, contractors, subcontractors, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.2. Commercial General Liability (with coverage at least as broad as ISO form CG 00 01) coverage shall be maintained in an amount not less than $4,000,000 per occurrence and $8,000,000 general aggregate for general liability, bodily injury, personal injury, and property damage, including without limitation, blanket contractual liability and coverage for explosion, collapse, and underground property hazards.

5.3. Professional Contracts. Developer shall cause its design professionals to maintain professional liability insurance that insures against professional errors and omissions that may be made in performing services related to the Work to be rendered in connection with this Agreement, in the minimum amount of one million dollars ($1,000,000) per claim and in the aggregate. Any policy inception date, continuity date, or retroactive date must be before the effective date of this Agreement, and Developer agrees to cause its design professionals to maintain continuous coverage through a period no less than three years after completion of the services required pursuant to this Agreement.

5.4. Automobile Liability (with coverage at least as broad as ISO form 00 01 07 97 for “any auto” including “hired autos” and “non-owned autos”) coverage shall be maintained in an amount not less than $2,000,000 per accident for bodily injury and property damage.

5.4.1. If Developer has no employees, or does not own automobiles, then “hired autos” and “non-owned autos” coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.5. Workers’ Compensation coverage shall be maintained as required by the State of California.

5.6. Endorsements. Developer shall obtain endorsements to the commercial general liability and automobile policies with the following provisions:

5.6.1. The City (including its elected and appointed officials, officers, employees, agents, and volunteers) shall be named as an Additional Insured on Developer’s Commercial General Liability policy utilizing endorsement form CG 20 10 (or its equivalent) for ongoing operations and CG 20 37 (or its equivalent) for products/completed operations.

5.6.2. For any claims related to this Agreement, Developer’s coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of Developer’s insurance and shall not contribute with it.

5.6.3. Developer shall require its contractors and subcontractors providing services required by this Agreement (e.g. general contractors, design professionals) to name it and the City as Additional Insureds.

5.7. Notice of Cancellation. Developer shall notify the City of any cancellation of either the commercial general liability policy or automobile insurance policy before the expiration date. For the purpose of this notice requirement, any material change in the policy before the expiration shall be considered a cancellation. Developer shall immediately obtain a replacement policy.

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5.8. Authorized Insurers. All insurance companies providing coverage to Developer shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California, with an AM Best rating of at least A-:VII.

5.9. Insurance Certificate. Developer shall provide evidence of compliance with the commercial general liability insurance and automobile insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City Attorney before the City executes this Agreement.

5.10. Substitute Certificates. No later than thirty (30) days before the policy expiration date of any insurance policy required by this Agreement, Developer shall provide a substitute certificate of insurance.

5.11. Developer's Obligation. Maintenance of insurance by Developer as specified in this Agreement shall in no way be interpreted as relieving Developer of any responsibility whatsoever (including indemnity obligations under this Agreement), and Developer may carry, at its own expense, such additional insurance as it deems necessary.

6. Independent Contractor Status. Developer is an independent contractor and is solely responsible for the acts of its employees, agents, and subcontractors, including any negligent acts or omissions. Developer is not City's employee and Developer shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization to Developer.

7. Default.

7.1. Notice. If Developer is in default of this Agreement, as defined in Section 7.2, the City Engineer shall provide written notice to Developer and Developer's surety (if any) describing the default.

7.2. Events of default. Developer shall be in default of this Agreement if the City Engineer determines that any one of the following conditions exist:

7.2.1. Developer is insolvent, bankrupt, or makes a general assignment for the benefit of its creditors.

7.2.2. Developer abandons the Project site.

7.2.3. Developer fails to perform one or more requirements of this Agreement.

7.2.4. Developer fails to replace or repair any damage caused by Developer or its agents, representatives, contractors, subcontractors, or employees in connection with performance of the Work.

7.2.5. Developer violates any legal requirement related to the Work.

7.3. If Developer fails to cure the default within thirty (30) calendar days, or provide adequate written assurance to the satisfaction of the City Engineer that the cure will be promptly started and diligently prosecuted to its completion, the City may, in the discretion of the City Engineer, take any or all of the following actions:

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7.3.1. Cure the default and charge Developer for the costs, including administrative costs and interest in an amount equal to 7% per annum from the date of default.
7.3.2. Demand Developer complete performance of the Work.
7.3.3. Demand Developer's surety (if any) complete performance of the Work.
7.3.4. Commence a legal action to enforce the terms of this Agreement.

8. Ownership of Work. All original documents prepared by Developer for this Agreement are the property of the City, and Developer shall provide them to the City at the completion of Developer's Work, or upon demand from the City.

9. Repair of Any Damage. In the event and to the extent Developer or its agents, representatives, contractors, subcontractors, or employees, in connection with performance of the Work, cause any damage to property owned by City or other property owners, then Developer shall promptly take all reasonable steps to repair or replace (as necessary) such property to remedy the damage caused thereto.

10. Inspection by the City; Inspection Fees and Fee Credits. In order to permit the City to inspect the Work, Developer shall, at all times, provide to the City proper and safe access to the Project site, and all portions of the Work, and to all shops where portions of the Work are in preparation.

Concurrently with Developer's execution of this Agreement and before the beginning of any Work, Developer shall pay the City Inspection Fees in the amount of 3.5% of the estimated Project costs (as approved by the City Engineer). If the City requires an independent inspection, Developer shall pay all such costs and provide a report directly to the City.

Developer shall be entitled to fee credits consistent with Section 3.3 of that certain Development Agreement by and between the City of Tracy and the Tracy Hills Project Owner, LLC, and Tracy Phase I, LLC, adopted by City of Tracy Ordinance No. 1213 and recorded in the Official Records of San Joaquin County on June 9, 2016, as Document Number 2016-066658, as may be amended from time to time (the "**DA**"), and as provided in greater detail in the Finance and Implementation Plan for the Project pursuant to the DA and Tracy Municipal Code Section 10.20.060(b)(3), as may be amended from time to time.

11. Developer's Authorized Representative. At all times during the progress of the Work, Developer shall have a competent foreperson or superintendent (Superintendent) on site with authority to act on behalf of Developer. Developer shall, at all times, keep the City Engineer informed in writing of the names and telephone numbers of: (a) the Superintendent; and (b) all contractors and subcontractors performing the Work. Exhibit "**C**" attached hereto includes the initial contact information referenced in this Section 11.

12. Acceptance of Work. Before the City Council's acceptance of the Work, Developer is solely responsible for maintaining the quality of the Work and maintaining

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safety at the Project site. Developer's obligation to perform the Work is not satisfied until after the City Engineer has made a written determination that all obligations of the Agreement have been satisfied, all outstanding fees and charges have been paid, and the City Council has accepted the Work as complete.

13. Warranty Period. Developer shall warrant the quality of the Work, in accordance with the terms of the Plans and Specifications, for a period of one year after acceptance of the Work by the City Council. If during the one year warranty period any portion of the Work is determined by the City Engineer to be defective as a result of an obligation of Developer under this Agreement, Developer shall be in default of this Agreement and shall without delay and without any cost to City repair, replace, or reconstruct any defective improvements.

14. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or electronically mailed to the respective party as follows:

To City:

City of Tracy
333 Civic Center Plaza
Tracy, CA 95376
Attn: City Engineer
notice@cityoftracy.org

With a copy to:

City Attorney
333 Civic Center Plaza
Tracy, CA 95376
Attn: City Engineer
attorney@cityoftracy.org

To Developer:

Lennar Homes of California, LLC
2603 Camino Ramon, Suite 525
San Ramon, CA 94583
Attn: Bridgit Koller
bridgit.koller@lennar.com

With a copy to:

AG Essential Housing CA 1, LP
c/o AGWIP Asset Management LLC
8585 E. Hartford Drive, Suite 118
Scottsdale, AZ 85255
Attn: Steven S. Benson, Manager
steve.benson@agwipam.com

Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the email address designated above, or (2) two working days following the deposit in the United States Mail of registered or certified mail, sent to the address designated above.

15. Approvals by City. Any approval or consent by that is to be given by City under this Agreement shall be in writing, and any approval or consent that is not in writing shall not be binding on City.

16. Modifications. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both parties.

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17. Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

18. Assignment and Delegation. This Agreement and any portion of it may not be assigned or transferred, nor shall any of Developer's duties be delegated, without the City's prior written consent. Any attempt to assign or delegate this Agreement without the City's written consent shall be void and of no effect. A consent by the City to one assignment shall not be deemed to be a consent to any subsequent assignment.

19. Jurisdiction and Venue. The interpretation, validity and enforcement of the Agreement shall be governed by the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

20. Permits, Licenses, and Compliance with Law. Developer shall, at Developer's expense, obtain and maintain all necessary permits and licenses for the performance of the Work. Before City signs the Agreement, Developer shall obtain a City of Tracy Business License. Developer shall comply with all local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

21. Entire Agreement; Severability. The recitals and all defined terms in this Agreement are part of this Agreement. This Agreement, including all documents incorporated by reference, comprises the entire integrated understanding between the parties concerning the improvements to be constructed pursuant to this Agreement. This Agreement supersedes all prior negotiations, representations, or agreements. The following Exhibits attached hereto are incorporated into this Agreement and made a part hereof by this reference:

A. Project Location (Recital A)
B. Conditions of Approval (Recital C)
C. Developer's Authorized Representative (Section 11)

If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

22. Signatures. The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity and authority to execute this Agreement. This Agreement shall inure to the benefit of and be binding upon the parties and their successors and assigns.

[SIGNATURES ON NEXT PAGE]

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The parties hereby agree to the full performance of the terms set forth herein.

City of Tracy

_____
Nancy D. Young, Mayor

Date: _____

Approved by City Council on _____
by Resolution No. _____.

Attest:

_____
Adrianne Richardson, City Clerk

Approved As To Form:

_____
Bijal M. Patel, City Attorney

Developer

LENNAR HOMES OF CALIFORNIA, LLC
a California limited liability company

DocuSigned by:
Bridgit Koller
5D50BB86FFA244A...
By: Bridgit Koller
Title: Vice President

Date: 5/9/2023

Federal Employer Tax ID No. 93-1223261

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EXHIBIT "A"
PROJECT LOCATION

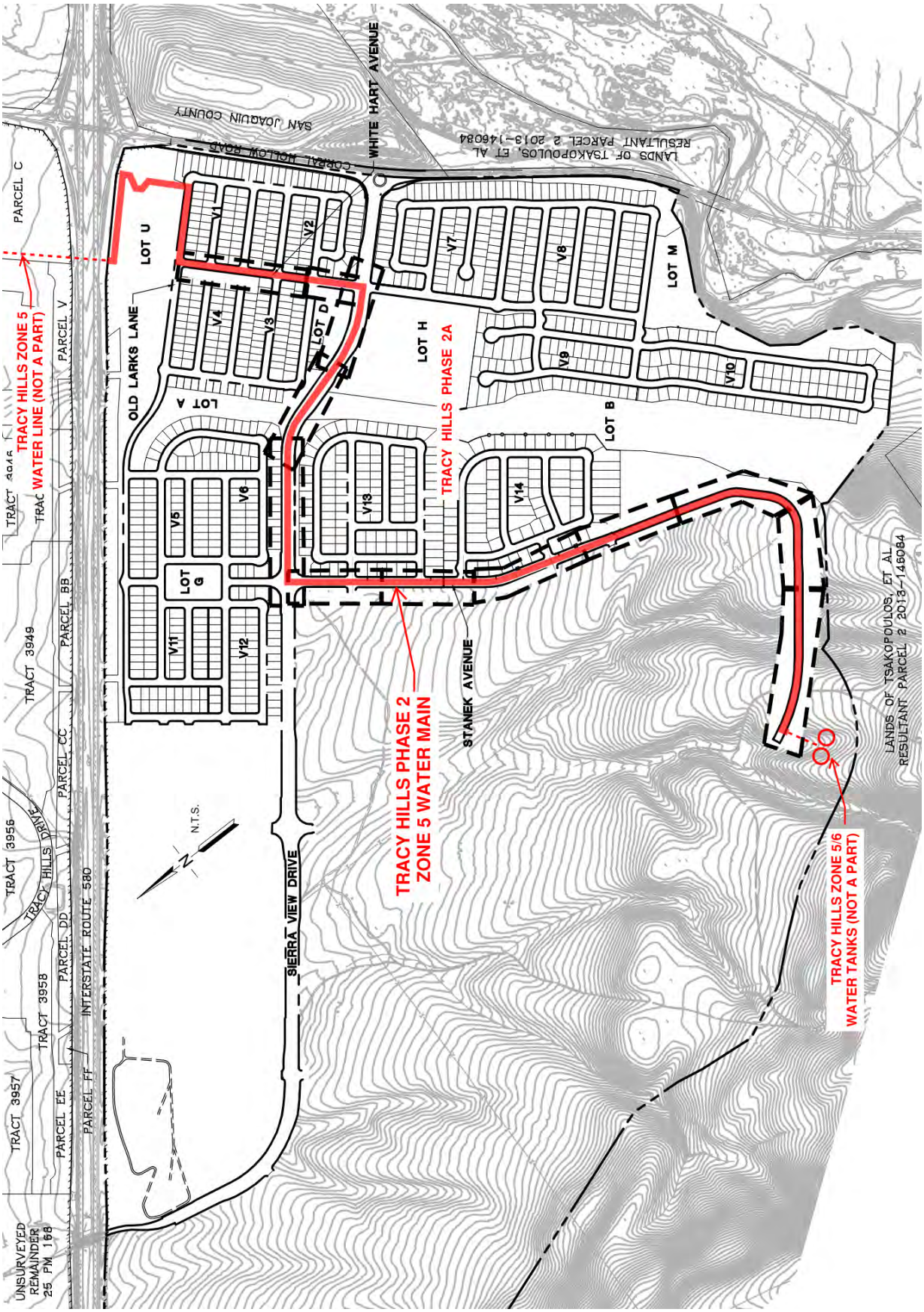

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EXHIBIT "B"
Conditions of Approval

Conditions of Approval for Tracy Hills Phase 2
Vesting Tentative Subdivision Map
Application Number TSM20-0003
October 19, 2021

Project: These Conditions of Approval shall apply to the Vesting Tentative Subdivision Map for Tracy Hills Phase 2, Application Number TSM20-0003, including approximately 1,470 single-family residential lots and various other parcels.

Property: The property consists of approximately 1,143 acres located in the Tracy Hills Specific Plan Area, south of I-580, west of Corral Hollow Road, Application Number TSM20-0003.

Community Facilities Districts: Certain conditions of approval herein involve the establishment of one or more Community Facilities Districts (CFDs) to implement the Project. The imposition of conditions requiring or involving the establishment of CFDs on the Property shall not limit the City from establishing additional CFDs over the Property, subject to an affirmative vote of the Property owner(s).

A. **Definitions; Abbreviations.**

The definitions in the City's zoning regulations (Tracy Municipal Code, Title 10, Chapter 10.08) and subdivision ordinance (Tracy Municipal Code, Title 12, Chapter 12.08) apply, and in addition:

1. "Applicant" means any person, or other legal entity, defined as a "Subdivider" by Section 12.08.010 of the City of Tracy Municipal Code.

2. "Development Services Director" means the Development Services Director of the City of Tracy, or any other person designated by the City Manager or the Development Services Director, to perform the duties set forth here. (The Development Services Director is also referred to in the Tracy Municipal Code as the Development and Engineering Services Director.)

3. "City Regulations" means all written laws, rules, and policies established by the City, including those set forth in the City of Tracy General Plan, the Tracy Hills Specific Plan, the Tracy Municipal Code, ordinances, resolutions, written policies, written procedures, and the City's Design Documents (including the Standard Plans, Standard Specifications, Design Standards, and relevant Public Facility Master Plans).

4. "Conditions of Approval" or "Conditions" means these conditions of approval.

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5. "Property" means the approximately 1,143 acres located in the Tracy Hills Specific Plan Area that is the subject of the Vesting Tentative Subdivision Map for Tracy Hills Phase 2, Application Number TSM20-0003.

The following abbreviations may be used in these Conditions:

EIR	Environmental Impact Report	PI&RA	Park Improvement and Reimbursement Agreement
DIA	Deferred Improvement Agreement	PUE	Public Utility Easement
OIA	Offsite Improvement Agreement	TMC	Tracy Municipal Code

B. Planning Division Conditions of Approval

1. Compliance with laws. The Subdivider shall comply with all laws (federal, state, and local) related to the development of real property within the Project boundaries, including, but not limited to: the Planning and Zoning Law (Government Code sections 65000, et seq.), the Subdivision Map Act (Government Code sections 66410, et seq.), the California Environmental Quality Act (Public Resources Code sections 21000, et seq., "CEQA"), and the Guidelines for the California Environmental Quality Act (California Administrative Code, title 14, sections 15000, et seq., "CEQA Guidelines").

2. City Regulations. Unless specifically modified by these Conditions of Approval, the Subdivider shall comply with all City Regulations.

3. Mitigation Measures. The Subdivider shall comply with all applicable mitigation measures in the Final Subsequent Environmental Impact Report (EIR) for the Tracy Hills Specific Plan Project (State Clearinghouse No. 2013102053), which was certified by the City Council on April 5, 2016, as it may be amended or modified pursuant to CEQA and the CEQA Guidelines.

4. Notice of protest period. Pursuant to Government Code Section 66020, including Section 66020 (d)(1), the City HEREBY NOTIFIES the Subdivider that the 90-day approval period (in which the Subdivider may protest the imposition of any fees, dedications, reservations, or other exactions that are within the purview of the Mitigation Fee Act [Government Code section 66000 et seq.] ("Exactions") and imposed on this Project by these Conditions of Approval) shall begin on the date of the conditional approval of this Project. If the Subdivider fails to file a protest of the Exactions complying with all of the requirements of Government Code Section 66020 within this 90-day period, the Subdivider will be legally barred from later challenging any of the Exactions. The terms of this paragraph shall not affect any other deadlines or statutes of limitations set forth in the Mitigation Fee Act or other applicable law, or constitute a waiver of any affirmative defenses available to the City.

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5. Final Maps for Financing Purposes. For the purpose of these Conditions of Approval, if any Final Map or Parcel Map is filed within the boundaries of the Project solely for financing purposes only, and no permits will be requested pursuant to such map, then the requirements listed in these Conditions of Approval shall not apply to the final map or parcel map for financing purposes only.

6. Conformance with Vesting Tentative Subdivision Map. All Final Maps shall be in substantial conformance with the approved Vesting Tentative Subdivision Map (Application Number TSM20-0003), which was received by the Development Services Department on October 12, 2021, unless modified by these Conditions.

7. Streets, Streetlights and Sidewalks

Before approval of the first Final Map or issuance of any building permit for the Property (except for up to fifteen (15) model homes), Subdivider shall provide for perpetual funding of the on-going costs of operation, maintenance and replacement for the traffic signals, streetlights, and street sweeping on the Property (including all costs required by PG&E), by doing one or more of the following, subject to the approval of the City's Finance Director:

a. Community Facilities District. Subdivider shall enter into an agreement with the City, to be signed by the Finance Director, which shall be recorded against the Property, which requires that prior to the issuance of a certificate of occupancy for a residential dwelling unit, Subdivider shall complete the annexation of the Property to City of Tracy Community Facilities District in compliance with the requirements of the Mello – Roos Community Facilities Act of 1982 (Gov. Code § 53311 et seq.) including, without limitation, affirmative votes, and the recordation of a Notice of Special Tax Lien. Subdivider shall be responsible for all costs associated with the CFD proceedings.

Or

b. HOA and dormant CFD. If the HOA is the chosen funding mechanism, the Subdivider must do the following:

(1) Form a Homeowner's Association (HOA) or other maintenance association, with CC&Rs reasonably acceptable to the City, to assume the obligation for the on-going costs of operation, maintenance and replacement for the traffic signals, streetlights, and street sweeping on the Property (including all costs required by PG&E);

(2) Cause the HOA to enter into an agreement with the City, in a form to be approved by the City and to be recorded against the Property prior to the final inspection or occupancy of the first dwelling (except for up to fifteen model homes), setting forth, among other things, the

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required maintenance obligations, the standards of maintenance, and all other associated obligation(s) to ensure the long-term operation, maintenance and replacement by the HOA for the traffic signals, streetlights, and street sweeping on the Property;

(3) Before final inspection or occupancy of the first dwelling (except for up to fifteen model homes), annex into a CFD in a "dormant" capacity, to be triggered if the HOA fails (as determined by the City in its sole and exclusive discretion) to perform the required level of operation, maintenance and replacement for the traffic signals, streetlights, and street sweeping on the Property. The dormant tax or assessment shall be disclosed to all homebuyers and non-residential property owners, even during the dormant period.

Or

c. Direct funding. Subdivider shall enter into an agreement with the City, which shall be recorded against the Property, which requires that prior to issuance of a certificate of occupancy for a residential dwelling unit, Subdivider shall deposit with the City an amount necessary, as reasonably determined by the City, to fund in perpetuity the on-going costs of operation, maintenance and replacement for the streets, streetlights, and sidewalks on the Property (including all costs required by PG&E).

If the provisions for adequate funding of the on-going costs of operation, maintenance and replacement for the traffic signals, streetlights, and street sweeping on the Property (including all costs required PG&E) are met prior to issuance of the first building permit for the Property, subject to the Finance Director's review and approval, the terms of this condition shall be considered to have been met and this condition shall become null and void.

8. Police/Public Safety & Public Works

Before approval of the first Final Map or issuance of any building permit for the Property (except for up to fifteen (15) model homes), Subdivider shall provide for perpetual funding of the on-going costs of providing Police and public safety and Public Works services for the Property, by doing one of the following, subject to the approval of the City's Finance Director:

a. Community Facilities District. Subdivider shall enter into an agreement with the City, to be signed by the Finance Director, which shall be recorded against the Property, which requires that prior to the issuance of a certificate of occupancy for a residential dwelling unit, Subdivider shall complete the annexation of the Property to City of Tracy Community Facilities District in compliance with the requirements of the Mello – Roos Community Facilities Act of 1982 (Gov. Code § 53311 et seq.) including, without limitation, affirmative votes, and the recordation of a Notice of

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Special Tax Lien. Subdivider shall be responsible for all costs associated with the CFD proceedings.

Or

b. Direct funding. Subdivider shall enter into an agreement with the City, which shall be recorded against the Property, which requires that prior to issuance of a certificate of occupancy for a residential dwelling unit, Subdivider shall deposit with the City an amount necessary, as reasonably determined by the City, to fund in perpetuity the on-going costs of providing Police and public safety and Public Works services for the Property.

If the provisions for adequate funding of the on-going costs of providing Police and public safety and Public Works services for the Property are met prior to issuance of the first building permit for the Property, subject to the Finance Director's review and approval, the terms of this condition shall be considered to have been met and this condition shall become null and void.

9. Landscaping Maintenance

Before approval of the first Final Map or issuance of any building permit for the Property (except for up to fifteen (15) model homes), Subdivider shall provide for perpetual funding of the on-going costs of maintenance and replacement for public landscaping for the Property (but shall exclude the community park), by doing one or more of the following, subject to the approval of the City's Finance Director:

a. CFD or other funding mechanism. The Subdivider shall enter into an agreement with the City, which shall be recorded against the Property, which stipulates the following: (1) prior to issuance of a building permit, the Subdivider shall form a Community Facilities District (CFD) for funding the on-going maintenance costs related to maintenance, operation, repair and replacement of public landscaping, public walls and any public amenities included in the Project, and ongoing public landscaping maintenance costs associated with major program roadways identified in the Citywide Roadway and Transportation Master Plan; (2) the items to be maintained include but are not limited to the following: ground cover, turf, shrubs, trees, irrigation systems, drainage and electrical systems; masonry walls or other fencing, entryway monuments. or other ornamental structures, furniture, recreation equipment, hardscape and any associated appurtenances within medians, parkways, dedicated easements, channel-ways, public parks and public open space areas; (3) formation of the CFD shall include, but not be limited to, affirmative votes and the recordation of a Notice of Special Tax Lien; (4) upon successful formation, the parcels will be subject to the maximum special tax rates as outlined in the Rate and Method of Apportionment; (5) prior to issuance of a building permit, the Subdivider shall deposit an amount equal to the first year's taxes; and (6) the Subdivider shall be responsible for all costs

DocuSign Envelope ID: 9823FE51-48B6-4652-984C-BFE57C11D13D

associated with formation of the CFD.

Or

b. HOA and dormant CFD. If the HOA is the chosen funding mechanism, the Subdivider must do the following:

(1) Form a Homeowner's Association (HOA) or other maintenance association, with CC&Rs reasonably acceptable to the City, to assume the obligation for the on-going maintenance of all public landscaping areas within the entire tentative subdivision map area;

(2) Cause the HOA to enter into an agreement with the City, in a form to be approved by the City and to be recorded against the Property prior to the final inspection or occupancy of the first dwelling (except for up to fifteen model homes), setting forth, among other things, the required maintenance obligations, the standards of maintenance, and all other associated obligation(s) to ensure the long-term maintenance by the HOA of all public landscape areas within the entire tentative subdivision map area;

(3) For each Final Map, make and submit to the City, in a form reasonably acceptable to the City, an irrevocable offer of dedication of all public landscape areas within the Final Map area;

(4) Before final inspection or occupancy of the first dwelling (except for up to fifteen model homes), annex into a CFD in a "dormant" capacity, to be triggered if the HOA fails (as determined by the City in its sole and exclusive discretion) to perform the required level of public landscape maintenance. The dormant tax or assessment shall be disclosed to all homebuyers and non-residential property owners, even during the dormant period.

Or

c. Direct funding. The Subdivider shall enter into an agreement with the City, which shall be recorded against the Property, which stipulates that prior to issuance of a building permit, the Subdivider shall deposit with the City an amount necessary, as reasonably determined by the City, to fund in perpetuity the full on-going maintenance costs related to maintenance, operation, repair and replacement of public landscaping, public walls and any public amenities included in the Project, and ongoing public landscaping maintenance costs associated with major program roadways identified in the Citywide Roadway and Transportation Master Plan. The items to be maintained include but are not limited to the following: ground cover, turf, shrubs, trees, irrigation systems, drainage and electrical systems, masonry walls or other fencing, entryway monuments or other ornamental structures, furniture, recreation equipment, hardscape and

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any associated appurtenances within medians, parkways, dedicated easements, channel-ways, public parks and public open space areas.

10. Neighborhood Parks. Before approval of the first Final Map, the Subdivider shall enter into an agreement with the City, which shall be recorded against the property, which stipulates the following:

    a. Prior to the issuance of the 125th building permit that allows construction of a dwelling, not including plumbing only permits, the developer shall commence construction of the first neighborhood park. If the construction of the first neighborhood park has not commenced by the issuance of 125th building permit, no further building permits shall be issued until the first neighborhood park construction is commenced;

    b. Prior to the issuance of the 500th building permit that allows construction of a dwelling, not including plumbing only permits, the developer shall commence construction of the second neighborhood park. If the construction of the second neighborhood park has not commenced by the issuance of 500th building permit, no further building permits shall be issued until the second neighborhood park construction is commenced;

    c. Prior to the issuance of the 976th building permit that allows construction of a dwelling, not including plumbing only permits, the developer shall commence construction of the third neighborhood park. If the construction of the third neighborhood park has not commenced by the issuance of 976th building permit, no further building permits shall be issued until the third neighborhood park construction is commenced; and

    d. Prior to the issuance of the 1,226th building permit that allows construction of a dwelling, not including plumbing only permits, the developer shall commence construction of the fourth neighborhood park. If the construction of the fourth neighborhood park has not commenced by the issuance of 1,226th building permit, no further building permits shall be issued until the fourth neighborhood park construction is commenced.

C. **Engineering Division Conditions of Approval**

1. General Conditions

C.1.1 Subdivider shall comply with the applicable requirements of the approved documents, technical analyses/reports prepared for the Project listed as follows:

a) *Tracy Hills Specific Plan* approved by City Council by Resolution No. 2016-063, dated April 5, 2016, and any amendments thereto.

b) *Amendment to the Tracy Hills Specific Plan for Phase 2*, approved by the City Council by Resolution No. 2021-_____ on _____, 2021, including the *Transportation Consistency Analysis* prepared for the Amendment by Kimley-Horn and Associates, dated

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September 23, 2021, and any updates or amendments thereto ("Specific Plan Amendment" or "SPA").

c) *Tracy Hills Specific Plan Final Subsequent Environmental Impact Report*, dated January 2016, certified by City Council by Resolution No. 2016-062 on April 5, 2016, and the *Addendum to the Tracy Hills Specific Plan EIR*, prepared by Kimley-Horn and Associates, dated September 2021, including all mitigation measures incorporated therein (hereinafter referred to together as "EIR").

d) *Tracy Hills Phase 2 Traffic Study,* prepared by Kimley-Horn and Associates, dated September 30, 2021, and any updates or amendments thereto ("Traffic Study").

e) *City of Tracy Citywide Roadway and Transportation Master Plan*, prepared by RBF Consulting, dated November 2012 ("TMP")

f) *Tracy Hills Phase 2 VTM Drainage Analysis* prepared by Ruggeri-Jensen-Azar, dated December 17, 2020, and the review of said analysis contained in the *Technical Memorandum* prepared by Wood Rodgers, dated April 26, 2021 (draft), and any updates or amendments to either document ("Storm Drainage Study").

g) *Tracy Hills Storm Drainage Master Plan* prepared by Ruggeri-Jensen-Azar, dated November 2013 ("*Storm Drainage Master Plan*"), as reviewed by Storm Water Consulting, Inc and Stantec Consulting Services, Inc.

h) *Tracy Hills Phase 2 Sanitary Sewer Study Technical Memorandum* prepared by Black Water Consulting Engineers, dated October 1, 2021, and any updates or amendments thereto ("Sanitary Sewer Study").

i) *Peer Review and Hydraulic Evaluation for Tracy Hills Phase 2, 3, and 4* prepared by West Yost, dated July 13, 2021, and any updates or amendments thereto ("Water Study").

j) *Pipeline Safety Hazard Assessment, Tracy Hills Specific Plan* prepared by Place Works, dated September 2014.

k) Any *Finance Implementation Plan* ("*FIP*"), as described in Section 10.20.060(b)(3)(B) of the Tracy Municipal Code, that is approved by the City Council for the property described in the Tracy Hills Phase 2 Vesting Tentative Subdivision Map, Application No. TSM20-0003.

l) Development Agreement, executed between the City of Tracy and the developers of the Tracy Hills Project, approved by the City Council on April 5, 2016, by Ordinance No. 1213, and the First Amendment to the Development Agreement, approved by the City

DocuSign Envelope ID: 9823FE51-48B6-4652-984C-BFE57C11D13D

Council on November 10, 2020, by Ordinance No. 1300 ("Development Agreement").

m) Settlement Agreement, executed between the City of Tracy and the developers of the Tracy Hills Project, having an effective date of December 17, 2019 ("Settlement Agreement").

n) *Agreement to Defer Payment of Development Impact Fees on New Residential Development,* executed between the City of Tracy and the developers of the Tracy Hills Project, dated November 15, 2016 ("Fee Deferral Agreement").

C.1.2 Timing of Compliance: The Applicant shall satisfy each of the following conditions prior to filing the first Final Map unless a different time for compliance is specifically stated in these Conditions of Approval. Any condition requiring an improvement that has already been designed and completed under a City-approved improvement agreement may be considered satisfied at the discretion of the City Engineer.

For the purpose of these Conditions of Approval, if any Final Map or Parcel Map is filed within the boundaries of the Project solely for financing purposes only, and no permits will be requested pursuant to such map, then the requirements listed in these Conditions of Approval shall not apply to the final map or parcel map for financing purposes only.

C.1.3 Revisions to the Vesting Tentative Subdivision Map ("VTSM"): The Subdivider shall incorporate revisions to comply with the recommendations and comments in the Traffic Study prior to signature by the City Engineer on the VTSM.

C.2 Improvement Plans

C.2.1 General

The Subdivider shall complete the Improvement Plans to comply with all applicable laws, including the City Regulations (defined above) and these Conditions of Approval. Improvement Plans shall contain the design, construction details and specifications of improvements that is/are required to serve the Project. The Improvement Plans shall be drawn on a 24" x 36" size 4-mil thick polyester film (mylar) and shall be prepared under the supervision of, and stamped and signed by a Registered Civil, Traffic, Electrical, Mechanical Engineer, and Registered Landscape Architect for the relevant work.

C.2.1 Signed and stamped Engineer's Estimate that summarizes the cost of constructing all the public improvements shown on the Improvement Plans.

DocuSign Envelope ID: 9823FE51-48B6-4652-984C-BFE57C11D13D

C.2.2 Site Grading

C.2.2.1 Grading and Drainage Plans

Submit a Grading and Drainage Plan prepared by a Registered Civil Engineer and accompanied by the Project's Geotechnical /Soils Engineering report. The report shall provide recommendations regarding adequacy of the site relative to the stability of soils such as soil types and classification, percolation rate, soil bearing capacity, highest observed ground water elevation, and others.

C.2.2.2 When the grade differential between the Project site and the adjacent property(s) exceeds 12 inches, a reinforced or masonry block wall, engineered slope, or engineered retaining wall is required for retaining soil. The Subdivider shall submit Retaining Wall Plans that includes the construction detail(s) and structural calculations of the retaining wall or masonry wall for City's review and approval.

C.2.2.3 If an engineered slope is used to retain soil subject to approval by the City Engineer, a slope easement will be necessary from the adjacent property. The Subdivider shall obtain a slope easement from owner(s) of the adjacent and affected property(s) and show the slope easement on the Final Map.

C.2.2.4 Erosion Control

Improvement Plans shall specify the method of erosion control to be employed and materials to be used.

C.2.2.5 If applicable, show all existing irrigation structure(s), channel(s) and pipe(s) that are to remain or relocated or to be removed, if any, after coordinating with the irrigation district or owner of the irrigation facilities. If there are irrigation facilities including tile drains, that are required to remain to serve existing adjacent agricultural uses, the Subdivider shall design, coordinate and construct required modifications to the facilities to the reasonable satisfaction of the owner of the irrigation facilities and the City.

C.2.3 Grading Permit

The City will not accept a grading permit application for the Project as complete until the Subdivider has provided all relevant documents related to the grading permit required by the City Regulations and these Conditions of Approval, to the satisfaction of the City Engineer.

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C.2.4 Storm Drainage

C.2.4.1 Site grading shall be designed such that the Project's storm drainage overland release point will be directed to a storm drainage easement or to public streets with a functional storm drainage system and that the storm drainage system within the public streets has adequate capacity to drain storm water from the Property.

C.2.4.2 All permanent underground storm drainage lines, structures and facilities to be maintained by the City shall be located within right-of-way to be dedicated to the City or within an easement. If applicable, interim facilities and storm drain lines and collection basins shall be maintained by the Subdivider.

C.2.4.3 Storm drainage plans are to be submitted with the required hydrologic and hydraulic calculations for the sizing of storm drainage pipe(s) and shall comply with the Storm Drainage Master Plan, Storm Drainage Study and City Regulations.

C.2.4.4 Prior to acceptance of maintenance of any public facilities by the City, the Subdivider shall prepare and obtain approval from the Public Works Department of a maintenance plan for all temporary and permanent storm drainage facilities to be maintained by the Subdivider or the HOA. The maintenance plan shall show the phasing of roadway construction, mass grading, drainage facilities, including collection channels, erosion control and protection of the Crimson crude oil pipeline during construction. A SWPPP may be used as the maintenance plan with approval by the City Engineer.

C.2.4.5 Storm water designs shall show facilities needed for the collection and channeling of surface water runoff and off-site flow-thru surface water runoff to underground storm drainage facilities, such as drainage collection channels, appropriately designed inlet structures and sedimentation/detention ponds. These improvements shall be shown on the Grading Plans and be approved by the City Engineer before the issuance of a Grading Permit.

C.2.4.6 Since the Project will construct terminal retention basins, it has been determined that the Project will be exempt from the Post Construction Stormwater Quality Standards. However, should new Federal or State regulations come into effect during the buildout of the Project that would require future compliance, then the Project may not be exempted from those new requirements.

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SWPPP's shall be implemented during project construction. In addition, the Project may implement stormwater control measures such as disconnected roof leaders, non-contiguous street sidewalks (providing landscape strips/parkways), tree planting in parkways and use of drought tolerant landscape with drip irrigation systems and "intelligent" controllers. Similarly, public education measures regarding the damaging effects of pollutants to water quality may also be implemented.

C.2.4.7 All storm water structural and construction details that are not part of the City Standard Plans or City Design Standards shall be provided by the Subdivider and submitted to the City for approval as part of the improvement plans.

C.2.4.8 Storm drainage retention basins shall be contained within a parcel suitable for dedication to the City of Tracy. The basins shall be provided with appropriate fencing with warning signs, access roadways to and from public roadways and access roadways into the basins for maintenance purposes as approved by the City Engineer. All storm drainage inlets into the basins shall have inlet structures with design acceptable to the City Engineer.

C.2.4.9 Fixed vertical sediment depth markers shall be installed near discharge points into the Retention Basin to assist with measurements of sediment deposition over time and future assessments of the need for maintenance activities.

C.2.4.10 Prior to or concurrently with the City's approval of the first Final Map within Project, the Subdivider shall dedicate to the City utility maintenance easements necessary for all storm drainage facilities. All requirements relating to the access and maintenance by the Utilities Department and Public Works Department shall be incorporated into the improvement plans.

C.2.5 <u>Sanitary Sewer</u>

C.2.5.1 All sanitary sewer lines and associated improvements shall be designed and installed in accordance with the Sanitary Sewer Study and City Regulations. Before approval of Final Map(s) for the Project, Subdivider shall submit improvement plans and obtain approval of plans for all on-site and off-site sewer improvements required to serve the Project.

C.2.5.2 As indicated in the Sewer Study, based on the projected sewer demand from approved projects within the Coral Hollow sewer contributory area, the Phase 2 of the Choke Points Improvements for Corral Hollow Road Sewer as

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identified in the Wastewater Master Plan (“ Phase 2 Choke Points Improvements”) will be required to serve the Project. The City has commenced the design of Phase 2 Choke Point Improvements. In the event the City does not have adequate funding for Phase 2 Choke Points Improvements the Subdivider will contribute funding as determined by the City Engineer to cover shortfall in funding, so the City can proceed with the construction of the improvement. Building permits will only be issued up to available capacity in the Corral Hollow Sewer system as determined by the City Engineer. Subdivider will be eligible for fee credits and/or reimbursements in accordance with Tracy Municipal Code.

C.2.5.3 Based on the analysis of the capacity of Wastewater Treatment Plant (WWTP) and the projected growth over the next five years, it is estimated that Phase 2C of the WWTP improvements as identified in the Wastewater Master Plan will be required to be constructed and operational in 2023. City has identified a funding shortfall of approximately $33.5 Million for the WWTP Phase 2 improvements. In order for the City to undertake design and construction of the WWTP Phase 2C improvements to provide adequate treatment capacity of the Project, City has identified the need to collect upfront fees from developments within the City.

On or prior to December 31, 2022, the Developer shall pay the City half the amount of the wastewater treatment development impact fees (estimated at approximately $6 Million) for lots within the boundary of Tracy Hills Phase 2 Tentative Map and shall provide a Letter of Credit (or other guarantee) to the satisfaction of the City Engineer for the other half of the wastewater treatment development impact fees. On or prior to December 31, 2023, the Developer shall pay to the City the remaining half the amount of the wastewater treatment development impact fees. After the second payment, the City Engineer may release the Letter of Credit (or other guarantee). For building permits issued prior to December 31, 2022, the Developer shall pay wastewater development impact fees per lot consistent with its agreement with the City and Title 13 of the Tracy Municipal Code. The City Engineer will determine the amount due on December 22, 2022 based on the available wastewater development impact fees collected and the funding shortfall for WWTP Phase 2C improvements. The Developer shall be required to pay wastewater development impact fee up to the amounts as outlined above (for all lots for which building permits have not been issued on December 31, 2022). Building permits will

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only be issued up to available capacity in the WWTP, as determined by the City Engineer.

In the event City collects adequate funding from other development projects within the City by December 31, 2022, Developer will not be required to pay the upfront fees as outlined above.

C.2.5.4 The Subdivider shall extend the sanitary sewer facilities within Lammers Road that are intended to serve future phases of the Tracy Hills Project northerly under I-580 and continuing north of I-580 within the Lammers Road right-of-way to connect to the sanitary sewer main stub to be installed with the Tracy Hills Drive improvements for Tracy Hills Phase 1B. Subdivider shall obtain an encroachment permit from Caltrans for the sewer improvements to be installed within the Caltrans right-of-way.

C.2.5.5 No final inspection of any residential building will be performed or certificate of occupancy for commercial building will be issued, with the exception of Model Homes, until all improvements required per the Sanitary Sewer Study and City Regulations are completed and functional, as determined by the City Engineer.

C.2.5.6 Subdivider shall pay impact fees at the time of issuance of building permit or in accordance with the Fee Deferral Agreement.

C.2.5.7 Prior to the City's approval of the first Final Map within Project, the Subdivider shall dedicate to the City utility maintenance easements necessary for all sanitary sewer lines. All requirements relating to the access and maintenance by the Utilities Department and Public Works Department shall be incorporated into the improvement plans.

C.2.6 <u>Water Distribution System</u>

C.2.6.1 All potable and recycled water lines and associated improvements shall be designed and installed in accordance with the Water Study and City Regulations. Before approval of Final Map(s) for the Project, Subdivider shall submit improvement plans and obtain approval of plans for all potable and recycled water lines and associated improvements.

C.2.6.2 During the construction phases (vertical construction) of the Project, the Subdivider shall be responsible for providing water infrastructure (temporary or permanent) capable of

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delivering adequate fire flows and pressure appropriate to the various stages of construction and as approved by the Fire Marshall.

C.2.6.3 Prior to approval of each Final Map, the Subdivider shall submit calculations and improvement plans as required by the Fire Marshall and the City Engineer, and obtain a letter from the Fire Marshall that the fire flow parameters per Tracy Design Standards Section 6.02 are met for the phased construction of water lines to the satisfaction of the Fire Marshal.

C.2.6.4 The Subdivider shall complete design and construction of one Zone 5/6 at-grade water storage tank with a holding capacity of at least 2.57 MG and water transition mains as necessary to serve the Project and in accordance the Water Study and City Regulations. These improvements are required to be complete and operational before the final inspection of the first residential building within the Project, unless an earlier time of completion is required to comply with Condition C.2.6.2. above.

All costs related to the design and construction of the water tanks and associated improvement are the responsibility of the Subdivider. Before approval of first Final Map within the Project, the Subdivider shall execute a Deferred Improvement Agreement (DIA) to address timing, scope of work and funding responsibilities. Subdivider may request formation of Benefit District for the water tanks and associated improvements per Condition C.10.4.

C.2.6.5 Subdivider shall install 12-inch and 16-inch recycled water mains in Lammers Road as required to serve the Project and as shown on Figures 9-2 and G-D1 in the draft (2020) Water System Master Plan Update. An approximately 1,150-foot segment of 16-inch recycled water main in Lammers Road under I-580 between the portions of Lammers Road north and south of the freeway will not be constructed with the interim two-lane Lammers Road undercrossing. Timing of the future installation of the above approximately 1,150-foot segment 16-inch recycled water main is to be determined by the City Engineer.

Initially, the recycled water main will be connected to a potable water supply (with a stub in place to future recycled water) as approved by the City until the program backbone recycled water facilities are in place. Once the recycled water system network is online the recycled water distribution main in Lammers Road will be disconnected from the potable water

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system and connected to the recycled water system.

C.2.6.6 Domestic and Irrigation Water Services – The HOA will be responsible for the repair and maintenance of all valves, fittings on services related to landscaping on all parcels to be owned by HOA and within HOA easements.

C.2.6.7 Where pressures at individual water services will be 80 psi or more, the Subdivider shall provide pressure reducing valves at the location approved by the City Engineer. The design operation of the individual pressure reducing valves for services shall be subject to approval by the Building Official.

C.2.6.8 Fire Service Line – The Subdivider shall design and install fire hydrants at the locations approved by the Fire Marshall. Before the approval of the Improvement Plans, the Subdivider shall obtain written approval from the Fire Marshall for the design, location and construction details of the fire service connections to the Project, and for the location and spacing of fire hydrants that are to be installed to serve the Project.

C.2.7 <u>Roadway Improvements</u>

C.2.7.1 Subdivider is required to design and construct all applicable on-site, frontage and off-site roadway improvements to serve the Project as identified in the Traffic Study, EIR and these Conditions of Approval. All improvements shall comply with City Regulations, and Tracy Hills Design Standards and Specific Plan Amendments. Such improvements shall include, but are not limited to, roadways, water distribution system, sewer system, storm drainage systems, curb and gutter, sidewalks, street lighting system, traffic signals, ITS systems, pavement and crosswalk striping, bicycle lanes and trails, roadway signage and street signs, fire hydrants, median islands, turn lanes, landscaping, and all necessary related improvements as required by the City. Timing of completion of roadway improvements shall comply with these Conditions of Approval and as outlined in the Mitigation Measures listed in the EIR.

In the case of a discrepancy between the information shown on the Vesting Tentative Subdivision Map ("VTSM") and/or Specific Plan Amendment and the right-of-way and street improvement requirements in the Traffic Study, the Traffic Study shall govern unless determined otherwise by the City Engineer.

C.2.7.2 <u>Lammers Road and Other In-tract Streets – Right-of-Way</u>

DocuSign Envelope ID: 9823FE51-48B6-4652-984C-BFE57C11D13D

The Subdivider shall dedicate all rights-of-way that are necessary to construct Lammers Road, between Tracy Hills Drive and Corral Hollow Road, and all the in-tract streets, based on their respective cross sections shown on the VTSM and in accordance the Traffic Study, with the Final Map for the respective phase. The width of travel lanes, turn lanes, street median, landscaping strips and sidewalks shall be in accordance with the VTSM and the Traffic Study.

C.2.7.3 Lammers Road and Other In-tract Streets – Improvements

Design and construction details for Lammers Road, between Tracy Hills Drive and Corral Hollow Road, and the in-tract streets such as asphalt concrete pavement, curb, gutter, median curb, sidewalks, street lights, fire hydrants, landscaping with automatic irrigation system, storm drains, catch basin and drop inlets, sanitary sewer mains and laterals, water mains, individual water services and meters, pavement marking and striping, traffic signs, driveways, curb ramps and all other street improvements shall comply with VTSM, Traffic Study and City Regulations, and shall be shown on the Improvement Plans. Interim improvements under I-580 include 5' wide sidewalk on east side only.

Improvements along Lammers Road and certain in-tract streets shall also include Class I bikeways or Class II bike lanes in accordance with the VTSM and Traffic Study. Interim improvements under I-580 do not include Class 1 bikeway or Class II bike lanes.

Lammers Road and Street B improvements adjacent to the school site on Lot H shall be constructed in accordance with the VTSM and Traffic Study and are subject to the review and approval of the Jefferson School District.

C.2.7.4 Corral Hollow Road - Right of Way

Per the TMP and SPA, Corral Hollow Road will be a 4-lane major arterial roadway with 11' wide raised median, sidewalk/Class I bikeway on west side and landscaping between I-580 and Lammers Road and 2-lane arterial with sidewalk/Class I bikeway on west side and landscaping south of Lammers Road to the Project boundary. The Subdivider shall dedicate all rights-of-way along the Project frontage necessary for the widening of Corral Hollow Road per TMP and including any additional right-of-way required for the construction of roundabout improvements, turn lanes and transitions at the intersection of Corral Hollow Road and

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Lammers Road in accordance with the VTSM and Traffic Study.

The width of travel lanes, turn lanes, street median, landscaping strips and sidewalks shall be in accordance with the VTSM and the Traffic Study.

The Subdivider may be eligible for fee Credits and/or reimbursements for right-of-way dedication beyond Project's frontage obligation per the TMP requirements. Temporary or interim improvements are not eligible for fee credits or reimbursements.

C.2.7.5 Corral Hollow Road - Improvements

Design and construction details for Corral Hollow Road such as asphalt concrete pavement, curb, gutter, median curb, sidewalks, street lights, fire hydrants, landscaping with automatic irrigation system, storm drains, catch basin and drop inlets, pavement marking and striping, traffic signs, curb ramps and all other street improvements shall comply with VTSM, SPA, Traffic Study and City Regulations, and shall be shown on the Improvement Plans.

Improvements along Corral Hollow Road shall also include Class I bikeway in accordance with the VTSM and Traffic Study.

C.2.7.6 Subdivider shall prepare improvement plans for Lammers Road and Corral Hollow Road improvements and obtain approval by the City Engineer. The timing and scope of the improvements to be shown on the improvement plans for Lammers Road and Corral Hollow Road shall be as determined by the City Engineer.

In order to guarantee completion of the Lammers Road and Corral Hollow Road Improvements, the Subdivider shall enter into an improvement agreement (SIA or OIA) and post an improvement security in the amounts and form in accordance with section 12.36.080 of the TMC and as required by these Conditions of Approval. The Subdivider shall submit the signed and notarized SIA or OIA with the necessary improvement security at the time of approval of the Final Map that triggers the need for improvements as determined by the City Engineer.

C.2.7.7 For any Corral Hollow Road Improvements considered frontage improvements (such as Subdivider's Frontage Obligation per the TMP and landscape improvements behind

DocuSign Envelope ID: 9823FE51-48B6-4652-984C-BFE57C11D13D

the curb) and improvements within Caltrans right-of-way at I-580/Corral Hollow Road interchange that are not constructed or security posted with OIA at the time of approval of the first Final Map, the Subdivider shall enter into a DIA with the City.

The Subdivider shall submit the signed and notarized DIA before approval of the first Final Map within the Project. The Subdivider shall post improvement security in the amounts and form in accordance with TMC section 12.36.080 at the times specified in the DIA.

C.2.7.8 Roadway Improvement Obligations per Traffic Study

The following roadway, intersection and interchange improvements are to be constructed by the Project:

a. I-580 & CORRAL HOLLOW ROAD RAMP TERMINALS.

Subdivider shall construct the I-580/Corral Hollow Road interchange improvements in accordance with the TMP, EIR and Traffic Study. Per the Traffic Study, interchange improvements are required to be completed prior to occupancy of the first residential unit within the Project because the interchange is already operating at a deficient level of service. Subdivider shall, in collaboration with the City Engineer and Caltrans, commence with the engineering design for the interchange improvements and initiate the Caltrans review, approval and permitting process no later than ninety (90) calendar days following approval of the Vesting Tentative Subdivision Map ("VSTM") for the Project.

If the Subdivider is unable to complete construction of the interchange prior to occupancy of the first residential unit, primarily as a consequence of the Caltrans approval and permitting process, City may issue occupancy permits including and beyond the first residential unit provided that the Subdivider has, to the reasonable satisfaction of the City Engineer, diligently pursued its efforts to obtain the required Caltrans permits and complete construction of the interchange improvements and has collaborated closely with City staff in this effort.

Funding of these improvements are the primary responsibility of the developer per the Tracy Municipal Code, the EIR, and the City's TMP. However, some funding may be provided in accordance with the Settlement Agreement and Development Agreement.

DocuSign Envelope ID: 9823FE51-48B6-4652-984C-BFE57C11D13D

Funding sources may also include other regional transportation funds and/or grants that may become available, subject to eligibility and approval by the City and other approving agencies. Developer will be eligible for fee credits in accordance with Tracy Municipal Code provisions and Development Agreement.

b. LAMMERS ROAD - BETWEEN TRACY HILLS DRIVE AND CORRAL HOLLOW ROAD.

Subdivider shall construct Lammers Road between Tracy Hills Drive and Corral Hollow Road in accordance with the TMP, Traffic Study and per Conditions C.2.7.2 and C.2.7.3.

c. CORRAL HOLLOW ROAD/LAMMERS ROAD INTERSECTION.

Concurrent with the construction of Lammers Road between Tracy Hills Drive and Corral Hollow Road as described above and in Condition C.2.7.3, the Subdivider shall construct the Corral Hollow Road and Lammers Road intersection improvements, consisting of a two-lane roundabout and all associated improvements.

d. CORRAL HOLLOW ROAD WIDENING - FROM LINNE ROAD INTERSECTION TO THE AQUEDUCT.

Subdivider shall widen Corral Hollow Road to provide two lanes in each direction, including pedestrian and bicycle facilities, from the southern terminus of bridge crossing the California Aqueduct to the Linne Road intersection, including canal crossings, in accordance with the adopted Corral Hollow Road Precise Plan, the TMP, and the Traffic Study.

Construction of the above Corral Hollow Road Widening improvements shall commence upon or prior to the final inspection of the two thousand six hundredth (2,600th) dwelling unit within the project boundary (as defined in the Development Agreement).

e. CORRAL HOLLOW ROAD - I-580 TO LAMMERS ROAD.

Subdivider shall widen Corral Hollow Road to provide two lanes in each direction, including pedestrian and bicycle facilities, between I-580 and Lammers Road in accordance with the TMP, SPA, Traffic Study and Conditions C.2.7.4 and C.2.7.5.

DocuSign Envelope ID: 9823FE51-48B6-4652-984C-BFE57C11D13D

C.2.7.9 The Subdivider shall construct an all-whether, emergency vehicle access across Lot CC as shown on the VTSM and in accordance with South San Joaquin County Fire Authority requirements.

C.2.7.10 Bus shelters on Lammers Road

The bus shelters (and turnouts if deemed necessary by the City) shall be constructed as part of the Lammers Road Improvements. Up to three bus shelters shall be placed on each side of Lammers Road between Corral Hollow Road and I-580 at the locations to be determined by the City Engineer. Timing of construction of bus shelters will be determined in the future based on the extension of TRACER's Fixed Route to serve the Project. In order to assure completion of construction of the bus shelters, the Subdivider may either enter into a DIA with security, or pay to the City the estimated cost for up to six bus shelters at the time of approval of the first Final Map within the Project.

C.2.7.11 Traffic Control Plan

Before starting any work within the project, the Subdivider shall submit a Traffic Control Plan for each phase of work, to show the method and type of construction signs to be used for regulating traffic at the work areas and within existing streets accessing the work areas. The Traffic Control Plan shall be prepared by a Civil Engineer or Traffic Engineer licensed to practice in the State of California.

C.2.7.12 Encroachment Permit

Before starting any work to be performed and improvements to be constructed within City's right-of-way, the Subdivider shall obtain an Encroachment Permit from the City. The Subdivider or its authorized representative shall submit all documents that are required to process the Encroachment Permit including but not limited to, approved Improvement Plans, Traffic Control Plan, payment of engineering review fees, copy of the Contractor's license, Contractor's Tracy business license, and certificate of insurance naming the City of Tracy as additional insured or as a certificate holder.

C.2.7.13 Dead-End Streets

A standard barricade and guardrail with appropriate traffic sign will be required at street ends. Alternatively, turnarounds/ hammerheads meeting the requirements of Fire Marshall shall be provided at the dead-end streets.

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C.2.7.14 All intersections shall be designed to accommodate fire truck movements as required by the Fire Department.

C.2.7.15 Subdivider must provide and verify sight distances, where applicable, with regard to intersections, reverse lots and fence placements as required by the City Engineer.

C.2.8 EIR Mitigation Measures

The EIR identifies Project impacts that are to be mitigated by the Subdivider. The mitigation measures are summarized in the Mitigation, Monitoring and Reporting Matrix contained in the EIR as referenced under Item C.1.1.c above. Subdivider shall comply with all applicable mitigation measures as outlined in the EIR.

C.2.9 Neighborhood and Community Parks

C.2.9.1 The Subdivider shall offer for dedication Parcels “G”, “M”, “P” and “Q” for neighborhood park purposes and Parcel “N” for community park purposes on the Final Map that corresponds to the timing of completion of respective parks as identified in the Planning Department’s Conditions of Approval.

The Subdivider shall design and construct the park improvements consistent with the Tracy Hills Specific Plan, Specific Plan Amendment, Development Agreement and City Regulations. The Subdivider shall be eligible for park fee credits in accordance with the Title 13 of the TMC and the Park Improvement and Reimbursement Agreement (“PI&RA”) and Development Agreement.

C.2.9.2 The Subdivider shall submit park improvement plans, signed and notarized PI&RA, and Improvement Security in the amount and type specified in the City Regulations at the time of approval of the Final Map that corresponds to the timing of completion of the park improvements specified in Planning Division’s Conditions of Approval or at such time as may be specified in the Deferred Improvement Agreement.

C.2.10 Public Utility Easements

C.2.10.1 Undergrounding of Overhead Utilities. Any existing overhead lines and poles within the Project boundaries shall be removed or undergrounded.

C.2.10.2 All private utility services to serve the Project such as electric, telephone and cable TV to the building must be

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installed underground, within right-of-way or a dedicated Public Utility Easement (PUE) and at the location approved by the City and the respective owner(s) of the utilities.

The Subdivider shall submit improvement plans for the installation of electric, gas, telephone and TV cable lines that are to be installed under the sidewalk or within the PUE. Underground utility conduits may be installed under the sidewalks, and underground boxes and structures may be located in the landscaped parkway next to the curb. All above-ground boxes and facilities shall be behind the sidewalk and within the PUE. Pop-outs to provide additional width of PUE where required to accommodate larger above-ground structures will be permitted subject to review and approval by Public Works Director and the City Engineer. Before approval of the first Final Map, the Subdivider shall complete the necessary coordination work with the respective owner(s) of the utilities for approval.

C.2.10.3 Public Utility Easements on side yard lots shall be adjusted in final neighborhood designs based on actual joint trench design requirements.

C.2.11 <u>Crimson (formerly Shell) Crude Oil Pipeline Easement and Facilities</u>

C.2.11.1 A minimum of 72-hours prior to the beginning of grading operations that may impact the existing Crimson underground facilities within the Project, the Subdivider shall notify the appropriate person at Crimson of the impending work. Grading and improvements affecting Crimson facilities shall comply with applicable Crimson pipeline encroachment permit and construction specifications.

C.2.11.2 The Subdivider shall notify in writing the future buyers of lots about the existing Crimson crude oil pipeline and any requirements or restrictions relating to the existence of the pipeline as required by Crimson, State or Federal regulations .The Disclosure Statement(s) shall be made part of the Sale Deeds and recorded in compliance with the applicable law.

C.3 <u>Final Map</u>

The City will not approve any Final Map until the Subdivider demonstrates, to the satisfaction of the City Engineer, that all the requirements set forth in these Conditions of Approval are completed, including, but not limited to the following:

DocuSign Envelope ID: 9823FE51-48B6-4652-984C-BFE57C11D13D

C.3.1 Subdivider has submitted one reproducible (mylar) copy of the approved tentative subdivision map for the Project after Subdivider's receipt of a notification of approval of the Tentative Subdivision Map. The signature of the owner of the Property on the Tentative Subdivision Map shall indicate the owner's consent to the preparation of the Tentative Subdivision Map and the proposed subdivision of the Property.

C.3.2 Each Final Map is prepared in accordance with the applicable requirements of the Tracy Municipal Code, these Conditions of Approval, all other applicable City Regulations, and in substantial conformance with the Tentative Subdivision Map.

C.3.3 Each Final Map includes and shows offer(s) of dedication of all right(s)-of-way and/or temporary or permanent easement(s) required by the Improvement Plans and Final Map, in accordance with City Regulations and these Conditions. If construction easement(s) is/are shown, it/they shall indicate the termination date of the construction easement(s).

C.3.4 Horizontal and vertical control for the Project shall be based upon the City of Tracy coordinate system and at least three 2nd order Class 1 control points establishing the "Basis of Bearings" and shown as such on the Final Map. The Final Map shall also identify surveyed ties from two of the horizontal control points to a minimum of two separate points adjacent to or within the Property described by the Final Map.

C.3.5 Subdivider has submitted a signed and stamped Engineer's Estimate that show construction cost of subdivision improvements that are described in Conditions C.2 above plus 10% for construction contingencies.

C.3.6 <u>Subdivision Improvement Agreement</u>.

Before the City's approval of any Final Map, the Subdivider shall execute a Subdivision Improvement Agreement (for the public facilities required to serve the real property described by the Final Map) and post all required improvement security in accordance with City Regulations.

C.3.7 <u>Final Map Phasing Plan</u>

Prior to Subdivider's submittal to the City of the first Final Map for City approval, Subdivider shall submit for the City Engineer's review and reasonable approval a phasing plan for the submittal of all Final Maps to be filed for this Vesting Tentative Subdivision Map. The phasing plan may be subject to subsequent modifications based on market conditions, the rate of development, and Subdivider's disposition of the parcels created by the Final Maps.

C.3.8 <u>Deferred Improvement Agreement</u>

DocuSign Envelope ID: 9823FE51-48B6-4652-984C-BFE57C11D13D

Prior to the City's approval of the first Final Map within the Project, the Subdivider shall execute a Deferred Improvement Agreement, in substantial conformance with the City's standard form agreement, by which (among other things) the Subdivider agrees to complete construction of all remaining public facilities (to the extent the public facilities are not included in the Subdivision Improvement Agreement) which are required by these Conditions of Approval. The Deferred Improvement Agreement shall identify timing requirements for construction of all remaining public facilities, in conformance with the phasing plan submitted by the Subdivider and approved by the City Engineer. The form and amount of Improvement Security shall be in accordance with the DIA and Section 12.36.080 of the TMC.

C.3.9 Off-Site Improvement Agreement

Prior to the City's approval of the first Final Map within the Project, or as otherwise provided for in a Deferred Improvement Agreement, the Subdivider shall execute an Off-Site Improvement Agreement, in substantial conformance with the City's standard form agreement, to guarantee completion of the identified public improvements that are necessary to serve the Project as required by these Conditions of Approval. The form and amount of Improvement Security shall be in accordance with the OIA and Section 12.36.080 of the TMC.

C.3.10 Improvement Security.

The Subdivider shall provide improvement security for all public facilities as required by Subdivision Improvement Agreement, Offsite Improvement Agreement or Deferred Improvement Agreement. The form of the improvement security may be a surety bond, letter of credit or other form in accordance with City Regulations. The amount of the improvement security shall be as follows:

C.3.10.1 Faithful Performance (100% of the estimated cost of constructing the public facilities),

C.3.10.2 Labor & Material (100% of the estimated cost of constructing the public facilities), and

C.3.10.3 Warranty (10% of the estimated cost of constructing the public facilities)

C.3.10.4 Monumentation ($750 multiplied by the total number of street centerline monuments that are shown on the Final Map)

C.3.11 Subdivider has paid engineering review fees including improvement plan checking, final map review, agreement processing, and all other fees required by these Conditions of Approval and City Regulations.

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C.3.12 Subdivider has submitted technical or materials specifications, cost estimate, and technical reports related to the design of improvements that are shown on the Improvement Plans and as required by these Conditions.

C.3.13 Subdivider has submitted hydrologic and storm drainage calculations for the design and sizing of in-tract storm drainage pipes located within the Project.

C.3.14 Subdivider has submitted signed and stamped Improvement Plans as required in Condition C.2 above.

C.4 Grading and Encroachment Permits

No applications for grading and encroachment permits will be accepted by the City as complete until the Subdivider has provided all documents required by these Conditions and City Regulations, to the reasonable satisfaction of the City Engineer, including, but not limited to, the following:

C.4.1 Grading and Drainage Plans prepared on a 24” x 36” size polyester film (mylar). Grading and Drainage Plans shall be prepared under the supervision of, and stamped and signed by a Registered Civil Engineer.

C.4.2 Payment of the applicable Grading Permit fees which include grading plan checking and inspection fees, and other applicable fees as required by these Conditions of Approval.

C.4.3 Three sets of the Storm Water Pollution Prevention Plan (SWPPP) identical to the reports submitted to the State Water Quality Control Board (SWQCB) and any documentation or written approvals from the SWQCB including a copy of the Notice of Intent (NOI) with the state-issued Wastewater Discharge Identification number (WDID). After the completion of the Project, the Subdivider is responsible for filing the Notice of Termination (NOT) required by SWQCB, and shall provide the City, a copy of the completed Notice of Termination.

C.4.4 Cost of preparing the SWPPP, NOI and NOT including the annual storm drainage fees and the filing fees of the NOI and NOT shall be paid by the Subdivider. The Subdivider shall comply with all the requirements of the SWPPP and applicable Best Management Practices (BMPs) and the Storm Water Regulations adopted by the City in 2008 and any subsequent amendment(s), and the City Regulations.

C.4.5 Two sets of the Project’s Geotechnical Report signed and stamped by a licensed Geotechnical Engineer licensed to practice in the State of California. The technical report must include relevant information related to soil types and characteristics, soil bearing capacity,

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percolation rate, roadway section construction recommendations and elevation of the highest observed groundwater level.

C.4.6 A copy of the Approved Fugitive Dust and Emissions Control Plan that meets San Joaquin Valley Air Pollution Control District (SJVAPCD) as required in Mitigation Monitoring and Reporting Program of the Tracy Hills Specific Plan Final Environmental Impact Report (TH-EIR).

C.4.7 Two sets of Hydrologic and Storm Drainage Calculations for the design of the on-site storm drainage system shall be provided with the submittal of the Improvement Plans. Partial submittal of Hydrologic and Storm Drainage Calculations may be required for Grading Plan review at the discretion of the City Engineer.

C.4.8 Reasonable written permission from irrigation district or affected owner(s), if applicable. The cost of relocating and/or removing irrigation facilities and/or tile drains is the sole responsibility of the Subdivider.

C.4.9 Written approval(s) or permit(s) obtained from San Joaquin County regarding the removal and abandonment of any existing well(s), if applicable. All existing on-site wells, if any, shall be abandoned or removed in accordance with the City and San Joaquin County requirements. The Subdivider shall be responsible for all costs associated with the abandonment or removal of the existing well(s) including the cost of permit(s) and inspection.

C.4.10 Improvement Plans prepared on a 24” x 36” size 4-mil thick polyester film (mylar) that incorporate all the requirements described in these Conditions of Approval. Improvement Plans shall be prepared under the supervision of, and stamped and signed by a Registered Civil, Traffic, Electrical, Mechanical Engineer, and Registered Landscape Architect for the relevant work.

C.4.11 Two sets of structural calculations for drainage structures and retaining walls within street right-of-way and retention basins signed and stamped by a Structural Engineer licensed in the State of California shall be submitted to the Building Safety Division at the time of building permit application for said structures.

C.4.12 Check payment for the applicable engineering review fees which include plan checking, permit and agreement processing, testing, construction inspection, and other applicable fees as required by these Conditions of Approval. The engineering review fees will be calculated based on the current fee rate adopted by the City Council.

C.4.13 Traffic Control Plan for each phase signed and stamped by a Registered Civil Engineer or Traffic Engineer licensed in the State of California.

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C.4.14 As required per Mitigation Measure 4.8-2a of the EIR, the Subdivider shall submit, prior to issuance of grading permits, a Phase II ESA focused on soil sampling conducted near the location of the underground crude oil pipelines, as determined by a qualified Phase II/Site Characterization specialist.

C.4.15 As required per Mitigation Measure 4.8-2b of the EIR, prior to issuance of grading permits, the Subdivider shall work with Crimson to implement and observe a site damage prevention plan to the satisfaction of the City of Tracy Engineering Division.

C.4.16 Grading Permit Security to guarantee completion of the grading improvements that are necessary to serve the Project as required by these Conditions of Approval. The form and amount of Grading Permit Security shall be in accordance with Section 12.36.080 of the Tracy Municipal Code (TMC).

C.5 Building Permit

The City will not approve any building permit within the Project boundaries, (except for up to ten model homes and except for a plumbing permit issued for the purpose of perfecting a RGA) until a Final Map is approved by the City Council and it is recorded at the San Joaquin County Recorder's Office, and the Subdivider demonstrates, to the reasonable satisfaction of the City Engineer, compliance with all the required Conditions of Approval and payment of fees in accordance with the Fee Deferral Agreement including but not limited to the following:

C.5.1 Payment of the applicable current City-Wide Roadway and Traffic, Water, Recycled Water, Wastewater, Storm Drainage, Public Safety, Public Facilities, and Park Development Impact Fees as these relate to the Project and as required by these Conditions of Approval.

C.5.2 Payment of applicable Regional Transportation Impact Fees (RTIF) as required in the Mitigation, Monitoring and Reporting Program of the EIR, these Conditions of Approval, and the Settlement Agreement.

C.5.3 Payment of any applicable Agricultural Mitigation Fee as required in Chapter 13.28 of the Tracy Municipal Code and Mitigation Measure AG 4.2.1 of the EIR and these Conditions of Approval.

C.5.4 Payment of the San Joaquin County Facilities Fees as required in Chapter 13.24 of the TMC.

C.6 Final Building Inspection

The City will not perform final building inspection (except for model homes) until after the Subdivider provides documentation which demonstrates, to the reasonable satisfaction of the City Engineer, that:

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C.6.1 The Subdivider has completed construction of all public facilities required to serve the building for which a certificate of occupancy is requested, or a final building inspection has to be performed unless otherwise defined herein. Unless specifically provided in these Conditions, or the City Regulations, the Subdivider shall take all actions necessary to construct all public facilities required to serve the Project, and the Subdivider shall bear all costs related to construction of the public facilities (including all costs of design, construction, construction management, plan check, inspection, land acquisition, program implementation, and contingency).

C.7 Temporary or Final Building Certificate of Occupancy

No Final Building Inspection shall be performed or a Temporary or Final Building Certificate of Occupancy will be issued by the City (except for model homes) until after the Subdivider provides reasonable documentation which demonstrates, to the satisfaction of the City Engineer, that:

C.7.1. The Subdivider has satisfied all the requirements set forth in these Conditions of Approval.

C.7.2 The Subdivider has completed construction of all required public facilities for the building for which a certificate of occupancy is requested, unless otherwise defined herein. Unless specifically provided in these Conditions of Approval, or some other applicable City Regulations, the Subdivider shall use diligent and good faith efforts in taking all actions necessary to construct all public facilities required to serve the Project, and the Subdivider shall bear all costs related to construction of the public facilities (including all costs of design, construction, construction management, plan check, inspection, land acquisition, program implementation, and contingency).

C.8 Acceptance of Public Improvements

Public improvements will not be considered for City Council's acceptance until after the Subdivider demonstrates to the reasonable satisfaction of the City Engineer, completion of the following:

C.8.1 All the public improvements shown on the Improvement Plans are completed and all the deficiencies listed in the deficiency report prepared by the assigned Engineering Inspector are all corrected.

C.8.2 Subdivider has completed the 90-day public landscaping maintenance period.

C.8.3 Subdivider has submitted Certified "As-Built" Improvement Plans (or Record Drawings). Upon completion of the construction by the Subdivider, the City shall temporarily release the originals of the Improvement Plans to the Subdivider so that the Subdivider will be able

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to document revisions to show the "As Built" configuration of all improvements.

C.8.4 Where applicable, signed and notarized Grant Deed(s) with legal description(s) and plat maps for the offer of dedication of right-of-way, and Grant of Easements as required per these Conditions of Approval and City Regulations, or dedications shown on the Final Map.

C.9 Release of Improvement Security

City will release Improvement Security(s) to the Subdivider after City Council's acceptance of public improvements, both on-site and off-site, in accordance with TMC section 12.36.080, upon written request and submittal of the recorded Notice of Completion.

C.10 Special Conditions

C.10.1 All streets and utilities improvements within City's right-of-way shall be designed and constructed in accordance with City Regulations, except as otherwise specifically approved in the Tracy Hills Specific Plan.

C.10.2 When street cuts are made for installation of utilities, the Subdivider is required to install 2 inches thick asphalt concrete overlay with reinforcing fabric at least 25-feet from all sides and for the entire length of the utility trench. A 2-inch deep grind on the existing asphalt concrete pavement will be required where the asphalt concrete overlay will be applied and shall be uniform thickness in order to maintain current pavement grades, cross and longitudinal slopes. If the utility trench extends beyond the median island, the limit of asphalt concrete overlay shall be up to the lip of existing gutter located along that side of the street.

C.10.3 All improvement plans shall contain a note stating that the Subdivider (or Contractor) will be responsible to preserve and protect all existing survey monuments and other survey markers. Any damaged, displaced, obliterated or lost monuments or survey markers shall be re-established or replaced by a licensed Land Surveyor at the Subdivider's (or Contractor's) sole expense. A corner record must be filed in accordance with the State law for any reset monuments (California Business and Professions Code Section 8871).

C.10.4 Benefit District

The Subdivider may make a written request to the City for the formation of a Benefit District before the approval of the final map and improvement plans for the public facility(s) considered to be oversized that benefits other property(s) or development(s). Reimbursement request(s) will be processed in accordance with TMC Chapter 12.60.

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C.10.5 The CFD or HOA shall include future costs of maintenance including PG&E charges for all new streetlights to be installed by the Project.

C.10.6 Nothing contained in these Conditions shall be construed to permit any violation of City Regulations. Subject, however, to City Regulations, this Condition does not preclude the City from requiring pertinent revisions and additional requirements to the final map, improvement agreements, and improvement plans, before the City Engineer's signature on the final map and improvement plans, if the City Engineer finds it necessary due to public health and safety reasons. (Government Code section 66498.6.) The Subdivider shall bear all the cost for the inclusion, design, and implementations of such additions and requirements, without reimbursement or any payment from the City.

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EXHIBIT "C"
Authorized Representative Contact Information

Initial Contact Information for Developer's Authorized Representative:

Bridgit Koller
Lennar Homes of California, LLC
2603 Camino Ramon, Suite 525
San Ramon, CA 94583
(925) 242-0811
bridgit.koller@lennar.com

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION 2023-_____

ADOPTING A RESOLUTION APPROVING THE OFF-SITE IMPROVEMENT AGREEMENT BETWEEN THE CITY AND LENNAR HOMES OF CALIFORNIA, LLC, FOR PUBLIC IMPROVEMENTS REQUIRED AS PART OF THE CONDITIONS OF APPROVAL, FOR THE TRACY HILLS PHASE 2 ZONE 5 WATER MAIN IMPROVEMENTS

WHEREAS, on October 19, 2021, the City Council adopted the Tracy Hills Specific Plan Amendment for Tracy Hills Phase 2 and approved various related land use entitlements, including that certain Vesting Tentative Subdivision Map for Tracy Hills Phase 2, Tract 4057, processed under Application No. TSM20-0003 and approved by Resolution No. 2021-154; and

WHEREAS, the Conditions of Approval for the Vesting Tentative Subdivision Map and the Citywide Water System Master Plan require the Developer, Lennar Homes of California, LLC, to design and construct the Zone 5 water transmission main from the John Jones Water Treatment Plant to the new Tracy Hills Zone 5/6 water tanks also being constructed by the Developer; and

WHEREAS, when completed, the Zone 5 water transmission main and Zone 5/6 water tanks will provide potable water service initially to the Tracy Hills Phase 2A development and ultimately to future phases of development within the Tracy Hills Specific Plan Area; and

WHEREAS, the subject Tracy Hills Phase 2 Zone 5 Water Main Improvements will construct the portion of the Zone 5 water transmission main generally extending between the I-580 Freeway and the Tracy Hills Zone 5/6 water tanks; and

WHEREAS, the Project will be partly located within public street rights-of-way and other parcels to be dedicated by Developer to City on the various Final Maps comprising the Tracy Hills Phase 2A development and partly within an Access and Water Line Easement to be dedicated by Developer to City across future phases of the Tracy Hills development; and

WHEREAS, improvement plans and specifications for the Tracy Hills Phase 2 Zone 5 Water Main Improvements, which describe in more detail the improvements which are required under the Off-Site Improvement Agreement, were prepared on behalf of the Developer and have been approved by the City Engineer, and are filed under Tracking No. ENG21-0032; and

WHEREAS, the Developer has executed the Off-Site Improvement Agreement and has submitted the required security to guarantee completion of the required improvements; now, therefore, be it

RESOLVED: That the City Council of the City of Tracy hereby adopts a resolution approving the Off-Site Improvement Agreement between the City and Lennar Homes of California, LLC, for public improvements required as part of the Conditions of Approval, for Tracy Hills Phase 2 Zone 5 Water Main Improvements.

* * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on the 15th day of August 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.Q

RECOMMENDATION

Staff recommends that City Council adopt six Resolutions approving General Services Agreements, each for two (2) year terms, with an administrative option to extend for an additional year, to supply and deliver certain chemicals necessary in the treatment process of water and wastewater, with the following vendors, for the specified amounts:

(1) Hill Brothers Chemical Company (not to exceed amount of $250,000 annually);
(2) Polydyne, Inc. (not to exceed amount of $1,500,000 annually);
(3) Pioneer Americas, LLC (not to exceed amount of $2,500,000 annually);
(4) HASA, Inc. (not to exceed amount of $100,000 annually);
(5) Sterling Water Technologies, LLC (not to exceed amount of $250,000 annually); and
(6) Thatcher Company of California, Inc. (not to exceed amount of $1,500,000 annually).

EXECUTIVE SUMMARY

This agenda item, with City Council consent, will approve General Services Agreements with six (6) different contractors (identified above) (collective, "Contractors") for the supply and delivery of certain chemicals used in the treatment of water through the John Jones Water Treatment Plant and wastewater through the Wastewater Treatment Plant to comply with Federal and State standards and permitting. Each of the six agreements are for two (2) year terms and give the City Manager the right to administratively extend each agreement for an additional one (1) year term. The funding for these six (6) agreements will be through the annual operations and maintenance budgets for Water and Wastewater (Fund 511 and Fund 521) with a combined not to exceed amount of $6,100,000 per annum.

BACKGROUND AND LEGISLATIVE HISTORY

As an integral part of operations, the City of Tracy water and wastewater treatment plants, water production wells, and water reservoirs, require various chemicals to disinfect and treat its water and wastewater to meet compliance with state and federal standards. Prices for many of these chemicals fluctuate greatly in the market based on supply and demand, and many vendors do not want to enter into agreements stagnating their rates. Every two to three years the City conducts a request for proposals to obtain competitive rates and many vendors will not participate for longer contract terms due to these fluctuations.

On February 2, 2023, staff followed established procedures, in accordance with Tracy Municipal Code, Section 2.20.140, and conducted a onetime Request for Proposal (RFP) to solicit experienced and qualified vendors to provide competitive rates to supply and deliver the various chemicals used in disinfection and treatment of both water and wastewater. Proposers had the ability to select which specific chemicals they were interested in, and the price and unit costs associated with that chemical. On March 13, 2023, staff had received eleven (11) proposals from vendors for all twelve (12) identified chemicals. After careful review and analysis, six (6) qualified proposers were selected based on their competitive rates and ability to deliver the required chemicals.

ANALYSIS

The City of Tracy uses bulk chemical for disinfection and treatment of Water and Wastewater which requires delivery of such chemicals to various City facilities to receiving equipment in a safe environment as applicable per local, State and Federal standards. Most chemical supply firms are specialized and deliver only certain types of chemicals; therefore, the City must purchase these chemicals from multiple vendors. Staff completed an extensive review of the eleven (11) proposals received based on expertise and proposal content. The following six (6) proposers and their corresponding rates are recommended for approval by City Council based on cost, and taking into consideration response time, specialty, and past performance with the City and/or other agencies.

CHEMICAL	VENDOR	$/not-to-exceed	Bid Price	Units	Contract Term
Aqua Ammonia (19%)	Hill Brother	$250,000	$0.252	lb	two (2) years
Ammonium Sulfate (40%)			$0.70		
Liquid Cationic Polymer	Polydyne Inc.	$1,500,000	$0.86	lb	two (2) years
Polyacrylamide			$1.65		
WE 114 Polymer			$1.949		
WE 907 Polymer			$2.003		
Bulk Liquid Sodium Hypochlorite (12.5%)	Pioneer Americas, LLC	$2,500,000	$2.976 (WWTP) 2.749 (WTP)	gal	two (2) years
Mini-Bulk Liquid Sodium Hypochlorite (12.5%)	HASA, Inc.	$100,000	$2.99	gal	two (2) years
Blended Liquid Phosphate	Sterling	$250,000	$1.16	lb	two (2) years
Liquid Alum (WTP)	Thatcher	$1,500,000	$357.00	Dry ton	two (2) years
Sodium Bisulfite - 25%			$0.1810	lb	
Sodium Bisulfite - 40%			$0.2130	lb	

Upon approval, staff will finalize the GSAs and issue Purchase Orders specifying the type and rate for the chemical as shown in the table above and will invoice based on the delivery of chemical needs for each facility. The City will utilize these goods and services on an “as-needed basis.” Staff will follow the City’s purchasing policy and return to Council, if necessary. The GSA will be for a two-year term with the potential to extend the contract by one (1) year. Should the vendor and City agree to the extension, the vendor may request an increase to the proposed chemical rate in proportion to any increase in the Producer Price Index (PPI) by Commodity for Chemicals for the extended year. Any increase shall be the lower of ten percent (10%) or the increase in the PPI annually. Both the City and the vendor must agree on the proposed rate increase.

CEQA DETERMINATION

The approval of the proposers in this request will not result in a physical change in the environment and therefore is not considered as a project as defined by Section 21065 of the Public Resources Code.

STRATEGIC PLAN

This agenda item is consistent with the City's Quality of Life Strategy and meets the goals to ensure physical infrastructure and systems necessary for the health and safety of the Tracy community through improved water quality.

FISCAL IMPACT

The cost of the goods and services provided by the proposers will be captured in both the Water Fund (511) and Wastewater Fund (521) annual operations and maintenance budgets.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that City Council adopt six Resolutions approving General Services Agreements, each for two (2) year terms, with an administrative option to extend for an additional year, to supply and deliver certain chemicals necessary in the treatment process of water and wastewater, with the following vendors, for the specified amounts:

(1) Hill Brothers Chemical Company (not to exceed amount of $250,000 annually);
(2) Polydyne, Inc. (not to exceed amount of $1,500,000 annually);
(3) Pioneer Americas, LLC (not to exceed amount of $2,500,000 annually);
(4) HASA, Inc. (not to exceed amount of $100,000 annually);
(5) Sterling Water Technologies, LLC (not to exceed amount of $250,000 annually); and
(6) Thatcher Company of California, Inc. (not to exceed amount of $1,500,000 annually).

Prepared by: Stephanie Reyna-Hiestand, Assistant Director of Utilities

Reviewed by: James Jackson, Director of Operations & Utilities
Sara Cowell, Director of Finance
Bijal Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

Attachments:

A – GSA Hill Brothers Chemical Company
B – GSA Polydyne, Inc.
C – GSA Pioneer Americas, LLC
D – GSA HASA, Inc.
E – GSA Sterling Water Technologies, LLC
F – GSA Thatcher Company of California, Inc.

CITY OF TRACY
GENERAL SERVICES AGREEMENT WITH
Hill Brothers Chemical Company

This General Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and Hill Brothers Chemical Company, a California Corporation (**Contractor**). City and Contractor are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Contractor to provide chemical delivery services to the John Jones Water Treatment Plant and the Wastewater Treatment Plant; and

B. On February 23, 2023, the City issued a Request for Proposals (RFP) for the Delivery of Chemicals 2023-2025 (**Project**). On February 28, 2023, Contractor submitted its proposal for the Project to the City. City has determined that Contractor possesses the skills, experience and certification required to provide the services.

C. After negotiations between the City and Contractor, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

D. This Agreement is being executed pursuant to Resolution No. 2023-____ approved by Tracy City Council on _____, 2023.

Now therefore, the Parties mutually agree as follows:

1. <u>Scope of Work</u>. Contractor shall perform the services described in Exhibit "A" attached and incorporated by reference. The services shall be performed by, or under the direct supervision of, Contractor's Authorized Representative: Frank Alari. Contractor shall not replace its Authorized Representative, nor shall Contractor replace any of the personnel listed in Exhibit "A," nor shall Contractor use or replace any subcontractors or subconsultants, without City's prior written consent. A failure to obtain the City's prior written consent for any change or replacement in personnel or subcontractor may result in the termination of this Agreement.

2. <u>Time of Performance</u>. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Contractor shall begin performance, and shall complete all required services no later than the dates set forth in Exhibit "A." Any services for which times for performance are not specified in this Agreement shall be started and completed by Contractor in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Contractor. Contractor shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The term of this Agreement shall begin on March 17, 2023 and end on February 28, 2025, unless terminated in accordance with Section 6. This Agreement may be extended for an additional one (1) year by the City Manager following a written determination that Contractor has satisfactorily met all the requirements of this Agreement.

3. Compensation. City shall pay Contractor on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Contractor's total compensation under this Agreement shall not exceed $250,000 annually. Contractor's billing rates shall cover all costs and expenses for Contractor's performance of this Agreement. No work shall be performed by Contractor in excess of the total compensation amount provided in this section without the City's prior written approval. Effective January 1, 2024, Contractor's billing rates under this Agreement may be annually increased in January of each year by the lesser of 3% or the annual increase in the cost-of-Living index. All items, for the Sacramento Metropolitan Region.

3.2 Invoices. Contractor shall submit monthly invoices to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1. Contractor's failure to submit invoices in accordance with these requirements may result in the City rejecting said invoices and thereby delaying payment to Contractor.

3.3 Payment. Within 30 days after the City's receipt of invoice, City shall make payment to the Contractor based upon the services described on the invoice and approved by the City.

4. Indemnification. Contractor shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Contractor's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees and volunteers; "Contractor" means the Contractor, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

The provisions of this section survive completion of the services or the termination of this Agreement and are not limited by the provisions of Section 5 relating to insurance.

5. Insurance. Contractor shall, throughout the duration of this Agreement, maintain insurance to cover Contractor, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Pollution Liability Insurance

i. Pollution Coverage shall be provided for liability arising out of sudden, accidental, and gradual pollution and remediation. The policy limit shall be no less than two million dollars ($2,000,000) per claim. All activities contemplated in this agreement shall be specifically scheduled on the policy as "covered operations." The policy will be applicable to the work performed in the delivery of chemicals in accordance with the scope of this agreement.

ii. The policy shall be endorsed to include the City, its officers, employees, and agents as insureds.

5.5 Endorsements. Contractor shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Contractor's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Contractor shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Contractor shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Contractor shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Contractor shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City before the City signs this Agreement.

5.9 Substitute Certificates. Contractor shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Contractor's Obligation. Maintenance of insurance by the Contractor as specified in this Agreement shall in no way be interpreted as relieving the Contractor of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Contractor may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. Termination. The City may terminate this Agreement by giving ten days' written notice to Contractor. Upon termination, Contractor shall give the City all original documents, including preliminary drafts and supporting documents, prepared by Contractor for this Agreement. The City shall pay Contractor for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. Dispute Resolution. If any dispute arises between the City and Contractor that cannot be settled after engaging in good faith negotiations, City and Contractor agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8 Labor Code Compliance. Contractor is aware of the requirements of Chapter 1 of Part 7 of Division 2 of the California Labor Code and applicable regulations which require the payment of prevailing wage rates (§1771, §1774, and §1775); employment of apprentices (§1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. The services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, Contractor agrees to fully comply with such Prevailing Wage Laws.

8.1 Rates. These prevailing wage rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Each Contractor and Subcontractor must pay no less than the specified rates to all workers employed to perform the services described herein. The schedule of per diem wages is based upon a working day of eight hours. The rate for holiday and overtime work must be at least time and one-half. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the City harmless from any and all claims made by the State of California, the Department of Industrial Relations, any subcontractor, any worker, or any other third party.

8.2 Registration with DIR. Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform the services consistent with Labor Code section 1725.5.

8.3 Monitoring. This Agreement will be subject to compliance monitoring and enforcement by the DIR, under Labor Code section 1771.4.

9. Ownership of Work. All original documents prepared by Contractor for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Contractor's services, or upon demand from the City. No such documents shall be revealed or made available by Contractor to any third party without the City's prior written consent.

10. Independent Contractor Status. Contractor is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Contractor is not City's employee and Contractor shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Contractor is free to work for other entities while under contract with the City. Contractor, and its agents or employees, are not entitled to City benefits.

11. Conflicts of Interest. Contractor (including its employees, agents, and subcontractors) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Contractor maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Contractor's conflicting interest.

12. Rebates, Kickbacks, or Other Unlawful Consideration. Contractor warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

13. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

Director of Operations and Utilities
James A. Jackson
520 Tracy Blvd.
Tracy, CA 95376

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Contractor:

Hill Brothers Chemical Company
3000 E Birch St., Ste. 108
Brea, CA 92821

14. Miscellaneous.

14.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Contractor's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

14.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

14.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

14.4 Assignment and Delegation. Contractor may not assign, transfer or delegate this Agreement or any portion of it without the City's written consent. Any attempt to do so will be void. City's consent to one assignment shall not be deemed to be a consent to any subsequent assignment.

14.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

14.6 Compliance with the Law. Contractor shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

14.6.1 Hazardous Materials. Contractor is responsible for all costs of clean up and/or removal of hazardous and toxic substances spilled as a result of performing their services.

14.6.2 Non-discrimination. Contractor represents and warrants that it is an equal opportunity employer, and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Contractor shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

14.7 Business Entity Status. Contractor is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Contractor. By entering into this Agreement, Contractor represents that it is not a suspended corporation. If Contractor is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

14.8 Business License. Before the City signs this Agreement, Contractor shall obtain a City of Tracy Business License. Contractor shall maintain an active City of Tracy Business License during the term of this Agreement.

14.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

14.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

14.11. Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

14.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's proposal (if any), the Exhibits shall control.

14.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations, or agreements. All exhibits attached hereto are incorporated by reference herein.

15. Signatures. The individuals executing this Agreement on behalf of Contractor represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of Contractor.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

_____

By: Nancy D. Young
Title: Mayor
Date: _____

Attest:

_____

Adrianne Richardson, City Clerk

Approved as to form:

_____

Bijal M. Patel, City Attorney

Contractor
Hill Brothers Chemical Company, a California Corporation

_____

By: Adam Hill
Title: Chief Executive Officer
Date: 6/2/2023

Federal Employer Tax ID No. _____

_____

By: Thomas James
Title: Chief Financial Officer
Date: 6/2/2023

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

Contractor shall provide the following chemicals as needed to the John Jones Water Treatment Plant and the Wastewater Treatment Plant. City will notify via email or phone when delivery is needed.

- Aqua Ammonium (19%)
    - 88,000 lbs. to the John Jones Water Treatment Plant
    - 175,000 lbs. to the Wastewater Treatment Plant

- Ammonium Sulfate (40%)
    - 88,000 lbs. to the John Jones Water Treatment Plant
    - 175,000 lbs. to the Wastewater Treatment Plant

EXHIBIT B - Compensation

Compensation is based upon the amount of chemical delivered (in pounds) for a not to exceed amount of $250,000 per year. The pricing is as follows:

- Aqua Ammonia (19%)
  - Price per pound delivered - $0.252
- Ammonium Sulfate (40%)
  - Price per pound delivered - $0.70

CITY OF TRACY
GENERAL SERVICES AGREEMENT WITH
POLYDYNE, INC.

This General Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and Polydyne, Inc., a Delaware Corporation (**Contractor**). City and Contractor are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Contractor to provide chemical delivery services to the John Jones Water Treatment Plant and Wastewater Treatment Plant; and

B. On February 23, 2023, the City issued a Request for Proposals (RFP) for Delivery of Chemicals 2023-2025 (**Project**). On March 7, 2023, Contractor submitted its proposal for the Project to the City. City has determined that Contractor possesses the skills, experience and certification required to provide the services.

C. After negotiations between the City and Contractor, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

D. This Agreement is being executed pursuant to Resolution No. 2023-____ approved by Tracy City Council on _____, 2023.

Now therefore, the Parties mutually agree as follows:

1. <u>Scope of Work</u>. Contractor shall perform the services described in Exhibit "A" attached and incorporated by reference. The services shall be performed by, or under the direct supervision of, Contractor's Authorized Representative: Boyd Stanley. Contractor shall not replace its Authorized Representative, nor shall Contractor replace any of the personnel listed in Exhibit "A," nor shall Contractor use or replace any subcontractors or subconsultants, without City's prior written consent. A failure to obtain the City's prior written consent for any change or replacement in personnel or subcontractor may result in the termination of this Agreement.

2. <u>Time of Performance</u>. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Any services for which times for performance are not specified in this Agreement shall be started and completed by Contractor in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Contractor. Contractor shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The term of this Agreement shall begin on March 17, 2023 and end on June 30, 2025 unless terminated in accordance with Section 6. This Agreement may be extended for an additional one (1) year by the City Manager following a written determination that Contractor has satisfactorily met all the requirements of this Agreement.

3. <u>Compensation</u>. City shall pay Contractor on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Contractor's total compensation under this Agreement shall not exceed $1,500,000 annually . Contractor's billing rates shall cover all costs and expenses for Contractor's performance of this Agreement. Contractor's billing rates under this Agreement may be annually increased in January of each year by the lesser of 3% of the annual increase in the Cost-of-Living Index – All items, for the Sacramento Metropolitan Region. No work shall be performed by Contractor in excess of the total compensation amount provided in this section without the City's prior written approval.

3.2 Invoices. Contractor shall submit monthly invoices to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1. Contractor's failure to submit invoices in accordance with these requirements may result in the City rejecting said invoices and thereby delaying payment to Contractor.

3.3 Payment. Within 30 days after the City's receipt of invoice, City shall make payment to the Contractor based upon the services described on the invoice and approved by the City.

4. <u>Indemnification</u>. Contractor shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Contractor's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence, or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees, and volunteers; "Contractor" means the Contractor, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

The provisions of this section survive completion of the services or the termination of this Agreement and are not limited by the provisions of Section 5 relating to insurance.

5. <u>Insurance</u>. Contractor shall, throughout the duration of this Agreement, maintain insurance to cover Contractor, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Pollution Liability Insurance

i. Pollution Coverage shall be provided for liability arising out of sudden, accidental and gradual pollution and remediation. The policy limit shall be no less than two million dollars ($2,000,000) per claim. All activities contemplated in this agreement shall be specifically scheduled on the policy as "covered operations." The policy will be applicable to the work performed in the delivery of chemicals in accordance with the scope of this agreement.

ii. The policy shall be endorsed to include the City, its officers, employees, and agents as insureds.

5.5 Endorsements. Contractor shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Contractor's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Contractor shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Contractor shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Contractor shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Contractor shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City before the City signs this Agreement.

5.9 Substitute Certificates. Contractor shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Contractor's Obligation. Maintenance of insurance by the Contractor as specified in this Agreement shall in no way be interpreted as relieving the Contractor of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Contractor may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. <u>Termination.</u> The City may terminate this Agreement by giving ten days' written notice to Contractor. Upon termination, Contractor shall give the City all original documents, including preliminary drafts and supporting documents, prepared by Contractor for this Agreement. The City shall pay Contractor for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. <u>Dispute Resolution.</u> If any dispute arises between the City and Contractor that cannot be settled after engaging in good faith negotiations, City and Contractor agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8 Labor Code Compliance. Contractor is aware of the requirements of Chapter 1 of Part 7 of Division 2 of the California Labor Code and applicable regulations which require the payment of prevailing wage rates (§1771, §1774, and §1775); employment of apprentices (§1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. The services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, Contractor agrees to fully comply with such Prevailing Wage Laws.

8.1 Rates. These prevailing wage rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Each Contractor and Subcontractor must pay no less than the specified rates to all workers employed to perform the services described herein. The schedule of per diem wages is based upon a working day of eight hours. The rate for holiday and overtime work must be at least time and one-half. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the City harmless from any and all claims made by the State of California, the Department of Industrial Relations, any subcontractor, any worker, or any other third party.

8.2 Registration with DIR. Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform the services consistent with Labor Code section 1725.5.

8.3 Monitoring. This Agreement will be subject to compliance monitoring and enforcement by the DIR, under Labor Code section 1771.4.

9. Ownership of Work. All original documents prepared by Contractor for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Contractor's services, or upon demand from the City. No such documents shall be revealed or made available by Contractor to any third party without the City's prior written consent.

10. Independent Contractor Status. Contractor is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Contractor is not City's employee and Contractor shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Contractor is free to work for other entities while under contract with the City. Contractor, and its agents or employees, are not entitled to City benefits.

11. Conflicts of Interest. Contractor (including its employees, agents, and subcontractors) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Contractor maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Contractor's conflicting interest.

12. Rebates, Kickbacks, or Other Unlawful Consideration. Contractor warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

13. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

Operations and Utilities Director
520 Tracy Blvd.
Tracy, CA 95376

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Contractor:

Polydyne, Inc.
1 Chemical Plant Road
Riceboro, GA 31323

14. Miscellaneous.

14.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Contractor's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

14.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

14.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

14.4 Assignment and Delegation. Contractor may not assign, transfer or delegate this Agreement or any portion of it without the City's written consent. Any attempt to do so will be void. City's consent to one assignment shall not be deemed to be a consent to any subsequent assignment.

14.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

14.6 Compliance with the Law. Contractor shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

14.6.1 Hazardous Materials. Contractor is responsible for all costs of clean up and/or removal of hazardous and toxic substances spilled as a result of performing their services.

14.6.2 Non-discrimination. Contractor represents and warrants that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Contractor shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

14.7 Business Entity Status. Contractor is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Contractor. By entering into this Agreement, Contractor represents that it is not a suspended corporation. If Contractor is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

14.8 Business License. Before the City signs this Agreement, Contractor shall obtain a City of Tracy Business License. Contractor shall maintain an active City of Tracy Business License during the term of this Agreement.

14.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

14.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

14.11. Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

14.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's proposal (if any), the Exhibits shall control.

14.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations or agreements. All exhibits attached hereto are incorporated by reference herein.

15. Signatures. The individuals executing this Agreement on behalf of Contractor represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of Contractor.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

_____

By: Nancy D. Young
Title: Mayor
Date: _____

Attest:

_____

Adrianne Richardson, City Clerk

Approved as to form:

_____

Bijal M. Patel, City Attorney

Contractor
Polydyne, Inc., a Delaware Corporation

_____

By: Boyd Stanley
Title: Senior Vice President
Date: 04/27/2023

Federal Employer Tax ID No. 34-1810283

_____

By: Mark Schlag
Title: Chief Financial Officer
Date: 04/27/2023

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

Contractor shall provide the following chemicals as needed to the John Jones Water Treatment Plant and the Wastewater Treatment Plant. City will contact vendor via email or phone to coordinate deliveries as needed.

- Liquid Cationic Polymer (CLARIFLOC C-4420)
    - 80,000 lbs. to the John Jones Water Treatment Plant
- 30% Non-ionic Liquid Polyacrylamide (CLARIFLOC N-6310)
    - 14,000 lbs. to the John Jones Water Treatment Plant
- CLARIFLOC WE-114 Polymer (Or approved equal)
    - 85,000 lbs. to the Wastewater Treatment Plant
- CLARIFLOC WE-907 Polymer (Or approved equal)
    - 85,000 lbs. to the Wastewater Treatment Plant

EXHIBIT B - Compensation

Compensation is based upon the amount of chemical delivered (in pounds). The pricing is as follows:

- Liquid Cationic Polymer – CLARIFLOC C-4420
  - Price per pound delivered - $0.8600
- 30% Non-ionic Liquid Polyacrylamide – CLARIFLOC N-6310
  - Price per pound delivered - $1.6500
- CLARIFLOC WE-114 Polymer
  - $1.949 per lb.
- CLARIFLOC WE-907 Polymer
  - $2.003 per lb.

CITY OF TRACY
GENERAL SERVICES AGREEMENT WITH
Pioneer Americas, LLC, a wholly owned subsidiary of Olin Corporation

This General Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and Pioneer Americas, LLC, a wholly owned subsidiary of Olin Corporation (**Contractor**). City and Contractor are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Contractor to provide chemical delivery services to the John Jones Water Treatment Plant and Wastewater Treatment Plant; and

B. On February 23, 2023, the City issued a Request for Proposals (RFP) for Delivery of Chemicals 2023-2025 (**Project**). On March 10, 2023, Contractor submitted its proposal for the Project to the City. City has determined that Contractor possesses the skills, experience and certification required to provide the services.

C. After negotiations between the City and Contractor, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

D. This Agreement is being executed pursuant to Resolution No. 2023-____ approved by Tracy City Council on _____, 2023.

Now therefore, the Parties mutually agree as follows:

1. <u>Scope of Work</u>. Contractor shall perform the services described in Exhibit "A" attached and incorporated by reference. Contractor's Authorized Representative: Jason Cho.

2. <u>Time of Performance</u>. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Any services for which times for performance are not specified in this Agreement shall be started and completed by Contractor in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Contractor. Contractor shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The term of this Agreement shall begin on March 17, 2023 and end on February 28, 2025 unless terminated in accordance with Section 6. This Agreement may be extended for an additional one (1) year by the City Manager following a written determination that Contractor has satisfactorily met all the requirements of this Agreement and upon mutual agreement of both Parties.

3. <u>Compensation</u>. City shall pay Contractor on a time and expense basis, at the billing prices set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement the first annual term.

3.1 Not to Exceed Amount. Contractor's total compensation under this Agreement shall not exceed $2,500,000 annually. Contractor's billing rates shall cover all costs and expenses for Contractor's performance of this Agreement. Contractor's billing rates under this Agreement may be annually increased in April of each year at current documented market rates and upon mutual

agreement of both Parties . No work shall be performed by Contractor in excess of the total compensation amount provided in this section without the City's prior written approval.

3.2 Invoices. Contractor shall submit monthly invoices to the City that describe the services performed, including times, dates, and names of carriers performing the services.

3.2.1. Contractor's failure to submit invoices in accordance with these requirements may result in the City rejecting said invoices and thereby delaying payment to Contractor.

3.3 Payment. Within 30 days after the City's receipt of invoice, City shall make payment to the Contractor based upon the services described on the invoice and approved by the City.

4. <u>Indemnification</u>. Contractor shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Contractor's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence, or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees, and volunteers; "Contractor" means the Contractor, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

The provisions of this section survive completion of the services or the termination of this Agreement and are not limited by the provisions of Section 5 relating to insurance.

5. <u>Insurance</u>. Contractor shall, throughout the duration of this Agreement, maintain insurance to cover Contractor, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Pollution Liability Insurance

i. Pollution Coverage shall be provided for liability arising out of sudden, accidental, and gradual pollution and remediation. The policy limit shall be no less than two million dollars ($2,000,000) per claim. All activities contemplated in this agreement shall be specifically scheduled on the policy as "covered operations." The policy will be applicable to the work performed in the delivery of chemicals in accordance with the scope of this agreement.

ii. The policy shall be endorsed to include the City, its officers, employees, and agents as insureds.

5.5 Endorsements. Contractor shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Contractor's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Contractor shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Contractor shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Contractor shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Contractor shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City before the City signs this Agreement.

5.9 Substitute Certificates. Contractor shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Contractor's Obligation. Maintenance of insurance by the Contractor as specified in this Agreement shall in no way be interpreted as relieving the Contractor of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Contractor may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. Termination. The City may terminate this Agreement by giving thirty days' written notice to Contractor. Upon termination, Contractor shall give the City all original documents, including preliminary drafts and supporting documents, prepared by Contractor for this Agreement. The City shall pay Contractor for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given. The Contractor may terminate this agreement any time by giving ninety (90) days advance notice in writing.

7. Dispute Resolution. If any dispute arises between the City and Contractor that cannot be settled after engaging in good faith negotiations, City and Contractor agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall bear their individual costs in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8 Labor Code Compliance. Contractor is aware of the requirements of Chapter 1 of Part 7 of Division 2 of the California Labor Code and applicable regulations which require the payment of prevailing wage rates (§1771, §1774, and §1775); employment of apprentices (§1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. The services being performed under this Agreement are part of a "public

works" or "maintenance" project, as defined in the Prevailing Wage Laws, Contractor agrees to fully comply with such Prevailing Wage Laws.

8.1 Rates. These prevailing wage rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Each Contractor and Subcontractor must pay no less than the specified rates to all workers employed to perform the services described herein. The schedule of per diem wages is based upon a working day of eight hours. The rate for holiday and overtime work must be at least time and one-half. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the City harmless from any and all claims made by the State of California, the Department of Industrial Relations, any subcontractor, any worker, or any other third party.

8.2 Registration with DIR. Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform the services consistent with Labor Code section 1725.5.

8.3 Monitoring. This Agreement will be subject to compliance monitoring and enforcement by the DIR, under Labor Code section 1771.4.

9. Ownership of Work. All original documents prepared by Contractor for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Contractor's services, or upon demand from the City. No such documents shall be revealed or made available by Contractor to any third party without the City's prior written consent.

10. Independent Contractor Status. Contractor is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Contractor is not City's employee and Contractor shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Contractor is free to work for other entities while under contract with the City. Contractor, and its agents or employees, are not entitled to City benefits.

11. Conflicts of Interest. Contractor (including its employees, agents, and subcontractors) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Contractor maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Contractor's conflicting interest.

12. Rebates, Kickbacks, or Other Unlawful Consideration. Contractor warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

13. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

Operations and Utilities Director
520 Tracy Blvd.
Tracy, CA 95376

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Contractor:

Pioneer Americas, LLC
a wholly owned subsidiary of Olin Corporation
490 Stuart Road, NE
Cleveland, TN 37312

14. Miscellaneous.

14.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Contractor's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

14.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

14.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

14.4 Assignment and Delegation. Contractor may not assign, transfer, or delegate this Agreement or any portion of it without the City's written consent. Any attempt to do so will be void. City's consent to one assignment shall not be deemed to be a consent to any subsequent assignment.

14.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

14.6 Compliance with the Law. Contractor shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

14.6.1 Hazardous Materials. Contractor is responsible for all costs of clean up and/or removal of hazardous and toxic substances spilled as a result of performing their services.

14.6.2 Non-discrimination. Contractor represents and warrants that it is an equal opportunity employer, and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Contractor shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

14.7 Business Entity Status. Contractor is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Contractor. By entering into this Agreement, Contractor represents that it is not a suspended corporation. If Contractor is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

14.8 Business License. Before the City signs this Agreement, Contractor shall obtain a City of Tracy Business License. Contractor shall maintain an active City of Tracy Business License during the term of this Agreement.

14.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

14.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

14.11. Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

14.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's proposal (if any), the Exhibits shall control.

14.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations, or agreements. All exhibits attached hereto are incorporated by reference herein.

15. Signatures. The individuals executing this Agreement on behalf of Contractor represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of Contractor.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

_____

By: Nancy D. Young
Title: Mayor
Date: _____

Attest:

_____

Adrianne Richardson, City Clerk

Approved as to form:

_____

Bijal M. Patel, City Attorney

Contractor
Pioneer Americas LLC, a wholly owned subsidiary of Olin Corporation

_____

By: Linas S. Staskevicius
Title: Business Director
Date: May 10, 2023

Federal Employer Tax ID No.
06-1420850_____

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

Contractor shall provide the following chemicals as needed to the John Jones Water Treatment Plant and the Wastewater Treatment Plant. City shall notify vendor via email or phone to request delivery.

- 12.5% Liquid Sodium Hypochlorite
  - 175,000 gallons delivered to the John Jones Water Treatment Plant and Wastewater Treatment Plant
  - Minimum order quantity is 4,800 gals. per delivery.
  - Order lead times to be at least 72 hours prior to desired delivery times.

EXHIBIT B - Compensation

Compensation is based upon the amount of chemical delivered (min. 4,800 gals/delivery) with a not to exceed amount of $2,500,000 per year. The pricing is as follows:

- 12.5% Liquid Sodium Hypochlorite
  - John Jones Water Treatment Plant per gallon - $2.749
  - Wastewater Treatment Plant per gallon - $2.976 (includes sales tax)
  - Pricing beyond the initial annual term to be reviewed and negotiated annually and mutually agreed upon by both Parties.

CITY OF TRACY
GENERAL SERVICES AGREEMENT WITH
HASA, INC.

This General Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and Hasa, Inc., a California Corporation (**Contractor**). City and Contractor are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Contractor to provide chemical delivery services to the John Jones Water Treatment Plant and Wastewater Treatment Plant; and

B. On February 23, 2023, the City issued a Request for Proposals (RFP) for Delivery of Chemicals 2023-2025 (**Project**). On March 13, 2023, Contractor submitted its proposal for the Project to the City. City has determined that Contractor possesses the skills, experience and certification required to provide the services.

C. After negotiations between the City and Contractor, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

D. This Agreement is being executed pursuant to Resolution No. 2023-____ approved by Tracy City Council on _____, 2023.

Now therefore, the Parties mutually agree as follows:

1. Scope of Work. Contractor shall perform the services described in Exhibit "A" attached and incorporated by reference. The services shall be performed by, or under the direct supervision of, Contractor's Authorized Representative: Christopher Cornish. Contractor shall not replace its Authorized Representative, nor shall Contractor replace any of the personnel listed in Exhibit "A," nor shall Contractor use or replace any subcontractors or subconsultants, without City's prior written consent. A failure to obtain the City's prior written consent for any change or replacement in personnel or subcontractor may result in the termination of this Agreement.

2. Time of Performance. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Any services for which times for performance are not specified in this Agreement shall be started and completed by Contractor in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Contractor. Contractor shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The term of this Agreement shall begin on March 17, 2023 and end on June 30, 2025, unless terminated in accordance with Section 6. This Agreement may be extended for an additional one (1) year by the City Manager following a written determination that Contractor has satisfactorily met all the requirements of this Agreement.

3. Compensation. City shall pay Contractor on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Contractor's total compensation under this Agreement shall not exceed $100,000 annually. Contractor's billing rates shall cover all costs and expenses for Contractor's performance of this Agreement. Contractor's billing rates under this Agreement may be annually increased in January of each year by the lesser of 3% of the annual increase in the Cost-of-Living Index – All items, for the Sacramento Metropolitan Region. No work shall be performed by Contractor in excess of the total compensation amount provided in this section without the City's prior written approval.

3.2 Invoices. Contractor shall submit monthly invoices to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1. Contractor's failure to submit invoices in accordance with these requirements may result in the City rejecting said invoices and thereby delaying payment to Contractor.

3.3 Payment. Within 30 days after the City's receipt of invoice, City shall make payment to the Contractor based upon the services described on the invoice and approved by the City.

4. <u>Indemnification</u>. Contractor shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Contractor's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence, or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees, and volunteers; "Contractor" means the Contractor, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

The provisions of this section survive completion of the services or the termination of this Agreement and are not limited by the provisions of Section 5 relating to insurance.

5. <u>Insurance</u>. Contractor shall, throughout the duration of this Agreement, maintain insurance to cover Contractor, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Pollution Liability Insurance

i. Pollution Coverage shall be provided for liability arising out of sudden, accidental and gradual pollution and remediation. The policy limit shall be no less than two million dollars ($2,000,000) per claim. All activities contemplated in this agreement shall be specifically scheduled on the policy as "covered operations." The policy will be applicable to the work performed in the delivery of chemicals in accordance with the scope of this agreement.

ii. The policy shall be endorsed to include the City, its officers, employees, and agents as insureds.

5.5 Endorsements. Contractor shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Contractor's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Contractor shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Contractor shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Contractor shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Contractor shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City before the City signs this Agreement.

5.9 Substitute Certificates. Contractor shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Contractor's Obligation. Maintenance of insurance by the Contractor as specified in this Agreement shall in no way be interpreted as relieving the Contractor of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Contractor may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. Termination. The City may terminate this Agreement by giving ten days' written notice to Contractor. Upon termination, Contractor shall give the City all original documents, including preliminary drafts and supporting documents, prepared by Contractor for this Agreement. The City shall pay Contractor for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. Dispute Resolution. If any dispute arises between the City and Contractor that cannot be settled after engaging in good faith negotiations, City and Contractor agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8 Labor Code Compliance. Contractor is aware of the requirements of Chapter 1 of Part 7 of Division 2 of the California Labor Code and applicable regulations which require the payment of prevailing wage rates (§1771, §1774, and §1775); employment of apprentices (§1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. The services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, Contractor agrees to fully comply with such Prevailing Wage Laws.

8.1 Rates. These prevailing wage rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Each Contractor and Subcontractor must pay no less than the specified rates to all workers employed to perform the services described herein. The schedule of per diem wages is based upon a working day of eight hours. The rate for holiday and overtime work must be at least time and one-half. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the City harmless from any and all claims made by the State of California, the Department of Industrial Relations, any subcontractor, any worker, or any other third party.

8.2 Registration with DIR. Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform the services consistent with Labor Code section 1725.5.

8.3 Monitoring. This Agreement will be subject to compliance monitoring and enforcement by the DIR, under Labor Code section 1771.4.

9. Ownership of Work. All original documents prepared by Contractor for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Contractor's services, or upon demand from the City. No such documents shall be revealed or made available by Contractor to any third party without the City's prior written consent.

10. Independent Contractor Status. Contractor is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Contractor is not City's employee and Contractor shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Contractor is free to work for other entities while under contract with the City. Contractor, and its agents or employees, are not entitled to City benefits.

11. Conflicts of Interest. Contractor (including its employees, agents, and subcontractors) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Contractor maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Contractor's conflicting interest.

12. Rebates, Kickbacks, or Other Unlawful Consideration. Contractor warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

13. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

Operations and Utilities Director
520 Tracy Blvd.
Tracy, CA 95376

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Contractor:

Hasa, Inc.
23119 Drayton St.
Saugus, CA 91350

14. Miscellaneous.

14.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Contractor's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

14.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

14.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

14.4 Assignment and Delegation. Contractor may not assign, transfer, or delegate this Agreement or any portion of it without the City's written consent. Any attempt to do so will be void. City's consent to one assignment shall not be deemed to be a consent to any subsequent assignment.

14.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

14.6 Compliance with the Law. Contractor shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

14.6.1 Hazardous Materials. Contractor is responsible for all costs of clean up and/or removal of hazardous and toxic substances spilled as a result of performing their services.

14.6.2 Non-discrimination. Contractor represents and warrants that it is an equal opportunity employer, and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Contractor shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

14.7 Business Entity Status. Contractor is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Contractor. By entering into this Agreement, Contractor represents that it is not a suspended corporation. If Contractor is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

14.8 Business License. Before the City signs this Agreement, Contractor shall obtain a City of Tracy Business License. Contractor shall maintain an active City of Tracy Business License during the term of this Agreement.

14.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

14.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

14.11. Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

14.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's proposal (if any), the Exhibits shall control.

14.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations, or agreements. All exhibits attached hereto are incorporated by reference herein.

15. Signatures. The individuals executing this Agreement on behalf of Contractor represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of Contractor.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

By: Nancy D. Young
Title: Mayor
Date: _____

Attest:

_____
Adrianne Richardson, City Clerk

Approved as to form:

_____
Bijal M. Patel, City Attorney

Contractor
Hasa, Inc., a California Corporation

By: Chris Brink
Title: Chief Executive Officer
Date: May 11, 2023

Federal Employer Tax ID No. 95-2302297

Ken Ward
By: Ken Ward
Title: Chief Financial Officer
Date: May 12, 2023

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

Contractor shall provide the following chemicals as needed to the John Jones Water Treatment Plant and the Wastewater Treatment Plant. City will notify contractor via email or phone to inform of chemical needs.

- 12.5% Liquid Sodium Hypochlorite Mini Bulk
  - 60,000 gallons delivered to the John Jones Water Treatment Plant and Wastewater Treatment Plant

EXHIBIT B - Compensation

Compensation is based upon the amount of chemical delivered. The pricing is as follows:

- 12.5% Liquid Sodium Hypochlorite Mini Bulk
  - Price per gallon delivered - $3.29

Sterling
Water Technologies LLC

May 2, 2023

Attn: Carla Sorich, Executive Assistant
City of Tracy, CA
520 Tracy Blvd.
Tracy, CA 95376

Re: **Bid Number:**
Contract Title: Delivery of Chemicals 2023-2025
Bid Period: 3/1/2023 - 2/28/2025
Bid Date: March 13, 2023 @ 01:30 PM

Thank you for granting us the privilege of supplying your chemical requirements as per the enclosed contract. We appreciate your decision to award Sterling Water Technologies this business.

Submitted herein are the executed copies of the contract per your instructions.

When you require chemicals, please contact our Customer Service Department at (800) 426-2428. They will be happy to arrange delivery for you.

We look forward to enjoying a fine relationship with your organization and we thank you for your business. Our Chemical Application Specialist will be in contact with you during the course of the contract to discuss any further requirements you may have.

We welcome the responsibility of providing this vital environmental chemical for your use.

Sincerely,

Sterling Water Technologies
Bid Administration Department

Customer Service **800.426.2428** ▪ Phone **931.540.1334** ▪ Fax **931.540.1338**
P.O. Box 602 Columbia, TN 38402-0602 ▪ www.sterlingwatertech.com

CITY OF TRACY
GENERAL SERVICES AGREEMENT WITH
Sterling Water Technologies, LLC

This General Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and Sterling Water Technologies, LLC, a Limited Liability Company (**Contractor**). City and Contractor are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Contractor to provide chemical delivery services to the John Jones Water Treatment Plant and Wastewater Treatment Plant; and

B. On February 23, 2023, the City issued a Request for Proposals (RFP) for the Delivery of Chemicals 2023-2025 (**Project**). On March 6, 2023, Contractor submitted its proposal for the Project to the City. City has determined that Contractor possesses the skills, experience and certification required to provide the services.

C. After negotiations between the City and Contractor, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

D. This Agreement is being executed pursuant to Resolution No. 2023-____ approved by Tracy City Council on _____, 2023.

Now therefore, the Parties mutually agree as follows:

1. <u>Scope of Work</u>. Contractor shall perform the services described in Exhibit "A" attached and incorporated by reference. The services shall be performed by, or under the direct supervision of, Contractor's Authorized Representative: Meredith Haskin. Contractor shall not replace its Authorized Representative, nor shall Contractor replace any of the personnel listed in Exhibit "A," nor shall Contractor use or replace any subcontractors or subconsultants, without City's prior written consent. A failure to obtain the City's prior written consent for any change or replacement in personnel or subcontractor may result in the termination of this Agreement.

2. <u>Time of Performance</u>. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Contractor shall begin performance, and shall complete all required services no later than the dates set forth in Exhibit "A." Any services for which times for performance are not specified in this Agreement shall be started and completed by Contractor in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Contractor. Contractor shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The term of this Agreement shall begin on March 17, 2023 and end on February 28, 2025, unless terminated in accordance with Section 6. This Agreement may be extended for an additional one (1) year by the City Manager following a written determination that Contractor has satisfactorily met all the requirements of this Agreement and by mutual agreement of the parties. Sterling Water Technologies, LLC will enter into contract extensions only by mutual consent of both parties.

3. <u>Compensation</u>. City shall pay Contractor on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Contractor's total compensation under this Agreement shall not exceed $250,000 annually . Contractor's billing rates shall cover all costs and expenses for Contractor's performance of this Agreement. No work shall be performed by Contractor in excess of the total compensation amount provided in this section without the City's prior written approval.

3.2 Invoices. Contractor shall submit monthly invoices to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1. Contractor's failure to submit invoices in accordance with these requirements may result in the City rejecting said invoices and thereby delaying payment to Contractor.

3.3 Payment. Within 30 days after the City's receipt of invoice, City shall make payment to the Contractor based upon the services described on the invoice and approved by the City.

4. <u>Indemnification</u>. Contractor shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Contractor's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees and volunteers; "Contractor" means the Contractor, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

The provisions of this section survive completion of the services or the termination of this Agreement and are not limited by the provisions of Section 5 relating to insurance.

5. <u>Insurance</u>. Contractor shall, throughout the duration of this Agreement, maintain insurance to cover Contractor, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Pollution Liability Insurance

i. Pollution Coverage shall be provided for liability arising out of sudden, accidental and gradual pollution and remediation. The policy limit shall be no less than two million dollars ($2,000,000) per claim. All activities contemplated in this agreement shall be specifically scheduled on the policy as "covered operations." The policy will be applicable to the work performed in the delivery of chemicals in accordance with the scope of this agreement.

ii. The policy shall be endorsed to include the City, its officers, employees, and agents as insureds.

5.5 Endorsements. Contractor shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Contractor's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Contractor shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Contractor shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Contractor shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Contractor shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City, before the City signs this Agreement.

5.9 Substitute Certificates. Contractor shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Contractor's Obligation. Maintenance of insurance by the Contractor as specified in this Agreement shall in no way be interpreted as relieving the Contractor of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Contractor may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. Termination. The City may terminate this Agreement by giving ten days' written notice to Contractor. Upon termination, Contractor shall give the City all original documents, including preliminary drafts and supporting documents, prepared by Contractor for this Agreement. The City shall pay Contractor for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. Dispute Resolution. If any dispute arises between the City and Contractor that cannot be settled after engaging in good faith negotiations, City and Contractor agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8 Labor Code Compliance. Contractor is aware of the requirements of Chapter 1 of Part 7 of Division 2 of the California Labor Code and applicable regulations which require the payment of prevailing wage rates (§1771, §1774, and §1775); employment of apprentices (§1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. The services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, Contractor agrees to fully comply with such Prevailing Wage Laws.

8.1 Rates. These prevailing wage rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Each Contractor and Subcontractor must pay no less than the specified rates to all workers employed to perform the services described herein. The schedule of per diem wages is based upon a working day of eight hours. The rate for holiday and overtime work must be at least time and one-half. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the City harmless from any and all claims made by the State of California, the Department of Industrial Relations, any subcontractor, any worker, or any other third party.

8.2 Registration with DIR. Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform the services consistent with Labor Code section 1725.5.

8.3 Monitoring. This Agreement will be subject to compliance monitoring and enforcement by the DIR, under Labor Code section 1771.4.

9. Ownership of Work. All original documents prepared by Contractor for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Contractor's services, or upon demand from the City. No such documents shall be revealed or made available by Contractor to any third party without the City's prior written consent.

10. Independent Contractor Status. Contractor is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Contractor is not City's employee and Contractor shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Contractor is free to work for other entities while under contract with the City. Contractor, and its agents or employees, are not entitled to City benefits.

11. Conflicts of Interest. Contractor (including its employees, agents, and subcontractors) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Contractor maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Contractor's conflicting interest.

12. Rebates, Kickbacks, or Other Unlawful Consideration. Contractor warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

13. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

Director of Operations and Utilities
James A. Jackson
520 Tracy Blvd.
Tracy, CA 95376

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Contractor:

Sterling Water Technologies, LLC
P.O. Box 602
Columbia, TN 38402-0602

14. Miscellaneous.

14.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Contractor's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

14.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

14.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

14.4 Assignment and Delegation. Contractor may not assign, transfer or delegate this Agreement or any portion of it without the City's written consent. Any attempt to do so will be void. City's consent to one assignment shall not be deemed to be a consent to any subsequent assignment.

14.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

14.6 Compliance with the Law. Contractor shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

14.6.1 Hazardous Materials. Contractor is responsible for all costs of clean up and/or removal of hazardous and toxic substances spilled as a result of performing their services.

14.6.2 Non-discrimination. Contractor represents and warrants that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Contractor shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

14.7 Business Entity Status. Contractor is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Contractor. By entering into this Agreement, Contractor represents that it is not a suspended corporation. If Contractor is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

14.8 Business License. Before the City signs this Agreement, Contractor shall obtain a City of Tracy Business License. Contractor shall maintain an active City of Tracy Business License during the term of this Agreement.

14.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

14.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

14.11. Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

14.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's proposal (if any), the Exhibits shall control.

14.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations, or agreements. All exhibits attached hereto are incorporated by reference herein.

15. Signatures. The individuals executing this Agreement on behalf of Contractor represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of Contractor.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

_____

By: Nancy D. Young
Title: Mayor
Date: _____

Attest:

_____

Adrianne Richardson, City Clerk

Approved as to form:

_____

Bijal M. Patel, City Attorney

Contractor

Sterling Water Technologies, LLC, a Limited Liability Company

_____

By: Thomas H. Coyne
Title: President / CEO
Date: 5/02/2023

Federal Employer Tax ID No. 23-0497800

Sterling Water Technologies LLC
P.O. Box 602
Columbia, TN 38402-0602
Phone: (931) 540-1334

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

Contractor shall provide the following chemicals as needed to the John Jones Water Treatment Plant. City will notify via email or phone to schedule delivery. Chemicals will be delivered within 7-10 business days for packaged delivery and 10-14 business days for bulk product delivery.

- Blended Liquefied Phosphate
    - 80,000 lbs. to the John Jones Water Treatment Plant

EXHIBIT B - Compensation

Compensation is based upon the amount of chemical delivered (in pounds) and shall not exceed $250,000 per year. The pricing is as follows:

- Blended Liquefied Phosphate
  - $1.16 per lb.

CITY OF TRACY
GENERAL SERVICES AGREEMENT WITH
THATCHER COMPANY OF CALIFORNIA, INC.

This General Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and Thatcher Company of California, Inc., a California Corporation (**Contractor**). City and Contractor are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Contractor to provide chemical delivery services to the John Jones Water Treatment Plant and Wastewater Treatment Plant; and

B. On February 23, 2023, the City issued a Request for Proposals (RFP) for Delivery of Chemicals 2023-2025 (**Project**). On March 8, 2023, Contractor submitted its proposal for the Project to the City. City has determined that Contractor possesses the skills, experience and certification required to provide the services.

C. After negotiations between the City and Contractor, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

D. This Agreement is being executed pursuant to Resolution No. 2023-____ approved by Tracy City Council on _____, 2023.

Now therefore, the Parties mutually agree as follows:

1. <u>Scope of Work</u>. Contractor shall perform the services described in Exhibit "A" attached and incorporated by reference. The services shall be performed by, or under the direct supervision of, Contractor's Authorized Representative: _____. Contractor shall not replace its Authorized Representative, nor shall Contractor replace any of the personnel listed in Exhibit "A," nor shall Contractor use or replace any subcontractors or subconsultants, without City's prior written consent. A failure to obtain the City's prior written consent for any change or replacement in personnel or subcontractor may result in the termination of this Agreement.

2. <u>Time of Performance</u>. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Any services for which times for performance are not specified in this Agreement shall be started and completed by Contractor in a reasonably prompt and timely manner based upon the circumstances and direction communicated to the Contractor. Contractor shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The term of this Agreement shall begin on March 17, 2023 and end on February 28, 2025, unless terminated in accordance with Section 6. This Agreement may be extended for an additional one (1) year by the Operations and Utilities Director following a written determination that Contractor has satisfactorily met all the requirements of this Agreement.

3. <u>Compensation</u>. City shall pay Contractor on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Contractor's total compensation under this Agreement shall not exceed $1,500,000 annually. Contractor's billing rates shall cover all costs and expenses for Contractor's performance of this Agreement. Contractor's billing rates under this Agreement may be annually increased in January of each year by the lesser of 3% of the annual increase in the Cost-of-Living Index – All items, for the Sacramento Metropolitan Region. No work shall be performed by Contractor in excess of the total compensation amount provided in this section without the City's prior written approval.

3.2 Invoices. Contractor shall submit monthly invoices to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1. Contractor's failure to submit invoices in accordance with these requirements may result in the City rejecting said invoices and thereby delaying payment to Contractor.

3.3 Payment. Within 30 days after the City's receipt of invoice, City shall make payment to the Contractor based upon the services described on the invoice and approved by the City.

4. <u>Indemnification</u>. Contractor shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Contractor's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence, or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees, and volunteers; "Contractor" means the Contractor, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

The provisions of this section survive completion of the services or the termination of this Agreement and are not limited by the provisions of Section 5 relating to insurance.

5. <u>Insurance</u>. Contractor shall, throughout the duration of this Agreement, maintain insurance to cover Contractor, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Pollution Liability Insurance

i. Pollution Coverage shall be provided for liability arising out of sudden, accidental, and gradual pollution and remediation. The policy limit shall be no less than two million dollars (42,000,000) per claim. All activities contemplated in this agreement shall be specifically scheduled on the policy as "covered operations." The policy will be applicable to the work performed in the delivery of chemicals in accordance with the scope of this agreement.

ii. The policy shall be endorsed to include the City, its officers, employees, and agents as insureds.

5.5 Endorsements. Contractor shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Contractor's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Contractor shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Contractor shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Contractor shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Contractor shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City before the City signs this Agreement.

5.9 Substitute Certificates. Contractor shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Contractor's Obligation. Maintenance of insurance by the Contractor as specified in this Agreement shall in no way be interpreted as relieving the Contractor of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Contractor may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. <u>Termination</u>. The City may terminate this Agreement by giving ten days' written notice to Contractor. Upon termination, Contractor shall give the City all original documents, including preliminary drafts and supporting documents, prepared by Contractor for this Agreement. The City shall pay Contractor for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. <u>Dispute Resolution</u>. If any dispute arises between the City and Contractor that cannot be settled after engaging in good faith negotiations, City and Contractor agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8 Labor Code Compliance. Contractor is aware of the requirements of Chapter 1 of Part 7 of Division 2 of the California Labor Code and applicable regulations which require the payment of prevailing wage rates (§1771, §1774, and §1775); employment of apprentices (§1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. The services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, Contractor agrees to fully comply with such Prevailing Wage Laws.

8.1 Rates. These prevailing wage rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Each Contractor and Subcontractor must pay no less than the specified rates to all workers employed to perform the services described herein. The schedule of per diem wages is based upon a working day of eight hours. The rate for holiday and overtime work must be at least time and one-half. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the City harmless from any and all claims made by the State of California, the Department of Industrial Relations, any subcontractor, any worker, or any other third party.

8.2 Registration with DIR. Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform the services consistent with Labor Code section 1725.5.

8.3 Monitoring. This Agreement will be subject to compliance monitoring and enforcement by the DIR, under Labor Code section 1771.4.

9. Ownership of Work. All original documents prepared by Contractor for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Contractor's services, or upon demand from the City. No such documents shall be revealed or made available by Contractor to any third party without the City's prior written consent.

10. Independent Contractor Status. Contractor is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Contractor is not City's employee and Contractor shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Contractor is free to work for other entities while under contract with the City. Contractor, and its agents or employees, are not entitled to City benefits.

11. Conflicts of Interest. Contractor (including its employees, agents, and subcontractors) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Contractor maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Contractor's conflicting interest.

12. Rebates, Kickbacks, or Other Unlawful Consideration. Contractor warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

13. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:

Operations and Utilities Director
520 Tracy Blvd.
Tracy, CA 95376

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Contractor:

Thatcher Company of California, Inc.
P.O. Box 27407
Salt Lake City, UT 84127-0407
Attn: Craig N. Thatcher
Chief Executive Officer

14. Miscellaneous.

14.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Contractor's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

14.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

14.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

14.4 Assignment and Delegation. Contractor may not assign, transfer, or delegate this Agreement or any portion of it without the City's written consent. Any attempt to do so will be void. City's consent to one assignment shall not be deemed to be a consent to any subsequent assignment.

14.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

14.6 Compliance with the Law. Contractor shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

14.6.1 Hazardous Materials. Contractor is responsible for all costs of clean up and/or removal of hazardous and toxic substances spilled as a result of performing their services.

14.6.2 Non-discrimination. Contractor represents and warrants that it is an equal opportunity employer, and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Contractor shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

14.7 Business Entity Status. Contractor is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Contractor. By entering into this Agreement, Contractor represents that it is not a suspended corporation. If Contractor is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

14.8 Business License. Before the City signs this Agreement, Contractor shall obtain a City of Tracy Business License. Contractor shall maintain an active City of Tracy Business License during the term of this Agreement.

14.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

14.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

14.11. **Severability.** If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

14.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's proposal (if any), the Exhibits shall control.

14.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations, or agreements. All exhibits attached hereto are incorporated by reference herein.

15. Signatures. The individuals executing this Agreement on behalf of Contractor represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of Contractor.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

_____

By: Nancy D. Young
Title: Mayor
Date: _____

Attest:

_____

Adrianne Richardson, City Clerk

Approved as to form:

_____

Bijal M. Patel, City Attorney

Contractor
Thatcher Company of California, Inc., a California Corporation

_____

By: Craig N. Thatcher
Title: Chief Executive Officer
Date: May 2, 2023

Federal Employer Tax ID No. 95-2944197

_____

By: Michael T. Mitchell
Title: President
Date: May 2, 2023

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

Contractor shall provide the following chemicals as needed to the John Jones Water Treatment Plant and the Wastewater Treatment Plant. City will notify contractor via email or phone to schedule delivery.

- Liquid Alum
    - 600 tons delivered to the John Jones Water Treatment Plant

- Sodium Bisulfite (25%)
    - 50,000 gallons delivered to the Wastewater Treatment Plant

- Sodium Bisulfite (40%)
    - 35,000 gallons delivered to the Wastewater Treatment Plant

EXHIBIT B - Compensation

Compensation is based upon the amount of chemical delivered. The pricing is as follows:

- Liquid Alum
  - Price per dry short ton delivered - $357.00

- Sodium Bisulfite (25%)
  - Price per pound delivered - $0.1810

- Sodium Bisulfite (40%)
  - Price per pound delivered - $0.2130

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. 2023- ____

APPROVING A GENERAL SERVICES AGREEMENT WITH HILL BROTHERS CHEMICAL COMPANY TO SUPPLY AND DELIVER CERTAIN CHEMICALS NECESSARY IN THE TREATMENT PROCESS OF WATER AND WASTEWATER WITH A TWO (2) YEAR INITIAL TERM, AN ADMINISTRATIVE OPTION FOR A ONE (1) YEAR EXTENSION, AND A NOT TO EXCEED AMOUNT OF $250,000 ANNUALLY

WHEREAS, the City of Tracy John Jones Water Treatment Plant, Wastewater Treatment Plant, water production wells, and water reservoirs require supply and delivery of certain chemicals to comply with Federal and State Standards and permitting; and

WHEREAS, every two to three years the City conducts a request for proposals to obtain competitive rates for the services the City seeks to obtain from Hill Brothers Chemical Company, including the supply and delivery of certain chemicals necessary for the City's water and wastewater treatment process ("Services"); and

WHEREAS, on February 2, 2023, staff followed established procedures, in accordance with Tracy Municipal Code, Section 2.20.140, and conducted a onetime Request for Proposal (RFP) to solicit experienced and qualified vendors to provide the Services and competitive rates to supply and deliver the various chemicals used in disinfection and treatment of both water and wastewater; and

WHEREAS, proposers had the ability to select which of the chemicals they were interested in providing along with the price and unit costs associated with those chemicals, and

WHEREAS, on March 13, 2023, staff completed an extensive review of the eleven (11) proposals received based on the proposers; qualifications, competence, price for the Services, overall responsibility, and content of the proposal; and

WHEREAS, six (6) qualified proposers were selected based on their competitive rates, responsibility, professional qualifications, competence, overall responsibility, and ability to deliver the required chemicals and Services. Hill Brothers Chemical Company was one of the six (6) selected proposers; and

WHEREAS, the City seeks to enter into a General Services Agreement with Hill Brothers Chemical Company for the provision of the Services. The City will utilize these goods and services on an "as-needed basis" and staff will follow the City's purchasing policy, returning to Council, if necessary.

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it,

FURTHER RESOLVED: That the City Council of the City of Tracy hereby approves a General Services Agreement with Hill Brothers Chemical Company, which includes an initial two (2) year term, an extension option, and a not to exceed amount of $250,000 annually (total not to exceed amount of $750,000) to provide the Services on an "as-needed" basis. After review and approval by the City Attorney's Office, the City Authorizes the execution of the Agreement and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy hereby authorizes the City Manager to execute a one (1) year extension to the Agreement, if the City Manager makes a written determination that Hill Brothers Chemical Company has satisfactorily met all of the requirements of its agreement with the City.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. 2023- ____

APPROVING A GENERAL SERVICES AGREEMENT WITH POLYDYNE, INC. TO SUPPLY AND DELIVER CERTAIN CHEMICALS NECESSARY IN THE TREATMENT PROCESS OF WATER AND WASTEWATER WITH A TWO (2) YEAR INITIAL TERM, AN ADMINISTRATIVE OPTION FOR A ONE (1) YEAR EXTENSION, AND A NOT TO EXCEED AMOUNT OF $1,500,000

WHEREAS, the City of Tracy John Jones Water Treatment Plant, Wastewater Treatment Plant, water production wells, and water reservoirs require supply and delivery of certain chemicals to comply with Federal and State Standards and permitting; and

WHEREAS, every two to three years the City conducts a request for proposals to obtain competitive rates for the services the City seeks to obtain from Polydyne, Inc., including the supply and delivery of certain chemicals necessary for the City's water and wastewater treatment process ("Services"); and

WHEREAS, on February 2, 2023, staff followed established procedures, in accordance with Tracy Municipal Code, Section 2.20.140, and conducted a onetime Request for Proposal (RFP) to solicit experienced and qualified vendors to provide the Services and competitive rates to supply and deliver the various chemicals used in disinfection and treatment of both water and wastewater; and

WHEREAS, proposers had the ability to select which of the chemicals they were interested in providing along with the price and unit costs associated with those chemicals, and

WHEREAS, on March 13, 2023, staff completed an extensive review of the eleven (11) proposals received based on the proposers' qualifications, competence, price for the Services, overall responsibility and content of the proposal; and

WHEREAS, six (6) qualified proposers were selected based on their competitive rates, responsibility, professional qualifications, competence, overall responsibility, and ability to deliver the required chemicals and Services. Polydyne, Inc. was one of the six (6) selected proposers, and

WHEREAS, the City seeks to enter into a General Services Agreement with Polydyne, Inc. for the provision of the Services. The City will utilize these goods and services on an "as-needed basis" and staff will follow the City's purchasing policy, returning to Council, if necessary.

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it,

FURTHER RESOLVED: That the City Council of the City of Tracy hereby approves the General Services Agreement with Polydyne, Inc., which includes an initial two (2) year term, an extension option, and a not to exceed amount of $1,500,000 annually (total not to exceed amount of $4,500,000) to provide the Services on an "as-needed" basis. After review and approval by the City Attorney's Office, the City authorizes the execution of the Agreement and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy hereby authorizes the City Manager to execute a one (1) year extension to the Agreement, if the City Manager makes a written determination that Polydyne, Inc. has satisfactorily met all the requirements of its agreement with the City.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. 2023- ____

APPROVING A GENERAL SERVICES AGREEMENT WITH PIONEER AMERICAS, LLC TO SUPPLY AND DELIVER CERTAIN CHEMICALS NECESSARY IN THE TREATMENT PROCESS OF WATER AND WASTEWATER WITH A TWO (2) YEAR INITIAL TERM, AN ADMINISTRATIVE OPTION FOR A ONE (1) YEAR EXTENSION, AND A NOT TO EXCEED AMOUNT OF $2,500,000 ANNUALLY

WHEREAS, the City of Tracy John Jones Water Treatment Plant, Wastewater Treatment Plant, water production wells, and water reservoirs require supply and delivery of certain chemicals to comply with Federal and State Standards and permitting; and

WHEREAS, every two to three years the City conducts a request for proposals to obtain competitive rates for the services the City seeks to obtain from Pioneer Americas, LLC, including the supply and delivery of certain chemicals necessary for the City's water and wastewater treatment process ("Services"); and

WHEREAS, on February 2, 2023, staff followed established procedures, in accordance with Tracy Municipal Code, Section 2.20.140, and conducted a onetime Request for Proposal (RFP) to solicit experienced and qualified vendors to provide the Services and competitive rates to supply and deliver the various chemicals used in disinfection and treatment of both water and wastewater; and

WHEREAS, proposers had the ability to select which of the chemicals they were interested in providing along with the price and unit costs associated with those chemicals, and

WHEREAS, on March 13, 2023, staff completed an extensive review of the eleven (11) proposals received based on the proposers' qualifications, competence, price for the Services, overall responsibility and content of the proposal; and

WHEREAS, six (6) qualified proposers were selected based on their competitive rates, responsibility, professional qualifications, competence, overall responsibility, and ability to deliver the required chemicals and Services. Pioneer Americas, LLC was one of the six (6) selected proposers, and

WHEREAS, the City seeks to enter into a General Services Agreement with Pioneer Americas, LLC for the provision of the Services. The City will utilize these goods and services on an "as-needed basis" and staff will follow the City's purchasing policy, returning to Council, if necessary.

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it,

RESOLVED: That the City Council of the City of Tracy hereby approves the General Services Agreement with Pioneer Americas, LLC, which includes an initial two (2) year term , an extension option, and a not to exceed amount of $2,500,000 annually (total not to exceed amount of $7,500,000) to provide the Services on an "as-needed" basis. After review and approval by the City Attorney's Office, the City authorizes the execution of the Agreement and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy hereby authorizes the City Manager to execute a one (1) year extension to the Agreement, if the City Manager makes a written determination that Pioneer Americas, LLC has satisfactorily met all the requirements of its agreement with the City.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023 by the following vote:

AYES:	COUNCIL MEMBERS:
NOES:	COUNCIL MEMBERS:
ABSENT:	COUNCIL MEMBERS:
ABSTENTION:	COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. 2023- ____

APPROVING A GENERAL SERVICES AGREEMENT WITH HASA INC. TO SUPPLY AND DELIVER CERTAIN CHEMICALS NECESSARY IN THE TREATMENT PROCESS OF WATER AND WASTEWATER WITH A TWO (2) YEAR INITIAL TERM, AN ADMINISTRATIVE OPTION FOR A ONE (1) YEAR EXTENSION, AND A NOT TO EXCEED AMOUNT OF $100,000 ANNUALLY.

WHEREAS, the City of Tracy John Jones Water Treatment Plant, Wastewater Treatment Plant, water production wells, and water reservoirs require supply and delivery of certain chemicals to comply with Federal and State Standards and permitting; and

WHEREAS, every two to three years the City conducts a request for proposals to obtain competitive rates for the services the City seeks to obtain from HASA Inc. including the supply and delivery of certain chemicals necessary for the City's water and wastewater treatment process ("Services"); and

WHEREAS, on February 2, 2023, staff followed established procedures, in accordance with Tracy Municipal Code, Section 2.20.140, and conducted a onetime Request for Proposal (RFP) to solicit experienced and qualified vendors to provide the Services and competitive rates to supply and deliver the various chemicals used in disinfection and treatment of both water and wastewater; and

WHEREAS, proposers had the ability to select which of the chemicals they were interested in providing along with the price and unit costs associated with those chemicals, and

WHEREAS, on March 13, 2023, staff completed an extensive review of the eleven (11) proposals received based on the proposers' qualifications, competence, price for the Services, overall responsibility, and content of the proposal; and

WHEREAS, six (6) qualified proposers were selected based on their competitive rates, responsibility, professional qualifications, competence, overall responsibility, and ability to deliver the required chemicals and Services. HASA, Inc.was one of the six (6) selected proposers; and

WHEREAS, the City seeks to enter into a General Services Agreement with HASA, Inc. for the provision of the Services. The City will utilize these goods and services on an "as-needed basis" and staff will follow the City's purchasing policy, returning to Council, if necessary.

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it,

FURTHER RESOLVED: That the City Council of the City of Tracy hereby approves the General Services Agreement with HASA, Inc., which includes an initial two (2) year term, an extension option, and a not to exceed amount of $100,000 annually (total not to exceed amount of $300,000) to provide the Services on an "as-needed" basis. After review and approval by the City Attorney's Office, the City authorizes the execution of the Agreement and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy hereby authorizes the City Manager to execute a one (1) year extension to the Agreement, if the City Manager makes a written determination that HASA, Inc. has satisfactorily met all the requirements of its agreement with the City.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. 2023- ____

APPROVING A GENERAL SERVICES AGREEMENT WITH STERLING WATER TECHNOLOGIES, LLC TO SUPPLY AND DELIVER CERTAIN CHEMICALS NECESSARY IN THE TREATMENT PROCESS OF WATER AND WASTEWATER WITH A TWO (2) YEAR TERM, AN ADMINISTRATIVE OPTION FOR A ONE (1) YEAR EXTENSION, AND A NOT TO EXCEED AMOUNT OF $250,000 ANNUALLY

WHEREAS, the City of Tracy John Jones Water Treatment Plant, Wastewater Treatment Plant, water production wells, and water reservoirs require supply and delivery of certain chemicals to comply with Federal and State Standards and permitting; and

WHEREAS, every two to three years the City conducts a request for proposals to obtain competitive rates for the services the City seeks to obtain from Sterling Water Technologies, LLC, including the supply and delivery of certain chemicals necessary for the City's water and wastewater treatment process ("Services"); and

WHEREAS, on February 2, 2023, staff followed established procedures, in accordance with Tracy Municipal Code, Section 2.20.140, and conducted a onetime Request for Proposal (RFP) to solicit experienced and qualified vendors to provide the Services and competitive rates to supply and deliver the various chemicals used in disinfection and treatment of both water and wastewater; and

WHEREAS, proposers had the ability to select which of the chemicals they were interested in providing along with the price and unit costs associated with those chemicals, and

WHEREAS, on March 13, 2023, staff completed an extensive review of the eleven (11) proposals received based on the proposers' qualifications, competence, price for the Services, overall responsibility, and content of the proposal; and

WHEREAS, six (6) qualified proposers were selected based on their competitive rates, responsibility, professional qualifications, competence, overall responsibility, and ability to deliver the required chemicals and services. Sterling Water Technologies, LLC. was one of the six (6) selected proposers; and

WHEREAS, the City seeks to enter into a General Services Agreement with Sterling Water Technologies, LLC. for the provision of the Services. The City will utilize these goods and services on an "as-needed basis" and staff will follow the City's purchasing policy, returning to Council, if necessary.

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct, and be it,

FURTHER RESOLVED: That the City Council of the City of Tracy hereby approves the General Services Agreement with Sterling Water Technologies, LLC., which includes an initial two (2) year term, an extension option, and a not to exceed amount of $250,000 annually (total not to exceed amount of $750,000) to provide the Services on an "as-needed" basis. After review and approval by the City Attorney's Office, the City authorizes the execution of the Agreement and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy hereby authorizes the City Manager to execute a one-year extension to the Agreement, if the City Manager makes a written determination that Sterling Water Technologies, LLC. has satisfactorily met all the requirements of its agreement with the City.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. 2023- ____

APPROVING A GENERAL SERVICES AGREEMENT WITH THATCHER COMPANY OF CALIFORNIA, INC. TO SUPPLY AND DELIVER CERTAIN CHEMICALS NECESSARY IN THE TREATMENT PROCESS OF WATER AND WASTEWATER WITH A TWO (2) YEAR INITIAL TERM, WITH AN ADMINISTRATIVE OPTION FOR A ONE (1) YEAR EXTENSION, AND A NOT TO EXCEED AMOUNT OF $100,000 ANNUALLY

WHEREAS, the City of Tracy John Jones Water Treatment Plant, Wastewater Treatment Plant, water production wells, and water reservoirs require supply and delivery of certain chemicals to comply with Federal and State Standards and permitting; and

WHEREAS, every two to three years the City conducts a request for proposals to obtain competitive rates for the services the City seeks to obtain from Thatcher Company of California, Inc. including the supply and delivery of certain chemicals necessary for the City's water and wastewater treatment process ("Services"); and

WHEREAS, on February 2, 2023, staff followed established procedures, in accordance with Tracy Municipal Code, Section 2.20.140, and conducted a onetime Request for Proposal (RFP) to solicit experienced and qualified vendors to provide the Services and competitive rates to supply and deliver the various chemicals used in disinfection and treatment of both water and wastewater; and

WHEREAS, proposers had the ability to select which of the chemicals they were interested in providing along with the price and unit costs associated with those chemicals, and

WHEREAS, on March 13, 2023, staff completed an extensive review of the eleven (11) proposals received based on the proposers' qualifications, competence, price for the Services, overall responsibility, and content of the proposal; and

WHEREAS, six (6) qualified proposers were selected based on their competitive rates, responsibility, professional qualifications, competence, overall responsibility, and ability to deliver the required chemicals and Services. Thatcher Company of California, Inc. was one of the six (6) selected proposers; and

WHEREAS, the City seeks to enter into a General Services Agreement with Thatcher Company of California Inc. for the provision of the Services. The City will utilize these goods and services on an "as-needed basis" and staff will follow the City's purchasing policy, returning to Council, if necessary.

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it,

FURTHER RESOLVED: That the City Council of the City of Tracy hereby approves the General Services Agreement with Thatcher Company of California Inc., which includes an initial two (2) year term, an extension option, and a not to exceed amount of $1,500,000 annually (total not to exceed amount of $4,500,000) to provide the Services on an "as-needed" basis. After review and approval by the City Attorney's Office, the City authorizes the execution of the Agreement and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution; and be it

FURTHER RESOLVED: That the City Council of the City of Tracy hereby authorizes the City Manager to execute a one (1) year extension to the Agreement, if the City Manager makes a written determination that Thatcher Company of California, Inc. has satisfactorily met all of the requirements of its agreement with the City.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.R

RECOMMENDATION

Staff recommends that the City Council 1) authorize the purchase of three (3) 29-foot low floor buses for Tracer fixed route service for a total of $2,175,000 from Gillig, LLC through the California Association for Coordinated Transportation/Morongo Basin Transit Authority Purchasing Cooperative Contract #18-01, pursuant to Tracy Municipal Code section 2.20.210; 2) approve a contingency amount of $75,000 for change orders necessary resulting during production; and 3) appropriate an additional $250,000 to Capital Improvement Project 77590 for the additional costs.

EXECUTIVE SUMMARY

The City of Tracy (City) Tracer bus service is in the process of expanding its service area. In order to effectively provide service to the community, additional vehicles are needed, in part, to ensure a sufficient number of spare vehicles are available. The City has a Capital Improvement Project for this effort (CIP 77590).

Staff is seeking to purchase three buses by entering into a cooperative purchasing agreement with the California Association for Coordinated Transportation/Morongo Basin Transit Authority Purchasing Cooperative (CALACT/MBTA) to purchase from their contract with Gillig, LLC (Gillig) of Livermore, California (Contract #18-01). The City Council appropriated this purchase in the FY 2023/2024 CIP budget with grant funding received through the Federal Transit Administration (FTA), California Department of Transportation (Caltrans), and the Transportation Development Act (TDA). As this funding is slightly short of the needed funds, staff is asking the City Council to appropriate an additional $250,000 to CIP 77590 for the additional costs.

BACKGROUND AND LEGISLATIVE HISTORY

As the City's Tracer public transit services expand, there is a need to purchase additional buses in order to provide the necessary service efficiently and effectively for the community.

Local government agencies are allowed to complete purchases using another agency's purchasing contract, a process known as "piggy-backing." Generally, smaller agencies piggy-back on contracts awarded by larger "host" agencies, allowing the smaller agencies to save time, competitive prices, and terms than smaller agencies may be able to obtain on their own. This form of procurement is allowable as defined in the FTA Circular 4220.1F wherein grantees may assign contractual rights to purchase goods and services to other grantees if the original contract contains appropriate assignability provisions.

Under the Tracy Municipal Code (TMC), section 2.20.220, the City is authorized to enter into cooperative purchasing agreements with other public agencies. 2.20.220 provides:

> "Nothing in this article prohibits the voluntary participation by the City in any cooperative purchasing agreement(s) or programs entered into between the City and another public agency. The City Manager is authorized to act under the provisions of this article to

> procure for the City general services, supplies or equipment in conjunction with such voluntary cooperative purchasing agreement(s) or programs as may be entered into by the City. All formal contract and bidding procedures to be followed in such cases shall be those specifically enumerated in the voluntary cooperative purchasing agreement or program."

The City has utilized this procurement process in all previous bus purchases.

ANALYSIS

This City of Tracy's Tracer transit system operates fixed route, paratransit, and on-demand services. Staff is seeking to purchase from the CALACT/MBTA Purchasing Cooperative, attached as Exhibit A, three heavy duty buses, which have a useful life of fourteen years, for service on the fixed route system. The expansion of additional service areas throughout Tracy have reduced the spare bus levels and additional buses are needed to ensure that service continuity can be achieved. The new buses will match existing vehicles currently in use on the fixed route system.

As stated above, the TMC Chapter 2.20 Contracts and Purchasing allows the City to voluntarily participate in any cooperative purchasing agreements with other public agencies. The CALACT/MBTA Purchasing Cooperative has entered into a contract with Gillig of Livermore, California, for the purchase of fixed route buses and said contract allows for other federal, state, county and local entities to purchase from the contract under the terms and conditions.

The quote based on the contract pricing for one Gillig Low Floor 29-foot diesel bus with the options recommended to the City will be $725,000. The total base price for all three buses will be $2,175,000. Staff is also asking that a contingency amount of $25,000 per bus, for a total of $75,000, be added to address any potential changes that may arise during the production and procurement process. There will be other costs after the new vehicles arrive such as license and registration fees, radio installation, and TRACER signage that are not included in this quote but will be funded through the contingency amount as needed. The total requested amount for all three buses, including the contingency, is $2,250,000. The current CIP for this purchase, CIP 77590, has $2,000,000 approved as part of the FY 23/24 budget. Staff is also requesting an additional appropriation of $250,000 to CIP 77590 to cover the additional costs.

The new buses will match the styling of the existing fixed route Gillig buses that have been in service since 2017. These buses will be 29 feet long, with low floors for easier ADA access, and use diesel fuel. They will have additional wheelchair securements to allow additional ADA passengers to ride without having to put another bus in service. It will take approximately 12 months from the time of order until the buses are in service.

FISCAL IMPACT

Funding for the purchase of the buses is budgeted in Capital Improvement Project (CIP) 77590. CIP 77590 has a total project of $2,000,000. The quoted base price for four buses will be $2,175,000. By adding in a contingency amount of $75,000 ($25,000 per bus) to address any changes that may arise during the production process, the total requested amount for all four buses, including the contingency, is $2,250,000. Staff is requesting an additional $250,000 be appropriated to CIP 77590 to cover the additional costs. All costs for the bus purchase will be

funded through a combination of FTA, Caltrans, and TDA funds.

STRATEGIC PLAN

This agenda item is a routine operational item and does not relate to the Council's Strategic Plans.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council 1) authorize the purchase of three (3) 29-foot low floor buses for Tracer fixed route service for a total of $2,175,000 from Gillig, LLC through the California Association for Coordinated Transportation/Morongo Basin Transit Authority Purchasing Cooperative Contract #18-01, pursuant to Tracy Municipal Code section 2.20.210; 2) approve a contingency amount of $75,000 for change orders necessary resulting during production; and 3) appropriate and additional $250,000 to Capital Improvement Project 77590 for the additional costs

Prepared by: Ed Lovell, Transit Manager

Reviewed by: Adriana Castañeda, Mobility & Housing Director
Sara Cowell, Finance Director
Bijal Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

Attachments:
Exhibit A – MBTA Contract #18-01

MBTA CONTRACT # 18-01 GILLIG

AGREEMENT REGARDING PURCHASE OF TRANSIT VEHICLES.

THIS AGREEMENT is made and entered into on **April 5, 2019** between and among **GILLIG LLC**, a California company, with its principal place of business located at 451 Discovery Drive, Livermore, California 94551 ("SELLER"), and **MORONGO BASIN TRANSIT AUTHORITY** ("MBTA"). SELLER and MBTA may be referred to herein individually as "Party" or collectively as "Parties."

RECITALS

WHEREAS, MBTA, by its Request for Proposals #18-01, duly advertised for written proposals to be submitted on or before 11:00 a.m. on October 12, 2018 for the purchase of Heavy Duty Rear engine Transit, Commuter and Trolley Vehicles ("BUSES") on behalf of itself and the Joint Procurement Participants of the CalACT-MBTA Vehicle Purchasing Cooperative by the MBTA; and

WHEREAS, the MBTA's RFP is attached hereto as Exhibit "A", and is incorporated herein by reference as if set forth in full; and

WHEREAS, SELLER submitted a sealed proposal in response to MBTA's Notice Inviting Proposals; and

WHEREAS, after it was determined that SELLER was a successful responsive and responsible proposer; and

WHEREAS, SELLER's proposal in response to MBTA's Notice Inviting Proposals is attached hereto as Exhibit "B", and is incorporated herein by reference as if set forth in full; and

WHEREAS, the MBTA Board of Directors has authorized the staff via Resolution and board action to award contracts and accept SELLER'S proposal through agreement by and between SELLER and MBTA upon the terms and conditions set forth herein; and

WHEREAS, MBTA has fully complied with all federal, state, and local laws governing public procurement process for the purchase of the BUSES;

NOW, THEREFORE, incorporating the foregoing recitals herein, for and in consideration of the promises and of the mutual covenants and agreements herein contained, SELLER and MBTA hereby agree as follows:

1. **CONTRACT DOCUMENTS.** This Agreement, along with all Exhibits referenced herein, and including without limitation, all documents referenced in said Exhibits shall hereinafter be referred to as the "Contract Documents." In the

event of any conflict, the Contract Documents, including specifically RFP #18-01 and any addendums thereto, shall take priority in interpreting the respective rights and obligations of the Parties created by this Agreement. Any contract, agreement, or other document subsequently created by any Party in connection with a purchase order issued pursuant to this Agreement and which changes or otherwise modifies the terms and conditions set forth in the Contract Documents shall not be valid without the prior written approval of both of the Parties to this Agreement.

2. **DESCRIPTION OF BUSES PURCHASED.** SELLER hereby agrees that it shall sell the BUSES as more particularly described in RFP #18-01 (attached hereto as Exhibit "B") to any and all participants named in the RFP who desire to purchase such BUSES from SELLER. BUSES are to be vehicles with less than 4000 miles and that have never been previously registered.

3. **CONTRACT PRICING.** SELLER hereby agrees to sell such BUSES as more particularly described in RFP #18-01 (attached hereto as Exhibit "B") under the terms and conditions set forth in RFP #18-01.

4. **DELIVERY.** SELLER shall deliver F.O.B. per terms and conditions of MBTA RFP #18-01 Section SP 7.4, 11 and 12 and as proposed.

5. **PAYMENT BY COOPERATIVE PARTICIPANTS.** SELLER shall collect payment from CalACT/MBTA participants within thirty (30) days after the delivery and acceptance of the BUSES by the participant, and a receipt of an invoice thereof, per RFP #18-01, Section SP 10.

6. **NO ASSIGNMENT**. Neither this Agreement, nor any interest in it, may be assigned or transferred by any Party without the prior written consent of all of the Parties to this Agreement.

7. **NO ATTORNEYS' FEES.** If litigation is required to enforce or interpret the provisions of this Agreement, neither SELLER nor the Cooperative shall be entitled to an award of attorneys' fees or costs, but shall be entitled to any other relief to which it may be entitled by law.

8. **MODIFICATION**. This Agreement may be modified only in a writing approved by the MBTA Board and signed by all Parties.

9. **GOVERNING LAW.** The laws of the State of California will govern the validity of this Agreement, its interpretation and performance. Any litigation arising in any way from this Agreement shall be brought in San Bernardino County, California.

10. **NO WAIVER OF DEFAULT**. The failure of any Party to enforce against another party any provision of this Agreement shall not constitute a waiver

of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Agreement.

11. FURTHER ASSURANCES. Each Party shall execute and deliver such papers, documents, and instruments, and perform such acts as are necessary or appropriate, to implement the terms of this Agreement and the intent of the parties to this Agreement.

12. BINDING EFFECT; CONTEXT; COUNTERPARTS. Subject to Paragraph 6, the rights and obligations of this Agreement shall inure to the benefit of, and be binding upon, the parties to the contract and their heirs, administrators, executors, personal representatives, successors and assigns. Whenever the context so requires, the masculine gender and includes the feminine and neuter, and the singular number includes the plural. This Agreement may be executed in any number of counterparts, each of which shall be considered as an original and be effective as such.

13. NON-INTEREST. No officer or employee of the MBTA shall hold any interest in this Agreement (California Government Code section 1090).

14. CORPORATE AUTHORITY. Each individual signing this Agreement on behalf of an entity represents and warrants that he or she is respectively, duly authorized to sign on behalf of the entity and to bind the entity fully to each and all of the obligations set forth in this Agreement.

15. INDEMNIFICATION. Indemnification will be as per the terms and conditions specified in RFP #18-01, GC 9.1.

16. WARRANTY. The BUSES are warranted by SELLER to be new and to be free from defects in material and workmanship pursuant to and in accordance with those certain manufacturer's warranties collectively attached hereto as Exhibit "B", and as submitted in response to RFP #18-01 by SELLER and incorporated herein by reference as if set forth in full. During said warranty periods, the BUSES shall maintain structural and functional integrity. The warranty is based on regular operation under operating conditions prevailing in the purchaser's operating area.

17. WARRANTY OF FITNESS. SELLER hereby warrants that the BUSES and all materials furnished shall meet the requirements and conditions of the Contract Documents and shall be fit for the purposes intended. Acceptance of this warranty and acceptance the BUSES and materials to be manufactured or assembled pursuant to the specifications in these Contract Documents shall not waive any warranty, either express or implied.

18. NOTICE. All notices relative to this Agreement shall be given in writing and shall be personally served or sent by certified or registered mail and be

effective upon depositing in the United States mail. The Parties shall be addressed as follows, or at any other address designated by proper notice:

19. CONTINGENCY. Contract validity is subject to successful completion of facility and pilot vehicle inspections.

MBTA: Joe Meer
Director of Cooperative Purchasing Programs
Morongo Basin Transit Authority
62405 Verbena Road
Joshua Tree, California 92252

SELLER: JOSEPH POLICARPIO
VICE PRESIDENT
Gillig, LLC
451 Discovery Drive
Livermore, California, 94551

19. EXECUTION. This Agreement is effective upon execution by both Parties. It is the product of negotiation and all parties are equally responsible for authorship of this Agreement. Section 1654 of the California Civil Code shall not apply to the interpretation of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first above written.

GILLIG, LLC.	**Morongo Basin Transit Authority**
By_____ Joseph Policarpio, Vice President	By_____ Joe Meer, Director of Purchasing

AMENDMENT 3
MBTA CONTRACT NO. 18-01 – GILLIG

THIS AMENDMENT is made and entered into on **April 5, 2023** between and among **GILLIG LLC**, a California company, with its principal place of business located at 451 Discovery Drive, Livermore, California 94551 ("SELLER"), and **MORONGO BASIN TRANSIT AUTHORITY** ("MBTA"). SELLER and MBTA may be referred to herein individually as "Party" or collectively as "Parties."

RECITALS

WHEREAS, MBTA, by its Request for Proposals # 18-01, duly advertised for written proposals to be submitted on or before October 12, 2018 for the purchase of Transit Vehicles ("BUSES") on behalf of the California Association for Coordinated Transportation ("CALACT") membership by the MBTA; and

WHEREAS the parties entered into an AGREEMENT, MTBA Contract No.18-01-GILLIG on April 5, 2019; and

WHEREAS the AGREEMENT was for a two-year base period with three one-year options; and

WHEREAS MBTA Board of Directors has provided authorization to staff to exercise options;

NOW THEREFORE BE IT RESOLVED incorporating the foregoing recitals herein, for and in consideration of the promises and of the mutual covenants and agreements herein contained, SELLER and MBTA hereby agree as follows:

1. Per Section SP-3, Period of Performance, the period of contract performance is extended to exercise the third one-year option. The new Period of Performance is extended through April 4, 2024.

2. Per Section SP-5.3, Vehicle and Optional Feature Pricing, the price of the vehicles and of the optional features for each option period shall be the unit price established in the initial Schedule adjusted by PPI 1413 as stipulated in the Contract. For the third one-year period, the price increase is 34.5% from the base price. The new pricing is attached to this Amendment and shall become effective for orders placed on or after April 5, 2023.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first above written.

GILLIG, LLC.	**MORONGO BASIN TRANSIT AUTHORITY**
William F. Fay Jr., Vice President of Sales	Joe Meer, Director of Purchasing

Morongo Basin Transit Authority
California Association for Coordinated Transportation

Request for Proposal
For a Joint Procurement for
Heavy Duty Rear Engine Transit, Commuter and Trolley Buses
(CNG/Diesel)

RFP No. 18-01 Rev 1 08312018
July 2018

Contents

SECTION 1: NOTICE OF REQUEST FOR PROPOSALS **5**
NR 1. Purpose of the Procurement and Period of Performance 5
NR 2. Description of the Work to be Done 5
NR 3. Validity of Proposals 6
NR 4. Pre-Proposal Meeting Information 6

SECTION 2: INSTRUCTIONS TO PROPOSERS **8**
IP 1. Background Information 8
IP 2. Proposed Schedule for the Procurement 8
IP 3. Obtaining Proposal Documents 8
IP 4. Proposal Security Requirements – None 9
IP 5. Pre-Proposal Meeting/Information for Proposers 9
IP 6. Questions, Clarifications and Omissions 9
IP 7. Addenda to RFP 10
IP 8. DBE Requirements for Transit Vehicle Manufacturers 10
IP 9. Conditions, Exceptions, Reservations or Understandings 10
IP 10. Protest Procedures 10
IP 11. Preparation of Proposals 12
IP 12. Proposal Evaluation, Negotiation and Selection 15
IP 13. Response to Proposals 22
IP 14. Conflicts of Interests and Gratuities 23
IP 15. Agency-Specific Provisions 23

SECTION 3: GENERAL CONDITIONS **25**
GC 1. Definitions 25
GC 2. Materials and Workmanship 27
GC 3. Conformance with Specifications and Drawings 27
GC 4. Inspection, Testing and Acceptance 27
GC 5. Title and Warranty of Title 28
GC 6. Intellectual Property Warranty 28
GC 7. Data Rights 29
GC 8. Changes 29
GC 9. Legal Clauses 30
GC 10. Agency-Specific Provisions – Not Used 40

SECTION 4: SPECIAL PROVISIONS **41**

SECTION 5: FEDERAL REQUIREMENTS **52**
FR 1. Access to Records 52
FR 2. Federal Funding, Incorporation of FTA Terms and Federal Changes 53
FR 3. Federal Energy Conservation Requirements 53
FR 4. Civil Rights Requirements 53
FR 5. No Government Obligation to Third Parties 55
FR 6. Program Fraud and False or Fraudulent Statements or Related Acts 55
FR 7. Suspension and Debarment 56
FR 8. Disadvantaged Business Enterprise (DBE) 56
FR 9. Prompt Payment to Subcontractors 56
FR 10. Clean Water Requirements 57

FR 11. Clean Air Requirements 57
FR 12. Compliance with Federal Lobbying Policy 57
FR 13. Buy America 57
FR 14. Testing of New Bus Models 58
FR 15. Pre-Award and Post-Delivery Audits 59
FR 16. Cargo Preference 59
FR 17. Fly America 59
FR 18. Contract Work Hours and Safety Standards Act 60
FR 19. ADA Access 61

SECTION 6: TECHNICAL SPECIFICATIONS 62
TS 1. GENERAL 62

SECTION 7: WARRANTY REQUIREMENTS 63
WR 1. Basic Provisions 63
WR 2. Repair Procedures 68

SECTION 8: QUALITY ASSURANCE 72
QA 1. Contractor's In-Plant Quality Assurance Requirements 72
QA 2. Inspection 74
QA 3. Acceptance Tests 76
QA 4. Agency-Specific Requirements 78

SECTION 9: FORMS AND CERTIFICATIONS 79
CER 1. Proposer's Checklist 79
CER 2. Request for Pre-Offer Change or Approved Equal 80
CER 3. Acknowledgement of Addenda 81
CER 4. Contractor Service and Parts Support Data 82
CER 5. Price Worksheet 83
CER 6. Pre-Award Evaluation Data Form 84
CER 7. Federal Certifications and Other Certifications 86
CER 8. Vehicle Questionnaire and Instructions (Attached) 97

SECTION 10: CONTRACT 98

SECTION 11: APPENDIXES 101

Appendix -A-1 – High Floor Bus 101

Appendix A-2 – Low Floor 30 – 35 Foot 101

Appendix A- 3 – Low Floor 35 – 40 Foot 101

Appendix A-4 – Commuter 101

Appendix A-5 – RE Trolley 101

Appendix B 102

Appendix C 106

Appendix D..... **107**

Appendix E..... **110**

Appendix F……**113**

Appendix G……**114**

SECTION 1: NOTICE OF REQUEST FOR PROPOSALS

NR 1. Purpose of the Procurement and Period of Performance

The purpose of this joint procurement is to procure Rear Engine Heavy Duty Transit Coaches, Commuter Buses and Trolleys. The Morongo Basin Transit Authority ("MBTA" or "Agency") is the lead agency for the solicitation on behalf of the other participants in the joint procurement. Only those agencies that are listed in **Appendix C** will have the ability to purchase vehicles through this contract and the agencies have provided their needs for the term of the contract. Following contract award, the California Association for Coordinated Transportation ("CalACT") shall provide contract administration activities related to the joint procurement. However, the resulting Contract may only be modified or amended by written action of MBTA.

The initial period of performance shall be two years. The MBTA shall have the right to extend the period of performance for three (3) one-year options under the provisions of SP 3.

NR 2. Description of the Work to be Done

The Agency requests Proposals for the manufacture and delivery Heavy Duty transit vehicles under the joint procurement in accordance with the terms and conditions set forth in RFP No. 18-01. A single Contract will be executed by MBTA acting on behalf of the all participants. Participating agencies will issue individual purchase orders against the basic contract as funding becomes available to the agencies during the life of the contract. The purchase orders would reflect the basic contract unit prices and reference the basic contract for other terms and conditions.

The proposer must confirm that it is willing to accept an order of a single bus.

Specifically, the Agency is requesting proposals and pricing for the following types of buses: Heavy Duty High Floor coaches (A-1), Rear Engine 29-32' coaches (A-2), 35-40' coaches (A-3), Commuter buses (A-4) and Rear Engine Low Floor Trolleys (A-5).

Proposal due Date and Submittal Requirements:

Proposals must be received by 11 a.m. on Friday, September 28, 2018.

1. Sealed Proposals shall be submitted to following addresses:
   Rutan and Tucker
   General Counsel for Morongo Basin Transit Authority
   611 Anton Boulevard, suite 400, Costa Mesa, California, 92626

2. Envelopes or boxes containing Proposals shall be sealed and clearly labeled with the Agency's Proposal number and the solicitation title: RFP No. 18-01, Joint Procurement for Transit Vehicles.
3. Proposers are requested to submit to the Agency one hard copy marked "Original," and one (1) additional printed copy, and eight (8) marked and labeled USB thumb drives, each containing an electronic PDF copy of the Proposal and all required Excel files and Buy America documents. Files are to be formatted to include Optical Character Recognition (OCR) so items can be searched. In case of any discrepancies, the hard copy shall be considered by the Agency in evaluating the Proposal, and the electronic version is provided for the Agency's administrative convenience only. A Proposal is deemed to be late if it is received by the Agency after the deadline stated above. Proposals received after the submission deadline shall be rejected.

   Firms that intend to propose multiple vehicle manufacturer lines may consolidate their electronic responses into eight (8) single high capacity drives provided that the media is labeled with "Manufacturer or Dealer name, RFP 18-01" and the electronic files are organized into subfolders with file names by manufacturer and type of file.

   Example: Main Folder named "Acme Bus," containing subfolders for "Acme Class H Proposal," "Acme Class H Price Worksheet," "Acme Vehicle Information Worksheet" etc.

NR 3. Validity of Proposals

Proposals and subsequent offers shall be valid for a period of one hundred twenty (120) days.

NR 4. Pre-Proposal Meeting Information

A Pre-Proposal Meeting shall be held on **Thursday**, **July 26, 2018**. The meeting shall convene at 10:00 a.m. at the offices of Rutan & Tucker, Conference Room 14 Main, 14th Floor, and 611 Anton Boulevard, Costa Mesa, California. Proposers are asked to notify the Contracting Officer of their attendance and the number of person/s attending so that they may be accommodated. **A limit of three (3) representatives per proposing firm is requested. The Pre-Proposal meeting is for Proposers only and not intended for subcontractor or supplier attendance.**

Proposers are requested to submit written questions to the Contract Administrator, identified below, in advance of the Pre-Proposal Meeting. In addition, questions may be submitted up to the date specified in "Proposed Schedule for the Procurement." Responses shall be shared with all prospective proposers. Prospective Proposers are reminded that any changes to the RFP shall be by written addenda only, and nothing stated at the Pre-Proposal Meeting shall change or qualify in any way any of the provisions in the RFP and shall not be binding on the Agency.

Pre-Contract Contracting Officer's Contact Information:
Name: Mr. Joe Meer
Title: Director of Cooperative Purchasing Programs
Address: 62504 Verbena Road, Joshua Tree, CA 92252
Phone number: 760-366-2986
E-mail: joe@mbtabus.com
Fax number: 760-366-2445

Identification of Source of Funding
Financial support of this project is provided through financial assistance grants from the Federal Transit Administration (FTA), and/or the State of California, California Department of Transportation (CalTrans) and other sources of local and state public funding.

Signed and Dated for Posting

_____ _____
Signature/Title Date

SECTION 2: INSTRUCTIONS TO PROPOSERS

IP 1. Background Information

This solicitation is a joint procurement for the manufacture and delivery of heavy duty transit vehicles which may be ordered by participants that have specifically entered into this joint procurement. Individual orders may include optional features, spare parts, training materials and manuals.

The resulting contract will be an Indefinite Delivery Indefinite Quantity (IDIQ) contract with specific minimum and maximum quantities for the total number of vehicles to be potentially ordered. During the two year base contract period, the minimum and maximum quantity of vehicles to be ordered shall be:

Base Period – Minimum - 79 vehicles

Maximum - 233 vehicles

The Agency shall have the option to purchase up to 612 additional Vehicles in orders that may be placed over the three one-year option periods. Funding is contingent on fiscal year availability.

These figures represent the foreseeable needs of the listed Agencies shown on Appendix C, List of Participating Agencies. ONLY these agencies shall be able to be order vehicles from this joint procurement. **Neither MBTA, CalACT nor any other participant guarantee any purchase beyond the minimum quantity for the base contract period.** Orders shall be placed on an as-needed basis and are subject to availability of funding.

IP 2. Proposed Schedule for the Procurement

The following is the solicitation schedule for proposers:

- Pre-Proposal Meeting: **Thursday, July 26, 2018 at 10 am.**
- Proposer communications and requests: **Friday, August 17, 2018 at 4 pm.**
- Responses to Proposer's communications and/or Agency addenda: **Friday, September 7, 2018 at 4 pm.**
- Proposals Due Date: **Friday, September 28, 2018 at 11 am.**

IP 3. Obtaining Proposal Documents

Proposal documents may be obtained from Morongo Basin Transit Authority electronically at www.mbtabus.com. Documents requested by mail shall be packaged and sent postage paid. Documents requested by courier shall be packaged and sent only at the Proposers' expense.

IP 4. Proposal Security Requirements – None

IP 5. Pre-Proposal Meeting/Information for Proposers

A Pre-Proposal Meeting shall be held on Thursday, June 26, 2018. The meeting shall convene at the offices of Rutan & Tucker, MBTA General Counsel at 611 Anton Drive, Conference Room 14, 14th floor, Costa Mesa California. Prospective Proposers are urged to make every effort to attend this meeting.

Prospective Proposers are requested to submit written questions to the Contracting Officer, identified above, in advance of the Pre-Proposal Meeting. In addition, questions may be submitted up to the date specified in "Proposed Schedule for the Procurement." Responses shall be shared with all prospective Proposers. Prospective Proposers are reminded that any changes to the RFP shall be by written addenda only, and nothing stated at the Pre-Proposal Meeting shall change or qualify in any way any of the provisions in the RFP and shall not be binding on the Agency.

IP 6. Questions, Clarifications and Omissions

All correspondence, communication and contact in regard to any aspect of this solicitation or offers shall be only with the Contracting Officer identified above. Unless otherwise instructed by the Contracting Officer, proposers and their representatives shall not make any contact with or communicate with any member of the Agency, or its employees and consultants, other than the designated Contracting Officer, in regard to any aspect of this solicitation or offers.

At any time during this procurement up to the time specified in "Proposed Schedule for the Procurement," Proposers may request, in writing, a clarification or interpretation of any aspect, a change to any requirement of the RFP, or any addenda to the RFP. Requests may include suggested substitutes for specified items and for any brand names, which whenever used in this solicitation shall mean the brand name or approved equal. Such written requests shall be made to the Contracting Officer. The Proposer making the request shall be responsible for its proper delivery to the Agency as identified on the form Request for Pre-Offer Change or Approved Equal. Any request for a change to any requirement of the Contract documents must be fully supported with technical data, test results or other pertinent information showing evidence that the exception shall result in a condition equal to or better than that required by the RFP, without a substantial increase in cost or time requirements.

All responses to Request for Pre-Offer Change or Approved Equal shall be provided to all proposers. Any response that is not confirmed by a written addendum shall not be official or binding on the Agency.

If it should appear to a prospective Proposer that the performance of the Work under the Contract, or any of the matters relating thereto, is not sufficiently described or explained in the RFP or Contract documents, or that any conflict or discrepancy exists between different parts of the Contract or with any federal, state, local or Agency law, ordinance, rule, regulation or other standard or requirement, then the proposer shall submit a written request for clarification to the Agency within the time period specified above.

IP 7. Addenda to RFP

The Agency reserves the right to amend the RFP at any time in accordance with "Proposed Schedule for the Procurement." Any amendments to the RFP shall be described in written addenda. Notification of or the addenda also shall be distributed to all such prospective Proposers officially known to have received the RFP. Failure of any prospective proposer to receive the notification or addenda shall not relieve the Proposer from any obligation under the RFP therein. All addenda issued shall become part of the RFP. Prospective Proposers shall acknowledge the receipt of each individual addendum in their Proposals on the form Acknowledgement of Addenda. Failure to acknowledge in the Proposal receipt of addenda may at the Agency's sole option disqualify the Proposal.

If the Agency determines that the addenda may require significant changes in the preparation of Proposals, the deadline for submitting the Proposals may be postponed no less than ten (10) days from the date of issuance of addenda or by the number of days that the Agency determines shall allow Proposers sufficient time to revise their Proposals. Any new Due Date shall be included in the addenda.

IP 8. DBE Requirements for Transit Vehicle Manufacturers

Pursuant to Title 49, Code of Federal Regulations, Part 26.49, the Vehicle Manufacturer, as a condition of being authorized to respond to this solicitation, must certify by completing the form DBE Approval Certification that it has submitted a goal to the Federal Transportation Administration (FTA) and it has not been disapproved. <u>In addition, TVMs are to submit to grantees a copy of their FTA approval letter along with the TVM certifications.</u>

IP 9. Conditions, Exceptions, Reservations or Understandings

Proposers are cautioned to limit exceptions, conditions and limitations to the provisions of this RFP, as they may be determined to be so fundamental as to cause rejection of the Proposal for not responding to the requirements of the RFP.

IP 10. Protest Procedures

All protests must be in writing, stating the name and address of protestor, a contact person, Contract number and title. Protests shall specify in detail the grounds of the protest and the facts supporting the protest.

IP 10.1 Address

All protests must be addressed as follows:

- Agency Contact: Mr. Joe Meer
- For U.S. Mail, special delivery or hand delivery:
  Morongo Basin Transit Authority
  62405 Verbena Road
  Joshua Tree, CA 92252

Protests not properly addressed to the address shown above may not be considered by the Agency.

Copies of the Agency's protest procedures and the protest provisions of FTA Circular 4220.1F or its successor may be obtained from Mr. Joe Meer, Director of Cooperative Purchasing Programs, Morongo Basin Transit Authority, 62405 Verbena Road, Joshua Tree, CA 92252, 760-366-2986. Proposals shall be opened and a Notice of Award shall be issued by the Agency in accordance with the Agency's protest procedures and the protest provisions of FTA Circular 4220.1F or its successor.

IP 10.2 Pre-Proposal Protests

Pre-Proposal protests are protests based upon the content of the solicitation documents. Three copies of Pre-Proposal protests must be received by the Agency's office no later than ten (10) calendar days after the RFP is first advertised. Protests shall be considered and either denied or sustained in part or in whole, in writing, in a manner that provides verification of receipt, prior to the Due Date for Proposals. A written decision specifying the grounds for sustaining all or part of or denying the protest shall be transmitted to the protestor prior to the Due Date for Proposals in a manner than provides verification of receipt prior to the Due Date for Proposals. If the protest is sustained, the Proposal Due Date may be postponed and an addendum issued to the solicitation documents or, at the sole discretion of the Agency, the solicitation may be canceled. If the protest is denied, Proposals shall be received and opened on the scheduled date unless a protest is filed with FTA. See "FTA Review," below.

IP 10.3 Protests on the Recommended Award

All proposers shall be notified of the recommended award. This notice shall be transmitted to each proposer at the address contained in its Proposal form in a manner that provides verification of receipt. Any Proposer whose Proposal has not lapsed may protest the recommended award on any ground not specified in "Pre-Proposal Protests," above. Three (3) copies of a full and complete written statement specifying in detail the grounds of the protest and the facts supporting the protest must be received by the Agency at the appropriate address in "Address," above, no later than fifteen (15) calendar days after the date such notification is received. Prior to the issuing of the Notice of Award, a written decision stating the grounds for allowing or

denying the protest shall be transmitted to the protestor and the proposer recommended for award in a manner that provides verification of receipt.

IP 10.4 FTA Review

After such administrative remedies have been exhausted, an interested party may file a protest with the Federal Transit Administration of the U.S. Department of Transportation or its designee, in this case, Caltrans Department of Rail and Mass Transit pursuant to the procedures provided in the FTA C 4220.1F or its successor. FTA/CalTrans review is limited to the alleged failure of the Agency to have written protest procedures, the alleged failure of the Agency to follow those procedures, the alleged failure of the Agency to review a protest or the alleged violation of federal law or regulation.

IP 11. Preparation of Proposals

IP 11.1 Use of Proposal Forms

Proposers are advised that the forms contained in this RFP are required to be used for submission of a Proposal.

IP 11.2 Alternate and Multiple Proposals

A Proposer may submit multiple proposals. However, each proposal may only contain information for one vehicle. Proposers are expressly prohibited from submitting a single proposal covering multiple vehicles.

IP 11.3 Proposal Format Requirements

Proposals shall be submitted in four separately sealed packages identified below. In this case, the contents of Package 1, Package 3 and Package 4 may be "combined" into a single package and can be placed in a single binder. 3 ring binders to be used marked with Proposers name, Manufacturer and Line Item Proposed on cover and spine of folder. Each package shall be marked as specified below and shall contain all of the Proposal documents for which the package is required to be marked and shall include no other documents. **Package 2, Price Proposal Requirements, must be submitted separately in a marked sealed package**. These same requirements shall apply to any Best and Final Offers (BAFOs) that may be requested.

Package 1: Technical Proposal Requirements

1. Letter of Transmittal
2. Acknowledgement of Addenda – CER 3
3. Contractor Service and Parts Support Data – CER 4. In addition, the Proposer should include a description of support resources available for the proposed vehicles. Include an overview of available training, parts locations and availability, help lines and service assistance resources. A Written Service Plan is to accompany CER 4.
4. Vehicle Questionnaire – CER 9

5. Manufacturing facilities plant layout including a narrative or list of the work being done at each station.
6. Typical delivery schedule from date of order placement
7. Warranty Provisions and Warranty Administration Plan. Each Proposer shall provide the proposed warranty for their vehicle and the major components. This information shall be submitted on the form provided for this purpose. In addition, the Proposer is to be submit a narrative on how warranties shall be handled, the forms, the process, etc.
8. Quality Assurance Procedures

Package 2: Price Proposal Requirements
Each Price Proposal shall be on the prescribed Proposal form(s) and shall be for the entire Contract, including all Proposal items.

1. Letter of Transmittal
2. Price Worksheet (including but not limited to such pricing elements as optional bus features). Note: Subject to the provisions of SP 4, Pricing, the selected Contractors shall agree to sell vehicle(s), including proposed optional equipment, at the same price and under the terms and conditions of this Agreement from the time of contract award to the expiration of the initial contract term. Contractors are prohibited from offering any parts credits, rebates, etc. following Contract award.

The Proposer is required to complete and execute the Agency's Pricing Form, contained as part of the Proposal documents, and provide same in the Price Proposal. The Contractor shall be liable for payment of all local taxes applicable to the complete bus as delivered and should add these amounts to the Proposal price.

Package 3: Qualification Package Requirements
1. Pre-Award Evaluation Data Form - CER 6
2. If the Proposer is not the vehicle manufacturer, the Proposal must include a confirmation from the vehicle manufacture that the Proposer is a bona-fide authorized factory dealer for the manufacture of the vehicle.
3. A copy of the three (3) most recent financial statements of the Proposer audited by an independent third party. If the proposal is from a bus dealer, statements from the dealer and manufacturer are to be submitted. Proposers may request that financial statements be furnished during the evaluation process prior to any recommendation of award is to be made.
4. Letter(s) for insurance, indicating the manufacturer and/or the Contractor's ability to obtain the insurance coverage in accordance with the RFP requirements
5. Proposal Form – CER 1.9
6. All Federal certifications: Buy America Certification, Debarment and Suspension Certification for Prospective Contractor, Debarment and Suspension Certification (Lower-Tier Covered Transaction), Non-Collusion Affidavit, Lobbying Certification,

Certificate of Compliance with Bus Testing Requirement, DBE Approval Certification, and Federal Motor Vehicle Safety Standards. – CER 1.1 – 1.8

7. Copy of the FTA's letter of the TVM's DBE goal showing either approval of the DBE goal or not disapproval.

Package 4: Proprietary/Confidential Information Package Requirements
The Proposer is directed to collect and submit any information it deems to be proprietary or confidential in nature in a separate marked and sealed package. If there is no confidential information, then the Proposer should include a statement to that effect. Subject package shall be submitted in accordance with the terms and conditions governing the submittal of proposer's Proposal to this RFP. Blanket-type identification by designating whole pages or sections as containing proprietary information, trade secrets or confidential commercial and financial information shall not ensure confidentiality. The specific proprietary information, trade secrets or confidential commercial and financial information must be clearly identified as such.

The Proposer is advised that the Agency is public and as such may be subject to certain state and/or local Public Records Act provisions regarding the release of information concerning this RFP. If a request is received by the Agency for the release of Proposer's propriety/confidential information, subject request shall be referred to the Proposer for review and consideration. If Proposer chooses to declare the information proprietary/confidential and withhold it from release, it shall defend and hold harmless the Agency from any legal action arising from such a declaration.

IP 11.4 Agency Treatment of Proprietary/Confidential Information
Access to government records is governed by the laws of the State of California. Except as otherwise required to be disclosed by applicable State law, the Agency shall exempt from disclosure proprietary information identified in Package 4.

Upon a request for records from a third party regarding this Proposal, the Agency shall notify the Proposer in writing. The Proposer must respond within ten (10) business days with the identification of any and all "proprietary, trade secret, or confidential commercial or financial" information. Failure to respond within the allowed period shall be deemed an approval to release. The proposer shall indemnify the Agency's defense costs associated with its refusal to produce such identified information; otherwise, the requested information may be released.

The Agency shall employ sound business practices no less diligent than those used for the Agency's own confidential information to protect the confidence of all licensed technology, software, documentation, drawings, schematics, manuals, data and other information and material provided by Proposers and the Contractor pursuant to the Contract that contain confidential commercial or financial information, trade secrets or proprietary information as defined in or pursuant to the California Law against disclosure of such information and material to third parties, except as permitted by the Contract. The Contractor shall be responsible for

ensuring that confidential commercial or financial information, trade secrets or proprietary information — with such determinations to be made by the Agency in its sole discretion — bears appropriate notices relating to its confidential character.

IP 11.5 Signing of Proposal Forms

Proposals shall include firm name (and, in the event that the Proposer is a joint venture, the names of the individual firms comprising the joint venture); business address; and the name, title and business address of the responsible individual(s) with their telephone, facsimile (fax) numbers and email address who may be contacted during the Proposal evaluation period for scheduling oral presentations and for receiving notices from the Agency. The proposer shall submit with their Proposal a copy of the joint venture agreement.

Proposals shall be signed by those individual(s) authorized to bind the proposer. The proposer shall submit evidence of the official's authority to act for and bind the Proposer in all matters relating to the Proposal. (In the event the Proposer is a joint venture or consortium, a representative of each of the members of the joint venture or consortium shall execute the Proposal. Each joint venture or consortium member is jointly and severally liable for the joint venture or consortium.)

IP 11.6 Modification or Withdrawal of Proposals

A modification of a Proposal already received shall be accepted by the Agency only if the modification is received prior to the Proposal Due Date, is specifically requested by the Agency, or is made with a requested BAFO. All modifications shall be made in writing and executed and submitted in the same form and manner as the original Proposal.

A Proposer may withdraw a Proposal already received prior to the Proposal Due Date by submitting to the Agency, in the same manner as the original Proposal, a written request for withdrawal executed by the Proposer's authorized representative. After the Proposal Due Date, a Proposal may be withdrawn only if the Agency fails to award the Contract within the Proposal validity period prescribed in "Duration of the Validity of Proposals," or any agreed-upon extension thereof. The withdrawal of a Proposal does not prejudice the right of a Proposer to submit another Proposal within the time set for receipt of Proposals.

IP 11.7 Cost of Proposal Development

This RFP does not commit the Agency to enter into a Contract, to pay any costs incurred in the preparation or presentation of a Proposal, nor to procure or contract for the equipment.

IP 12. Proposal Evaluation, Negotiation and Selection

Proposals shall be evaluated, negotiated, selected and any award made in accordance with the criteria and procedures described below. The approach and procedures are those that are applicable to a competitive negotiated procurement whereby Proposals are evaluated to determine which Proposals are within a Competitive Range. Discussions and negotiations may

then be carried out with Proposers within the Competitive Range, after which BAFOs may be requested.

However, the Agency may select a Proposal or Proposals for award without any discussions or negotiations or request for any BAFOs. Proposers are hereby notified that the selected firms are expressly prohibited from offering any rebates, parts credits and any other price discounts following contract award. Thus, the initial proposal should represent the "best offer."

Subject to the Agency's right to reject any or all Proposals, the Proposer or Proposers whose Proposal or Proposals are found to be most advantageous to the Agency shall be selected, based upon consideration of the criteria of "Proposal Selection Process," below.

IP 12.1 Confidentiality of Proposals

Proposals shall not be publicly opened. All Proposals and evaluations shall be kept strictly confidential throughout the evaluation, negotiation and selection process, except as otherwise required by applicable law. Only the members of the Selection Committee and Evaluation Team and other Agency officials, employees and agents having a legitimate interest shall be provided access to the Proposals and evaluation results during this period.

IP 12.2 Duration of the Validity of Proposals

Proposals and subsequent offers shall be valid for the period stated in "Section 1: Notice of Request for Proposals." The Agency may request Proposers to extend the period of time specified herein by written agreement between the Agency and the Proposer(s) concerned.

IP 12.3 Evaluation Committee

An Evaluation Committee, which shall include officers, employees and agents of the Agency and/or other participating agencies, shall be established. The Evaluation Committee shall carry out the detailed evaluations, including establishing the Competitive Range, carrying out negotiations and making the selection of the Proposer, if any, that may be awarded the Contract.

The Evaluation Committee may report its recommendations and findings to the appropriate Agency individual or body responsible for awarding the Contract.

IP 12.4 Proposal Selection Process

The following describes the process by which Proposals shall be evaluated and a selection made for a potential award. Any such selection of a Proposal shall be made by consideration of only the criteria set forth below.

"Qualification Requirements" specifies the requirements for determining responsible Proposers, all of which must be met by a Proposer to be found qualified. Final determination of a Proposer's qualification shall be made based upon all information received during the evaluation process and as a condition for award.

"Proposal Evaluation Criteria" contains all the evaluation criteria, and their relative order of importance, by which a Proposal from a qualified Proposer shall be considered for selection. An award, if made, shall be to responsible Proposer(s) for a Proposal that is found to be in the Agency's best interests, based on price and other evaluation criteria considered. The procedures to be followed for these evaluations are provided in "Evaluation Procedures," below.

Qualification Requirements
The following are the requirements for qualifying responsible proposers. All of these requirements should be met; therefore, they are not listed by any particular order of importance. Any Proposal that the Evaluation Committee finds not to meet these requirements, and cannot be made to meet these requirements, may be determined by the Evaluation Committee not to be responsible and the Proposal rejected. The requirements are as follows:

1. Sufficient financial strength, resources and capability to finance the Work to be performed and to complete the Contract in a satisfactory manner, as measured by the following:
2. Proposer's financial statements prepared in accordance with generally accepted accounting principles of the jurisdiction in which the proposer is located, and audited by an independent certified public accountant. If the proposal is from a bus dealer, statements from the dealer <u>and</u> manufacturer are to be submitted.

    - Proposer's ability to obtain required insurance with coverage values that meet minimum requirements evidenced by a letter from an underwriter confirming that the proposer can be insured for the required amount.

3. Evidence that the human and physical resources are sufficient to perform the Contract as specified and to ensure delivery of all equipment within the time specified in the Contract, to include the following:
    - Engineering, management and service organizations with sufficient personnel and requisite disciplines, licenses, skills, experience and equipment to complete the Contract as required and to satisfy any engineering or service problems that may arise during the warranty period.
    - Adequate manufacturing facilities sufficient to produce and factory-test equipment on schedule.
    - A spare parts procurement and distribution system sufficient to support equipment maintenance without delays and a service organization with skills, experience and equipment sufficient to perform all warranty and on-site Work.

4. Evidence that proposer is qualified in accordance with the provisions of "Section 8: Quality Assurance."

5. Evidence of satisfactory performance and integrity on contracts in making deliveries on time, meeting specifications and warranty provisions, parts availability and steps Proposer took to resolve any judgments, liens, Fleet Defects history or warranty claims. Evidence shall be confirmed by client references.

Proposal Evaluation Criteria
The following are the complete criteria, listed by their relative degree of importance, by which Proposals from responsible Proposers shall be evaluated and ranked for the purposes of determining any Competitive Range and to make any selection of any Proposal for a potential award. Any exceptions, conditions, reservations or understandings explicitly, fully and separately stated on Form for Proposal Deviation, which do not cause the Agency to consider a Proposal to be outside the Competitive Range, shall be evaluated according to the respective evaluation criteria and sub-criteria that they affect.

PASS-FAIL ELEMENTS

Category	Scoring Method
Responsiveness requirements (Certificates and forms)	Pass/Fail
Vehicle Questionnaire (Products meets specifications)	Pass/Fail

POINT ALLOCATION

Category		Scoring Method
NON-COST FACTORS (60%)		
Proposer Qualifications and Requirements:		
	Past Performance information gathered from reference inquiries*	10 Points
	Warranty Provisions and Warranty Administration Plan*	10 Points
	Customer Service, Parts Support, Service Plan	15 Points
	Proposer and Manufacturer Qualifications and Experience	10 Points
	Conformance with RFP specifications	15 Points
	Total Non-Cost Factor Points	**60 Points**
COST FACTORS (40%)		

	Price Sheet- Base Models	25 Points
	Price Sheet- Optional Features	15 Points
	Total Cost Factor Points	**40 Points**
Total Possible Points		**100 Points**

***Provide list of last 5 agency deliveries made of the specific model proposed and all deliveries of the bus model proposed made over the last three years with contact information.**

As noted, pricing will be scored on a basis of 40 points. The proposer's price score will be calculated in the following manner:

$$\text{Proposer Price Score} = \frac{\text{Lowest Price Proposed}}{\text{Proposer's Cost}} \times \text{Proposer's Price Points}$$

Under this formula, the proposer with the lowest proposed price for the base model vehicle will receive 25 points. The other proposals will receive a proportionate share of points based on how much higher their proposed price is in relationship to the low proposed price. This same formula will be used to score the pricing for selected optional features.

IP 12.5 Evaluation Procedures

Proposals shall be analyzed for conformance with the instructions and requirements of the RFP and Contract documents. Proposals that do not comply with these instructions and do not include the required information may be rejected as insufficient or not be considered for the Competitive Range. The Agency reserves the right to request that a Proposer provide any missing information and make corrections. Proposers are advised that the detailed evaluation forms and procedures shall follow the same Proposal format and organization specified in "Preparation of Proposals." Therefore, Proposers should pay close attention to and strictly follow all instructions. Submittal of a Proposal shall signify that the Proposer has accepted the whole of the Contract documents. Any such conditions, exceptions, reservations or understandings that do not result in the rejection of the Proposal are subject to evaluation under the criteria set forth in "Proposal Selection Process."

Evaluations shall be made in strict accordance with all of the evaluation criteria specified in "Proposal Selection Process," above. The Agency shall choose the Proposal/s that it finds to be most advantageous to the Agency, based upon the evaluation criteria.

IP 12.6 Evaluations of Competitive Proposals

1. **Qualification of responsible Proposers.** Proposals shall be evaluated to determine the responsibility of proposers. A final determination of a Proposer's responsibility shall be made upon the basis of initial information submitted in the Proposal, any information submitted upon request by the Agency, information submitted in a BAFO (if required) and information resulting from Agency inquiry of Proposer's references and its own knowledge of the Proposer.

2. **Detailed evaluation of Proposals and determination of Competitive Range.** The Agency shall carry out and document its evaluations in accordance with the criteria and procedures set forth in "Proposal Selection Process." Any Proposal deficiencies that may render a Proposal unacceptable shall be documented. The Agency shall make specific note of questions, issues, concerns and areas requiring clarification by Proposers and to be discussed in any meetings with Proposers that the Agency finds to be within the Competitive Range.

   Rankings of the Proposals against the evaluation shall then be made for determining which Proposals are within the Competitive Range, or may reasonably be made to be within the Competitive Range.

3. **Proposals not within the Competitive Range.** Proposers of any Proposals that have been determined by the Agency as not in the Competitive Range, and that cannot be reasonably made to be within the Competitive Range, shall be notified in accordance with the Agency's policies.

4. **Discussions with Proposers in the Competitive Range.** The Proposers whose Proposals are found by the Agency to be within the Competitive Range, or that may be reasonably made to be within the Competitive Range, shall be notified and any questions or requests for clarifications provided to them in writing. Each such Proposer may be invited for an interview and discussions with the Agency to discuss answers to written or oral questions, clarifications and any facet of its Proposal. In the event that interviews and discussions are held, these interviews and discussions may be scored. MBTA reserves the right to accept proposals as submitted without conducting discussions.

   No information, financial or otherwise, shall be provided to any Proposer about any of the Proposals from other Proposers, to the extent permitted by applicable law. Proposers shall not be given a specific price or specific financial requirements they must meet to gain further consideration, except that proposed prices may be considered to be too high with respect to the marketplace or unacceptable. Proposers shall not be told of their rankings among the other Proposers prior to Contract award.

5. **Factory and site visits.** The Agency reserves the right to conduct factory visits of the Proposer's facilities and/or the facilities of major sub-suppliers included in the Proposal.

6. **Best and final offers.** After all interviews, if any, have been completed, the Proposers in the Competitive Range may be afforded the opportunity to amend their Proposals and make their BAFOs. If MBTA decides to request a BAFO, the Request for BAFOs shall include the following:

    - Notice that discussions and negotiations are concluded.
    - A complete listing of the conditions, exceptions, reservations or understandings that have been approved.
    - A common date and time for submission of written BAFOs, allowing a reasonable opportunity for preparation of the written BAFOs.
    - Notice that if any modification to a BAFO is submitted, it must be received by the date and time specified for the receipt of BAFOs.
    - Notice to Proposers that do not submit a notice of withdrawal or a BAFO that their immediately previous Proposal shall be construed as their BAFO.

    Any modification to the initial Proposal made by a Proposer in its BAFO shall be identified in its BAFO. BAFOs shall be evaluated by the Agency according to the same requirements and criteria as the initial Proposals, ("Proposal Selection Process"). The Agency shall make appropriate adjustments to the initial scores for any sub-criteria and criteria that have been affected by any Proposal modifications made by the BAFOs. These final scores and rankings within each criterion shall again be arrayed by the Agency and considered according to the relative degrees of importance of the criteria defined in "Proposal Selection Process."

    The Agency shall then choose the Proposal(s) that it finds to be most advantageous to the Agency, based upon the evaluation criteria. The results of the evaluations and the selection of a Proposal(s) for any award shall be documented. In this instance, the Agency expects to award to multiple Proposers. Subsequent orders shall be placed following the Ordering Procedures outlined in Section 4, Special Provisions.

    The Agency reserves the right to make an award to a Proposer(s) who's Proposal(s) it judges to be most advantageous to the Agency based upon the evaluation criteria, without conducting any written or oral discussions with any Proposers or solicitation of any BAFOs.

7. **Debriefing.** Subsequent to the award, the unsuccessful Proposers shall be notified and may request a debriefing. Proposers shall be debriefed in accordance with Agency policies, including information regarding the shortcomings of their Proposal.

IP 13. Response to Proposals

IP 13.1 Single Proposal Response

If only one Proposal is received in response to this RFP and it is found by the Agency to be acceptable, a price or cost analysis, or both, possibly including an audit, may be performed by or for the Agency. The Proposer has agreed to such analysis by submitting a Proposal in response to this RFP.

IP 13.2 Availability of Funds

Orders placed as a result of this procurement are subject to the availability of funding.

IP 13.3 Agency Contract Approval Process

Following completion of the evaluation process, firms being considered for award shall show compliance with the FTA Pre-Award Buy America requirements. **Refusal to provide the required information shall result in the immediate elimination of the specific manufacturer(s) for award consideration.** This required information is to include a copy of the electronic Bill of Materials showing all of the components of the "base vehicle." The Bill of Materials is to show the component manufacturer name, the cost of each component and whether the item is foreign or meets Buy America requirements for being classified as "domestic". Following the initial review, MBTA may require Buy America certifications from component suppliers to be provided. In addition, the same information is to be provided for all of the optional features. **Once the Buy America Pre-Award audit is completed, MBTA and/or its reviewers shall return all provided information. Copies of the data shall not be kept**.

Once compliance with the Buy America requirements is verified, the Agency shall prepare a written recommendation for contract award(s) to the recommended firm(s). This recommendation shall then be presented to the Board of Directors for approval.

IP 13.4 Agency Rights

The Agency reserves the right to cancel the procurement in whole or in part, at its sole discretion, at any time before the Contract is fully executed and approved on behalf of the Agency.

The Agency reserves the right to reject any or all Proposals, to undertake discussions with one or more Proposers, and to accept that Proposal or modified Proposal which, in its judgment, shall be most advantageous to the Agency, considering price and other evaluation criteria. The Agency reserves the right to determine any specific Proposal that is conditional or not prepared in accordance with the instructions and requirements of this RFP to be nonresponsive. The Agency

reserves the right to waive any Defects, or minor informalities or irregularities in any Proposal which do not materially affect the Proposal or prejudice other Proposers.

If there is any evidence indicating that two or more proposers are in collusion to restrict competition or are otherwise engaged in anti-competitive practices, the Proposals of all such Proposers shall be rejected, and such evidence may be a cause for disqualification of the participants in any future solicitations undertaken by the Agency.

The Agency may reject a Proposal that includes unacceptable Deviations as provided in Form for Proposal Deviation.

IP 13.5 Execution of Contract

The acceptance of a Proposal for award, if made, shall be evidenced in writing by a notice of award of Contract delivered to those Proposers whose Proposal is accepted. Upon notice of award of the Contract to a Proposer, the Proposer shall commence performance under the Contract by furnishing copies of the certificates of insurance required to be procured by the Contractor pursuant to the Contract documents within thirty (30) calendar days after the date of receipt of the notice of award. Failure to fulfill these requirements within the specified time may be cause for termination of the Contract under "Termination for Default" in Section 3.

IP 14. Conflicts of Interests and Gratuities

Proposers are prohibited from engaging in any practice that may be considered as a conflict of interests under existing Agency policies and/or state law, and to refrain from participating in any gifts, favors or other forms of compensation that may be viewed as a gratuity in accordance with existing policies and laws.

IP 15. Agency-Specific Provisions

IP 15.1 Purpose of the Solicitation

The purpose of this solicitation is to establish a multi-vendor contract for the purchase of public transportation vehicles. The requirement has been divided into multiple types of vehicles that shall be competed separately and assembled into a listing of vehicles after award. The selected contractors shall accept purchase orders directly from the users. Each purchase order shall incorporate the base contract and all terms and conditions. The intent is to reduce the cost and effort needed to order these vehicles in order to make the funds and equipment available to increase services available to transit organizations.

IP 15.2 Roles of the Parties for this Solicitation

The Morongo Basin Transit Authority ("MBTA"), a member of the California Association for Coordinated Transportation ("CalACT"), is the lead agency role for the joint procurement for Heavy Duty Transit Vehicles.

The specific roles and obligations of the MBTA and CalACT are described in detail in the Cooperative Purchasing Agreement entered into by the parties. For the purposes of this solicitation, the arrangement entered into by the MBTA and CalACT shall hereinafter be referred to as the "Cooperative." As a general matter, MBTA staff, consultants, and counsel shall be responsible for the development of RFP solicitation documents, the technical product specifications and the awarding of vehicle contracts on behalf of the Cooperative. After the vehicle contract is awarded, CalACT shall be responsible for providing participating agencies with the ordering instructions and forms required to insure compliant purchasing, solicitation documentation required for the agency's files, collecting fees, and the general administration of the vehicle contract. Participating Agencies must contact CalACT-MBTA to secure formal letters of assignment prior to execution of any orders.

SECTION 3: GENERAL CONDITIONS

GC 1. Definitions

The following are definitions of special terms used in this document:

Agency: Morongo Basin Transit Authority (MBTA). Any contract modification involving the base contract shall be issued by MBTA. The term Agency shall also refer to any Agency which is a party to the joint procurement and that places a purchase order under the joint procurement.

Authorized Signer: The person who is executing this Contract on behalf of the Contractor and who is authorized to bind the Contractor.

Best And Final Offer (BAFO): The last Proposal made by a Proposer. If a BAFO is not specifically requested by the Agency, or if the Proposer does not promptly respond to a request for BAFO, then the most recent, current Proposal is the BAFO.

Class 1 Failure (physical safety): A failure that could lead directly to passenger or operator injury and represents a severe crash situation.

Class 2 Failure (road call): A failure resulting in an en route interruption of revenue service. Service is discontinued until the bus is replaced or repaired at the point of failure.

Competitive Range: The range of proposals that are identified as the most highly rated, unless the range is further reduced for purposes of efficiency.

Contract: The Proposal and its acceptance by the Agency as manifested by the Contract documents specified in "Section 10: Contract."

Contracting Officer: The person who is executing this Contract on behalf of the Agency and who has complete and final authority except as limited herein. For this solicitation, the Contracting Officer prior to Contract award is the authorized representative of MBTA. The Contracting Officer for administration of the contract following Contract award is the authorized representative of CalACT. Each order placed shall also designate a Contracting Officer for the Agency placing the order.

Contractor: The successful Proposer(s) who is awarded a Contract for providing buses and equipment described in the Contract documents.

Cooperative: Term used to describe the relationship between MBTA and CalACT for the establishment of the joint procurement.

Days: Unless otherwise stated, "days" shall mean calendar days.

Defect: Patent or latent malfunction or failure in manufacture, installation or design of any component or subsystem.

Deviation: Variance from a requirement or specification that does not alter the basis of a contract or adversely affects its performance.

Due Date: The date and time by which Proposals must be received by the Agency as specified in "Section 1: Notice of Request for Proposals."

Extended Warranty: A warranty available for purchase above the standard warranty.

Fatigue Failure (Corrosion Fatigue): The mechanical degradation of a material under the joint action of corrosion and cyclic loading.

Joint Procurement: An arrangement between multiple local government entities and/or CalTrans or its subrecipients with multiple vendors to provide specific property or services in the future at established prices. In this case, the specific property includes heavy duty transit vehicles.

Ordering Agency: Term for the agency that shall be purchasing vehicles from the joint procurement. In this case, an agency must be a listed member of the joint procurement shown in Appendix F.

Pass-Through Warranty: A warranty provided by the Contractor but administered directly with the component Supplier.

Proposal: A promise, if accepted, to deliver equipment and services according to the underlying solicitation of the Agency documented using the prescribed form in the solicitation, including any Proposal or BAFO.

Proposer: A legal entity that makes a Proposal. For this solicitation, the Proposer may be a vehicle manufacturer or a dealer representing a vehicle manufacturer.

Related Defect: Damage inflicted on any component or subsystem as a direct result of a separate Defect.

Solicitation: Agency's request for proposals.

Superior Warranty: A warranty still in effect after all contractually required warranties have expired. The remaining warranty is administered directly between the sub-Supplier and the Agency.

Supplier: Any manufacturer, company or Agency providing units, components or subassemblies for inclusion in the bus that is installed by the Contractor. Supplier items shall require qualification by type and acceptance tests in accordance with requirements defined in "Section 8: Quality Assurance."

Subcontractor: Any manufacturer, company or Agency providing units, components or subassemblies for inclusion in the bus that is installed by a Subcontractor. Subcontractor items shall require qualification by type and acceptance tests in accordance with requirements defined in "Section 8: Quality Assurance."

Work: Any and all labor, supervision, services, materials, machinery, equipment, tools, supplies and facilities called for by the Contract and necessary to the completion thereof.

GC 2. Materials and Workmanship

The Contractor shall be responsible for all materials and workmanship in the construction of the bus and all accessories used, whether the same are manufactured by the Contractor or purchased from a Supplier. This provision excludes any equipment leased or supplied by the Agency, except insofar as such equipment is damaged by the failure of a part or component for which the Contractor is responsible, or except insofar as the damage to such equipment is caused by the Contractor during the manufacture of the buses.

GC 3. Conformance with Specifications and Drawings

Materials furnished and Work performed by the Contractor shall conform to the requirements of the Technical Specifications and other Contract documents. Notwithstanding the provision of drawings, technical specifications or other data by the Agency, the Contractor shall have the responsibility of supplying all parts and details required to make the bus complete and ready for service even though such details may not be specifically mentioned in the drawings and specifications. Items that are installed by the Agency shall not be the responsibility of the Contractor unless they are included in this Contract.

GC 4. Inspection, Testing and Acceptance

GC 4.1 General

The pre-delivery tests and inspections shall be performed at the Contractor's plant; they shall be performed in accordance with the procedures defined in "Section 8: Quality Assurance"; and they may be witnessed by the resident inspector. When a bus passes these tests and inspections, the resident inspector, if one is present, shall authorize release of the bus.

Within fifteen (15) calendar days after arrival at the designated point of delivery, the bus shall undergo the Agency tests defined in "Post-Delivery Tests." If the bus passes these tests or if the Agency does not notify the Contractor of non-acceptance within 15 calendar days after delivery, then acceptance of the bus by the Agency occurs on the 15th day after delivery. If the bus fails these tests, it shall not be accepted until the repair procedures defined in "Repairs after

Nonacceptance" have been carried out and the bus retested until it passes. Acceptance occurs earlier if the Agency notifies the Contractor of early acceptance or places the bus in revenue service. .

GC 4.2 Risk of Loss

The Agency shall assume risk of loss of the bus on delivery, as defined in "Bus Delivery." Prior to this delivery, the Contractor shall have risk of loss of the bus, including any damages sustained during the delivery regardless of the status of title or any payments related to the bus. If the vehicle is driven to the designated point of delivery, drivers shall keep a maintenance log en route, and it shall be delivered to the Agency with the bus. If the bus is released back to the Contractor for any reason, the Contractor has the risk of loss upon such release.

GC 5. Title and Warranty of Title

Adequate documents for registering the bus in California shall be provided to the Contractor not less than ten (10) business days before delivery to the Agency. Sales and Use taxes to be paid by Contractor and reflected in its quotes and invoices to the ordering agencies. Contractor understands that ADA equipment installed on the vehicle is tax exempt and will reflect this in its quotes and invoices to the ordering agencies. Upon acceptance of each bus, the Contractor registers the vehicle and warrants that the title shall pass to the Agency free and clear of all encumbrances. See Appendix "D" for additional information on ADA equipment that is exempt for Sales or Use Tax. Upon acceptance of each bus, the Contractor registers the vehicle and warrants that the title shall pass to the Agency free and clear of all encumbrances.

GC 6. Intellectual Property Warranty

The Agency shall advise the Contractor of any impending patent suit related to this Contract against the Agency and provide all information available. The Contractor shall defend any suit or proceeding brought against the Agency based on a claim that any equipment, or any part thereof, furnished under this Contract constitutes an infringement of any patent, and the Contractor shall pay all damages and costs awarded therein, excluding incidental and consequential damages, against the Agency. In case said equipment, or any part thereof, is in such suit held to constitute infringement and use of said equipment or parts is enjoined, the Contractor shall, at its own expense and at its option, either procure for the Agency the right to continue using said equipment or part, or replace same with non-infringing equipment, or modify it so it becomes non-infringing.

The Contractor's obligations under this section are discharged and the Agency shall hold the Contractor harmless with respect to the equipment or part if it was specified by the Agency and all requests for substitutes were rejected, and the Contractor advised the Agency under "Questions, Clarifications and Omissions" of a potential infringement, in which case the Contractor shall be held harmless.

GC 7. Data Rights

GC 7.1 Proprietary Rights/Rights in Data

The term "subject data" used in this clause means recorded information, whether or not copyrighted, that is delivered or specified to be delivered under the Contract. It includes the proprietary rights of the following:

- Shop drawings and working drawings
- Technical data including manuals or instruction materials, computer or microprocessor software
- Patented materials, equipment, devices or processes
- License requirements

The Agency shall protect proprietary information provided by the Contractor to the fullest extent of the law. The Contractor shall grant a non-exclusive license to allow the Agency to utilize such information in order to maintain the vehicles. In the event that the Contractor no longer provides the information the Agency has the right to reverse engineer patented parts and software.

The Agency reserves a royalty-free, non-exclusive and irrevocable license to the abovementioned subject data for the sole purpose of operating and maintaining the buses. The Contractor agrees to include the requirements of this clause, modified as necessary to identify the affected parties, in each subcontract and supply order placed under the Contract.

GC 7.2 Access to Onboard Operational Data

The Agency grants to the Contractor the right to inspect, examine, download, and otherwise obtain any information or data available from components provided by the Contractor, including, but not limited to, any electronic control modules or other data-collection devices, to the extent necessary to enable Contractor to perform reliability maintenance analysis, corrective action and/or other engineering type Work for the bus. This right expressly excludes access to information or data collected on any equipment not provided and installed by the Contractor.

GC 8. Changes

GC 8.1 Contractor Changes

Any proposed change in this Contract shall be submitted to the Agency for its prior approval. Oral change orders are not permitted. No change in this Contract shall be made without the prior written approval of the Contracting Officer. The Contractor shall be liable for all costs resulting from, and/or for satisfactorily correcting, any specification change not properly ordered by written modification to the Contract and signed by the Contracting Officer.

GC 8.2 Agency Changes

The Agency may obtain changes to the Contract by notifying the Contractor in writing. As soon as reasonably possible but no later than thirty (30) calendar days after receipt of the written

change order to modify the Contract, the Contractor shall submit to the Contracting Officer a detailed price and schedule Proposal for the Work to be performed. This Proposal shall be accepted or modified by negotiations between the Contractor and the Contracting Officer. At that time, a detailed modification shall be executed in writing by both parties. Disagreements that cannot be resolved within negotiations shall be resolved in accordance with "Disputes," below. Regardless of any disputes, the Contractor shall proceed with the Work ordered.

GC 9. Legal Clauses

GC 9.1 Indemnification

GC 9.1.1 The Contractor shall, to the extent permitted by law: (1) protect, indemnify and save the Agency and its officers, employees and agents, including consultants, harmless from and against any and all liabilities, damages, claims, demands, liens, encumbrances, judgments, awards, losses, costs, expenses and suits or actions or proceedings, including reasonable expenses, costs and attorneys' fees incurred by the Agency and its officers, employees and agents, including consultants, in the defense, settlement or satisfaction thereof, for any injury, death, loss or damage to persons or property of any kind whatsoever, arising out of or resulting from the intentional misconduct or negligent acts, errors or omissions of the Contractor in the performance of the Contract, including intentional misconduct, negligent acts, errors or omissions of its officers, employees, servants, agents, Subcontractors and Suppliers; and (2) upon receipt of notice and if given authority, shall settle at its own expense or undertake at its own expense the defense of any such suit, action or proceeding, including appeals, against the Agency and its officers, employees and agents, including consultants, relating to such injury, death, loss or damage. Each party shall promptly notify the other in writing of the notice or assertion of such claim, demand, lien, encumbrance, judgment, award, suit, action or other proceeding hereunder. The Contractor shall have sole charge and direction of the defense of such suit, action or proceeding. The Agency shall not make any admission that might be materially prejudicial to the Contractor unless the Contractor has failed to take over the conduct of any negotiations or defense within a reasonable time after receipt of the notice and authority above provided. The Agency shall at the request of the Contractor furnish to the Contractor all reasonable assistance that may be necessary for the purpose of defending such suit, action or proceeding, and shall be repaid all reasonable costs incurred in doing so. The Agency shall have the right to be represented therein by advisory council of its own selection at its own expense.

GC 9.1.2 The obligations of the Contractor under the above paragraph shall not extend to circumstances where the injury, death or damages are caused solely by the negligent acts, errors or omissions of the Agency, its officers, employees, agents or consultants, including, without limitation, negligence in: (1) the preparation of the Contract documents, or (2) the giving of directions or instructions with respect to the requirements of the Contract by written order. The obligations of the Contractor shall not extend to circumstances where the injury, death or damages are caused, in whole or in part, by the negligence of any third-party operator, not including an assignee or Subcontractor of the Contractor, subject to the right of contribution. In

case of joint or concurrent negligence of the parties giving rise to a claim or loss against either one or both, each shall have full rights of contribution from the other.

GC 9.2 Suspension of Work

GC 9.2.1. The Agency may at any time and for any reason within its sole discretion issue a written order to the Contractor suspending, delaying or interrupting all or any part of the Work for a specified period of time.

GC 9.2.2. The Contractor shall comply immediately with any such written order and take all reasonable steps to minimize costs allocable to the Work covered by the suspension during the period of work stoppage. Contractor shall continue the Work that is not included in the suspension and shall continue such ancillary activities as are not suspended. The Contractor shall resume performance of the suspended Work upon expiration of the notice of suspension, or upon direction from the Agency.

GC 9.2.3. The Contractor shall be allowed an equitable adjustment in the Contract price (excluding profit) and/or an extension of the Contract time, to the extent that cost or delays are shown by the Contractor to be directly attributable to any suspension. However, no adjustment shall be made under this section for any suspension, delay or interruption due to the fault or negligence of the Contractor, or for which an equitable adjustment is provided for, or excluded under any other term or condition of the Contract. As soon as reasonably possible but no later than forty-five (45) calendar days, or any other period of time agreed to by the parties, after receipt of the written suspension of work notice, the Contractor shall submit to the Contracting Officer a detailed price and schedule Proposal for the suspension, delay or interruption.

GC 9.3 Excusable Delays/Force Majeure

GC 9.3.1. If the Contractor is delayed at any time during the progress of the Work by the neglect or failure of the Agency or by a cause as described below, then the time for completion and/or affected delivery date(s) shall be extended by the Agency subject to the following cumulative conditions:

a. The cause of the delay arises after the Notice of Award and neither was nor could have been anticipated by the Contractor by reasonable investigation before such award. Such cause may also include force majeure events such as any event or circumstance beyond the reasonable control of the Contractor, including but not limited to acts of God; earthquake, flood and any other natural disaster; civil disturbance, strikes and labor disputes; fires and explosions; war and other hostilities; embargo; or failure of third parties, including Suppliers or Subcontractors, to perform their obligations to the Contractor;
b. The Contractor demonstrates that the completion of the Work and/or any affected deliveries shall be actually and necessarily delayed;

c. The Contractor has taken measures to avoid and/or mitigate the delay by the exercise of all reasonable precautions, efforts and measures, whether before or after the occurrence of the cause of delay; and
d. The Contractor makes written request and provides other information to the Agency as described in GC 9.3.4 below.

A delay in meeting all of the conditions of this section shall be deemed an excusable delay. Any concurrent delay that does not constitute an excusable delay shall not be the sole basis for denying a request hereunder.

GC 9.3.2. None of the above shall relieve the Contractor of any liability for the payment of any liquidated damages owing from a failure to complete the Work by the time for completion that the Contractor is required to pay pursuant to "Liquidated Damages for Late Delivery of the Bus" for delays occurring prior to, or subsequent to the occurrence of an excusable delay.

GC 9.3.3. The Agency reserves the right to rescind or shorten any extension previously granted, if subsequently the Agency determines that any information provided by Contractor in support of a request for an extension of time was erroneous; provided, however, that such information or facts, if known, would have resulted in a denial of the request for an excusable delay. Notwithstanding the above, the Agency shall not rescind or shorten any extension previously granted if the Contractor acted in reliance upon the granting of such extension and such extension was based on information which, although later found to have been erroneous, was submitted in good faith by the Contractor.

GC 9.3.4. No extension or adjustment of time shall be granted unless: (1) written notice of the delay is filed with the Agency within fourteen (14) calendar days after the commencement of the delay and (2) a written application therefore, stating in reasonable detail the causes, the effect to date and the probable future effect on the performance of the Contractor under the Contract, and the portion or portions of the Work affected, is filed by the Contractor with the Agency within thirty (30) calendar days after the commencement of the delay. No such extension or adjustment shall be deemed a waiver of the rights of either party under this Contract. The Agency shall make its determination within thirty (30) calendar days after receipt of the application.

GC 9.4 Termination

GC 9.4.1. Termination for Convenience

The performance of Work under this Contract may be terminated by the Agency in accordance with this clause in whole, or from time to time in part, whenever the contracting officer shall determine that such termination is in the best interest of the Agency. Any such termination shall be effected by delivery to the Contractor of a notice of termination specifying the extent to which performance of Work under the Contract is terminated, and the date upon which such termination becomes effective.

After receipt of a notice of termination, and except as otherwise directed by the Contracting Officer, the Contractor shall do the following:

- Stop Work under the Contract on the date and to the extent specified in the notice of termination.
- Place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of such portion of the Work under the Contract as is not terminated.
- Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the notice of termination; assign to the Agency in the manner, at the times, and to the extent directed by the Contracting Officer, all of the right, title and interest of the Contractor under the orders and subcontracts so terminated, in which case the Agency shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts.
- Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Contracting Officer, to the extent he or she may require, which approval or ratification shall be final for all the purposes of this clause.
- Transfer title to the Agency and deliver in the manner, at the times and to the extent, if any, directed by the Contracting Officer the fabricated or unfabricated parts, Work in process, completed Work, supplies and other material produced as part of, or acquired in connection with the performance of, the Work terminated, and the completed or partially completed plans, drawings, information and other property which, if the Contract had been completed, would have been required to be furnished to the Agency.
- Use its best efforts to sell, in the manner, at the times, to the extent, and at the price(s) directed or authorized by the Contracting Officer, any property of the types referred to above, provided, however, that the Contractor shall not be required to extend credit to any purchaser, and may acquire any such property under the conditions prescribed by and at a price(s) approved by the Contracting Officer, and provided further that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the Agency to the Contractor under this Contract or shall otherwise be credited to the price or cost of the Work covered by this Contract or paid in such other manner as the Contracting Officer may direct.
- Complete performance of such part of the Work as shall not have been terminated by the notice of termination.
- Take such action as may be necessary, or as the Contracting Officer may direct, for the protection or preservation of the property related to this Contract that is in the possession of the Contractor and in which the Agency has or may acquire an interest.

The Contractor shall be paid its costs, including Contract close-out costs, and profit on Work performed up to the time of termination. The Contractor shall promptly submit its termination claim to Agency to be paid the Contractor. Settlement of claims by the Contractor under this

termination for convenience clause shall be in accordance with the provisions set forth in Part 49 of the Federal Acquisition Regulations (48 CFR 49) except that wherever the word "Government" appears, it shall be deleted and the word "Agency" shall be substituted in lieu thereof.

GC 9.4.2. Termination for Default

The Agency may, by written notice of default to the Contractor, terminate the whole or any part of this Contract if the Contractor fails to make delivery of the supplies or to perform the services within the time specified herein or any extension thereof; or if the Contractor fails to perform any of the other material provisions of the Contract, or so fails to make progress as to endanger performance of this Contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of ten (10) business days, or such longer period as the Contracting Officer may authorize in writing, after receipt of notice from the Contracting Officer specifying such failure.

If the Contract is terminated in whole or in part for default, the Agency may procure, upon such terms and in such manner as the Contracting Officer may deem appropriate, supplies or services similar to those so terminated. The Contractor shall be liable to the Agency for any excess costs for such similar supplies or services, and shall continue the performance of this Contract to the extent not terminated under the provisions of this clause.

Except with respect to defaults of Subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises out of a cause beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a Subcontractor, and if such default arises out of causes beyond the control of both the Contractor and Subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the supplies or services to be furnished by the Subcontractor were obtainable from other sources and in sufficient time to permit the Contractor to meet the required delivery schedule.

Payment for completed supplies delivered to and accepted by the Agency shall be at the Contract price. The Agency may withhold from amounts otherwise due the Contractor for such completed supplies such sum as the Contracting Officer determines to be necessary to protect the Agency against loss because of outstanding liens or claims of former lien holders.

If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to termination for convenience of the Agency.

GC 9.5 Compliance with Laws and Regulations

Contractor shall at all times comply with all applicable laws, regulations, policies, procedures and directives (together, the "Law"), including without limitation, FTA regulations, policies, procedures and directives, including those listed directly or by reference in the agreement between the Agency and FTA that funds any part of this Contract, as they may be amended or promulgated from time to time during the term of this Contract. Contractor's failure to so comply shall constitute a material breach of this Contract.

GC 9.6 Changes of Law

Changes of Law that become effective after the Proposal Due Date may result in price changes. If a price adjustment is indicated, either upward or downward, it shall be negotiated between the Agency and the Contractor and the final Contract price shall be adjusted upwards or downwards to reflect such changes in Law. Such price adjustment may be audited, where required.

GC 9.7 Governing Law and Choice of Forum

This Contract shall be governed by the laws of State of California without regard to conflict of law rules. The Contractor consents to the jurisdiction of the identified State and the County where the Agency purchasing the Vehicles is located.

GC 9.8 Disputes

Except as otherwise provided in this Contract, any dispute concerning a question of fact arising under or related to this Contract that is not disposed of by agreement shall be decided in accordance with the following steps. However, by mutual agreement the matter may be taken immediately to any higher step in the dispute resolution process, or mutually agreed to alternative dispute resolution process (which may include structured negotiations, mediation or arbitration) or litigation. Pending final resolution of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract and in accordance with the Contracting Officer's or Chief Executive Officer's decision, as the case may be.

1. **Notice of dispute.** All disputes shall be initiated through a written dispute notice submitted by either party to the other party within 10 (ten) calendar days of the determination of the dispute.

2. **Negotiation between contracting officers.** The parties shall attempt in good faith to resolve any dispute arising out of or relating to this Contract promptly by negotiation between the designated Contracting Officer of the Agency ordering the vehicles and the Contractor's executives who have authority to settle the controversy. Any party may give the other party written notice of any dispute not resolved in the normal course of business as provided in (1) above. Within 14 (fourteen) calendar days after delivery of the dispute notice, the receiving party shall submit to the other party a written response. The dispute notice and written response shall include: (a) a statement of the party's position and a

summary of the arguments supporting that position, (b) any evidence supporting the party's position and (c) the name of the executive who shall represent that party and of any others who shall accompany the executive in negotiations. Within 28 (twenty-eight) calendar days after delivery of the dispute notice, the Contracting Officer of both parties shall meet at a mutually acceptable time and place, and thereafter as they reasonably deem necessary to attempt to resolve the dispute. All reasonable requests for information by one party to the other shall be honored.

If the matter has not been resolved by these people within 42 (forty-two) calendar days of the dispute notice, the dispute may be referred to more senior executives of both parties who have authority to settle the dispute and who shall likewise meet to attempt to resolve the dispute.

GC 9.9 Maintenance of Records; Access by Agency; Right to Audit Records

In accordance with 49 CFR § 18.36(i), 49 CFR § 19.48(d), and 49 USC § 5325(a), provided the Agency is the FTA recipient or a sub-grantee of the FTA recipient, the Contractor agrees to provide the Agency, FTA, the Comptroller General of the United States, the Secretary of the U.S. Department of Transportation, the State of California or any of their duly authorized representatives access to any books, documents, papers and records of the Contractor that are directly pertinent to or relate to this Contract (1) for the purpose of making audits, examinations, excerpts and transcriptions and (2) when conducting an audit and inspection.

1. In the event of a sole source Contract, single Proposal, single responsive Proposal, or competitive negotiated procurement, the Contractor shall maintain and the Contracting Officer, the U.S. Department of Transportation (if applicable) or the representatives thereof shall have the right to examine all books, records, documents and other cost and pricing data related to the Contract price, unless such pricing is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the public, or prices set by law or regulation, or combinations thereof. Data related to the negotiation or performance of the Contract shall be made available for the purpose of evaluating the accuracy, completeness and currency of the cost or pricing data. The right of examination shall extend to all documents necessary for adequate evaluation of the cost or pricing data, along with the computations and projections used therein, including review of accounting principles and practices that reflect properly all direct and indirect costs anticipated for the performance of the Contract.

2. For Contract modifications or change orders the Contracting Officer, the U.S. Department of Transportation, if applicable, or their representatives shall have the right to examine all books, records, documents and other cost and pricing data related to a Contract modification, unless such pricing is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the public, or prices set by law or regulation, or combinations thereof. Data related to the

negotiation or performance of the Contract modification or change order shall be made available for the purpose of evaluating the accuracy, completeness and currency of the cost or pricing data. The right of examination shall extend to all documents necessary for adequate evaluation of the cost or pricing data, along with the computations and projections used therein, either before or after execution of the Contract modification or change order for the purpose of conducting a cost analysis. If an examination made after execution of the Contract modification or change order reveals inaccurate, incomplete or out-of-date data, the Contracting Officer may renegotiate the Contract modification or change order price adjustment, and the Agency shall be entitled to any reductions in the price that would result from the application of accurate, complete or up-to-date data.

The requirements of this section are in addition to other audit, inspection and record-keeping provisions specified elsewhere in the Contract documents.

GC 9.10 Confidential Information

Access to government records is governed by the statutes of the State of California. Except as otherwise required by the statutes of the State of California, the Agency shall exempt from disclosure proprietary information, trade secrets and confidential commercial and financial information submitted or disclosed during the Contract period. Any such proprietary information, trade secrets or confidential commercial and financial information that a Contractor believes should be exempted from disclosure shall be specifically identified and marked as such. Blanket-type identification by designating whole pages or sections as containing proprietary information, trade secrets or confidential commercial and financial information shall not ensure confidentiality. The specific proprietary information, trade secrets or confidential commercial and financial information must be clearly identified as such.

Upon a request for records from a third party regarding the Contract, the Agency shall notify the Contractor in writing. The Contractor must respond within twenty (20) days with the identification of any and all “proprietary, trade secret or confidential commercial or financial” information, and the Contractor shall indemnify the Agency’s defense costs associated with its refusal to produce such identified information; otherwise, the requested information may be released.

The Agency shall employ sound business practices no less diligent than those used for the Agency’s own confidential information to protect the confidence of all licensed technology, software, documentation, drawings, schematics, manuals, data and other information and material provided by the Contractor pursuant to the Contract that contain confidential commercial or financial information, trade secrets or proprietary information as defined in or pursuant to the statutes of the State of California against disclosure of such information and material to third parties except as permitted by the Contract. The Contractor shall be responsible for ensuring that confidential commercial or financial information, trade secrets or proprietary

information, with such determinations to be made by the Agency in its sole discretion, bears appropriate notices relating to its confidential character.

During the performance of the Work under the Contract, it may be necessary for either party (the "Discloser") to make confidential information available to the other party (the "Recipient"). The Recipient agrees to use all such information solely for the performance of the Work under the Contract and to hold all such information in confidence and not to disclose same to any third party without the prior written consent of the Discloser. Likewise, the Recipient agrees that all information developed in connection with the Work under the Contract shall be used solely for the performance of the Work under the Contract, and shall be held in confidence and not disclosed to any third party without the prior written consent of the Discloser.

This Confidentiality section shall survive the termination or expiration of the Contract.

GC 9.11 Conflicts of Interest, Gratuities

No member, officer, or employee of the Agency or of a local public body during his or her tenure, or one year thereafter, shall have any interest, direct or indirect, in this Contract or the proceeds thereof.

GC 9.12 General Nondiscrimination Clause

In connection with the performance of Work provided for under this Contract, the Contractor agrees that it shall not, on the grounds of race, religious creed, color, national origin, ancestry, physical disability, medical condition, marital status, sex, sexual orientation or age, discriminate or permit discrimination against any person or group of people in any manner prohibited by federal, state or local laws.

GC 9.13 Amendment and Waiver

GC 9.13.1. Amendment

Any modification or amendment of any provisions of any of the Contract documents shall be effective only if in writing, signed by authorized representatives of both the Agency and Contractor, and specifically referencing this Contract.

GC 9.13.2. Waiver

In the event that either party elects to waive its remedies for any breach by the other party of any covenant, term or condition of this Contract, such waiver shall not limit the waiving party's remedies for any succeeding breach of that or of any other term, covenant or condition of this Contract.

GC 9.14 Remedies not Exclusive

The rights and remedies of the Agency provided herein shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract.

GC 9.15 Counterparts

This Contract may be executed in any number of counterparts. All such counterparts shall be deemed to constitute one and the same instrument, and each of said counterparts shall be deemed an original thereof.

GC 9.16 Severability

Whenever possible, each provision of the Contract shall be interpreted in a manner as to be effective and valid under applicable law. However, if any provision, or part of any provision, should be prohibited or invalid under applicable law, such provision, or part of such provision, shall be ineffective to the extent of such prohibition or invalidity without invalidating the remainder of such provision or the remaining provisions of the Contract.

GC 9.17 Third-Party Beneficiaries

No provisions of the Contract shall in any way inure to the benefit of any third party, including the public at large, so as to constitute such person a third-party beneficiary of the Contract or of any one or more of the terms and conditions of the Contract or otherwise give rise to any cause of action in any person not a party to the Contract, except as expressly provided elsewhere in the Contract.

GC 9.18 Assignment of Contract

Neither party shall assign or subcontract its rights nor obligations under the Contract without prior written permission of the other party, and no such assignment or subcontract shall be effective until approved in writing by the other party. Independent Parties

The Contractor is an independent contractor with respect to the performance of all Work hereunder, retaining control over the detail of its own operations, and the Contractor shall not be considered the agent, employee, partner, fiduciary or trustee of the Agency.

GC 9.19 Survival

The following sections shall survive the nominal expiration or discharge of other Contract obligations, and the Agency may obtain any remedy under law, Contract or equity to enforce the obligations of the Contractor that survive the manufacturing, warranty and final payment periods:

- “Intellectual Property Warranty”
- “Data Rights”
- “Indemnification”
- “Governing Law and Choice of Forum”
- “Disputes”
- “Confidential Information”
- “Parts Availability Guarantee”

- "Access to Records"
- "Training"

GC 10. Agency-Specific Provisions – Not Used

SECTION 4: SPECIAL PROVISIONS

SP 1. Authorization to Use the Joint Procurement Contract

The use of the Joint Procurement contract shall be restricted to the agencies listed in Appendix "C" which includes publicly funded transit agencies, city transit systems, other governmental agencies or non-profit organizations performing governmental services.

SP 2. Assignability

MBTA reserves the right to assign the ability to use the contract to any other grantees of FTA funds in accordance with FTA Circular 4220.1F or successor circulars. A letter of Assignment shall be issued by either MBTA or by CalACT acting for MBTA under the terms of their Cooperative Purchasing Contract. MBTA reserves the right to withhold assignments at its unilateral discretion. **The maximum quantity of buses that shall be authorized to any Agency each contract year shall be fifteen (15) vehicles.** Each Assignment shall be valid for a one-year period.

SP 3. Period of Performance

The initial period of performance shall be two (2) years. MBTA shall have the right to extend the period of performance for three (3) one-year options. **The three (3) one-year option periods are a unilateral right that shall not be refused by the Contractor**. Subject to the Agency's right to order modifications, the Option Vehicles shall have the same specifications as the vehicles purchased under the initial Contract. The Agency may exercise the Options by written notice to the Contractor ("Notice of Exercise of Option") at least ninety (90) days prior to the expiration of the initial period of performance.

In the event that these option is exercised, the pricing for each option period shall be established per the provisions of SP 5.2, Vehicle and Optional Feature Pricing for Option Periods.

SP 4. Procurement Fee

A procurement fee of 1% of total pre-tax price per vehicle, up to $20,000 per transaction shall be paid by the Contractor(s) to the Cooperative each month based on activity on this contract. This fee shall be shown as a separate line item on the invoice to the Agency ordering the vehicles. The fee is to be collected by the contractor for the convenience of the purchasing agencies, remitted as a pass thru cost and not to be considered a part of the cost of producing the bus and therefore not subject to sales tax. It shall be payable to the Cooperative within forty five (45) days of delivery to agencies. Contractors shall also supply monthly activity reports showing all orders and payments to the Cooperative. This activity may be audited. The Cooperative may charge interest for late payment if payment is delayed more than ten (10) days after the payment Due Date set forth above. Interest will be charged at a rate of 10% of the procurement fee that is due. MBTA reserves the right to unilaterally revise these fees at any time by giving written notice to the contractor.

Failure to report shall also be seen as failure to perform the contract and may lead to corrective action up to and including Termination for Default.

SP 5. Pricing

SP 5.1 Price Validity for the Initial Contract Term

Contractor agrees to sell vehicle(s), including proposed optional equipment, at the same price and under the terms and conditions of this Agreement from the time of contract award to the expiration of the initial contract term. By submittal and acceptance of its pricing, the Contractor also agrees to provide any of the listed optional features at the listed pricing for the initial two-year contract term.

SP 5.2 Vehicle and Optional Feature Pricing for Option Periods

Subject to the provisions of SP 5.4 Price Adjustments, the price of the vehicles and of the optional features for each option period shall be the unit price established in the initial contract adjusted by multiplying the Base Order Price by the following fraction:

$$\frac{\text{Preliminary Index Number on Month Prior to Notice of Exercise of Option}}{\text{Index Number on Effective Date of the Contract}}$$

The Index shall be the Producer Price Index for Truck and Bus Bodies, Series No. 1413 published by the United States Department of Labor or if such Index is no longer in use, then such replacement which is most comparable to the Index as may be designated by the Bureau of Labor Statistics, or as agreed by the parties.

SP 5.3 Prohibitions

Contractors are expressly prohibited from offering any rebates, parts credits and any other price discounts following contract award.

SP 5.4 Price Adjustments

With the exception of price changes for option periods permitted under SP 5.2, Section GC 9.6, Changes of Law, and SP 19, New Technology and are the only provisions that provide for price adjustments.

SP 6. Ordering Procedures

Agencies that are members of the joint procurement and that are using federal funds to place orders under this contract shall follow the following procedures:

1. The Agency shall develop a requirements list (simplified RFI) showing all optional features, if any, that are required. In addition, the Agency shall identify any other evaluation factors that shall be considered in determining which vehicle is to be ordered. (Factors that may also be considered include past performance, special features of the

specific vehicle required for effective program performance, warranty considerations, if any, maintenance or inventory considerations, if any and proposed delivery schedule.)

2. The Agency shall issue a request for delivery schedule to Contractors for at least three of vehicles available on the contract. (If there are fewer than three vehicles listed, the Agency shall obtain this information for the maximum number of vehicles available.) The RFI shall list any other additional information that is required. It shall also note how information shall be evaluated and the deadline for submittal.

3. Following receipt of the information, the Agency shall evaluate the submittals according to the evaluation criteria and select the quote that represents the offer that is most advantageous to the Agency when all factors are evaluated.

4. The recommended firm shall receive a written Order Confirmation form from the Ordering Agency. This form shall indicate:

    a. Itemized list of all vehicles, parts, etc. being ordered and prices
    b. Designated delivery point
    c. Delivery due date.

5. The Order Confirmation form does not replace any other required document such as Purchase Orders that may be issued by the agency.

6. All eligible orders must provide a quote/proposal from the selected Dealer or Manufacturer that provides at a minimum the following information:

    - Vehicle Type-provide description that includes make, model, vehicle class, propulsion type and capacity
    - Full and legal Ordering Agency Name as it will appear on the Assignment
    - Contact at Ordering Agency (including email, title, mailing address, phone number). Provide additional name if your contact is not the person that will receive the Assignment Letter.
    - Sales person
    - Proposer's response shall confirm that the vehicle configuration proposed including optional features is projected to meet prevailing Buy America requirements and provide an estimate of domestic content.

    Quantity ordered-quote is to reflect entire and complete bus order, and is not per bus Price of all options

7. **Ordering agency to initiate the transaction in the Cooperative's online ordering program.** The agency and Contractor to update all information and changes as needed.

Awarded contractors to be briefed by Cooperative (CALACT) staff on use of this program prior to beginning sales activity on the contract. An authorized representative will issue a Letter of Assignment only after all the aforementioned steps have taken place.

ADA eligible Items identified for sales tax exemption
Published and Non Published Options are to be listed separately
Total Price of Bus subject to the procurement fee
Document Fee
Sales Tax
Procurement Fee
Delivery fee as quoted on Price Worksheet with expected delivery date-**quotes issued without a delivery date are not valid.**
Date of Order

All quotes from the contractor must be written using the same format and approved by the Cooperative prior to first order. Any changes to the order by the buyer or seller after receipt need to be sent to the Cooperative. All buses ordered must be compliance with contract including but not limited to the buyer being a current member of CalACT. Questions about buyer eligibility to purchase from the contract need to be sent to the Cooperative for verification. Any change orders made to the initial purchase order are to be communicated as soon as possible to the Cooperative.

SP 7. Inspection, Testing, Acceptance and Repairs

SP 7.1 First Article/Facility Inspection

At the sole election of MBTA, the Agency may conduct an on-site inspection of the first vehicle produced to confirm compliance with the specification and to validate the Post-Delivery Buy America and any other audit requirements. The first production bus shall serve as the "First Article" vehicle and standard for the units that follow as ordered. This shall not relieve the Contractor and manufacturer from an obligation to manufacture all units in compliance with all specifications.

At least thirty (30) days prior to completion of the Facility/First Article bus, the Contractor is to notify MBTA in writing. The First Article bus is to be available for inspection either at the point of delivery or at the manufacturing facility. The failure to notify the MBTA of the First Article's manufacturing schedule affects the ability to confirm compliance with Post-Delivery Buy America requirements. (See also SP16 - Buy America Post-Delivery Audit.) **This failure may be determined to be a Breach of Contract which could lead to Termination. In addition, the lack of compliance may result in a determination of Non-Responsibility which could prohibit future contract awards.**

Parties that are to be present include representatives from the successful manufacturer, the Contractor if proposed by a dealer and representative(s) from the MBTA.

SP 7.2 Pre-Delivery Tests

The Contractor's or manufacturer's pre-delivery tests and inspections of all Vehicles shall be performed at or near the manufacturing plant; they shall be performed in accordance with the procedures defined in Quality Assurance Provisions, and they may be witnessed by the Resident Inspector, if one is assigned to a specific order. The records of this testing shall be provided to the ordering agency in accordance with the Quality Assurance Provisions.

SP 7.3 Service Prior to Delivery

Prior to delivery, each vehicle shall be inspected and serviced by the Contractor or by an authorized dealer of the manufacturer in a service shop located near the Ordering Agency. The service shall include not less than the following:

A. Check and fill all fluid levels as necessary. This shall include but not be limited to engine oil, hydraulic oil, transmission fluid, coolant level and mixture, battery levels, brake fluid, differential oil, washer fluid, and any and all other fluid levels.
B. Complete wash and detail of the vehicle and removal of all unnecessary dealer stickers prior to delivery and inspection.
C. A four-wheel alignment at final point of inspection. Wheel alignment shall take place after delivery to the Contractor's location. Documentation of alignment settings for camber, caster, and toe-in settings shall be furnished for the final inspection, and must accompany delivery documentation to Ordering Agency**.**
D. Full tank of fuel at the Contractor's location.
E. Documentation of the alignment of headlights shall be provided to the Ordering Agency at delivery**.**
F. Check to insure proper operation of all accessories, gauges, lights, mechanical, and hydraulic features. Particular attention shall be given to door alignment, lift operation, weather-stripping, hardware, paint condition, and labeling of the cooling system.
G. Copy of the Contractor's pre-delivery inspection and all subsequent inspections by Contractor's inspectors shall be provided to the Ordering Agency upon delivery.
H. A certified weight certificate showing the "as built" weight of the vehicle shall be provided with each vehicle at the time of delivery. The vehicle shall be full of fuel and all fluids and weighed with all equipment installed. The weight certificate shall be included with the bus and available for review at time of inspection.

SP 7.4 Delivery Coordination and Pricing of Delivery

All vehicle deliveries shall be coordinated with the ordering agency. The Contractor shall contact the ordering agency to agree upon a delivery schedule at least three (3) working days prior to delivery. Delivery shall be made during normal working hours. Delivery terms are FOB Destination to be specified by the ordering agency to their place of business. For orders placed

by other ordering agencies, the delivery charges shall be based on the delivery cost per zone as established in the price worksheet.

SP 7.5 Delivery Inspection, Post-Delivery Tests and Acceptance

1. Upon delivery of the Vehicle at a point of delivery, the Agency shall take possession of the Vehicle and shall perform the inspections and tests. For vehicles that are federally funded, each bus shall be inspected and road tested per Appendix B, Visual Inspection and Road Test Forms. For vehicles funded by or through Caltrans, each bus shall also be inspected using Appendix C, Caltrans Vehicle Inspection Report. If the Vehicle passes these inspections and tests, the Agency shall accept the Vehicle no later than the fifteenth day after Contractor delivers the Vehicle to the Agency. The Agency may accept a Vehicle earlier upon Notice of early Acceptance to the Contractor. If the Agency does not notify the Contractor of non-acceptance within 15 calendar days after delivery, then acceptance of the bus by the Agency occurs on the 15th day after delivery.

Vehicles that fail to pass the post-delivery tests are subject to non-acceptance. The Agency shall record details of all Defects on the appropriate test forms and shall notify the Contractor of acceptance or non-acceptance of each bus after completion of the tests. The Defects detected during these tests shall be repaired according to procedures defined in "Repairs after Non-Acceptance."

SP 7.6 Documentation and Deliverables Per Bus Order

The Technical Specification identifies all technical deliverables that must be provided with each bus order. In addition to those items, the Contractor shall provide deliver the following documentation and deliverables with the bus (es).

- Warranty papers – forms, policy, procedures
- Post Delivery Buy America documentation if different from the Post Delivery Buy America audit conducted under SP 17. **Must accompany or precede bus delivery. These are to be marked and placed in a separate envelope for each and every delivery for the specific bus ordered by the participating agency.**

The Contractor also shall exert its best efforts to keep maintenance manuals, operator manuals and parts books up to date for a period of five (5) years. The supplied manuals shall incorporate all equipment ordered on the buses covered by this procurement. In instances where copyright restrictions or other considerations prevent the Contractor from incorporating major components information into the bus parts and service manuals, separate manual sets as published by the subcomponent Supplier shall be provided.

SP 7.7 Repairs after Non-Acceptance

The Contractor, or its designated representative, shall perform the repairs after non-acceptance.

SP 8. Orientation with Delivery

The Contractor shall provide a vehicle orientation with each vehicle delivered to an Agency. If an agency orders more than one (1) vehicle of identical specifications, the orientations shall be provided on the first vehicle delivered. The orientation shall be conducted by the Contractor for the maintenance and operations supervisory and training personnel. The orientation shall include but not be limited to:

- Engine type and proper type of fuel
- How to check coolant level and type of coolant required
- Function of all controls on the vehicle.
- Function of all controls on the driver control panel
- Location and function of controls on all add-on equipment, such as the A/C, etc.
- Location and identification of all visible and audible alarms.
- Location and identification of tire pressure ID plate
- Location of batteries and how to service the batteries.

SP 9. Registration of Vehicles

The Contractor shall register all vehicles. A certification of compliance for vehicle emissions must be supplied at the time of delivery of each vehicle. Any additional requirements involving vehicle registration such as listing of lien holders shall be provided by the ordering Agency and included in the Order Confirmation form. The Contractor warrants that the title shall pass to the Agency free and clear of all liens, mortgages and encumbrances, financing statements, security agreements, claims, and demands of any character following the Agency's Acceptance of each bus.

SP 10. Payment

All payments shall be made as provided herein, less any additional amount withheld as provided below and less any amounts for liquidated damages in accordance with "Liquidated Damages for Late Delivery of the Bus."

The Agency shall make payments for buses at the unit prices itemized in the price worksheet offered by firm within thirty (30) calendar days after the delivery and acceptance of each bus and receipt of a proper invoice.

The Agency shall make payments for spare parts and/or equipment at the unit prices itemized in the price worksheet offered by firm within thirty (30) calendar days after the delivery and acceptance of said spare parts and/or equipment and receipt of a proper invoice.

The Agency shall make a final payment for all withholding within thirty (30) calendar days of receipt of a final proper invoice and the following:

1. Delivery and acceptance of all Contract deliverables, including manuals and other documentation required by the Contract, excluding training.
2. Contractor provision of any certifications as required by law and/or regulations.
3. Completion of post-delivery audits required under the Contract.

SP 10.1 Invoices

Contractor shall submit invoices for all Vehicles, Spare Parts, and all equipment and other items purchased under this Contract to the Agency thirty (30) calendar days prior to each delivery. Payment shall be within 30 days after Acceptance of each item. Proforma invoices shall be acceptable.

SP 10.2 Payment of Taxes

Unless otherwise provided in this Contract, the Contractor shall pay all federal, state and local taxes, and duties applicable to and assessable against any Work, goods, services, processes and operations incidental to or involved in the Contract, including but not limited to retail sales and use, transportation, export, import, business and special taxes. The Contractor is responsible for ascertaining and paying the taxes when due. The total Contract price shall include compensation for all taxes the Contractor is required to pay by laws in effect on the Proposal Due Date. The Contractor shall maintain auditable records, subject to the Agency reviews, confirming that tax payments are current at all times. Each invoice for vehicles shall specifically indicate the tax exemption for handicapped equipment (California Revenue and Taxation Code Section 6394.4).

SP 11. Delivery Schedule

The Contractor shall deliver all buses on or before the delivery date contained in the Order Confirmation issued by each ordering agency. The Order Confirmation shall also indicate the point of delivery as well as days and hours of delivery.

SP 12. Liquidated Damages for Late Delivery of the Bus

It is mutually understood and agreed by and between the parties to the Contract that time is of the essence with respect to the completion of the Work and that in case of any failure on the part of the Contractor to deliver the buses within the time specified in “Delivery Schedule,” except for any excusable delays as provided in “Excusable Delays/Force Majeure” or any extension thereof, the Agency shall be damaged thereby. The amount of said damages, being difficult if not impossible of definite ascertainment and proof, it is hereby agreed that the amount of such damages due to the Agency shall be fixed at $100 per business day per bus not delivered in substantially as good condition as inspected by the Agency at the time released for shipment.

The Contractor hereby agrees to pay the aforementioned amounts as fixed, agreed and liquidated damages, and not by way of penalty, to the Agency and further authorizes the Agency to deduct the amount of the damages from money due the Contractor under the Contract, computed as aforesaid. If the money due the Contractor is insufficient or no money is due the Contractor, then the Contractor shall pay the Agency the difference or the entire amount, whichever may be the case, within thirty (30) days after receipt of a written demand by the Contracting Officer.

The payment of aforesaid fixed, agreed and liquidated damages shall be in lieu of any damages for any loss of profit, loss of revenue, loss of use, or for any other direct, indirect, special or consequential losses or damages of any kind whatsoever that may be suffered by the Agency arising at any time from the failure of the Contractor to fulfill the obligations referenced in this clause in a timely manner.

SP 13. Service and Parts

SP 13.1 Contractor Service and Parts Support/Service Plan

The Contractor shall state on the form the location/s of the nearest distribution center, which shall furnish a complete supply of parts and components for the repair and maintenance of the buses to be supplied. The Contractor also shall state in its Proposal its policy on transportation charges for parts other than those covered by warranty. The Contractor must identify in its proposal that it has the resources and experience to service a contract of this scale. Physical service centers with the proximity and the technical capacity to serve the Cooperative's statewide participants are to be identified. Alternatively, if a proposer intends to utilize a subcontractor to provide service and warranty the proposed subcontractor must be identified in the Proposal. A letter documenting the manufacturer's approval and authorization of the proposed service provider to perform service and warranty repairs for this contract, along with a letter from the subcontract service provider agreeing to perform the proposed service and warranty requirements, must be submitted with the Proposal. A **Written Service Plan** that identifies the representatives responsible for assisting the Agency and fully describes the Contractor's plan to address the service and support requirements of this procurement. The MBTA reserves the right to evaluate and approve the subcontractor's technical capacity to adequately serve a contract of the size and scope anticipated for this procurement.

SP 13.2 Parts Availability Guarantee

The Contractor hereby guarantees to provide, within reasonable periods of time, the spare parts, software and all equipment necessary to maintain and repair the buses supplied under this Contract for a period of at least twelve (12) years after the date of acceptance. Parts shall be interchangeable with the original equipment and shall be manufactured in accordance with the quality assurance provisions of this Contract. Prices shall not exceed the Contractor's then-current published catalog prices.

Where the parts ordered by the Agency are not received within two working days of the agreed-upon time and date and a bus procured under this Contract is out of service due to the lack of

said ordered parts, then the Contractor shall provide the Agency, within eight (8) hours of the Agency's verbal or written request, the original Suppliers' and/or manufacturers' parts numbers, company names, addresses, telephone numbers and contact persons' names for all of the specific parts not received by the Agency.

Where the Contractor fails to honor this parts guarantee or parts ordered by the Agency are not received within thirty (30) days of the agreed-upon delivery date, then the Contractor shall provide to Agency, within seven (7) days of the Agency's verbal or written request, the design and manufacturing documentation for those parts manufactured by the Contractor and the original Suppliers' and/or manufacturers' parts numbers, company names, addresses, telephone numbers and contact persons' names for all of the specific parts not received by the Agency. The Contractor's design and manufacturing documentation provided to the Agency shall be for its sole use in regard to the buses procured under this Contract and for no other purpose.

SP 14. Federal Motor Vehicle Safety Standards (FMVSS)

The Contractor shall submit either a manufacturer's FMVSS self-certification that the vehicle complies with relevant FMVSS or a manufacturer's certified statement that the contracted buses shall not be subject to FMVSS regulations. One copy of the statement shall be provided to each Agency with the delivery of the buses.

SP 15. Motor Vehicle Pollution Requirements

The Contractor shall furnish to each Agency a certification in writing with each Vehicle delivered that:

- Vehicles shall meet Federal and California pollution requirements.
- The horsepower of the Vehicle is adequate for the speed, range, and terrain in which it shall be required to operate and meet the demands of all auxiliary power equipment.

SP 16. Insurance

The Agency recognizes that the Contractor may be a dealer whose role is warranty and service of the vehicle or the manufacturer of the vehicles. In either case, the Contractor shall maintain in effect during the term of this Contract, including any warranty period, at its own expense, at least the following coverage and limits of insurance:

- Statutory Workers Compensation and Employers Liability insurance and/or qualified self-insurance program covering Supplier's employees while on Agency property.
- Commercial General Liability Insurance:
    - Bodily Injury and Property Damage, including Contractual Liability covering the indemnification contained herein, $1,000,000 combined single limits per occurrence, $5,000,000 aggregate, where applicable.

    - Product liability: $1,000,000 per occurrence, for a period of five (5) years after acceptance of the last bus delivered under this Contract (Products Liability coverage may be effected through one or more excess liability policies).
- Automobile Liability Insurance: Bodily Injury and Property Damage, $1,000,000 combined single limits per occurrence.

In addition, the vehicle manufacturer whose role is to provide the vehicle shall maintain in effect during the term of this Contract, including any warranty period, at its own expense, at least the following coverage and limits of insurance:

- Commercial General Liability Insurance:
    - Bodily Injury and Property Damage, including Contractual Liability covering the indemnification contained herein, $1,000,000 combined single limits per occurrence, $5,000,000 aggregate, where applicable.
    - Product liability: $1,000,000 per occurrence, for a period of five (5) years after acceptance of the last bus delivered under this Contract (Products Liability coverage may be effected through one or more excess liability policies).

Contractor shall deliver to the Agency, within thirty (30) days after receiving Notice of Award of this Contract, evidence of the above. Prior to the expiration of any insurance during the time required, the Supplier shall furnish evidence of renewal to the Agency's Contract Administrator.

SP 17. Buy America Post-Delivery Audit

Prior to delivery of the first vehicle, the Contractor shall provide documentation or access to documentation required to evidence compliance with the Buy America Post-Delivery audit requirements. The documentation shall be provided in the same format as was submitted for the Pre-Award Buy America audit. The Agency shall not retain a copy of any audit documentation that is provided.

SP 18. Interchangeability

All buses delivered under this Contract, whether provided by a Subcontractor or Supplier, or manufactured by the Contractor, shall be duplicates in design and manufacture, and installed to assure Interchangeability among Buses in each separate order. This Interchangeability shall extend to the components and parts as well as to their locations in the Buses for all buses produced during the first year of the contract.

For buses being produced during the second base year of the Contract, MBTA shall consider changes such as product improvements on a case-by-case basis. MBTA's basic expectation for any such change is that the new product shall perform at least as well if not better than the original. To that end, the Contractor may be required to obtain and provide an extended warranty at no cost for any proposed change in components.

In the event that a supplier discontinues a product during the Contract period, MBTA shall consider a substitute product on a case-by-case basis. No substitutions are to be not without the express written consent of MBTA. MBTA's basic expectation for any such change is that the new product shall perform at least as well if not better than the original. To that end, the Contractor may be required to obtain and provide an extended warranty at no cost for any proposed change in components.

All such changes shall be processed according to the provisions of GC 8, Changes. The Contractor shall not modify any of the listed items contained on the Technical Submittal which was submitted with the proposal without the express written consent of MBTA.

SP 19. New Technology

MBTA reserves the right to add new devices or accessories to this contract that may evolve or become available through new technology to the resulting contract. Such additions must be for the same general purpose as equipment awarded and fall within the original scope. Price adjustments may be considered at the discretion of MBTA. Such equipment shall only be added if it is presented as an items addition or approved replacement by an awarded Contractor.

SECTION 5: FEDERAL REQUIREMENTS

FR 1. Access to Records

The Contractor agrees to maintain all books, records, accounts and reports required under this Contract for a period of not less than three years after the date of termination or expiration of this Contract, except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case Contractor agrees to maintain same until the Agency, the FTA Administrator, the Comptroller General or any of their duly authorized representatives have disposed of all such litigation, appeals, claims or exceptions related thereto. Reference 49 CFR 18.39(i)(11).

The following access to records requirements apply to this Contract:

FR 1.1 Local Governments

In accordance with 49 CFR 18.36(i), the Contractor agrees to provide the Agency, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor that are directly pertinent to this Contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 CFR 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 USC 5302(a)1, which is receiving federal financial assistance through the programs described at 49 USC 5307, 5309 or 5311.

FR 1.2 State Governments

In accordance with 49 CFR 633.17, the Contractor agrees to provide the Agency, the FTA Administrator or his authorized representatives, including any PMO Contractor, access to the Contractor's records and construction sites pertaining to a major capital project, defined at 49 USC 5302(a)1, which is receiving federal financial assistance through the programs described at 49 USC 5307, 5309 or 5311. By definition, a major capital project excludes contracts of less than the simplified acquisition threshold currently set at $100,000.

The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

FR 2. Federal Funding, Incorporation of FTA Terms and Federal Changes

The preceding provisions include, in part, certain standard terms and conditions required by the Department of Transportation, whether or not expressly set forth in the preceding Contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F or its successors are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this agreement. The Contractor shall not perform any act, fail to perform any act or refuse to comply with any Agency requests that would cause the Agency to be in violation of the FTA terms and conditions.

The Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between Agency and FTA, as they may be amended or promulgated from time to time during the term of this Contract. Contractor's failure to so comply shall constitute a material breach of this Contract.

FR 3. Federal Energy Conservation Requirements

The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

FR 4. Civil Rights Requirements

The following requirements apply to the underlying Contract:

1. **Nondiscrimination:** In accordance with Title VI of the Civil Rights Act, as amended, 42 USC § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 USC § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 USC § 12132, and Federal transit law at 49 USC § 5332, the Contractor agrees that it shall not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply

with applicable Federal implementing regulations and other implementing requirements FTA may issue.

2. **Equal Employment Opportunity:** The following equal employment opportunity requirements apply to the underlying Contract:

   (a) **Race, Color, Creed, National Origin, Sex:** In accordance with Title VII of the Civil Rights Act, as amended, 42 USC § 2000e, and Federal transit laws at 49 USC § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 CFR Parts 60 *et seq.*, (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 USC § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

   (b) **Age:** In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 USC §§ 623 and Federal transit law at 49 USC § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

   (c) **Disabilities:** In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 USC § 12112, the Contractor agrees that it shall comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 CFR Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

3. The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

FR 5. No Government Obligation to Third Parties

1. The Agency and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the Solicitation or award of the underlying Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to the Agency, Contractor, or any other party (whether or not a party to that Contract) pertaining to any matter resulting from the underlying Contract.

2. The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the Subcontractor who shall be subject to its provisions.

FR 6. Program Fraud and False or Fraudulent Statements or Related Acts

1. The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 USC §§ 3801 *et seq*. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 CFR Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying Contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying Contract or the FTA assisted project for which this Contract Work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

2. The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a Contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 USC § 5307, the Government reserves the right to impose the penalties of 18 USC § 1001 and 49 USC § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

3. The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the

clauses shall not be modified, except to identify the Subcontractor who shall be subject to the provisions.

FR 7. Suspension and Debarment

This Contract is a covered transaction for purposes of 49 CFR Part 29. As such, the Contractor is required to verify that none of the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The Contractor is required to comply with 49 CFR 29, Subpart C, and must include the requirement to comply with 49 CFR 29, Subpart C, in any lower-tier covered transaction it enters into.

By signing and submitting it Proposal, Proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by the Agency. If it is later determined that Proposer knowingly rendered an erroneous certification, in addition to remedies available to the Agency, the federal government may pursue available remedies, including but not limited to suspension and/or debarment. The Proposer agrees to comply with the requirements of 49 CFR 29, Subpart C, while this Proposal is valid and throughout the period of any Contract that may arise from this Proposal. The Proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

FR 8. Disadvantaged Business Enterprise (DBE)

This Contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.

The Contractor shall maintain compliance with “DBE Approval Certification” throughout the period of Contract performance.

The Contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted Contract. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as the Agency deems appropriate. Each subcontract the Contractor signs with a Subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

FR 9. Prompt Payment to Subcontractors

Pursuant to 49 Code of Federal Regulations (CFR) Part 26, the Contractor shall pay each Subcontractor under this Contract for satisfactory performance of its Contract no later than thirty

days (30) days after receipt of each Progress Payment received from Agency. The Contractor shall pay to each Subcontractor all amounts it has retained from payments under the Subcontract within thirty (30) days after the Subcontractor's work is satisfactorily completed. Any delay of payment beyond the thirty (30) day time limit shall be only for good cause, and only upon the prior written approval of Agency.

FR 10. Clean Water Requirements

1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 USC 1251 *et seq.* The Contractor agrees to report each violation to the Agency and understands and agrees that the Agency shall, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

2. The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

FR 11. Clean Air Requirements

1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 USC §§ 7401 *et seq*. The Contractor agrees to report each violation to the Agency and understands and agrees that the Agency shall, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

2. The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

FR 12. Compliance with Federal Lobbying Policy

Contractors who apply or propose for an award of $100,000 or more shall file the certification required by 49 CFR Part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it shall not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any Agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal Contract, grant or any other award covered by 31 USC 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-federal funds with respect to that federal Contract, grant or award covered by 31 USC 1352. Such disclosures are forwarded from tier to tier up to the recipient.

FR 13. Buy America

The Contractor agrees to comply with 49 USC 5323(j) and 49 CFR Part 661, which provide that federal funds may not be obligated unless steel, iron and manufactured products used in FTA-

funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 CFR 661.7. A general public interest waiver from the Buy America requirements applies to microprocessors, computers, microcomputers, software or other such devices, which are used solely for the purpose of processing or storing data. This general waiver does not extend to a product or device that merely contains a microprocessor or microcomputer and is not used solely for the purpose of processing or storing data.

Separate requirements for rolling stock are set out at 49 USC 5323(j)(2)(C) and 49 CFR 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

Proposer must submit to the Agency the appropriate Buy America Certification with all offers on FTA-funded contracts, except those subject to a general waiver. Proposals that are not accompanied by a properly completed Buy America certification are subject to the provisions of 49 CFR 661.13 and may be rejected as nonresponsive.

FR 14. Testing of New Bus Models

The Contractor agrees to comply with 49 USC A 5323(c) and FTA's implementing regulation at 49 CFR Part 665 and shall perform the following:

1. A manufacturer of a new bus model or a bus produced with a major change in components or configuration shall provide a copy of the final test report to the recipient at a point in the procurement process specified by the recipient, which shall be prior to the recipient's final acceptance of the first vehicle.

2. A manufacturer who releases a report under Paragraph 1 above shall provide notice to the operator of the testing facility that the report is available to the public.

3. If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to the recipient prior to recipient's final acceptance of the first vehicle. If the configuration or components are not identical, the manufacturer shall provide a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing.

4. If the manufacturer represents that the vehicle is "grandfathered" (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

FR 15. Pre-Award and Post-Delivery Audits

The Contractor agrees to comply with 49 USC § 5323(l) and FTA's implementing regulation at 49 CFR Part 663 and to submit the following certifications:

1. **Buy America requirements:** The Contractor shall complete and submit a declaration certifying either compliance or noncompliance with Buy America. If the recommended Proposer certifies compliance with Buy America, it shall submit documentation that lists (1) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and (2) the location of the final assembly point for the rolling stock, including a description of the activities that shall take place at the final assembly point and the cost of final assembly.

2. **Solicitation specification requirements:** The Contractor shall submit evidence that it shall be capable of meeting the solicitation's specifications.

3. **Federal Motor Vehicle Safety Standards (FMVSS):** The Contractor shall submit (1) manufacturer's FMVSS self-certification, Federal Motor Vehicle Safety Standards, that the vehicle complies with relevant FMVSS or (2) manufacturer's certified statement that the contracted buses shall not be subject to FMVSS regulations.

FR 16. Cargo Preference

The Contractor agrees to the following:

- To use privately owned U.S.-flag commercial vessels to ship at least fifty (50) percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners and tankers) involved, whenever shipping any equipment, material or commodities pursuant to the underlying Contract to the extent such vessels are available at fair and reasonable rates for U.S.-flag commercial vessels;
- To furnish within twenty (20) working days following the date of loading for shipments originating within the United States or within thirty (30) working days following the date of leading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill of lading in English for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the Contractor in the case of a Subcontractor's bill-of-lading.)
- To include these requirements in all subcontracts issued pursuant to this Contract when the subcontract may involve the transport of equipment, material or commodities by ocean vessel.

FR 17. Fly America

The Contractor agrees to comply with 49 USC 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide

that recipients and sub recipients of federal funds and their contractors are required to use U.S. flag air carriers for U.S. government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

FR 18. Contract Work Hours and Safety Standards Act

1. **Overtime requirements:** No Contractor or Subcontractor contracting for any part of the Contract Work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any work week in which he or she is employed on such Work to work in excess of 40 hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.
2. **Violation; liability for unpaid wages; liquidated damages:** In the event of any violation of the clause set forth in paragraph 1 of this section, the Contractor and any Subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 1 of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 1 of this section.
3. **Withholding for unpaid wages and liquidated damages:** The Morongo Basin Transit Authority shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same Prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same Prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or Subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 of this section.
4. **Subcontracts:** The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any Subcontractor or lower-tier Subcontractor with the clauses set forth in paragraphs 1 through 4 of this section.

FR 19. ADA Access

The Contractor and any of its Subsuppliers under this Contract agree to comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA), 42 USC §§ 12101 *et seq.*; Section 504 of the Rehabilitation Act of 1973, as amended, 29 USC § 794; 49 USC § 5301(d); and the following regulations and any amendments thereto:

1. DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 CFR Part 37;
2. DOT regulations, "Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance," 49 CFR Part 27;
3. Joint U.S. Architectural and Transportation Barriers Compliance Board (U.S. ATBCB)/U.S. DOT regulations, "American With Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 CFR Part 1192 and 49 CFR Part 38;
4. Department of Justice (DOJ) regulations, "Nondiscrimination on the Basis of Disability in State and Local Government Services," 28 CFR Part 35;
5. DOJ regulations, "Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities," 28 CFR Part 36;
6. General Services Administration regulations, "Accommodations for the Physically Handicapped," 41 CFR Subpart 101-19;
7. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 CFR Part 1630;
8. Federal Communications Commission regulations, "Telecommunications Relay Services and Related Customer Premises Equipment for Persons with Disabilities," 47 CFR Part 64, Subpart F;
9. FTA regulations, "Transportation for Elderly and Handicapped Persons," 49 CFR Part 609;
10. U.S. ATBCB regulations, "Electronic and Information Technology Accessibility Standards," 36 CFR Part 1194; and
11. Any implementing requirements FTA may issue.

SECTION 6: TECHNICAL SPECIFICATIONS

GENERAL

Technical specifications define requirements for transit vehicles and are contained in Appendix A-1 through A-5 which are attached.

SECTION 7: WARRANTY REQUIREMENTS

WR 1. Basic Provisions

WR 1.1 Warranty Requirements

WR 1.1.1 Contractor Warranties

Warranties in this document are in addition to any statutory remedies or warranties imposed on the Contractor. Consistent with this requirement, the Contractor warrants and guarantees to the original Agency each complete bus and specific subsystems and components as follows. Performance requirements based on design criteria shall not be deemed a warranty item.

Contractor to provided standard OEM and supplier warranties for chassis, engine, wheelchair lifts or ramps and climate control systems describing these on the vehicle information sheets and as submissions on the proposal. **Warranties proposed are subject to evaluation as a condition of award and may be evaluated post award by the ordering agencies to evaluate the vehicles they will choose.**

WR 1.1.2 Complete Bus

The complete bus, propulsion system, components, major subsystems and body and chassis structure are warranted to be free from Defects and Related Defects for a minimum of one (1) year or 50,000 miles, whichever comes first, beginning on the date of revenue service but not longer than 15 days after acceptance under "Inspection, Testing, Acceptance and Repairs." The warranty is based on regular operation of the bus under the operating conditions prevailing in the Agency's locale. [Information from the selected firm(s) will be inserted at time of Contract award.]

WR 1.1.3 Body and Chassis Structure

Body, body structure, structural elements of the suspension and engine cradle are warranted to be free from Defects and Related Defects for three years or 150,000 miles, whichever comes first. [Information from the selected firm(s) will be inserted at time of Contract award.]

Primary load-carrying members of the bus structure, including structural elements of the suspension, are warranted against corrosion failure and/or Fatigue Failure sufficient to cause a Class 1 or Class 2 Failure for a minimum period of 12 years or 500,000 miles for the Transit and Commuter buses, 10 years and 350,000 miles for the trolleys on this solicitation whichever comes first. [Information from the selected firm(s) will be inserted at time of Contract award.]

WR 1.1.4 Propulsion System

Propulsion system components, specifically the engine, transmission or drive motors, and generators (for hybrid technology) and drive and non-drive axles shall be warranted to be free from Defects and Related Defects for the standard 2 years or 100,000 miles, whichever comes first. The propulsion system manufacturer's standard warranty, delineating items excluded from the Extended Warranty, submitted in accordance with the Request for Pre-Offer Change. [Information from the selected firm(s) will be incorporated at time of Contract award.]

WR 1.1.5 Emission Control System (ECS)

The Contractor warrants the emission control system for five years or 100,000 miles, whichever comes first. The ECS shall include, but is not limited to, the following components:

- complete exhaust system, including catalytic converter (if required)
- after-treatment device
- components identified as emission control devices

WR 1.1.6 Warranty Summary including Subsystems

Other subsystems shall be warranted to be free from Defects and Related Defects for the period shown below: [Information from the selected firm(s) will be incorporated at time of Contract award.]

The subsystems listed below shall be warranted to be free from Defects and Related Defects for two years or 100,000 miles, whichever comes first. These subsystems are listed below:

- **Brake system:** Foundation brake components, including advancing mechanisms, as supplied with the axles, excluding friction surfaces.

- **Destination signs:** All destination sign equipment for the front, side and rear signs, power modules and operator control.

- **Heating, ventilating:** Roof and/or rear main unit only, excluding floor heaters and front defroster.

- **AC unit and compressor:** Roof and/or rear main unit only, excluding floor heaters and front defroster.

- **Door systems:** Door operating actuators and linkages.

- **Air compressor.**

- **Air dryer.**

- **Wheelchair lift and ramp system:** Lift and/or ramp parts and mechanical only.
- **Starter.**
- **Alternator:** Alternator only. Does not include the drive system.
- **Charge air cooler:** Charge air cooler including core, tanks and including related surrounding framework and fittings.
- **Fire suppression:** Fire suppression system including tank and extinguishing agent dispensing system.
- **Hydraulic systems:** Including radiator fan drive and power steering as applicable.
- **Engine cooling systems:** Radiator including core, tanks and related framework, including surge tank. **Transmission cooler.**
- **Passenger seating excluding upholstery.**
- **Fuel storage and delivery system.**
- **Surveillance system including cameras and video recorders.**

Item	Years	Mileage
Body Structure		
Chassis		
Engine		
Transmission		
Air Conditioner		
Lift/Ramp		
Other Optional Features		

WR 1.1.7 Extension of Warranty

If, during the warranty period, repairs or modifications on any bus are made necessary by defective design, materials or workmanship but are not completed due to lack of material or inability to provide the proper repair for thirty (30) calendar days, the applicable warranty period shall be extended by the number of days equal to the delay period.

WR 1.1.8 Serial Numbers

Upon delivery of each bus, the Contractor shall provide a complete electronic list of serialized units installed on each bus to facilitate warranty tracking. The list shall include, but is not limited to the following:

Engine
Transmission
Alternator
Starter
A/C compressor and condenser/evaporator unit
Drive axle
Power steering unit
Fuel cylinders (if applicable)
Air compressor
Wheelchair ramp (if applicable)

The contractor shall provide updated serial numbers resulting from warranty campaigns.
The forma of the list to be approved prior to the delivery of the first production bus.

WR 1.2 Voiding of Warranty

The warranty shall not apply to the failure of any part or component of the bus that directly results from misuse, negligence, accident or repairs not conducted in accordance with the Contractor-provided maintenance manuals and with workmanship performed by adequately trained personnel in accordance with recognized standards of the industry. The warranty also shall be void if the Agency fails to conduct normal inspections and scheduled preventive maintenance procedures as recommended in the Contractor's maintenance manuals and if that omission caused the part or component failure. The Agency shall maintain documentation, auditable by the Contractor, verifying service activities in conformance with the Contractor's maintenance manuals.

WR 1.3 Exceptions and Additions to Warranty

The warranty shall not apply to the following items:

- scheduled maintenance items
- normal wear-out items
- items furnished by the Agency

Should the Agency require the use of a specific product and has rejected the Contractor's request for an alternate product, then the standard Supplier warranty for that product shall be the only warranty provided to the Agency. This product shall not be eligible under "Fleet Defects," below.

The Contractor shall not be required to provide warranty information for any warranty that is less than or equal to the warranty periods listed.

WR 1.3.1 Pass-Through Warranty

Should the Contractor elect to not administer warranty claims on certain components and wish to transfer this responsibility to the sub-Suppliers, or to others, the Contractor shall request this waiver.

Contractor shall state in writing that the Agency's warranty reimbursements shall not be impacted. The Contractor also shall state in writing any exceptions and reimbursement including all costs incurred in transport of vehicles and/or components. At any time during the warranty period, the Contractor may request approval from the Agency to assign its warranty obligations to others, but only on a case-by-case basis approved in writing by the Agency. Otherwise, the Contractor shall be solely responsible for the administration of the warranty as specified. Warranty administration by others does not eliminate the warranty liability and responsibility of the Contractor.

WR 1.3.2 Superior Warranty

The Contractor shall pass on to the Agency any warranty offered by a component Supplier that is superior to that required herein. The Contractor shall provide a list to the Agency noting the conditions and limitations of the Superior Warranty not later than the start of production. The Superior Warranty shall not be administered by the Contractor.

WR 1.4 Fleet Defects

WR 1.4.1 Occurrence and Remedy

A Fleet Defect is defined as cumulative failures of three (3) of the same components in the same or similar application where the fleet size is fewer than twelve (12) buses where such items are covered by warranty. Where the fleet size is twelve (12) or more buses, a Fleet Defect is defined as twenty-five (25) percent of the same components in the same or similar application where such items are covered by warranty. A Fleet Defect shall apply only to the base warranty period in sections entitled "Complete Bus," "Propulsion System" and "Major Subsystems." When a Fleet Defect is declared, the remaining warranty on that item/component stops. The warranty period does not restart until the Fleet Defect is corrected.

For the purpose of Fleet Defects, each order placed through the joint procurement shall be treated as a separate bus fleet.

The Contractor shall correct a Fleet Defect under the warranty provisions defined in "Repair Procedures." After correcting the Defect, the Agency and the Contractor shall mutually agree to and the Contractor shall promptly undertake and complete a work program reasonably designed to prevent the occurrence of the same Defect in all other buses and spare parts purchased under this Contract. Where the specific Defect can be solely attributed to particular identifiable part(s),

the work program shall include redesign and/or replacement of only the defectively designed and/or manufactured part(s). In all other cases, the work program shall include inspection and/or correction of all of the buses in the fleet via a mutually agreed-to arrangement. The Contractor shall update, as necessary, technical support information (parts, service and operator's manuals) due to changes resulting from warranty repairs. The Agency may immediately declare a Defect in design resulting in a safety hazard to be a Fleet Defect. The Contractor shall be responsible to furnish, install and replace all defective units.

WR 1.4.2 Exceptions to Fleet Defect Provisions

The Fleet Defect warranty provisions shall not apply to Agency-supplied items, such as radios, fare collection equipment, communication systems and tires. In addition, Fleet Defects shall not apply to interior and exterior finishes, hoses, fittings and fabric.

WR 2. Repair Procedures

WR 2.1 Repair Performance

The Contractor is responsible for all warranty-covered repair Work. To the extent practicable, the Agency shall allow the Contractor or its designated representative to perform such Work. At its discretion, the Agency may perform such Work if it determines it needs to do so based on transit service or other requirements. Such Work shall be reimbursed by the Contractor.

WR 2.2 Repairs by the Contractor

If the Agency detects a Defect within the warranty periods defined in this section, it shall, within thirty (30) days, notify the Contractor's designated representative. The Contractor or its designated representative shall, if requested, begin Work on warranty-covered repairs within five calendar days after receiving notification of a Defect from the Agency. The Agency shall make the bus available to complete repairs timely with the Contractor's repair schedule.

The Contractor shall provide at its own expense all spare parts, tools and space required to complete repairs. Whenever feasible and mutually beneficial, the Agency may provide a work space for the Contractor to accomplish the repair onsite. At the Agency's option, the Contractor may be required to remove the bus from the Agency's property while repairs are being affected. If the bus is removed from the Agency's property, repair procedures must be diligently pursued by the Contractor's representative.

WR 2.3 Repairs by the Agency

WR 2.3.1 Parts Used

If the Agency performs the warranty-covered repairs, it shall correct or repair the Defect and any Related Defects utilizing parts supplied by the Contractor specifically for this repair. At its

discretion, the Agency may use Contractor-specified parts available from its own stock if deemed in its best interests.

WR 2.3.2 Contractor-Supplied Parts

The Agency may require that the Contractor supply parts for warranty-covered repairs being performed by the Agency. Those parts may be remanufactured but shall have the same form, fit and function, and warranty. The parts shall be shipped prepaid to the Agency from any source selected by the Contractor within fourteen (14) days of receipt of the request for said parts and shall not be subject to an Agency handling charge.

WR 2.3.3 Defective Component Return

The Contractor may request that parts covered by the warranty be returned to the manufacturing plant. The freight costs for this action shall be paid by the Contractor. Materials should be returned in accordance with the procedures outlined in "Warranty Processing Procedures."

WR 2.3.4 Failure Analysis

The Contractor shall, upon specific request of the Agency, provide a failure analysis of Fleet Defect or safety-related parts, or major components, removed from buses under the terms of the warranty that could affect fleet operation. Such reports shall be delivered within 60 days of the receipt of failed parts.

WR 2.3.5 Reimbursement for Labor and Other Related Costs

The Agency shall be reimbursed by the Contractor for labor. The amount shall be the rate proposed to this RFP in the Price Worksheet by the manufacturer/dealer, which aside from price adjustment afforded in SP 5.2 will be the rate established for the entire term of the contract including extensions. This rate is to be the current standard rate in effect at the time of proposal submission charged by the proposer's service department. Contractor to submit an electronic copy of its Standard Repair Time Manual and update as revised. The cost of towing the bus if such action was necessary and if the bus was in the normal service area, is to be reimbursed.

WR 2.3.6 Reimbursement for Parts

The Agency shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the Defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus fifteen (15) percent handling costs. Handling costs shall not be paid if part is supplied by Contractor and shipped to Agency.

WR 2.3.7 Reimbursement Requirements

The Contractor shall respond to the warranty claim with an accept/reject decision including necessary failure analysis no later than sixty (60) days after the Agency submits the claim and

defective part(s), when requested. Reimbursement for all accepted claims shall occur no later than sixty (60) days from the date of acceptance of a valid claim. The Agency may dispute rejected claims or claims for which the Contractor did not reimburse the full amount. The parties agree to review disputed warranty claims during the following quarter to reach an equitable decision to permit the disputed claim to be resolved and closed. The parties also agree to review all claims at least once per quarter throughout the entire warranty period to ensure that open claims are being tracked and properly dispositioned.

WR 2.4 Warranty after Replacement/Repairs

If any component, unit or subsystem is repaired, rebuilt or replaced by the Contractor or by the Agency with the concurrence of the Contractor, the component, unit or subsystem shall have the unexpired warranty period of the original. Repairs shall not be warranted if the Contractor-provided or authorized parts are not used for the repair, unless the Contractor has failed to respond within five days, in accordance with "Repairs by the Contractor."

If an item is declared to be a Fleet Defect, the warranty stops with the declaration of the Fleet Defect. Once the Fleet Defect is corrected, the item(s) shall have three (3) months or remaining time and/or miles of the original warranty, whichever is greater. This remaining warranty period shall begin on the repair/replacement date for corrected items on each bus if the repairs are completed by the Contractor or on the date the Contractor provides all parts to the Agency.

WR 2.4.1 Warranty Processing Procedures

The following list represents requirements by the Contractor to the Agency for processing warranty claims. One failure per bus per claim is allowed.

- bus number and VIN
- total vehicle life mileage at time of repair
- date of failure/repair
- acceptance/in-service date
- Contractor part number and description
- description of failure
- all costs associated with each failure/repair (invoices may be required for third-party costs):
    - towing
    - road calls
    - labor
    - materials
    - parts
    - handling
    - troubleshooting time

WR 2.5 Forms

The Contractor shall supply warranty forms to each Ordering Agency. The completed forms shall be accepted by the Contractor if all of the above information is included. Electronic submittal may be used if available between the Contractor and Agency.

WR 2.6 Return of Parts

When returning defective parts to the Contractor, the Agency shall tag each part with the following:

- bus number and VIN
- claim number
- part number

WR 2.7 Timeframe

Each claim must be submitted no more than thirty (30) days from the date of failure and/or repair, whichever is later. All defective parts must be returned to the Contractor, when requested, no more than forty-five (45) days from date of repair.

WR 2.8 Reimbursements

Reimbursements are to be transmitted to the address provided by the Agency.

SECTION 8: QUALITY ASSURANCE

QA 1. Contractor's In-Plant Quality Assurance Requirements

QA 1.1 Quality Assurance Organization

QA 1.1.1 Organization Establishment

The Contractor shall establish and maintain an effective in-plant quality assurance organization. It shall be a specifically defined organization and should be directly responsible to the Contractor's top management.

QA 1.1.2 Control

The quality assurance organization shall exercise quality control over all phases of production, from initiation of design through manufacture and preparation for delivery. The organization shall also control the quality of supplied articles.

QA 1.1.3 Authority and Responsibility

The quality assurance organization shall have the authority and responsibility for reliability, quality control, inspection planning, establishment of the quality control system, and acceptance/rejection of materials and manufactured articles in the production of the transit buses.

QA 1.2 Quality Assurance Organization Functions

QA 1.2.1 Minimum Functions

The quality assurance organization shall include the following minimum functions:

- Work instructions: The quality assurance organization shall verify inspection operation instructions to ascertain that the manufactured product meets all prescribed requirements.
- Records maintenance: The quality assurance organization shall maintain and use records and data essential to the effective operation of its program. These records and data shall be available for review by the resident inspectors. Inspection and test records for this procurement shall be available for a minimum of one year after inspections and tests are completed.
- Corrective action: The quality assurance organization shall detect and promptly ensure correction of any conditions that may result in the production of defective transit buses. These conditions may occur in designs, purchases, manufacture, tests or operations that culminate in defective supplies, services, facilities, technical data or standards.

QA 1.2.2 Basic Standards and Facilities

The following standards and facilities shall be basic in the quality assurance process:

- Configuration control: The Contractor shall maintain drawings, assembly procedures, and other documentation that completely describe a qualified bus that meets all of the options and special requirements of this procurement. The quality assurance organization shall

verify that each transit bus is manufactured in accordance with these controlled drawings, procedures, and documentation.

- Measuring and testing facilities: The Contractor shall provide and maintain the necessary gauges and other measuring and testing devices for use by the quality assurance organization to verify that the buses conform to all specification requirements. These devices shall be calibrated at established periods against certified measurement standards that have known, valid relationships to national standards.
- Production tooling as media of inspection: When production jigs, fixtures, tooling masters, templates, patterns, and other devices are used as media of inspection, they shall be proved for accuracy at formally established intervals and adjusted, replaced, or repaired as required to maintain quality.
- Equipment use by resident inspectors: The Contractor's gauges and other measuring and testing devices shall be made available for use by the resident inspectors to verify that the buses conform to all specification requirements. If necessary, the Contractor's personnel shall be made available to operate the devices and to verify their condition and accuracy.

QA 1.2.3 Maintenance of Control

The Contractor shall maintain quality control of purchases:

- Supplier control: The Contractor shall require that each Supplier maintains a quality control program for the services and supplies that it provides. The Contractor's quality assurance organization shall inspect and test materials provided by Suppliers for conformance to specification requirements. Materials that have been inspected, tested, and approved shall be identified as acceptable to the point of use in the manufacturing or assembly processes. Controls shall be established to prevent inadvertent use of nonconforming materials.
- Purchasing data: The Contractor shall verify that all applicable specification requirements are properly included or referenced in purchase orders of articles to be used on transit buses.

QA 1.2.4 Manufacturing Control

- Controlled conditions: The Contractor shall ensure that all basic production operations, as well as all other processing and fabricating, are performed under controlled conditions. Establishment of these controlled conditions shall be based on the documented Work instructions, adequate production equipment and special working environments if necessary.
- Completed items: A system for final inspection and test of completed transit buses shall be provided by the quality assurance organization. It shall measure the overall quality of each completed bus.
- Nonconforming materials: The quality assurance organization shall monitor the Contractor's system for controlling nonconforming materials. The system shall include procedures for identification, segregation and disposition.

- Statistical techniques: Statistical analysis, tests and other quality control procedures may be used when appropriate in the quality assurance processes.
- Inspection status: A system shall be maintained by the quality assurance organization for identifying the inspection status of components and completed transit buses. Identification may include cards, tags or other normal quality control devices.

QA 1.2.5 Inspection System

The quality assurance organization shall establish, maintain and periodically audit a fully documented inspection system. The system shall prescribe inspection and test of materials, Work in process and completed articles. As a minimum, it shall include the following controls:

- Inspection personnel: Sufficient trained inspectors shall be used to ensure that all materials, components and assemblies are inspected for conformance with the qualified bus design.
- Inspection records: Acceptance, rework or rejection identification shall be attached to inspected articles. Articles that have been accepted as a result of approved materials review actions shall be identified. Articles that have been reworked to specified drawing configurations shall not require special identification. Articles rejected as unsuitable or scrap shall be plainly marked and controlled to prevent installation on the bus. Articles that become obsolete as a result of engineering changes or other actions shall be controlled to prevent unauthorized assembly or installation. Unusable articles shall be isolated and then scrapped. Discrepancies noted by the Contractor or resident inspectors during assembly shall be entered by the inspection personnel on a record that accompanies the major component, subassembly, assembly, or bus from start of assembly through final inspection. Actions shall be taken to correct discrepancies or deficiencies in the manufacturing processes, procedures or other conditions that cause articles to be in nonconformity with the requirements of the Contract specifications. The inspection personnel shall verify the corrective actions and mark the discrepancy record. If discrepancies cannot be corrected by replacing the nonconforming materials, then the Agency shall approve the modification, repair or method of correction to the extent that the Contract specifications are affected.
- Quality assurance audits: The quality assurance organization shall establish and maintain a quality control audit program. Records of this program shall be subject to review by the Agency.

QA 2. Inspection

QA 2.1 Inspection Stations

Inspection stations shall be at the best locations to provide for the Work content and characteristics to be inspected. Stations shall provide the facilities and equipment to inspect structural, electrical, hydraulic and other components and assemblies for compliance with the design requirements.

Stations shall also be at the best locations to inspect or test characteristics before they are concealed by subsequent fabrication or assembly operations. These locations shall minimally include underbody structure completion, body framing completion, body prior to paint preparation, water test, engine installation completion, underbody dress-up and completion, bus prior to final paint touchup, bus prior to road test and bus final road test completion.

QA 2.2 Optional Resident Inspectors

For orders greater than ten (10) buses, the Ordering Agency shall determine if a Resident Inspector is required under 49 CFR Part 663.37, In the event that the agency decides to have a Resident Inspector either full time or part-time, the following sections apply.

QA 2.2.1 Resident Inspector's Role

The Agency may be represented at the Contractor's plant by resident inspectors, as may be required by FTA. Resident inspectors may be Agency employees or outside contractors. The Agency shall provide the identity of each inspector and shall also identify their level of authority in writing. They shall monitor, in the Contractor's plant, the manufacture of transit buses built under the procurement. The presence of these resident inspectors in the plant shall not relieve the Contractor of its responsibility to meet all of the requirements of this procurement. The Agency shall designate a primary resident inspector, whose duties and responsibilities are delineated in "Pre-Production Meetings," "Authority" and "Pre-Delivery Tests," below. Contractor and resident inspector relations shall be governed by the guidelines included as Attachment A to this "Section 8: Quality Assurance."

QA 2.2.2 Pre-Production Meetings

If there are Pre-Production Meetings scheduled, the primary resident inspector may participate in design review and pre-production meetings with the Agency. At these meetings, the configuration of the buses and the manufacturing processes shall be finalized, and all Contract documentation provided to the inspector.

No less than thirty (30) days prior to the beginning of bus manufacture, the primary resident inspector may meet with the Contractor's quality assurance manager and may conduct a pre-production audit meeting. They shall review the inspection procedures and finalize inspection checklists. The resident inspectors may begin monitoring bus construction activities two weeks prior to the start of bus fabrication.

QA 2.2.3 Authority

Records and data maintained by the quality assurance organization shall be available for review by the resident inspectors. Inspection and test records for this procurement shall be available for a minimum of one year after inspections and tests are completed.

The Contractor's gauges and other measuring and testing devices shall be made available for use by the resident inspectors to verify that the buses conform to all specification requirements. If

necessary, the Contractor's personnel shall be made available to operate the devices and to verify their condition and accuracy.

Discrepancies noted by the resident inspector during assembly shall be entered by the Contractor's inspection personnel on a record that accompanies the major component, subassembly, assembly or bus from start of assembly through final inspection. Actions shall be taken to correct discrepancies or deficiencies in the manufacturing processes, procedures or other conditions that cause articles to be in nonconformity with the requirements of the Contract specifications. The inspection personnel shall verify the corrective actions and mark the discrepancy record. If discrepancies cannot be corrected by replacing the nonconforming materials, the Agency shall approve the modification, repair or method of correction to the extent that the Contract specifications are affected.

If applicable, the primary resident inspector shall remain in the Contractor's plant for the duration of bus assembly Work under this Contract. Only the primary resident inspector or designee shall be authorized to release the buses for delivery. The resident inspectors shall be authorized to approve the pre-delivery acceptance tests. Upon request to the quality assurance supervisors, the resident inspectors shall have access to the Contractor's quality assurance files related to this procurement. These files shall include drawings, assembly procedures, material standards, parts lists, inspection processing and reports, and records of Defects.

QA 2.2.4 Support Provisions

The Contractor shall provide office space for the resident inspectors in close proximity to the final assembly area. This office space shall be equipped with desks, outside and interplant telephones, Internet access, file cabinet and chairs.

QA 2.2.5 Compliance with Safety Requirements

At the time of the Pre-Production meeting, the Contractor shall provide all safety and other operational restrictions that govern the Contractor's facilities. These issues shall be discussed and the parties shall agree which rules/restrictions shall govern the Agency's inspector(s) and any other Agency representatives during the course of the Contract.

QA 3. Acceptance Tests

QA 3.1 Responsibility

Fully documented tests shall be conducted on each production bus following manufacture to determine its acceptance to the Agency. These acceptance tests shall include pre-delivery inspections and testing by the Contractor and inspections and testing by the Agency after the buses have been delivered.

QA 3.2 Pre-Delivery Tests

The Contractor shall conduct acceptance tests at its plant on each bus following completion of manufacture and before delivery to the Agency. These pre-delivery tests shall include visual and measured inspections, as well as testing the total bus operation. The tests shall be conducted and documented in accordance with written test plans approved by the Agency.

Additional tests may be conducted at the Contractor's discretion to ensure that the completed buses have attained the required quality and have met the requirements in Section 6: Technical Specifications. The Agency may, prior to commencement of production, demand that the Contractor demonstrate compliance with any requirement in that section if there is evidence that prior tests have been invalidated by the Contractor's change of Supplier or change in manufacturing process. Such demonstration shall be by actual test, or by supplying a report of a previously performed test on similar or like components and configuration. Any additional testing shall be recorded on appropriate test forms provided by the Contractor and shall be conducted before acceptance of the bus.

The pre-delivery tests shall be scheduled and conducted with thirty (30) days' notice so that they may be witnessed by the resident inspectors, who may accept or reject the results of the tests. The results of pre-delivery tests, and any other tests, shall be filed with the assembly inspection records for each bus. The underfloor equipment shall be available for inspection by the resident inspectors, using a pit or bus hoist provided by the Contractor. A hoist, scaffold or elevated platform shall be provided by the Contractor to easily and safely inspect bus roofs. If there is an on-site inspector, delivery of each bus shall require written authorization of the primary resident inspector. Authorization forms for the release of each bus for delivery shall be provided by the Contractor. An executed copy of the authorization shall accompany the delivery of each bus.

QA 3.2.1 Visual and Measured Inspections

Visual and measured inspections shall be conducted with the bus in a static condition. The purpose of the inspection testing includes verification of overall dimension and weight requirements, that required components are included and are ready for operation, and that components and subsystems designed to operate with the bus in a static condition do function as designed.

QA 3.2.2 Total Bus Operation

Total bus operation shall be evaluated during road tests. The purpose of the road tests is to observe and verify the operation of the bus as a system and to verify the functional operation of the subsystems that can be operated only while the bus is in motion.

Each bus shall be driven for a minimum of fifteen (15) miles during the road tests. If requested, computerized diagnostic printouts showing the performance of each bus shall be produced and provided to the Agency. Observed Defects shall be recorded on the test forms. The bus shall be

retested when Defects are corrected and adjustments are made. This process shall continue until Defects or required adjustments are no longer detected.

QA 4. Agency-Specific Requirements

QA 4.1 Pre-Delivery Bus Documentation Package (BDP)

The Contractor's quality assurance organization shall be responsible for preparing a documentation package for each Bus. The BDP shall be inserted into a manila envelope which shall be labeled with the Agency name and the bus number on the front of the envelope. This envelope shall be placed into the Bus and shall be presented to the Agency upon delivery.

At a minimum, each BDP shall contain the following items:

- BDP Check-off Sheet listing the following:
- QA Certificate of Completion (signed by Contractor QC representative).
- CNG pressure test certification – if applicable
- Water test Certification.
- Alignment and Steering Stop Adjustment Certification.
- Smoke Opacity Test (Exhaust Emissions), if applicable.
- "Completed Bus" Inspection document.
- Copy of defects noted during any Agency on-site inspection.
- List of "Open Items"- if any
- VIN number (copy of bus data plate)
- Certificate of Origin
- Weight slip (curb weight)
- Certificate of compliance for high voltage/energy storage protective devices, if applicable.
- Copy of FMVSS plate
- Component Serial Number List - List of serialized components installed on each Bus to include, but not limited to:
    - Engine
    - Transmission
    - Alternator
    - Starter
    - A/C Compressor
    - Drive Axle
    - Power Steering Unit
    - Air Compressor
    - CNG Fuel Cylinders with installation location diagram.
    - Other serialized components for which the Contractor shall require serial numbers for the processing of warranty claims.

SECTION 9: FORMS AND CERTIFICATIONS

CER 1. Proposer's Checklist

RFP No. 18-01, Joint Procurement For Heavy Duty Transit Vehicles	
Package 1: Technical Proposal (Note: Package 1, 3 and 4 may be combined into one submittal.)	
□	1. Letter of Transmittal
□	2. Acknowledgement of Addenda
□	3. Contractor Service and Support Data, References List
□	4. Vehicle Questionnaire
□	5. Manufacturing facility plant layout including description of work by station
□	6. Warranty Provisions and Warranty Administration Plan, Written Service Plan
□	7. Quality Assurance Program
Package 2: Price Proposal (Package 2 must be a separate sealed submittal.)	
□	1. Letter of Transmittal
□	2. Pricing Worksheet (including option bus features)
Package 3: Qualifications Package	
□	1. Pre-Award Evaluation Data Form
□	2. Authorized Factory Dealer Confirmation (If dealer submitted proposal)
□	3. A copy of the proposing firm's three (3) most recent audited financial statements
□	4. Letter for insurance
□	5. Proposal Form
□	6. Required executed Certifications and Qualifications
□	7. FTA approval letter required for TVMs
Package 4: Proprietary/Confidential Information Package[1]	
□	1. Proprietary/Confidential Information
1. There may be items in the first three packages that are included in Package 4 because they are considered to be proprietary/confidential information. When this occurs, the Proposer must note that fact in Packages 1 through 3.	

CER 2. Request for Pre-Offer Change or Approved Equal

This form must be used for requested clarifications, changes, substitutes or approval of items equal to items specified with a brand name and must be submitted as far in advance of the Due Date, as specified in "Questions, Clarifications and Omissions." Please submit the document electronically with separate files for clarifications on the contract and each bus type. File names should describe the category of request made. Submissions are to be made in a single consolidated MS Word document per bus. Please describe the item requested, cite the section and attachment #, provide supporting information and suggested language for revision if appropriate to expedite a response.

Morongo Basin Transit Authority

RFP No. 18-01, Joint Procurement for Heavy Duty Transit Vehicles

Request #: **Proposer:** **RFP Section:** **Page:**		
Questions/clarification or approved equal:		
Agency action:	□ Approved □ See addendum	□ Denied □ See response below
Agency response:		

CER 3. Acknowledgement of Addenda

Failure to acknowledge receipt of all addenda may cause the Proposal to be considered nonresponsive to the Solicitation. Acknowledged receipt of each addendum must be clearly established and included with the Proposal.

The undersigned acknowledges receipt of the following addenda to the documents: Addendum No.: – Dated: Addendum No.: – Dated: Addendum No.: – Dated: Addendum No.: – Dated:
Proposer: Name: Title: Phone: Street address: City, state, ZIP:
_____ _____ Authorized signature Date

CER 4. Contractor Service and Parts Support Data

Location/s of nearest Technical Service Representative and Facilities to Agency

Name:
Address:
Telephone:
Describe technical services readily available from said representative:

Location of nearest Parts Distribution Center/s to Agency:

Name:
Address:
Telephone:
Describe the extent of parts available at said center:

Policy for delivery of parts and components to be purchased for service and maintenance:

Regular method of shipment:
Cost to Agency:

CER 5. Price Worksheet

The Price Worksheet is contained in a separate document that is an Excel Spreadsheet. Each Proposer is to complete the appropriate spreadsheet tabs, print and return an original with a "wet signature" with the required proposal forms. Proposers are to also provide the other copies as required in NR 3, Proposal Date and Submittal Requirements.

RFP 18-01 Att
C-Price and Options

CER 6. Pre-Award Evaluation Data Form

Instructions: This form is to be completed and included in the Qualification Package. Attach additional pages if required.

Morongo Basin Transit Authority

RFP No. 18-01 for a Joint Procurement for Heavy Duty Transit Vehicles

1. Name of firm:

2. Address:

3. □ Individual □ Partnership □ Corporation □ Joint Venture

4. Date organized:
State in which incorporated:

5. Names of officers or partners:
a.
b.
c.
d.

6. How long has your firm been in business under its present name?

7. Have you been terminated or defaulted in the past five years, on any Contract you were awarded? Have you been barred by Federal process or any Western State?
□ Yes □ No
If yes, then attach as **SCHEDULE ONE** the full particulars regarding each occurrence.

8. Attach as **SCHEDULE TWO** Proposer's last three (3) financial statements prepared in accordance with generally accepted accounting principles of the jurisdiction in which the Proposer is located, and audited by an independent certified public accountant. [This may require execution of an acceptable non-disclosure agreement between the Agency and the Proposer.]

9. Attach as **SCHEDULE THREE** a list of all principal Subcontractors (if applicable) and the percentage and character of Work (Contract amount) that each shall perform on this Contract. Note: A subcontractor is one that physically works on manufacturing the bus.

10. If the Contractor or Subcontractor is a joint venture, submit **PRE-AWARD EVALUATION DATA** forms for each member of the joint venture.

The above information is confidential and shall not be divulged to any unauthorized personnel.

The undersigned certifies to the accuracy of all information:
Name and title: _____
Company: _____

_____ _____
Authorized signature Date

CER 7. Federal Certifications and Other Certifications

CER 1.1 Buy America Certification

This form is to be submitted with an offer exceeding the small purchase threshold for federal assistance programs. To be completed and executed by manufacturer.

Certificate of Compliance

The Proposer hereby certifies that it shall comply with the requirements of 49 USC Section 5323(j)(2)(C), Section 165(b)(3) of the Surface Transportation Assistance Act of 1982, as amended, and the regulations of 49 CFR 661.11:

Name and title:

Company:

_____ _____

Authorized signature Date

Certificate of Non-Compliance

The Proposer hereby certifies that it cannot comply with the requirements of 49 USC Section 5323(j)(2)(C) and Section 165(b)(3) of the Surface Transportation Assistance Act of 1982, as amended, but may qualify for an exception to the requirements consistent with 49 USC Sections 5323(j)(2)(B) or (j)(2)(D), Sections 165(b)(2) or (b)(4) of the Surface Transportation Assistance Act, as amended, and regulations in 49 CFR 661.7.

Name and title:

Company:

_____ _____

Authorized signature Date

CER 1.2 Debarment and Suspension Certification for Prospective Contractor

Primary covered transactions must be completed by proposer for contract value over $25,000. To be completed by manufacturer (and dealer if applicable).

Choose one alternative:

☐ – The Proposer, [insert name], certifies to the best of its knowledge and belief that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
2. Have not within a three-year period preceding this Proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or Contract under a public transaction; violation of federal or state antitrust statutes or commission or embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in Paragraph 2 of this certification; and
4. Have not within a three-year period preceding this Proposal had one or more public transactions (federal, state or local) terminated for cause or default.

OR

☐ – The Proposer is unable to certify to all of the statements in this certification, and attaches its explanation to this certification. (In explanation, certify to those statements that can be certified to and explain those that cannot.)

The Proposer certifies or affirms the truthfulness and accuracy of the contents of the statements submitted on or with this certification and understands that the provisions of Title 31 USC § Sections 3801 are applicable thereto.

– **Executed in** [insert city and state]**.**

Name:

_____ _____

Authorized signature Date

CER 1.3 Debarment and Suspension Certification (Lower-Tier Covered Transaction)

This form is to be submitted by each Subcontractor receiving an amount exceeding $25,000.

The prospective lower-tier participant (Proposer) certifies, by submission of this Proposal, that neither it nor its "principals" as defined at 49 CFR § 29.105(p) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or Agency. If the prospective Proposer is unable to certify to the statement above, it shall attach an explanation, and indicate that it has done so by placing an "X" in the following space: _____ **THE PROPOSER, _____, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF EACH STATEMENT OF ITS CERTIFICATION AND EXPLANATION, IF ANY. IN ADDITION, THE PROPOSER UNDERSTANDS AND AGREES THAT THE PROVISIONS OF 31 USC §§ 3801 *ET SEQ*. APPLY TO THIS CERTIFICATION AND EXPLANATION, IF ANY.**
Name and title of the proposer's authorized official: _____ _____ Authorized signature Date

CER 1.4 Non-Collusion Affidavit

This affidavit is to be filled out and executed by the Proposer; if a corporation makes the Proposal, then by its properly executed agent. The name of the individual swearing to the affidavit should appear on the line marked "Name of Affiant." The affiant's capacity, when a partner or officer of a corporation, should be inserted on the line marked "Capacity." The representative of the Proposer should sign his or her individual name at the end, not a partnership or corporation name, and swear to this affidavit before a notary public, who must attach his or her seal. To be completed by manufacturer (and dealer if applicable).

State of _____, County of _____

I, _____, being first duly sworn, do hereby state that
(Name of Affiant)

I am _____ of _____
(Capacity) (Name of Firm, Partnership or Corporation)
whose business is

_____

and who resides at

_____

and that

_____
(Give names of all persons, firms, or corporations interested in the Proposal)

is/are the only person(s) with me in the profits of the herein contained Contract; that the Contract is made without any connection or interest in the profits thereof with any persons making any bid or Proposal for said Work; that the said Contract is on my part, in all respects, fair and without collusion or fraud, and also that no members of the Board of Trustees, head of any department or bureau, or employee therein, or any employee of the Authority, is directly or indirectly interested therein.

_____ _____
Signature of Affiant Date

Sworn to before me this _____ day of _____,20_____. _____ Notary public My commission expires	Seal

CER 1.5 Lobbying Certification

This form is to be submitted with an offer exceeding $100,000. To be completed by manufacturer (and dealer if applicable).

The Proposer certifies, to the best its knowledge and belief, that:

1. No federal appropriated funds have been paid or shall be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of a federal department or agency, a member of the U.S. Congress, an officer or employee of the U.S. Congress, or an employee of a member of the U.S. Congress in connection with the awarding of any federal Contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification thereof.

2. If any funds other than federal appropriated funds have been paid or shall be paid to any person for making lobbying contacts to an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this federal Contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instruction, as amended by "Government-wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96).

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, USC § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

THE PROPOSER, _____, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF EACH STATEMENT OF ITS CERTIFICATION AND DISCLOSURE, IF ANY. IN ADDITION, THE PROPOSER UNDERSTANDS AND AGREES THAT THE PROVISIONS OF 31 USC §§ 3801 ET SEQ. APPLY TO THIS CERTIFICATION AND DISCLOSURE, IF ANY.

Name of the Proposer's authorized official:

_____

Title: _____

_____ _____
Signature Date

Per paragraph 2 of the included form Lobbying Certification, add Standard Form–LLL, "Disclosure Form to Report Lobbying," if applicable.

CER 1.6 Certificate of Compliance with Bus Testing Requirement

The undersigned certifies that the vehicle offered in this procurement complies and shall, when delivered, comply with 49 USC § 5323(c) and FTA's implementing regulation at 49 CFR Part 665 according to the indicated one of the following three alternatives.

Mark one and only one of the three blank spaces with an "X."

1. _____The buses offered herewith have been tested in accordance with 49 CFR Part 665 on _____ (date). If multiple buses are being proposed, provide additional bus testing information below or on attached sheet. The vehicles being sold should have the identical configuration and major components as the vehicle in the test report, which must be submitted with this Proposal. If the configuration or components are not identical, then the manufacturer shall provide with its Proposal a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing. If multiple buses are being proposed, testing data on additional buses shall be listed on the bottom of this page.

2. _____The manufacturer represents that the vehicle is "grandfathered" (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), and submits with this Proposal the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

3. _____The vehicle is a new model and shall be tested and the results shall be submitted to the Agency prior to acceptance of the first bus.

The undersigned understands that misrepresenting the testing status of a vehicle acquired with federal financial assistance may subject the undersigned to civil penalties as outlined in the Department of Transportation's regulation on Program Fraud Civil Remedies, 49 CFR Part 31. In addition, the undersigned understands that FTA may suspend or debar a manufacturer under the procedures in 49 CFR Part 29.

Company name:

Name and title of the proposer's authorized official:

_____ _____

Authorized signature Date

CER 1.7 DBE Approval Certification

I hereby certify that the Proposer has complied with the requirements of 49 CFR 26, Participation by Disadvantaged Business Enterprises in DOT Programs, and it has submitted a goal to Federal Transit Administration and it has not been disapproved.

Name and title of the proposer's authorized official:

_____ _____

Authorized signature Date

In addition, TVMs are to submit a copy of their FTA approval letter along with the above TVM certification.

CER 1.8 Federal Motor Vehicle Safety Standards

The Proposer and (if selected) Contractor shall submit (1) manufacturer's FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or (2) manufacturer's certified statement that the contracted buses shall not be subject to FMVSS regulations.

Company name:

Name of signer:

Title:

_____ _____

Authorized signature Date

CER 1.9 Proposal Form

NOTE: The following is an example of a Proposal form to be modified as appropriate by the Agency and included in the RFP.

Proposer shall complete the following form and include it in the price Proposal.

PROPOSAL
By execution below by a duly authorized representative(s) of the Proposer, the Proposer hereby offers to furnish equipment and services as specified in its Proposal submitted to MBTA in response to Request for Proposal No. 18-01: Joint Procurement for Heavy Duty Transit Vehicles in its entirety.

Proposer:

_____

Street address:

_____

City, state, ZIP:

_____

Name and title of Authorized Signer(s):

_____

Name and title of Authorized Signer(s):

_____

Phone:

_____

_____ _____
Authorized signature Date

_____ _____
Authorized signature Date

CER 1.10 Notice of Award

By execution below, Morongo Basin Transit Authority accepts Proposal as indicated above. (The Authority reserves the right to issue a Notice of Award and resulting contract that is separate from this document).

Contracting officer:

_____

_____ _____

Authorized signature Date

CER 8. Vehicle Questionnaire and Instructions (Attached)

The Vehicle Questionnaire is attached as an Excel Spreadsheet. Each Proposer is to complete the appropriate spreadsheet tabs, print and return an original with a "wet signature" with the required proposal forms. Proposers shall also provide the required Warranty Provisions. Proposers are to also provide the other copies as required in NR 3, Proposal Date and Submittal Requirements. This form must be completed and included in the Technical Proposal.

Vehicle Questionnaire RFP #

SECTION 10: CONTRACT

1. Contract Documents and Order of Precedence

The Contract consists of the documents listed below. In case of any conflict among these documents, the order of precedence shall be:

1. Form of Contract
2. "Section 4: Special Conditions"
3. "Section 3: General Conditions," and "Section 5: Federal Requirements"
4. "Section 6: Technical Specifications," "Section 7: Warranty Requirements," and "Section 8: Quality Assurance"
5. Contractor's Best and Final Offer (including Contractor Proposal)
6. Addenda
7. RFP No. 18-01

A modification or change to any Contract document shall take its precedence from the term it amends. All other documents and terms and conditions shall remain unchanged.

2. Compensation

The Price Worksheet is Attachment 1 to this Contract. Each ordering Agency shall pay the Contractor the amount shown on the Ordering Confirmation Form as full compensation for all costs and expenses of completing the Work in accordance with the Contract, including but not limited to all labor and material required, overhead, storage and shipping, risks and obligations, taxes (as applicable), fees and profit, and any unforeseen costs.

3. Contract Term and Period of Performance

The effective date of this Contract shall be the effective date set forth in the Notice to Proceed (NTP). The Contractor shall provide vehicles under the Schedule for a period of two (2) years after the effective date of the Contract, upon receipt of the NTP.

4. Contract Type

This is an Indefinite Delivery/Indefinite Quantity (ID/IQ) contract. The minimum and maximum quantities established for the contract period are identified in Appendix "C" and "G."

> These figures represent the foreseeable needs of the listed Agencies shown on Appendix "C". <u>ONLY these firms shall be able to be order vehicles from this joint procurement</u>. Neither MBTA, CalACT nor any other participant guarantee any purchase beyond the minimum quantity for the base contract period. Orders shall be placed on an as-needed basis.

5. Notices

Any Notice legally required to be given by one party to another under the Contract shall be in writing, dated and signed by the party giving such Notice or by a duly authorized representative of such party.

Notices shall not be effective unless transmitted by any method that provides confirmation of transmission and delivery, such as fax, certified mail or registered mail and addressed to:

To Agency:
Mr. Joe Meer, Director of Cooperative Purchasing Programs
Morongo Basin Transit Authority
62405 Verbena Road
Joshua Tree, CA 92252

[Insert Contractor name, address and point of contact]

6. Entire Agreement

This Contract constitutes the complete and entire agreement between the Agency and Contractor and supersedes any prior representations, understandings, and communications, commitments, agreements or Proposals, oral or written that are not incorporated as a part of the Contract.

_____	_____
Contractor name	Agency name
_____	_____
Signature of authorized official	Signature of authorized official
_____	_____
(Print or type name and title)	(Print or type name and title)
_____	_____
Date	Date
_____	Approved as to form by:
Tax ID number	
	_____
	Insert name and title

Attachment 1 – Pricing Form

[INSERT COMPLETED AND EXECUTED PRICING FORM]

SECTION 11: APPENDIXES

Appendix -A-1 – High Floor Bus

Att A-1 (H-HF) RFP #18-01 REV 1.pdf

Appendix A-2 – Low Floor 30 – 35 Foot

Att A-2 (H-LF 30-35') RFP #18-01 R

Appendix A- 3 – Low Floor 35 – 40 Foot

Att A-3 (H-LF 35-40') RFP #18-01 REV 1.pc

Appendix A-4 – Commuter

Att A-4 (H-OTR-) RFP #18-01 REV 1.pc

Appendix A-5 – RE Trolley

Att A-5 (H-TR) RFP #18-01 REV 1.pdf

Appendix B: **Visual Inspection and Road Test Forms**

Guide for Inspection:

The Following Items Should Be Inspected

on Every Coach of Each Order

Coach Manufacturer_____

Coach Number_____

Test Location_____

ITEM	REQUIREMENT	INSPECTION INSTRUCTION	RESULT	INSPECTOR/ DATE	REMARKS/NOTES
Curb Weight	Maximum curb weight of lb.	Measure on certified scale, front and rear axles	Weight		
FMVSS Stickers	Affixed to vehicle	Locate sticker	Pass/Fail		
Finish and Color	Smooth body surfaces and paint	Visually inspect all surfaces for flaws	Pass/Fail		
Interior Panel Fastening	Absence of rough edges or surfaces	Visually inspect for proper installation	Pass/Fail		
Towing Devices	Provision of towing eyes (front/rear)	Verify presence of towing eyes	Pass/Fail		
Door Control	Opening time of sec.	Verify door opening time frame	Pass/Fail		
Interior Lighting	Lighting operable without engine	Switch on all interior lights	Pass/Fail		
Exterior Lighting	All vehicle lights operable	Switch on and verify lamps are on	Pass/Fail		
Fuel Tank	Fill rate and filler location	Inspect filler for easy access and check fill rate	Pass/Fail		
Chassis	Welds, axles, suspension,	Inspect for leaks, and interference. Check fluid	Pass/Fail		

	steering, wheels, and brakes	levels, welds, undercoating, air lines, brake slack, and lug nuts			
Electrical	Wiring and junction boxes	Inspect for loose or stretched wires	Pass/Fail		
Batteries	Secured and polarized wiring access for jump start	Inspect compartment and jumper cable access	Pass/Fail		
HVAC	Capacity and performance	Operate AC, check compressor, condenser, flow, and temperature	Pass/Fail		
Wheelchair Access	Clear lift or ramp access, and securement area	Operate lift or ramp, inspect operation, measure areas	Pass/Fail		
Power Plant	Mounting and arrangement	Check for loose lines, leaks, and noises. Check fluid levels, belt alignment, and cap fit	Pass/Fail		

SAMPLE ROAD TEST SHEET

Guide for Inspection:

The Following Items Should Be Inspected

on Every Coach of Each Order

Coach Manufacturer_____

Coach Number_____

Test Location_____

ITEM	REQUIREMENT	INSPECTION INSTRUCTION	RESULT	INSPECTOR /DATE	REMARKS/ NOTES
Engine	N/A	Record low idle, fast idle, and high idle speeds	Low Fast High		
Service Brakes	Stopping distance	Verify function and indicator, check for pulling to either side	Pass/Fail		
Parking Brake	N/A	Verify indicator, and no movement	Pass/Fail		
Turning Effort	Steering wheel torque	Check effort with coach stopped	Pass/Fail		
Turning Radius	Not to exceed at corner of body	Verify turning radius in both directions	Pass/Fail		
Acceleration	rate from 0 to mph	Verify acceleration on smooth road	Pass/Fail		
Resonance	Absence of audible and/or visible vibrations	Operate coach at various speeds, check for vibrations and rattles	Pass/Fail		
Windshield Wipers	Evenly deposited wash fluid	Operate coach at safe speed over 40 mph, check coverage, parking position,	Pass/Fail		

		and wiper frequency			
Power Plant	N/A	Check for leaks under coach and in engine compartment, check for abnormal noises	Pass/Fail		
HVAC	Interior temperature	Operate system, check internal and ambient temp.	Int. Amb.		
Door Control	Accelerator and brake interlocks	At speeds less than 10 mph, verify accelerator and brake interlocks with door open	Pass/Fail		
General	N/A	During testing, observe any abnormalities in ride and handling of coach	Pass/Fail		

Signature of Inspector **Date**

Appendix C Participants List

RFP No. 18-01 PARTICIPANTS LIST

RFP 18-01
Participating Agenci

Participating Agencies RFP 18-01 1

Appendix D**, References**

SAE #	Title	Date Published
J10	– Methods of Test for Paints - Part J10: Determination of Deposition Efficiency of Coating Powders	– Sep 15, 1998
– J211	– Instrumentation for Impact Test—Part 2: Photographic Instrumentation	– May 1, 2001
– J287	– Driver Hand Control Reach	– Feb 1, 2007
– J366	– Exterior Sound Level for Heavy Trucks and Buses	– Feb 1, 1987
– J382	– Windshield Defrosting Systems Performance Requirements - Trucks, Buses, and Multipurpose Vehicles.	– Jan 1, 1994
– J534	– Lubrication Fittings	– May 1, 2008
– J537	– Storage Batteries	– Sep 1, 2000
– J541	– Voltage Drop for Starting Motor Circuits	– Oct 1, 1996
– J587	– License Plate Illumination Devices (Rear Registration Plate Illumination Devices)	– Sep 1, 2003
– J593	– Backup Lamps (Reversing Lamps)	– Sep 1, 2005
– J673	– Automotive Safety Glasses	– Oct 1, 2005
– J680	– Location and Operation of Instruments and Controls in Motor Truck Cabs, Recommended Practice	– Sep 1, 1988

– J686	– Motor Vehicle License Plates	– Oct 1, 1999
– J689	– Curbstone Clearance, Approach, Departure, and Ramp Breakover Angles—Passenger Car and Light Truck	– Aug 1, 2009
– J833	– Human Physical Dimensions	– May 1, 2003
– J844	– Nonmetallic Air Brake System Tubing	– Nov 1, 2004
– J941	– Motor Vehicle Drivers' Eye Locations	– Mar 1, 2010
– J994	– Alarm—Backup—Electric Laboratory Performance Testing	– Mar 1, 2009
– J1050	– Describing and Measuring the Driver's Field of View	– Jan 1, 2003
– J1113	– Electromagnetic Compatibility Component Test Procedure Part 42, Conducted Transient Emissions	– Oct 1, 2006
– J1127	– Low Voltage Battery Cable	– Mar 1, 2010
– J1128	– Low Voltage Primary Cable	– Dec 1, 2005
– J1149	– Metallic Air Brake System Tubing and Pipe	– Aug 1, 2007
– J1292	– Automobile and Motor Coach Wiring	– Jan 1, 2008
– J1455	– Recommended Environmental Practices for Electronic Equipment Design in Heavy-Duty Vehicle Applications	– Jun 1, 2006
– J1587	– Joint SAE/TMC Electronic Data Interchange between Microcomputer Systems in Heavy-Duty Vehicle Applications, Recommended Practice	– Jan 1, 1996
– J1708	– Serial Data Communications Between Microcomputer Systems in Heavy-Duty Vehicle Applications	– Oct 1, 2008
– J1986	– Balance Weight and Rim Flange Design Specifications, Test Procedures, and Performance Recommendations	– Jan 1, 2006
– J1939	– Data Link Layer	– Dec 1, 2006
– J1995	– Engine Power Test Code - Spark Ignition and Compression Ignition - Gross Power Rating, Standard;	– Jun 1, 1990

– J2402	– Road Vehicles—Symbols for Controls, Indicators, and Tell-tales	– Jan 1, 2010
– J2711	– Recommended Practice for Measuring Fuel Economy and Emissions of Hybrid-Electric and Conventional Heavy-Duty Vehicles	– Sept 1, 2002

Appendix E**, Abbreviation and Acronyms**

A/C	air conditioning
ABS	anti-lock braking system
AC	alternating current
ACQ	alkaline copper quaternary
ADA	Americans with Disabilities Act
Ah	amp hour
ALR	auto-locking retractor
APA	The Engineered Wood Association, formerly the American Plywood Association
APC	automatic passenger counter
APTA	American Public Transportation Association
ASTM	ASTM International, formerly the American Society for Testing and Materials
ATC	automatic traction control
AVL	automatic vehicle location
AWG	American Wire Gauge
BAFO	Best and Final Offer
BMS	Battery Management System
CalACT	**California Association for Coordinated Transportation**
Caltrans	**California Department of Transportation**
CARB	California Air Resources Board
CCS	climate control system
CCTV	closed-circuit television
cfm	cubic feet per minute
CGA	Compressed Gas Association
CNG	compressed natural gas
dB	decibel
DBE	disadvantaged business enterprise
DC	direct current
DDU	driver display unit
DEF	diesel exhaust fluid
DOT	Department of Transportation
DPF	diesel particulate filter
ECM	Engine Control and Monitoring
ECS	emission control system
ELR	emergency locking retractor
EMI	electromagnetic interference
EPA	Environmental Protection Agency
ESS	energy storage system
FEA	Finite Element Analysis
FEMA	failure mode effects analysis
FMCSA	Federal Motor Carrier Safety Administration

FMCSR	Federal Motor Carrier Safety Regulations
FMVSS	Federal Motor Vehicle Safety Standards
FTA	Federal Transit Administration
GAWR	gross axle weight rated
GPS	global positioning system
GVW	gross vehicle weight
GVWR	gross vehicle weight rated
H-point	hip-point
HDS	hybrid drive system
HMI	human-machine interface
HSC	hybrid system controller
HV	high voltage
HVAC	heating, ventilation and air conditioning
I/O	input/output
IEEE	Institute of Electrical and Electronics Engineers
ISO	International Standards Organization
LEL	LED emergency light
LV	low voltage
mA	milliamp ere
MBTA	Morongo Basin Transit Authority
MDT	mobile data terminal
MPa	mega-Pascal
NC	normally closed
NFPA	National Fire Protection Association
NGV	natural gas vehicle
NOx	nitrogen oxide
NO	normally open
NTP	notice to proceed
NVLAP	National Volunteer Laboratory Accreditation Program
OEM	original equipment manufacturer
OSI	Open Systems Interconnect
PA	public address
PMO	project management oversight
PPU	primary propulsion unit
PPU	prime power init
PPV	price per vehicle
PRD	pressure relief device
psi	pounds per square inch
RF	radio frequency
RFI	radio frequency interference
RTC	real-time clock
SAE	SAE International, formerly the Society of Automotive Engineers

scf	standard cubic feet
SLW	seated load weight
SOC	state of change
UL	Underwriters Laboratories
UNECE	United Nations Economic Commission for Europe
VDC	volts of direct current
Wh	watt-hours
VIN	vehicle information number

Appendix F, CA ADA SALES TAX

The following is a listing of items which are exempt from California Sales Tax. Contractor shall review these items and determine the gross value of the items which will be installed on the proposed Bus. In calculating the Sales or Use Tax, the Contractor shall indicate the gross value of the items including material, labor, overhead and profit. When the Vehicle is registered and the Use or Sales Tax is paid, the Contractor shall pay the Sales or Use Tax on the adjusted value of the Bus.

Wheelchair System

- Wheelchair lift and lift control panel.
- Brake-accelerator-wheelchair lift interlock.
- Rear/Front door wheelchair lift disarming switch/key at driver's position.
- Lights above wheelchair boarding position (floodlight).
- External/internal public address system.
- Fold-up seats.
- Seat belts with storage box for wheelchair patron.
- Wheelchair securement devices.
- Wheelchair securement straps.
- Kneeling System
- Kneeling mechanism.
- Brake-throttle-kneeling interlock.
- Illuminated indicator on driver's panel.
- Control switch on driver's panel.
- Warning system (lights and audible alarm).

Miscellaneous

- Modifications to doorways, loading area, aisle, and passenger's assist design.
- Signs and Decals
- Non-Skid Flooring

Gross Value of Items Exempt from California Sales Taxes $_____

Appendix G, Proposal Deviation Form.

Proposal Deviation Form RFP 18-01.doc

GILLIG

December 12, 2018

Email: joe@mbtabus.com

Mr. Joe G. Meer
MORONGO BASIN TRANSIT AUTHORITY
62405 Verbena Road
Joshua Tree, CA 92252

RE: RFP NO. 18-01 PROPOSAL FOR JOINT PROCUREMENT for
- **MODEL (30-35') LOW FLOOR HEAVY DUTY BUS – ATTACHMENT A-2**
- **MODEL (35-40') LOW FLOOR HEAVY DUTY BUS – ATTACHMENT A-3**

BEST & FINAL DATE DUE: December 14, 2018 at 3:00PM

Dear Mr. Meer:

GILLIG is pleased to submit the enclosed documentation covering our **BEST AND FINAL** response to the above solicitation for your review and consideration.

If you have any additional questions, please do not hesitate to contact Joseph Policarpio, Vice President at "Joseph Policarpio" <sales@gillig.com>.

We appreciate this opportunity and look forward to a successful bid opening.

Very truly yours,

Christopher Turner
Executive Vice President Operations
Phone: 800-735-1500
Email: sales@gillig.com

Encs.

Cc: Joseph Policarpio, Vice President
Benjamin M. Grunat, Director Project Sales Management
William F. Fay, Jr., Director National Sales
Norm Reynolds, Regional Sales Manager

Attachment C, MBTA IFB 18-01 BAFO Price Worksheet

Instructions

1-Please submit electronic version of this BAFO worksheet to joe@mbtabus.com
2-Executed hardcopy to be sent to MBTA at 62405 Verbena Rd. Joshua Tree, Ca 92252
3-Submission of hardcopy **and** electronic worksheets is due by Friday December 14, 2018 at 3 pm.
4-Only the base pretax vehicle price is subject to BAFO resubmission.
5-By submission, proposer acknowledges receipt of Amendment #4 referring to this document.

Manufacturer				
Model	**CNG**		**Diesel**	
High Floor (Att A1 H-HF)				
29' – 26 Passengers or 20 + 2 (Dual Doors)	Not Available	Base Price	Not Available	Base Price
33' – 32 Passengers or 26 + 2 (Dual Doors)	Not Available	Base Price	Not Available	Base Price
35' – 35 Passengers or 28 + 2 (Dual Doors)	Not Available	Base Price	Not Available	Base Price
Model				
Low Floor (Att A2 H-LF 30-35') <35,500 GVWR				
30' – 29 Passengers or 22 + 2 (Dual Doors)	$444,048	Base Price	$395,070	Base Price
32' – 30 Passengers or 22 + 2 (Dual Doors)	Not Available	Base Price	Not Available	Base Price
35' – 37 Passengers or 29 + 2 (Dual Doors)	Not Available	Base Price	Not Available	Base Price
Model	GILLIG Low Floor CNG	Base Price	GILLIG Low Floor Diesel	Base Price
Low Floor Heavy Duty (Att A3 H-LF 35-40')				
35' – 32 Passengers or 24 + 2 (Dual Doors)	$449,973	Base Price	$400,995	Base Price
40' – 39 Passengers or 33 + 2 (Dual Doors)	$454,173	Base Price	$405,195	Base Price

Signature _____ Christopher Turner, Executive Vice President Operations

Company Name **GILLIG LLC**

Date **12/12/2018**

Signatory represents he/she has authority to bind company named to the bid submitted and any contract awarded.

OPTIONS

1	ADA - Additional Mobility Aid Position	Quote
2	Sportworks Bike Rack - (2-Position) - DL2 SSTL	$1,285
3	Sportworks Bike Rack - (3-Position)	Not Available
4	Camera - Back Up - Safety Vision	$1,170
5	Camera - Mirror Mounted Camera	Quote
6	Electronic Signs - Luminator Titan (Full Size) (Front/Side) - Amber	$935
7	Electronic Signs - Luminator (Standard 16x160) (Front/Side) - Amber	$315
8	Electronic Signs - Twin Vision Smart Series 3 (Full Size) (Front/Side)- Amber	$315
8	Dinex Star LED headlight	$950
9	Dinex sapphire Interior Light package	$750
10	Electronics - Digital Dashboard - I/O Controls - MFD2	$2,706
11	Electronics - Multiplex Upgrade Over Std.	Not Available
12	Electronics - Tower Option	Not Available
13	Exterior LED Lighting Package - Dialight Curb Lights	$50
14	Farebox - Diamond (Quote) XV	$1,325
15	Farebox-Main with 1 extra Vault	Not Available
16	Farebox - GFI (Quote)	Quote
17	Farebox - Guardrail	$144
18	Farebox - Prewire, Stanchion, Light	$300
19	Fire Detection and Suppression - Amerex ~~V30~~ V25 w detection (Diesel/Hybrid)	(250)
20	Fire Detection and Suppression - Amerex w methane detection (CNG)	$329
21	Fire Detection and Suppression - Kidde w detection	$490
22	Fuel - CNG 8 Tank Dual Pod	Not Available
23	HVAC - Brushless Motor	Included
24	HVAC - Drivers Dash AC/Heat/Defrost	Quote
25	HVAC - Heater Booster Pump	Included
26	Lighting - LED Headlights - Pretoria	Included
27	Locking Fuel Door	$50
28	OEM Repair Manuals	1 Set Included
29	PA System - Optional Microphone	$125
30	Paint - Black Out Around Windows	$2,150
31	Paint - Skirt (Only) - Per Color (Single Stage)	$2,150
32	Paint - Special	Quote
33	Radiator - Modine (Credit?) Panel Mount	(900)
34	Radio - Additional Speakers (2)	$100
35	Radio - AM/FM/CD/MP3 w/Antenna and ~~4~~ 2 Speakers	$760
36	Ramp - Lift U	Included
37	Remote Cable Release for Wheelchair Retractors	Included
38	USSC-4One Q Pod system To Base Layout (Each)	$2,951
39	Retractor - Q'Straint Q Pod System -USSC w. Base Layout - Each	$2,951

NOTE: IN COMPLIANCE WITH PAGE 5 ITEM NR2-
GILLIG CONFIRMS WE ARE WILLING TO ACCEPT
AN ORDER FOR A SINGLE BUS.

40	Retractor - Q'Straint QRT MAX (Q-8300-A1-L)	Included
41	Roof Escape/Vent Hatch	$300
42	Rubber Floor - In Lieu of Altro (Credit if applicable)	(400)
43	Seating - Cloth Seat Upgrade	Quote
44	Seating - Drivers Seat Alarm (Parking Brake) - Seat Cushion	$120
45	Seating - Drivers Seat Alarm (Seatbelt)	$50
46	Seating - Flip Seat: 17" - 18" - Single FW Flip	Quote
47	Seating - Flip Seat: 34" - 36" Double FW Flip	Quote
48	Seating - Folding Seat: 17" - 18" - Single FW Foldaway	Quote
49	Seating - Folding Seat: 34" - 36" - Double FW Foldaway	Quote
50	Seating - Reclining Seat	Quote
51	Snow Chains - Automatic - 35'/40' Only	$1,940
52	Solid Pane Windows (Each)	Quote
53	Stanchions - Powder Coated	$400
54	Storage - 30" Interior Rack	Quote based on position
55	Suppression System (Only) - Amerex	(250)
56	Suppression System (Only) - Kidde	$490
57	Transmission - B500	Quote
58	Transmission - Retarder	Included
59	Wheels - Aluminum - Clean & Buff	$1,225
60	Windows - Diamond Guard	Not Available
61	Rear/Mid Door Delete (Show as Credit)	(1,300)
59	Standard Seat Delete (Enter as Credit)	Quote
60	Decals by Design "Basic" graphics package	Not Available
61	Decals by Design "mid level spot" graphics package	Not Available
62	Decals by Design "full body wrap" graphics package	Not Available
66	Delivery Zone 1	$1,445
67	Delivery Zone 2	$873
68	Delivery Zone 3	$643
69	Delivery Zone 4	$383
70	Delivery Zone 5	$1,023
71	Allison B400R 5-Speed Transmisstion	Included
72	Rear LED Route Number - Hanover Amber	$1,015
73	Velvac Mirrors with Cameras (Blind Spot)	Not Available
74	Meritor 79000 Series Axles	Included
75	Hill Hold Switch	$75
76	Curbside Battery Tray	Not Available
77	Disc Brakes (Front/Rear)	$4,315
78	Group 31 AGM Battery ~~(Each)~~ Deka	$290
79	Byk-Rak 3 Position Bike Rack	Not Available
80	FerryRiser	Not Available
81	Aluminum Wheels - Brushed Finish - Clean & Buff	$1,225
82	Aluminum Wheels - Polished Finish	$2,354
83	Sensitive Door Edge - Both Doors (Front/Rear)	$650
84	I/) Controls LED Interior Lighting (1/2 Watt)	Included
85	Hanover 19" LCD Message Screen	$17,021

86	Mobileye Shield + System w/DV4 Continuous Event Camera	Quote	
87	Bike Rack Usage Counter	$256	
88	"Bus is Turning" Outside Announcement	Quote	
89	Protran Safe Turn Alert System - without LED Strobe Lights	$3,793	
90	Spheros Roof Hatch	Quote	
91	SafeFleet Exterior Mirrors	Included	
92	Hidden Frame Full Fixed Windows	$3,579	
93	Floor Mount Directional Signals	Standard	
94	Stadium Style Floor - (3) Levels	Quote Per Seat Layout	
95	Pretoria Transit Suburban Overhead Parcel Racks	Quote Per Seat Layout	
96	LED Lighting - Overhead Parcel Racks	Quote Per Seat Layout	
97	Lucerix Vision Disply	Quote	
98	USSC Gemini (per seat)	Quote Per Seat Layout	
99	USSC Aries (per seat)	Quote Per Seat Layout	
100	Kiel Citos (per seat)	Quote Per Seat Layout	
101	Kiel QPOD	Quote Per Seat Layout	
102	Kiel QPO w/ Secubar	Quote Per Seat Layout	
103	Kiel Intra (per seat)	Quote Per Seat Layout	
104	Sutrak roofmount electric HVAC	Not Available	
103	Sutrak rearmount electric HVAC	Not Available	
104	Diesel Hybrid Option 1 - Allison H40EP w/ B6.7	$193,390	Subject to Buy America Availibility
105	Diesel Hybrid Option 2 - BAE APS2, 32K w/ B6.7 (35'/40' Only)	$213,439	
106	BAE "REAL" accessory power system	Not Available	
107	Freedman CitiSeat w/2 pt seatbelts (If tested), per seat	Quote	
108	Freedman CitiPro w/3 pt seatbelts (If tested), per seat	Quote	
109	America Seating Insight (per seat)	Quote Per Seat Layout	
110	American Seating Vision (per seat)	Quote Per Seat Layout	
111	American Seating Prime (per seat)	Quote Per Seat Layout	
112	American Seating QPOD	Quote Per Seat Model	
113	Durabright Aluminum Wheels - Full Polished	$2,275	
114	Haldex Gemini Air Dryer	Quote	
115	AD9 Tandem Air Dryer	Quote	
116	Graham White QBA15NX Air Dryer	Quote	
117	Group 31 Odyssey Battery ~~(each)~~	$905	
118	Group 31 Interstate Battery ~~(each)~~	$185	
119	Goodall Jump Starter	Quote	
120	Whitaker Jump Starter	$350	
121	Anderson SB50 Jump Starter	$178	
122	Speakeasy Microphone system	$1,950	
123	Silent Alarm	Included	
124	Touch Screen Instrument Panel	Not Available	
125	First Aid Kit	$75	
126	~~Teleflex~~ adjustable pedals Kongsberg	$925	
127	Side Impact Panels	Standard	
128	"Space Age" composite subfloor	Not Available	
129	Luminator Infotainment-1 monitor	$10,196	

130	Luminator Infotainment-2 monitor	**$15,338**	
131	Warranty Labor Reimbursal Rate (per hour)	**$43.79**	
132	ThermoGuard sliders (AS2) - BS70Laminated	**Not Available**	
133	ThermoGuard Side Destination (AS2) - BS70Laminated	**Not Available**	
134	ThermoGuard Front Doors (AS2) - BS70Laminated	**Not Available**	
135	ThermoGuard Passenger (AS3) - BS65Laminated	**Not Available**	
136	ThermoGuard Rear Door (AS3) - BS65Laminated	**Not Available**	
137	ThermoGuard Driver cut (AS2) - BS72Tempered	**Not Available**	(only if required)
138	Trolley Styling Package	**Quote**	

GILLIG

PRICING CLARIFICATION

PRICING CLARIFICATION

All the following general comments and clarifications may not apply to your specific procurement, but they are included so as to avoid misunderstandings, so they should not be construed as making this a conditional bid. These comments do not change the quoted pricing for the initial order and build.

TAX/FEE STATEMENT

The prices quoted for this procurement are for the specified deliverables only and exclude (unless specifically noted by buyer or seller) any Local, City, County, State, Franchise or Income or Value Added(VAT) taxes, tariffs, fees, business licenses, or other licenses, that may need to be paid as part of the performance of this contract, or any option of it. If any additional fees are required, they will be noted and added to the appropriate invoice.

PAYMENT

All Prices are in U.S. Dollars and payments are only accepted on U.S. bank checks or via electronic funds transfers, (no credit, debit or bank cards) and any applicable transaction fees would be the responsibility of the buyer.

EMISSIONS AND OTHER REGULATED OR MANDATED CHANGES

The prices quoted for the initial build quantity are for vehicles meeting all applicable Federal and State regulations (including EPA, CARB, or NHTSA requirements) currently known to be in effect at the time of delivery of those vehicles. Changes caused by or related to future regulations, any subsequently enacted regulations, or technologies necessitating revisions from the currently proposed vehicle configuration (e.g. component change/availability due to emission or other regulations, requirements or mandates), may require a price adjustment, which would be subject to negotiation and agreement by both GILLIG and the buyer. This latter statement applies to future builds only that may need to use different components or currently unknown or unavailable technology, to meet regulations or requirements in effect at the time(s) of those optional deliveries.

OPTIONAL BUILD PRICING

Most bids include a PPI adjuster to determine pricing for future builds, and this is to clarify that bus pricing for such future build quantities may be different from the PPI adjusted price because of the above regulated/mandated changes and/or due to customer initiated change notices.

GILLIG LLC

By: _____

CHRISTOPER TURNER

Title: EXECUTIVE VICE PRESIDENT OPERATIONS

Date: DECEMBER 12, 2018

SUMMARY OF STANDARD WARRANTIES

(Provide detailed warranty information with proposal)

Warranty	Miles*	Years*
Body Structure	150,000	3
Chassis	500,000	12
Engine	Unlimited	2
Transmission	Unlimited	2
Air conditioner	Unlimited	2
Lift/Ramp	Unlimited	2
Other Options	N/A	N/A

*COVERAGE CEASES AT THE FIRST EXPIRATION OF THE TIME OR DISTANCE NOTED. SEE ADDITIONAL GILLIG WARRANTY ATTACHED.

GILLIG LLC

LOW FLOOR TRANSIT COACH

STANDARD LIMITED WARRANTY & EXTENDED COVERAGE FOR

CalAct – MORONGO BASIN TRANSIT AUTHORITY RFP 18-01 – BEST & FINAL - DECEMBER 14, 2018

GILLIG LLC warrants to the original purchaser, that its transit coaches, save and except for those major component assemblies and other parts described below which are separately warranted by their respective manufacturer's (OEM's), will be **FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP UNDER NORMAL USE AND SERVICE**, for the distance or time periods specified in the attached, and agrees to REPAIR or REPLACE the defective parts AT NO COST TO THE PURCHASER. This is a limited warranty subject to the provisions stated below and is referred to as GILLIG's Standard Limited Warranty.

This warranty **DOES NOT COVER** malfunction or failure resulting from the purchaser's or its agents or employees alteration, misuse, abuse, accident, neglect or failure to perform normal preventive maintenance as outlined in GILLIG's Service Manual, nor does it cover components or assemblies not originally provided by GILLIG. Further, this warranty **DOES NOT APPLY** to normal replacement items such as light bulbs, seals, filters or bushings, nor to consumable items such as belts, tires, brake linings or drums.

PURCHASER'S SOLE REMEDIES FOR LIABILITY OF ANY KIND WITH RESPECT TO THE PRODUCTS FURNISHED UNDER THIS WARRANTY AND ANY OTHER PERFORMANCE BY GILLIG UNDER OR PURSUANT TO THIS WARRANTY, OR WITH RESPECT TO PURCHASER'S USE THEREOF, INCLUDING NEGLIGENCE, SHALL BE LIMITED TO THE REMEDIES PROVIDED IN THIS WARRANTY AND SHALL IN NO EVENT INCLUDE ANY INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OR LOSS OF USE, REVENUE OR PROFIT. IN NO EVENT SHALL GILLIG'S LIABILITY FOR DAMAGES WITH RESPECT TO ANY OF THE PRODUCTS COVERED UNDER THIS WARRANTY EXCEED THE AMOUNT PAID BY THE PURCHASER TO GILLIG FOR SUCH PRODUCTS.

GILLIG **DOES NOT WARRANT** some major component assemblies (such as the engines, transmissions and air conditioning systems) which are warranted by their respective manufacturers (OEM's) and identified as Category 3 items on page three (3) of this Warranty. **Warranty coverage for these items is as defined in those manufacturer's own warranty documents** and per their terms and conditions, and as administered by their own support networks.

GILLIG makes **NO OTHER WARRANTIES,** except as stated herein, and GILLIG's obligation under this warranty is **LIMITED AND FULLY DESCRIBED HEREIN**. Determination of warrantable defects is at GILLIG's (or the OEM's) discretion and will require inspection of failed components. Correction or compensation under this warranty for Category 1 and Category 2 items cannot be made unless requested on a GILLIG Application for Warranty Claim form and in accordance with the claim procedure established by GILLIG.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTY EXPRESSED OR IMPLIED, but if such has legal status, it **CANNOT EXCEED THE DURATIONS STATED HEREIN**. This warranty gives the purchaser specific legal rights and some state statutes may include other rights.

This is GILLIG's sole warranty with respect to its transit coaches. **GILLIG MAKES NO OTHER WARRANTY OF ANY KIND WHATEVER, EXPRESS OR IMPLIED; AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESAID OBLIGATION ARE HEREBY DISCLAIMED BY GILLIG AND EXCLUDED FROM THIS AGREEMENT.**

GILLIG LLC

LOW FLOOR TRANSIT COACH

STANDARD LIMITED WARRANTY & EXTENDED COVERAGE FOR

CalAct – MORONGO BASIN TRANSIT AUTHORITY RFP 18-01 – – BEST & FINAL - DECEMBER 14, 2018

GILLIG's Standard Limited Warranty which covers Category 1 and Category 2 parts, components and assemblies, covers the following systems, components or assemblies for the period specified, and includes 100% PARTS AND LABOR to repair or replace the defective components as determined by GILLIG. (See Page 3 for explanation of notes (1)-(7).)

CATEGORY 1

Includes GILLIG manufactured or assembled components and systems as well as some purchased assemblies. Warranty and warranty claims administration provided by GILLIG.

	Coverage Period [1]	
	Months	Miles
FULL COACH WARRANTY [2] [3] [7]	12	50,000
BODY STRUCTURE WARRANTY [4]	36	150,000
CORROSION & STRUCTURAL INTEGRITY WARRANTY [5]	144	500,000

CATEGORY 2

Includes major components purchased and installed by GILLIG. Warranty provided by component OEM's. Warranty claims administration provided by GILLIG.

AXLE		
Meritor Front Steering	60	300,000
Meritor Rear Driving	60	300,000
BRAKE SYSTEM		
(Excludes Friction Material)		
Bendix Valves	24	100,000
Meritor Brakes	24	100,000
RADIATOR & CHARGE AIR COOLER		
EMP	36	Unlimited

GILLIG LLC

LOW FLOOR TRANSIT COACH

STANDARD LIMITED WARRANTY & EXTENDED COVERAGE FOR

CalAct – MORONGO BASIN TRANSIT AUTHORITY RFP 18-01 – – BEST & FINAL - DECEMBER 14, 2018

Major components listed below under "Category 3" are covered by warranties or extended coverages[6], for the miles and/or months indicated, provided by the manufacturer (OEM's) of those components. Purchasers should refer to specific OEM warranty documents for details. Warranty claims are and will be administered by the respective manufacturers (OEM's) and all warranty claims must be made directly to said manufacturers. GILLIG will assist purchasers in dealing with these OEM's and warranty issues that may arise from time to time.

CATEGORY 3

	Coverage Period [1]	
	Months	Miles
ENGINE [7]		
Cummins L9 & L9N	24	Not applicable
ENGINE ACCESSORIES		
Delco Starter	36	350,000
EMP Alternator	24	Unlimited
Air Compressor	24	200,000
TRANSMISSION		
Allison B400R	24	Unlimited
AIR CONDITIONING SYSTEM		
Thermo King	24	Not applicable
A/C Compressor	24	Unlimited
WHEELCHAIR RAMP		
Lift-U LU18	24	Unlimited
DOOR SYSTEM		
Vapor	12	Unlimited

Low Floor Transit Coach Emission Warranty

GILLIG warrants to the ultimate purchaser and each subsequent purchaser that the new vehicle isdesigned, built and equipped so it conforms at the time of sale to the ultimate purchaser with all U.S. federal emissions regulations applicable at the time of manufacture and that it is free from defects in materials or workmanship which would cause the vehicle to fail to not meet these regulations within five years or 100,000 miles of operation, whichever occurs first, as measured from the date the vehicle is placed into service. In no case may this period be less than the Standard Limited Warranty where applicable to emission warrantable parts. If the ultimate purchaser registers the vehicle in the state of California (or any other state following the applicable California Air Resources Board regulations) a separate California Emissions Warranty applies.

GILLIG LLC

LOW FLOOR TRANSIT COACH

STANDARD LIMITED WARRANTY & EXTENDED COVERAGE FOR

CalAct – MORONGO BASIN TRANSIT AUTHORITY RFP 18-01 – BEST & FINAL - DECEMBER 14, 2018

GILLIG warrants to the ultimate purchaser that registers the vehicle in the state of California (or any other state following the applicable California Air Resources Board regulations), and each subsequent purchaser, that the new vehicle is designed, built and equipped so it conforms at the time of sale to the ultimate purchaser with all applicable regulations adopted by the California Air Resources Board at the time of manufacture and that it is free from defects in materials or workmanship which would cause the vehicle to fail to not meet these regulations within five years, 100,000 miles or 3000 hours of operation, whichever occurs first, as measured from the date the vehicle is placed into service. In no case may this period be less than the basic mechanical warranty provided to the purchaser of the engine.

GILLIG warrants to the ultimate purchaser and each subsequent purchaser that the tires on this vehicle conform at the time of sale to the ultimate purchaser with all U.S federal emissions regulations and all applicable regulations adopted by the California Air Resources Board at the time of manufacture and are free from defects in materials or workmanship which would cause the vehicle to fail to not meet these regulations for a period of 2 years or 24,000 miles, whichever occurs first.

This list of emission control parts may be covered by the Emission Warranty under certain failure modes.

- Ambient Air Temperature Sensor
- Charge Air Cooler and associated plumbing
- Wire harness circuits connected at both ends to emissions warrantable components
- Exhaust gas pipes from turbocharger out to the last after treatment device
- Urea quality sensor
- Urea tank, heating element, level sensor, temperature sensor, coolant control valve
- Urea lines and line heater controls
- On-Board Diagnostic (OBD) Malfunction Indicator Lamp (MIL)
- Diesel Exhaust Fluid (DEF) Lamp
- OBD Connector

NOTES

1) Coverage ceases at the first expiration of the time or distance noted.
2) Full coach warranty includes and applies to electrical, doors, seats, flooring, roof hatches, destination signs, wheelchair ramp, handrails, radio, P.A., etc., but not to IVS systems or special options.
3) Fleet defect coverage is for a maximum of 12 months or 50,000 miles and includes all warrantable components and assemblies on the vehicle.
4) Basic body structure warranty includes and applies to structural members in the body and undercarriage including the structural members in the suspensions.
5) The corrosion and structural integrity guarantee covers against a significant loss of structural integrity of the assembly or its functional performance, resulting from a pertinent loss of cross-section due to corrosion caused by normal environmental elements but excludes corrosion caused by aggressive road de-icers such as Magnesium Chloride or equivalents, unless Gillig approved preventative measures are taken (see Service Manual).
6) Extended coverage may not duplicate Standard Limited warranty coverage. Note: Please refer to OEM warranty documents for details.
7) Use of non-ASTM biodiesel blends from non-BQ9000 suppliers in excess of B20 may void the engine manufacturer's warranty on fuel related components, and also may void warranties of hoses, seals and fittings in contact with the fuel.

From: Joe Meer <joe@mbtabus.com>
Sent: Tuesday, December 04, 2018 11:02 AM
To: joe@mbtabus.com
Subject: BAFO Worksheet
Attachments: RFP 18-01 Att C-Price and Options Worksheet BAFO.xlsx

Please receive this worksheet and note the submission date is Friday, December 14, 2018.

Joe G. Meer
Morongo Basin Transit Authority
760.285.3479 (m)
760.366.2445 (f)

The information in this e-mail and any attachments are for the sole use of the intended recipient and may contain privileged and confidential information. If you are not the intended recipient, any use, disclosure, copying or distribution of this message or attachment is strictly prohibited. If you believe that you have received this e-mail in error, please contact the sender immediately and delete the e-mail and all of its attachments.

This email has been scanned for spam and viruses by Proofpoint Essentials. Click here to report this email as spam.

MORONGO BASIN TRANSIT AUTHORITY
AMENDMENT NO. 4
Vehicle RFP #18-01
Date Issued: November 30, 2018

The following clarifications, amendments, additions, deletions, revisions and/or modifications form a part of the documents, and change original or previously issued documents only in the manner and to the extent stated. The contract price shall reflect all addendum changes and each proposer submit with the proposal, a copy of this Addendum.

Items requested by proposers in the RFP's approved equal and request for comment period that are not addressed by addendum or included by reference are to be considered denied.

MBTA revises RFP #18-01 as follows:

Revisions to RFP commercial terms

1. MBTA clarifies WR 1.4 (Fleet Defects) as follows: Fleet defect rule does not apply to normal wear-and-tear items or the following major components: engine, transmission, and HVAC. However, if the fleet defect percentage is reached in a major component, it is expected that the manufacturer will fully support and assist the purchasing agencies with obtaining the appropriate remedy from the major component supplier. The fleet defect provision remains in force for all other components and structural elements proposed.

   The BAFO process with submissions due December 15, 2018 will be applied to bus models proposed towards RFP 18-01 attachments A-2 and A-3 in order for pricing to reflect the above clarification.

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

AUTHORIZING THE PURCHASE OF THREE (3) 29-FOOT LOW FLOOR BUSES FOR TRACER FIXED ROUTE SERVICE FOR A TOTAL OF $2,175,000 FROM GILLIG, LLC THROUGH THE CALIFORNIA ASSOCIATION FOR COORDINATED TRANSPORTATION/MORONGO BASIN TRANSIT AUTHORITY PURCHASING COOPERATIVE CONTRACT #18-01, PURSUANT TO TRACY MUNICIPAL CODE SECTION 2.20.210; APPROVING A CONTINGENCY AMOUNT OF $75,000 FOR CHANGE ORDERS NECESSARY RESULTING DURING PRODUCTION; APPROPRIATING AN ADDITIONAL $250,000 TO CIP 77590 FOR THE ADDITIONAL COSTS

WHEREAS, The City of Tracy ("City") is in the process of expanding the services offered by the City) Tracer public transit services; and

WHEREAS, The City needs to purchase additional buses in order to effectively and efficiently service the community and ensure a sufficient number of spare buses are available; and

WHEREAS, Tracy Municipal Code Section 2.20.220 allows the City to voluntarily participate in cooperative purchasing agreements with other public agencies. Section 2.20.220 provides that "[n]othing in this article prohibits the voluntary participation by the City in any cooperative purchasing agreement(s) or programs entered into between the City and another public agency. The City Manager is authorized to act under the provisions of this article to procure for the City general services, supplies or equipment in conjunction with such voluntary cooperative purchasing agreement(s) or programs as may be entered into by the City. All formal contract and bidding procedures to be followed in such cases shall be those specifically enumerated in the voluntary cooperative purchasing agreement or program[;]" and

WHEREAS, The Transportation/Morongo Basin Transit Authority (CALACT/MBTA) MBTA is a public agency and has entered into a contract with Gillig, LLC of Livermore, California (Purchasing Cooperative Contract #18-01), for the purchase of fixed route buses. Said contract between the MBTA and Gillig, LLC allows for other federal, state, county and local entities to contract under its terms and conditions; and

WHEREAS, The City desires to participate in the CALACT/MBTA Purchasing Cooperative for Transit Busses (Contract No. 18-01) ("Agreement") for the purchase of three (3) 29 foot, low floor buses (collectively, "Buses"), a form which Agreement is attached to the staff report as Exhibit A; and

WHEREAS, Funding for the purchase of the Buses was budgeted in CIP 77590. CIP 77590 has a total has $2,000,000 appropriated for the purchase of fixed route replacement buses; and

WHEREAS, the City anticipates the Buses costing $2,175,000, and due to changes that may occur during the production process, the City seeks to allow for a contingency amount of $25,000 per Bus; and

NOW, THEREFORE, be it resolved as follows:

RESOLVED: That the above recitals are true and correct; and be it,

RESOLVED: That the City Council of the City of Tracy approves the use of the CALACT/MBTA Purchasing Cooperative, pursuant to Tracy Municipal Code 2.20.210; and be it

FURTHER RESOLVED: That, after review and approval by the City Attorney's Office, the City authorizes the City to enter into the Agreement attached in the staff report as Exhibit A; and be it

FURTHER RESOLVED: That the City Council authorizes the purchase of three (3) 29-foot, low floor buses for Tracer fixed route service in an amount of $2,175,000 from Gillig, LLC, approves a contingency amount of $75,000 ($25,000 per Bus) for any change orders needed during production, and appropriates an additional $250,000 to CIP 77590; and be it

FURTHER RESOLVED: That the City Manager, in consultation with the City Attorney, is authorized to take any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on August 15, 2023, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 1.S

RECOMMENDATION

Staff recommends that City Council adopt a resolution approving the First Amendment to the Subdivision Improvement Agreement for Western Park and Orchard Park (Parks) in the Ellis Specific Plan area to allocate credit and security amounts as between the Parks and reflect adjustments due to the voided Master Program Improvements and Reimbursement Agreement and authorize the City Clerk to file the First Amendment with the San Joaquin County Recorder's Office.

EXECUTIVE SUMMARY

The Subdivision Improvement Agreement for Western and Orchard Parks in the Ellis Specific Plan area combined the required improvement security amounts in a single total for both parks. The Subdivider has completed the improvements for Western Park and is requesting that the City accept the improvements and return the improvement security for the Western Park at this time. Approval of the First Amendment of the Subdivision Improvement Agreement to separate the improvement security amounts for the two parks will allow the City to accept the Western Park improvements, release sureties provided by Subdivider under the original Subdivision Improvement Agreement, require new sureties for Orchard Park, and new warranty bond for Western Park. In addition, as the SIA reflected terms from a Reimbursement Agreement that is now voided, the First Amendment reflects the currently applicable credit amounts for both Parks.

BACKGROUND AND LEGISLATIVE HISTORY

On January 17, 2023, by Resolution No. 2023-015, City Council approved that certain City of Tracy—Subdivision Improvement Agreement—Western and Orchard Parks—Ellis Town & Country Tract 4007 (SIA) with LS-Tracy, LLC (Subdivider) for construction of Western Park and Orchard Park, both being neighborhood parks within Ellis Phase 3 – Town and Country Tract 4007, a subdivision consisting of 308 single family residential lots. The neighborhood parks are generally located west of Corral Hollow Road along Ellis Towne Drive. The SIA was recorded in San Joaquin County Records on February 3, 2023 as Document No. 2023-008934.

As noted above, the SIA requires Subdivider to construct both Western Park and Orchard Park. However, Subdivider began construction of Western Park many months prior to the City Council's approval of the SIA. As such, Subdivider completed all work for Western Park shortly after the execution of the SIA but has not completed the work for Orchard Park. As the SIA is for both Western Park and Orchard Park, staff is requesting that the City Council approve this First Amendment to the SIA that apportions security, credits and other matters as between the two Parks so that the City may separately accept each park as it is completed. If the SIA is so amended, then acceptance of each park would not be considered a "partial acceptance" under the Tracy Municipal Code.

Western Park will provide additional park amenities to City residents. In addition, mail kiosks that will be used by all residents of the Ellis Town and Country subdivision are located in Western Park. As such, City staff recommends that the City Council grant this request.

ANALYSIS

The estimated credit included in the SIA for Western Park and Orchard Park was $2,721,140. This credit amount was based on an estimated park acreage originally prepared by the Subdivider. However, the City's consultant, Harris & Associates, calculated the correct credit amount to be $2,327,747, based on the actual park acreage built by Subdivider. Of this total, Western Park receives a credit amount of $1,604,183 and Orchard Park receives a credit amount of $723,565. Per Section 13.08.020 of the Tracy Municipal Code, applicants are not eligible to receive credits for contingency or program administration costs.

Per the requirements of Section 9 of the Agreement, the Subdivider furnished Improvement security in the amount of $3,666,599 for completion of both parks.

Pursuant to the terms of the First Amendment to City of Tracy—Subdivision Improvement Agreement—Western and Orchard Parks—Ellis Town & Country Tract 4007 (First Amendment), the Subdivider shall replace the existing improvement security with new, separate security instruments for each Park, thereby allowing the City to return the improvement security required under the original SIA, require new warranty bond for Western Park, and new sureties for the Orchard Park, which has not been completed. The new improvement security to be furnished by Subdivider pursuant to the First Amendment will be the following:

Bond Type	**Agreement**
Warranty – Western Park	$273,028
Faithful Performance - Orchard Park	$936,321
Labor and Material – Orchard Park	$936,321
Warranty – Orchard Park	$93,632

FISCAL IMPACT

There will be no impact to the General Fund; the First Amendment does not change the total amount of improvement security provided by the Subdivider pursuant to the SIA.

PUBLIC OUTREACH / INTEREST

Not applicable.

COORDINATION

The Engineering Department coordinated with the Parks Department on the staff report.

CEQA DETERMINATION

The action authorized by the recommended action is exempt from California Environmental Quality Act (CEQA) requirements under Section 15061(b)(3) of the CEQA regulations (California Code of Regulations, Title 14, Section 15061(b)(3)).

STRATEGIC PLAN

This agenda item is consistent with the Council approved Economic Development Strategy to ensure physical infrastructure necessary for development.

ACTION REQUESTED OF THE CITY COUNCIL

That City Council, by resolution, approve the First Amendment to the Subdivision Improvement Agreement for Western Park and Orchard Park in the Ellis Specific Plan area to allocate credit and security amounts as between the Parks and reflect adjustments due to the voided Reimbursement Agreement and authorize the City Clerk to file the First Amendment with the San Joaquin County Recorder's Office.

Prepared by: Al Gali, Associate Engineer

Reviewed by: Koosun Kim, PE, City Engineer / Assistant Director of Development Services
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

ATTACHMENTS

Attachment A – First Amendment to City of Tracy—Subdivision Improvement Agreement—Western and Orchard Parks—Ellis Town & Country Tract 4007

Attachment A

Recording Requested By
City of Tracy
Development Services Department
333 Civic Center Plaza
Tracy, CA 95376

And When Recorded Mail To:
City of Tracy
Office of the City Clerk
333 Civic Center Plaza
Tracy, CA 95376
Attention: Al Gali
(No recording fee under government code 27383)

CITY OF TRACY
FIRST AMENDMENT TO
SUBDIVISION IMPROVEMENT AGREEMENT
WESTERN AND ORCHARD PARKS
ELLIS TOWN & COUNTRY TRACT 4007

This **FIRST AMENDMENT TO SUBDIVISION IMPROVEMENT AGREEMENT—WESTERN AND ORCHARD PARKS—ELLIS TOWN & COUNTRY TRACT 4007** (hereinafter "**First Amendment**") is made and entered into by and between the **CITY OF TRACY**, a municipal corporation ("City") and **LS-Tracy, LLC**, a Delaware Limited Liability Company ("Subdivider").

RECITALS

A. On January 17, 2023, pursuant to Resolution No. 2023-0015, the City Council approved the City of Tracy—Subdivision Improvement Agreement—Western and Orchard Parks—Ellis Town & Country Tract 4007 (the "**SIA**") to authorize the Subdivider to proceed with the construction of the park improvements for the 1.29-acre Orchard Park site and the 2.86-acre Western Park site parcels. The Agreement was subsequently executed by the City and recorded on February 03, 2023 as Document No. 2023-008934 in San Joaquin County Records, and is on file with the City Clerk.

B. On February 15, 2023, the City issued the Notice to Proceed for the Western and Orchard Parks. Pursuant to Section 2.3 of the SIA, the Subdivider is required to complete all park improvements by May 15, 2024.

C. Subdivider began construction of Western Park many months prior to the City Council's approval of the SIA, and as such, Subdivider completed all work for Western Park shortly after the execution of the SIA.

D. The Subdivider has asked the City to accept the Western Park improvements and release to the Subdivider the improvement security provided by the Subdivider for

the Western Park improvements.

E. The City desires to accept the Western Park improvements so that the Ellis Town and Country subdivision residents may use the mail kiosks located in the Western Park parcel and so that City residents can have additional park amenities.

F. City and Subdivider now wish to amend the Agreement to apportion security, credits and other matters as between the two parks so that the City may separately accept each park as it is completed.

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. **INCORPORATION BY REFERENCE.** This First Amendment hereby incorporates by reference all terms and conditions set forth in the SIA unless specifically modified by this First Amendment. All terms and conditions set forth in the SIA not specifically modified by this First Amendment shall remain in full force and effect.

2. **AMENDMENTS TO THE SUBDIVISION IMPROVEMENT AGREEMENT.**

   A. **Section 4** of the SIA is hereby amended and replaced in its entirety to read as follows:

   4. PARK FEE CREDITS. Following Subdivider's completion and City's acceptance of the Work in accordance with Section 16 of this Agreement, Subdivider will be eligible to receive NP Fee credits for the Park Fee portion in the following amounts:

   - **For Western Park,** in an amount equal to $1,604,183.
   - **For Orchard Park,** in an amount equal to $723,565.

   Accordingly, Subdivider was required to pay only the PM Fee portion of the NP Fees, in the amount of $225.46, for each of the 308 SFDUs on the Property.

   Subdivider acknowledges and agrees that Subdivider already has been reimbursed NP Fees for all SFDUs on the Property paid by Subdivider in the amount of $1,874,962.32. Future reimbursements shall be made in compliance with the Tracy Municipal Code.

   B. **Section 9** of the SIA is hereby amended to read as follows:

   9. IMPROVEMENT SECURITY. The Parties agree that, subject to the City accepting that portion of the Work related to Western Park, the City will release the existing improvement security provided by Subdivider for the entire Work, subject to Subdivider furnishing new improvement security for the that portion of the Work related to Orchard Park, and new warranty bond specific to

Western Park in a form authorized by the Subdivision Map Act (Government Code sections 66499 et seq.) and Section 12.36.080 of the Tracy Municipal Code, in the following amounts:

1. **Faithful Performance** security in the amount of **$ 936,321** to secure faithful performance of this Agreement for **Orchard Park**.

2. **Labor and Material** security in the amount of **$ 936,321** to secure payment to all laborers and materialmen (until the date of which claims are required to be made by laborers and materialmen) for **Orchard Park**.

3. **Warranty** security in the amount of $ 93,632 to secure faithful performance of this Agreement (from the date on which the City Council accepts the Work as complete until one year thereafter) for Orchard Park.

4. **Warranty** security in the amount of $273,028 to secure faithful performance of this Agreement (from the date on which the City Council accepts the Work as complete until one year thereafter) for Western Park.

C. **Section 16** of the SIA is hereby amended and replaced in its entirety to read as follows:

16. ACCEPTANCE OF WORK; RELEASE OF IMPROVEMENT SECURITY. Prior to acceptance of the Work by the City Council, Subdivider shall be solely responsible for maintaining the quality of the Work and maintaining safety at the Project Site. Subdivider's obligation to perform the Work shall not be satisfied until after the City Engineer has made a reasonable written determination that all the obligations of the Agreement have been satisfied and all outstanding fees and charges have been paid and that the title to the real property underlying the improvements is free and clear of all encumbrances, to the satisfaction of the City. Subdivider shall clear all encumbrances not acceptable to the City prior to recordation of acceptance of any Work. Subject to the satisfaction of the foregoing, City shall release the Improvement Security for Faithful Performance and for described in Sections 9.1 through 9.4 in accordance with the requirements of the Public Contract Code, and shall release the Improvement Security describe in Sections 9.5 and 9.6 upon expiration of Warranty Period described in Section 17. Notwithstanding any contrary provisions of this Agreement, the City may, in its sole discretion, accept the Work, release the Improvement Security, and issue Park Fee Credits, for each of the Western Park and the Orchard Park separately, subject to Subdivider's satisfaction of all the requirements of this Agreement as they apply to each park, as reasonably determined by the City Engineer.

3. **SIGNATURES.** The individuals executing this First Amendment represent and warrant that they have the right, power, legal capacity, and authority to enter into

and to execute this First Amendment on behalf of the respective legal entities of the Subdivider and the City. This First Amendment shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

4. **MODIFICATIONS.** This Amendment may not be modified orally or in any manner other than an agreement in writing signed by both parties, in accordance with the requirements of this Agreement.

5. **SEVERABILITY.** In the event any term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in full force and effect.

IN WITNESS WHEREOF the parties do hereby agree to the full performance of the terms set forth herein.

CITY OF TRACY,
a municipal corporation

_____
By: Nancy Young
Title: MAYOR
Date: _____

Attest:

_____
By: Adrianne Richardson
Title: CITY CLERK
Date: _____

Approved As To Form:

_____
By: Bijal Patel
Title: CITY ATTORNEY
Date: _____

SUBDIVIDER:
LS-Tracy LLC
a Delaware limited liability company

_____
By: Josh Santos
Title: Division President
Date: 08/18/23

CALIFORNIA ACKNOWLEDGMENT **CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Contra Costa }

On August 8, 2023 (Date) before me, Lauren Snashall, Notary Public (Here Insert Name and Title of the Officer)

personally appeared Josh Santos (Name(s) of Signer(s))

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

LAUREN SNASHALL
Notary Public - California
Contra Costa County
Commission # 2431747
My Comm. Expires Dec 20, 2026

Place Notary Seal and/or Stamp Above

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Lauren Snashall
Signature of Notary Public

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer – Title(s): _____	☐ Corporate Officer – Title(s): _____
☐ Partner – ☐ Limited ☐ General	☐ Partner – ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer is Representing: _____	Signer is Representing: _____

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APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION 2023-_____

APPROVING THE FIRST AMENDMENT TO THE SUBDIVISION IMPROVEMENT AGREEMENT FOR WESTERN PARK AND ORCHARD PARK IN THE ELLIS SPECIFIC PLAN AREA TO ALLOCATE CREDIT AND SECURITY AMOUNTS AS BETWEEN THE PARKS AND REFLECT ADJUSTMENTS DUE TO THE VOIDED MASTER PROGRAM IMPROVEMENTS AND REIMBURSEMENT AGREEMENT AND AUTHORIZING THE CITY CLERK TO RECORD THE FIRST AMENDMENT WITH THE SAN JOAQUIN COUNTY RECORDER'S OFFICE

WHEREAS, on January 17, 2023, by Resolution No. 2023-015, City Council approved that certain City of Tracy—Subdivision Improvement Agreement—Western and Orchard Parks—Ellis Town & Country Tract 4007 (SIA) between the City and LS-Tracy, LLC (Subdivider), for the construction of two neighborhood parks in the Ellis Specific Plan area; and

WHEREAS, the Subdivider began construction of Western Park before the City Council approved the SIA; and

WHEREAS, the Subdivider has completed the improvements for Western Park and has asked the City to accept the Western Park improvements and release the improvement security for Western Park, which the City Council is considering by a separate agenda item; and

WHEREAS, Section 9 of the SIA required Subdivider to furnish Improvement Security in the amount of $3,666,599 for completion of both Orchard Park and Western Park, and pursuant to the SIA, Subdivider furnished the City with a single security instrument for both parks; and

WHEREAS, the First Amendment to City of Tracy—Subdivision Improvement Agreement—Western and Orchard Parks—Ellis Town & Country Tract 4007 (First Amendment) will revise and replace Section 9 of the Agreement to require the Subdivider to provide new security instruments for Orchard Park improvements, thereby allowing the City to release Subdivider's improvement security for the Western Park while retaining Subdivider's improvement security for the Orchard Park; and

WHEREAS, the estimated cost of the infrastructure improvements for Western Park and Orchard Park are as follows:

Park Improvements (Western Park)	$ 2,730,278
Park Improvements (Orchard Park)	$ 936,321; and

WHEREAS, upon approval and execution of the First Amendment, Subdivider will provide the City with new security instruments in the following amounts to replace the existing security instruments:

Faithful Performance (Orchard Park)	$	936,321
Labor and Material (Orchard Park)	$	936,321
Warranty (Western Park)	$	273,028
Warranty (Orchard Park)	$	93,632; now, therefore be it

RESOLVED: That the City Council of the City of Tracy hereby approves the First Amendment to the Subdivision Improvement Agreement for Western Park and Orchard Park in the Ellis Specific Plan area to allocate credit and security amounts as between the Parks and reflect adjustments due to the voided Reimbursement Agreement; and be it further

RESOLVED: That the City Council authorizes the City Clerk to file the First Amendment with the San Joaquin County Recorder's Office.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on the 15th day of August 2023, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

Exhibit A: First Amendment to City of Tracy—Subdivision Improvement Agreement—
Western and Orchard Parks—Ellis Town & Country Tract 4007

Exhibit A

Recording Requested By
City of Tracy
Development Services Department
333 Civic Center Plaza
Tracy, CA 95376

And When Recorded Mail To:
City of Tracy
Office of the City Clerk
333 Civic Center Plaza
Tracy, CA 95376
Attention: Al Gali
(No recording fee under government code 27383)

CITY OF TRACY
FIRST AMENDMENT TO
SUBDIVISION IMPROVEMENT AGREEMENT
WESTERN AND ORCHARD PARKS
ELLIS TOWN & COUNTRY TRACT 4007

This **FIRST AMENDMENT TO SUBDIVISION IMPROVEMENT AGREEMENT—WESTERN AND ORCHARD PARKS—ELLIS TOWN & COUNTRY TRACT 4007** (hereinafter "**First Amendment**") is made and entered into by and between the **CITY OF TRACY**, a municipal corporation ("City") and **LS-Tracy, LLC**, a Delaware Limited Liability Company ("Subdivider").

RECITALS

A. On January 17, 2023, pursuant to Resolution No. 2023-0015, the City Council approved the City of Tracy—Subdivision Improvement Agreement—Western and Orchard Parks—Ellis Town & Country Tract 4007 (the "**SIA**") to authorize the Subdivider to proceed with the construction of the park improvements for the 1.29-acre Orchard Park site and the 2.86-acre Western Park site parcels. The Agreement was subsequently executed by the City and recorded on February 03, 2023 as Document No. 2023-008934 in San Joaquin County Records, and is on file with the City Clerk.

B. On February 15, 2023, the City issued the Notice to Proceed for the Western and Orchard Parks. Pursuant to Section 2.3 of the SIA, the Subdivider is required to complete all park improvements by May 15, 2024.

C. Subdivider began construction of Western Park many months prior to the City Council's approval of the SIA, and as such, Subdivider completed all work for Western Park shortly after the execution of the SIA.

D. The Subdivider has asked the City to accept the Western Park improvements and release to the Subdivider the improvement security provided by the Subdivider for

the Western Park improvements.

E. The City desires to accept the Western Park improvements so that the Ellis Town and Country subdivision residents may use the mail kiosks located in the Western Park parcel and so that City residents can have additional park amenities.

F. City and Subdivider now wish to amend the Agreement to apportion security, credits and other matters as between the two parks so that the City may separately accept each park as it is completed.

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. **INCORPORATION BY REFERENCE.** This First Amendment hereby incorporates by reference all terms and conditions set forth in the SIA unless specifically modified by this First Amendment. All terms and conditions set forth in the SIA not specifically modified by this First Amendment shall remain in full force and effect.

2. **AMENDMENTS TO THE SUBDIVISION IMPROVEMENT AGREEMENT.**

   A. **Section 4** of the SIA is hereby amended and replaced in its entirety to read as follows:

   4. PARK FEE CREDITS. Following Subdivider's completion and City's acceptance of the Work in accordance with Section 16 of this Agreement, Subdivider will be eligible to receive NP Fee credits for the Park Fee portion in the following amounts:

   - **For Western Park,** in an amount equal to $1,604,183.
   - **For Orchard Park,** in an amount equal to $723,565.

   Accordingly, Subdivider was required to pay only the PM Fee portion of the NP Fees, in the amount of $225.46, for each of the 308 SFDUs on the Property.

   Subdivider acknowledges and agrees that Subdivider already has been reimbursed NP Fees for all SFDUs on the Property paid by Subdivider in the amount of $1,874,962.32. Future reimbursements shall be made in compliance with the Tracy Municipal Code.

   B. **Section 9** of the SIA is hereby amended to read as follows:

   9. IMPROVEMENT SECURITY. The Parties agree that, subject to the City accepting that portion of the Work related to Western Park, the City will release the existing improvement security provided by Subdivider for the entire Work, subject to Subdivider furnishing new improvement security for the that portion of the Work related to Orchard Park, and new warranty bond specific to

Western Park in a form authorized by the Subdivision Map Act (Government Code sections 66499 et seq.) and Section 12.36.080 of the Tracy Municipal Code, in the following amounts:

1. **Faithful Performance** security in the amount of **$ 936,321** to secure faithful performance of this Agreement for **Orchard Park**.

2. **Labor and Material** security in the amount of **$ 936,321** to secure payment to all laborers and materialmen (until the date of which claims are required to be made by laborers and materialmen) for **Orchard Park**.

3. **Warranty** security in the amount of $ 93,632 to secure faithful performance of this Agreement (from the date on which the City Council accepts the Work as complete until one year thereafter) for Orchard Park.

4. **Warranty** security in the amount of $273,028 to secure faithful performance of this Agreement (from the date on which the City Council accepts the Work as complete until one year thereafter) for Western Park.

C. **Section 16** of the SIA is hereby amended and replaced in its entirety to read as follows:

16. ACCEPTANCE OF WORK; RELEASE OF IMPROVEMENT SECURITY. Prior to acceptance of the Work by the City Council, Subdivider shall be solely responsible for maintaining the quality of the Work and maintaining safety at the Project Site. Subdivider's obligation to perform the Work shall not be satisfied until after the City Engineer has made a reasonable written determination that all the obligations of the Agreement have been satisfied and all outstanding fees and charges have been paid and that the title to the real property underlying the improvements is free and clear of all encumbrances, to the satisfaction of the City. Subdivider shall clear all encumbrances not acceptable to the City prior to recordation of acceptance of any Work. Subject to the satisfaction of the foregoing, City shall release the Improvement Security for Faithful Performance and for described in Sections 9.1 through 9.4 in accordance with the requirements of the Public Contract Code, and shall release the Improvement Security describe in Sections 9.5 and 9.6 upon expiration of Warranty Period described in Section 17. Notwithstanding any contrary provisions of this Agreement, the City may, in its sole discretion, accept the Work, release the Improvement Security, and issue Park Fee Credits, for each of the Western Park and the Orchard Park separately, subject to Subdivider's satisfaction of all the requirements of this Agreement as they apply to each park, as reasonably determined by the City Engineer.

3. **SIGNATURES.** The individuals executing this First Amendment represent and warrant that they have the right, power, legal capacity, and authority to enter into

and to execute this First Amendment on behalf of the respective legal entities of the Subdivider and the City. This First Amendment shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

4. **MODIFICATIONS.** This Amendment may not be modified orally or in any manner other than an agreement in writing signed by both parties, in accordance with the requirements of this Agreement.

5. **SEVERABILITY.** In the event any term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in full force and effect.

IN WITNESS WHEREOF the parties do hereby agree to the full performance of the terms set forth herein.

CITY OF TRACY,
a municipal corporation

_____
By: Nancy Young
Title: MAYOR
Date: _____

Attest:

_____
By: Adrianne Richardson
Title: CITY CLERK
Date: _____

Approved As To Form:

_____
By: Bijal Patel
Title: CITY ATTORNEY
Date: _____

SUBDIVIDER:
LS-Tracy LLC
a Delaware limited liability company

_____
By: Josh Santos
Title: Division President
Date: 8/18/23

CALIFORNIA ACKNOWLEDGMENT **CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Contra Costa }

On August 8, 2023 before me, Lauren Snashall, Notary Public,
Date *Here Insert Name and Title of the Officer*

personally appeared Josh Santos
Name(s) of Signer(s)

_____,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

LAUREN SNASHALL
Notary Public - California
Contra Costa County
Commission # 2431747
My Comm. Expires Dec 20, 2026

Place Notary Seal and/or Stamp Above

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Lauren Snashall
Signature of Notary Public

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer – Title(s): _____	☐ Corporate Officer – Title(s): _____
☐ Partner – ☐ Limited ☐ General	☐ Partner – ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer is Representing: _____	Signer is Representing: _____

©2019 National Notary Association

August 15, 2023

Agenda Item 1.T

RECOMMENDATION

Staff recommends that the City Council adopt a resolution (1) accepting improvements for Western Park within Ellis Town and Country, Tract 4007 subdivision, constructed by LS-Tracy, LLC, and accepting future maintenance and repair; and (2) authorizing the City Clerk to file the Notice of Completion for Western Park and record said notice with the San Joaquin County Recorder's Office; and (3) authorizing the City Engineer to release the Western Park improvement security in accordance with the terms of the Subdivision Improvement Agreement, as amended.

EXECUTIVE SUMMARY

LS-Tracy, LLC, a Delaware Limited Liability Company (Subdivider), has completed subdivision improvements for Western Park, a 2.86-acre neighborhood park within Ellis Phase 3 - Town and Country Tract 4007, a subdivision consisting of 308 single-family residential lots, in accordance with the applicable Subdivision Improvement Agreement. Staff recommends that City Council adopt a resolution accepting the improvements related to Western Park as completed, authorizing the City Clerk to file a Notice of Completion, and authorizing the City Engineer to release the Subdivider's improvement security in accordance with the terms of the amended Subdivision Improvement Agreement, with respect to Western Park.

BACKGROUND AND LEGISLATIVE HISTORY

On June 1, 2021, by Resolution No. 2021-068, City Council approved a Subdivision Map and Subdivision Improvement Agreement for Ellis Phase 3, Tract 4007. The Subdivision Map, recorded as 43-MP-169, included dedication of Parcel E (the Western Park site) subject to satisfactory completion of improvements.

On January 17, 2023, by Resolution No. 2023-015, City Council approved that certain City of Tracy Subdivision Improvement Agreement—Western and Orchard Parks—Ellis Town & Country Tract 4007 (SIA) between the City and Subdivider. Among other things, the SIA requires the Subdivider to perform the Scope of Work defined in the following plan set for Western Park: "Improvement Plans for Western Park Tract 4007," consisting of 35 sheets, prepared by Gates + Associates of San Ramon, California (Plans and Specifications).

ANALYSIS

The SIA requires Subdivider to construct both Western Park and Orchard Park. However, Subdivider has begun construction of Western Park many months prior to the City Council's approval of the SIA. As such, Subdivider completed all work for Western Park shortly after the execution of the SIA but has not completed the work for Orchard Park. As the SIA is for both Western and Orchard Park, by separate agenda item, staff is requesting that the City Council approve an Amendment to the SIA that apportions security, credits and other matters as between the two parks so that the City may separately accept each park as it is completed. If the SIA is so amended, then acceptance of each park would not be considered a "partial acceptance" under the Tracy Municipal Code. In addition, as the SIA reflected terms from a

Reimbursement Agreement that is now voided, the First Amendment reflects the currently applicable credit amounts for both Parks.

The City Engineer has inspected the completed work and confirmed that the improvements conform to the SIA and City specifications and plans, as related to Western Park. Subject to the City Council's approval, a Notice of Completion for Western Park would be filed by the City Clerk, to be recorded with the San Joaquin County Recorder's Office. Filing the Notice of Completion by City Clerk will finalize acceptance of the improved Western Park land pursuant to Tracy Municipal Code 12.36.110. The project carries a one-year warranty bond for all public improvements.

STRATEGIC PLAN

This agenda item is consistent with the Council approved Economic Development Strategy to ensure physical infrastructure necessary for development.

FISCAL IMPACT

All improvements were completed by the Developer in accordance with the SIA and there was no fiscal impact to the General Fund for the construction cost. Once accepted, Western Park will be maintained by the City, with funds collected through the Ellis Communities Facilities District assessment that is paid by all residents within the Ellis Specific Plan area. The first year of maintenance is estimated at $62,000.

The estimated credit included in the SIA for Western Park and Orchard Park was $2,721,140. This credit amount was based on an estimated park acreage originally prepared by the Subdivider. However, the City's consultant, Harris & Associates, calculated the correct credit amount to be $2,327,747, based on the actual park acreage built by Subdivider. Of this total, Western Park receives a credit amount of $1,604,183 and Orchard Park receives a credit amount of $723,565. Per Section 13.08.020 of the Tracy Municipal Code, applicants are not eligible to receive credits for contingency or program administration costs.

Based on the original estimated costs, bonds were provided by Subdivider. The Subdivider furnished Improvement security in the amount of $3,666,599 for completion of both parks. Pursuant to the terms of the First Amendment to City of Tracy—Subdivision Improvement Agreement—Western and Orchard Parks—Ellis Town & Country Tract 4007 (First Amendment), which is being considered by the City Council by separate agenda item, the Subdivider shall replace the existing improvement security with new, separate security instruments for each park, thereby allowing the City to return the improvement security for the Western Park while retaining the improvement security for the Orchard Park, which has not been completed. The new improvement security to be furnished by Subdivider pursuant to the First Amendment will be the following:

Bond Type	**Agreement**
Warranty – Western Park	$273,028
Faithful Performance - Orchard Park	$936,321
Labor and Material – Orchard Park	$936,321
Warranty – Orchard Park	$93,632

Faithful Performance bonds may be released upon acceptance of improvements by the City. Labor and Material bonds may be released thirty (30) days after recordation of a Notice of Completion, as the statute of limitations period expires in accordance with Civil Code § 9356. Warranty bond may be released one (1) year after the City accepts the improvements and any warranty work is completed.

A total of 2.86 acres has been offered for dedication for Western Park, Parcel E on the Final Map of Town and Country, Tract 4007, and accepted by the City Clerk subject to satisfactory completion of improvements. With completion of the Western Park improvements, the City can accept the improved Western Park parcel and proceed to releasing the security as set forth above. Satisfactory completion of improvements will be confirmed by City Council acceptance and filing of Notice of Completion.

COORDINATION

Development Services Department's Engineering Division coordinated with the Operations & Utilities Department, and the Parks & Recreation Department.

CEQA DETERMINATION

The recommended actions were adequately analyzed by that certain Environmental Impact Report for the Modified Ellis Project, State Clearinghouse Number 2012022023, certified by City Council Resolution No. 2013-011.

STRATEGIC PLAN

This agenda item is consistent with the Council approved Economic Development Strategy to ensure physical infrastructure necessary for development.

ACTION REQUESTED OF THE CITY COUNCIL

That City Council, by resolution, (1) accept the public improvements for Western Park within the Ellis Town and Country, Tract 4007 subdivision, that were constructed by LS-Tracy, LLC; (2) authorize the City Clerk to file a Notice of Completion for Western Park and record said Notice with the San Joaquin County Recorder's office; and (3) authorize the City Engineer to release the Western Park improvement security in accordance with the terms of the Subdivision Improvement Agreement, as amended.

Prepared by: Leisser Mazariegos, Associate Engineer

Reviewed by: Koosun Kim, PE, City Engineer / Assistant Director of Development Services
Richard Joaquin, Parks Planning & Development Manager
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION 2023-_____

ADOPTING A RESOLUTION (1) ACCEPTING IMPROVEMENTS FOR WESTERN PARK WITHIN ELLIS TOWN AND COUNTRY, TRACT 4007 SUBDIVISION, CONSTRUCTED BY LS-TRACY, LLC AND ACCEPTING FUTURE MAINTENANCE AND REPAIR, (2) AUTHORIZING THE CITY CLERK TO FILE THE NOTICE OF COMPLETION FOR WESTERN PARK AND RECORD SAID NOTICE WITH THE SAN JOAQUIN COUNTY RECORDER'S OFFICE, AND (3) AUTHORIZING THE CITY ENGINEER TO RELEASE THE WESTERN PARK IMPROVEMENT SECURITY IN ACCORDANCE WITH THE TERMS OF THE SUBDIVISION IMPROVEMENT AGREEMENT, AS AMENDED

WHEREAS, on June 1, 2021, by Resolution No. 2021-068, City Council approved a Subdivision Map and Subdivision Improvement Agreement for Ellis Phase 3, Tract 4007. The Subdivision Map, recorded as 43-MP-169, included dedication of Parcel E (the Western Park site) subject to satisfactory completion of improvements; and

WHEREAS, on January 17, 2023, by Resolution No. 2023-015, City Council approved that certain City of Tracy—Subdivision Improvement Agreement—Western and Orchard Parks—Ellis Town & Country Tract 4007 (SIA) with LS-Tracy, LLC, a Delaware limited liability company (Subdivider), for the construction of two neighborhood parks in the Ellis Specific Plan area; and

WHEREAS, the SIA requires Subdivider to construct both Western Park and Orchard Park; and

WHEREAS, Subdivider began construction of Western Park many months prior to the City Council's approval of the SIA, and, as such, has completed all work for Western Park shortly after the execution of the SIA, and prior to completion of Orchard Park; and

WHEREAS, Subdivider has asked the City to accept the completed improvements as related to Western Park and release to the Subdivider the improvement security furnished by the Subdivider for the Western Park improvements; and

WHEREAS, Western Park provides park amenities to City residents, so by separate agenda item, staff is requesting that the City Council approve an Amendment to the SIA that apportions security, credits and other matters as between the two parks; and

WHEREAS, if the SIA is so amended, the City may separately accept each park as it is completed, and acceptance of each park would not be considered a "partial acceptance" under the Tracy Municipal Code; and

WHEREAS, a total of 2.85 acres within the Ellis Specific Plan (Parcel E of Tract No. 4007), recorded in Book 43 Maps and Plats (page 169), has been dedicated to the City in fee to the City by Subdivider with respect to Western Park; and

WHEREAS, the City Engineer has inspected the completed improvements for the Western Park improvements and has determined that Subdivider has (*i*) constructed the Western Park improvements in conformity with all approved plans and specifications (Plans), (*ii*) has completed all improvements as set out in the Plans, (*iii*) corrected all deficiencies (if any), and (*iv*) submitted record drawing of the improvements. As such, pursuant to TMC section 12.36.110, the City seeks to accept as complete the Western Park improvements; and

WHEREAS, with the Western Park improvements complete, the City also seeks to file a Notice of Completion pursuant to Civil Code sections 8184 *et seq*. for the Western Park improvements with the San Joaquin County Recorder's office and authorize the City Engineer to release the bonds relating to the Western Park improvements in accordance with the terms of the SIA and the California Civil Code; now, therefore, be it

RESOLVED: That the City Council accepts the improvements for Western Park within Ellis Town and Country, Tract 4007 subdivision, constructed by LS-Tracy, LLC, and accepting future maintenance and repair of the Western Park Site; and be it

FURTHER RESOLVED: That the City Council authorizes the City Clerk to file a Notice of Completion for Western Park and record said improvements with the San Joaquin County Recorder's office; and be it

FURTHER RESOLVED: That the City Council authorizes the City Engineer to release the Western Park improvement security in accordance with the terms of the Subdivision Improvement Agreement, as amended, and the California Civil Code; and be it

FURTHER RESOLVED: That the City Council hereby determines that the actions taken herein were adequately analyzed by that certain Environmental Impact Report for the Modified Ellis Project, State Clearinghouse Number 2012022023, certified by City Council Resolution No. 2013-011, and no further environmental review is required.

* *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on the 15th day of August 2023 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST: _____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of
the City of Tracy, California

August 15, 2023

Agenda Item 1.U

RECOMMENDATION

Staff recommends that the City Council (1) determine that waiving a competitive bidding process is in the best interest of the City, Pursuant to Tracy Municipal Code Section 2.20.140(B)(6); and (2) adopt a resolution approving (A) Amendment No. 1 to the Master Professional Services Agreement with West Yost & Associates for water pressure and capacity analyses and engineering services to extend the agreement, by an additional 18 months, through December 31, 2024, and increase compensation, from $200,000 per calendar year to a not-to-exceed amount of $300,000 per calendar year, and (B) Amendment No. 1 to the Master Professional Services Agreement with Wood Rodgers for storm drainage engineering services to extend the agreement, by an additional 18 months, through December 31, 2024, and increase compensation from $200,000 per calendar year to a not-to-exceed amount of $300,000 per calendar year.

EXECUTIVE SUMMARY

The proposed amendments will extend the Master Professional Services Agreements (MPSAs) with West Yost & Associates (WYA) and Wood Rodgers (WR, and collectively, Consultants) for storm drainage engineering services and water pressure and capacity analyses by an additional 18 months, through December 31, 2024. The amendments with the Consultants will increase compensation from $200,000 per calendar year, respectively, to a not-to-exceed amount of $300,000 per calendar year.

BACKGROUND AND LEGISLATIVE HISTORY

The City issued a Request for Proposals (RFP) for storm drainage engineering services on March 19, 2020. As a result, the City and WR entered into an MPSA on September 24, 2020, under Resolution No. 2020-151, through June 30, 2023, per the RFP.

The City issued an RFP for water pressure and capacity analyses on July 18, 2019. As a result, the City entered into a MPSA with WYA on September 1, 2020, under Resolution No. 2020-161, through June 30, 2023 per the RFP.

The Consultants have satisfactorily met all of the terms of the MPSAs.

ANALYSIS

Development Services Staff is working with various developers on a large number of entitlement applications, most of which include the need for storm drainage-related engineering analyses, water pressure and capacity analyses and/or other engineering assistance. Staff requires assistance from consultants to review development projects in terms of storm drainage and water pressure and capacity analyses. Staff also requires the assistance of the Consultants for other high-priority storm drainage review services and/or water pressure and capacity analyses. As such, Staff requests the extension of the term of each MPSA through December 31, 2024. Staff also requests an increase to compensation under the MPSAs to a not-to-exceed amount of $300,000 per calendar year. The extensions of the contracts will allow staff to continue with the necessary evaluations.

Staff is working on issuing a Request for Proposals (RFP) that will include the services in these

agreements. The process of issuing the RFP awarding contracts and taking those contracts to Council for approval will take 6 to 9 months. In order for the City to continue to provide these necessary analyses in the meantime, staff is asking the City Council to determine that these Amendments with the Consultants are in the best interest of the City pursuant to Tracy Municipal Code Section 2.20.140(b)(6).

FISCAL IMPACT

Funding for the amendments to agreements with Consultants are budgeted in the Development Services annual operating budget. The cost of the work performed by consultants will be recovered through developer contributions. The developer contributions include Cost Recovery Agreements, plan-check fees, and/or other fees collected by the City. It should be noted that Cost Recovery Agreements cover the costs of staff time and consultant work related to each project.

STRATEGIC PLAN

This agenda item supports the City of Tracy's Quality of Life Strategic Priority, which is to provide an outstanding quality of life by enhancing the City's amenities, business mix and services, and cultivating connections to promote positive change and progress in our community.

ACTION REQUESTED OF THE CITY COUNCIL

That the City Council adopt a resolution (1) determining that waiving a competitive bidding process is in the best interest of the City, Pursuant to Tracy Municipal Code Section 2.20.140(B)(6); and (2) adopting a resolution approving (A) Amendment No. 1 to the Master Professional Services Agreement with West Yost & Associates for water pressure and capacity analyses and engineering services to extend the agreement by an additional 18 months, through December 31, 2024, and increase compensation from $200,000 per calendar year to a not-to-exceed amount of $300,000 per calendar year, and (B) Amendment No. 1 to the Master Professional Services Agreement with Wood Rodgers for storm drainage engineering services to extend the agreement for an additional 18 months, through December 31, 2024, and increase compensation from $200,000 per calendar year to a not-to-exceed amount of $300,000 per calendar.

Prepared by: Veronica Child, Management Analyst II

Reviewed by: Koosun Kim, PE, City Engineer/Assistant Director of Development Services
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

ATTACHMENTS

Attachment A – Final Amendment No. 1 with West Yost & Associates
Attachment B – MPSA West Yost & Associates - Water
Attachment C – Final Amendment No. 1 with Wood Rodgers
Attachment D – MPSA Wood Rodgers - Storm

CITY OF TRACY
AMENDMENT NO. 1 TO
MASTER PROFESSIONAL SERVICES AGREEMENT WITH WEST YOST & ASSOCIATES, INC. FOR WATER PRESSURE AND CAPACITY ANALYSES, AND ENGINEERING SERVICES

This Amendment No. 1 (**Amendment**) to the Master Professional Service Agreement is entered into between the City of Tracy, a municipal corporation (**City**), and West Yost & Associates, Inc. a California Corporation (**Consultant**). City and Consultant are referred to individually as "**Party**" and collectively as "**Parties**."

Recitals

A. The City and Consultant entered into a Master Professional Services Agreement (**Agreement**) for Water Pressure and Capacity Analyses, and Engineering Services (**Project**) on September 1, 2020, under Resolution No. 2020-161.

B. The City desires to extend the term of the Agreement through December 31, 2024.

C. The Parties also seek to amend the Agreement to increase compensation by $100,000 annually for the remainder of the Agreement term for the tasks identified in Exhibit "A".

D. This Amendment is being executed pursuant to Resolution No. ____ approved by Tracy City Council on _____, 2023.

Now therefore, the Parties mutually agree as follows:

1. Incorporation by Reference. This Amendment incorporates by reference all terms set forth in the Agreement, unless specifically modified by this Amendment. The terms which are not specifically modified by this Amendment will remain in effect.

2. Terms of Amendment.

A. 2.1 Term.

The term of the Agreement shall be extended through December 31, 2024 in accordance with Sections 2 and 13 of the Agreement.

B. 3.1 Compensation.

Consultant's total compensation under this Agreement shall not exceed $300,000 per calendar year.

C. Exhibits.

Exhibit "B-1" shall replace and supersede Exhibit "B" of the Agreement.

3. Modifications. This Amendment may not be modified orally or in any manner other than by an agreement in writing signed by both parties, in accordance with the requirements of the Agreement.

4. Severability. If any term of this Amendment is held invalid by a court of competent jurisdiction, the Amendment shall be construed as not containing that term, and the remainder of this Amendment shall remain in effect.

5. Signatures. The individuals executing this Amendment represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Amendment. This Amendment shall inure to the benefit of and be binding upon the parties and their respective successors and assigns.

The Parties agree to the full performance of the terms set forth here.

City of Tracy

By: _____
Nancy Young
Title: Mayor
Date: _____

Attest:

By: _____
Adrianne Richardson, City Clerk

Consultant
West Yost & Associates

By: Charles Duncan
Charles Duncan
Title: Chief Executive
Date: 4/17/2023

Federal Employer ID No. 68-0370826

By: Lindsay Smith
Lindsay Smith
Title: Treasurer
Date: 4/17/2023

Approved as to form

By: _____
Bijal M. Patel, City Attorney

Exhibit B-1

2023 Billing Rate Schedule

(Effective January 1, 2023 through December 31, 2023)*

WEST YOST
Water. Engineered.

POSITIONS	LABOR CHARGES (DOLLARS PER HOUR)
ENGINEERING	
Principal/Vice President	$338
Engineer/Scientist/Geologist Manager I / II	$319 / $334
Principal Engineer/Scientist/Geologist I / II	$288 / $307
Senior Engineer/Scientist/Geologist I / II	$259 / $272
Associate Engineer/Scientist/Geologist I / II	$215 / $231
Engineer/Scientist/Geologist I / II	$173 / $201
Engineering Aide	$101
Field Monitoring Services	$125
Administrative I / II / III / IV	$92 / $115 / $138 / $152
ENGINEERING TECHNOLOGY	
Engineering Tech Manager I / II	$332 / $334
Principal Tech Specialist I / II	$305 / $315
Senior Tech Specialist I / II	$279 / $291
Senior GIS Analyst	$252
GIS Analyst	$239
Technical Specialist I / II / III / IV	$178 / $203 / $228 / $254
Technical Analyst I / II	$128 / $152
Technical Analyst Intern	$103
Cross-Connection Control Specialist I / II / III / IV	$133 / $144 / $162 / $180
CAD Manager	$201
CAD Designer I / II	$156 / $176
CONSTRUCTION MANAGEMENT	
Senior Construction Manager	$322
Construction Manager I / II / III / IV	$197 / $211 / $224 / $283
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	$172 / $191 / $213 / $221
Apprentice Inspector	$156
CM Administrative I / II	$83 / $112
Field Services	$221

- Hourly rates include Technology and Communication charges such as general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at actual cost plus 15%.
- The Federal Mileage Rate will be used for mileage charges and will be based on the Federal Mileage Rate applicable to when the mileage costs were incurred. Travel other than mileage will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

CITY OF TRACY
MASTER PROFESSIONAL SERVICES AGREEMENT WITH WEST YOST & ASSOCIATES, INC. FOR WATER PRESSURE AND CAPACITY ANALYSES, AND ENGINEERING ASSISTANCE

This Master Professional Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and **West Yost & Associates, Inc.** a California corporation (**Consultant**). City and Consultant are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Consultant for water pressure and capacity analyses engineering assistance for land development projects; and

B. On July 18, 2019, the City issued a Request for Proposals (RFP) for Water Pressure and Capacity Analyses (**Project**). On August 27, 2019, Consultant submitted its proposal for the Project to the City. City has determined that Consultant possesses the skills, experience and certification required to provide the services.

C. After negotiations between the City and Consultant, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

D. This Agreement is being executed pursuant to Resolution No. 2020-161 approved by Tracy City Council on Sept. 1, 2020.

Now therefore, the Parties mutually agree as follows:

1. <u>Scope of Work</u>. Consultant shall perform the services generally described in Exhibit "A" attached, and incorporated by reference, as directed by written Notice to Proceed by the City's Development Services Director. The services shall be performed by, or under the direct supervision of, Consultant's Authorized Representative: Elizabeth T. Drayer, P.E. Consultant shall not replace its Authorized Representative, nor shall Consultant replace any of the personnel listed in Exhibit "A," nor shall Consultant use or replace any subcontractor or subconsultant, without City's prior written consent. A failure to obtain the City's prior written consent for any change or replacement in personnel or subcontractor/subconsultant may result in the termination of this Agreement.

1.1 Non-Exclusive Agreement. The City reserves the right to contract with other consultants providing the same or similar scope of services described above during the term of this Agreement. The City further reserves the right to, assign work, at its sole discretion, to consultants other than Consultant based on City's budget, experience, and skills of consultants based on the City's specific needs.

2. <u>Time of Performance</u>. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Consultant shall begin performance, and shall complete all required services no later than the dates set forth in each individual Notice to Proceed. Any services for which times for performance are not specified in each individual Notice to Proceed shall be started and completed by Consultant in a reasonably prompt and timely manner based upon the circumstances and direction communicated by the City to the

Consultant. Consultant shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The term of this Agreement shall begin on July 1, 2020 and end on June 30, 2023, unless terminated in accordance with Section 6.

3. Compensation. City shall pay Consultant on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Consultant's total compensation under this Agreement shall not exceed $200,000 per calendar year. Consultant's billing rates shall cover all costs and expenses for Consultant's performance of this Agreement. Effective January 1, 2021, Consultant's billing rates under this Agreement may be annually increased in January of each year by the lesser of 3% or the annual increase in the Cost of Living Index – All Items, for the Sacramento Metropolitan Region. No work shall be performed by Consultant in excess of the total compensation amount provided in this section without the City's prior written approval.

3.2 Invoices. Consultant shall submit monthly invoice(s) to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1 If Consultant is providing services in response to a development application, separate invoice(s) must be issued for each application and each invoice shall contain the City's designated development application number.

3.2.2 Consultant's failure to submit invoice(s) in accordance with these requirements may result in the City rejecting said invoice(s) and thereby delaying payment to Consultant.

3.3 Payment. Within 30 days after the City's receipt of invoice(s), City shall make payment to the Consultant based upon the services described on the invoice(s) and approved by the City.

4. Indemnification. Consultant shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Consultant's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees and volunteers; "Consultant" means the Consultant, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

(The duty of a "design professional" to indemnify and defend the City is limited to claims that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of the design professional, under Civ. Code § 2782.8.)

The provisions of this section survive completion of the services or the termination of this Agreement, and are not limited by the provisions of Section 5 relating to insurance.

5. Insurance. Consultant shall, throughout the duration of this Agreement, maintain insurance to cover Consultant, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Professional Liability "claims made" coverage shall be maintained to cover damages that may be the result of errors, omissions, or negligent acts of Consultant in an amount not less than $1,000,000 per claim.

5.5 Endorsements. Consultant shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Consultant's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Consultant shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Consultant shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Consultant shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Consultant shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City, before the City signs this Agreement.

5.9 Substitute Certificates. Consultant shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Consultant's Obligation. Maintenance of insurance by the Consultant as specified in this Agreement shall in no way be interpreted as relieving the Consultant of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Consultant may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. <u>Termination</u>. The City may terminate this Agreement by giving ten days' written notice to Consultant. Upon termination, Consultant shall give the City all original documents, including preliminary drafts and supporting documents, prepared by Consultant for this Agreement. The City shall pay Consultant for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. <u>Dispute Resolution</u>. If any dispute arises between the City and Consultant that cannot be settled after engaging in good faith negotiations, City and Consultant agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8. Ownership of Work. All original documents prepared by Consultant for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Consultant's services, or upon demand from the City. No such documents shall be revealed or made available by Consultant to any third party without the City's prior written consent.

9. Independent Contractor Status. Consultant is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Consultant is not City's employee and Consultant shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Consultant is free to work for other entities while under contract with the City. Consultant, and its agents or employees, are not entitled to City benefits.

10. Conflicts of Interest. Consultant (including its employees, agents, and subconsultants) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Consultant maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Consultant's conflicting interest.

11. Rebates, Kickbacks, or Other Unlawful Consideration. Consultant warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

12. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City: To Consultant:

Development Services Department
Attn: City Engineer
333 Civic Center Plaza
Tracy, CA 95337

West Yost & Associates
Attn: Elizabeth T. Drayer, P.E.
2020 Research Drive, Suite 100
Davis CA 95618

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

13. Miscellaneous.

13.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Consultant's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

13.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

13.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

13.4 Assignment and Delegation. Consultant may not assign, transfer or delegate this Agreement or any portion of it without the City's written consent. Any attempt to do so will be void. City's consent to one assignment shall not be deemed to be a consent to any subsequent assignment.

13.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

13.6 Compliance with the Law. Consultant shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

13.6.1 Prevailing Wage Laws. Consultant is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates; employment of apprentices (§ 1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. If the services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, and if the total compensation is $1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. These prevailing rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Consultant shall defend, indemnify and hold the City, its officials, officers, employees and agents, harmless from any and all claims, costs, penalties, or interests arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

13.6.2 Non-discrimination. Consultant represents and warrants that it is an equal opportunity employer and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Consultant shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

13.7 Business Entity Status. Consultant is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Consultant. By entering into this Agreement, Consultant represents that it is not a suspended corporation. If Consultant is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

13.8 Business License. Before the City signs this Agreement, Consultant shall obtain a City of Tracy Business License. Consultant shall maintain an active City of Tracy Business License during the term of this Agreement.

13.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

13.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

13.11 Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

13.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Consultant's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Consultant's proposal (if any), the Exhibits shall control.

13.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations or agreements. All exhibits attached hereto are incorporated by reference herein.

14. <u>Signatures</u>. The individuals executing this Agreement on behalf of Consultant represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of Consultant.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

By: Robert Rickman
Title: Mayor
Date: 9-24-2020

Attest:

Adrianne Richardson, City Clerk

Approved as to form:

for Leticia M. Ramirez, City Attorney

Consultant
West Yost & Associates

By: Charles T. Duncan
Title: Chief Executive
Date: 7.15.2020

Federal Employer Tax ID No. 68-0370826

By: John Goodwin
Title: Assistant Treasurer
Date: 7-15-20

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A - Scope of Work

MASTER PROFESSIONAL SERVICES AGREEMENT WITH WEST YOST AND ASSOCIATES, INC. FOR WATER PRESSURE AND CAPACITY ANALYSES, AND ENGINEERING ASSISTANCE

Consultant shall provide Professional Services for the following:

1 Conduct/perform water pressure and capacity studies, in connection with private land development projects within City limits and its sphere of influence, of off-site water plans, assess a development's water infrastructure impacts on the City's water system, assure adequate pressure and flow for domestic use and fire safety. The Consultant may be tasked to perform the following professional services, among others:

a. Conduct/perform water pressure and capacity modeling and calculations. The studies shall conform with the Water System Master Plan, any edition, its Updates, associated Specific Plan, if any, the Urban Water Management Plan, and City of Tracy Design Documents.
b. Conduct/perform water supplies studies.
c. Conduct/perform the feasibility of a Project's ability to use recycled water infrastructure.

2 Peer-review water pressure and capacity studies including review for technical accuracy of data and analyses methods and proposed mitigations provided by private land development projects against the items cited below. The Consultant may be tasked to perform the following professional services, among others:

a. Review water pressure and capacity modeling and calculations. Confirm that the Developer's studies conforms with the Water System Master Plan, any edition, its Updates, associated Specific Plan, if any, the Urban Water Management Plan, and City of Tracy Design Documents.
b. Review water supplies studies.
c. Review the feasibility of a Project's ability to use recycled water infrastructure.

3 In both conducted/performed and peer-reviewed studies, Consultant shall identify potential trigger points requiring construction of off-site Water System Master Plan ("Program") capital improvements within the pressure zone and the City and determine project's fair share of such capital improvements.

4 In both conducted/performed and peer-reviewed studies, Consultant shall identify and recommend Project on-site water pipeline infrastructure sizing and alignment modifications and/or other off-site system modifications to mitigate any Project design deficiencies identified above.

5 To properly document the findings of the Project's water pressure and capacity studies, the Consultant will deliver a Technical Memorandum to the CITY summarizing the project, the methodology, document any recommended system modifications, identify potential impacts on drainage infrastructure, and recommend mitigations of those impacts.

5 Consultant may have to attend meetings, Public Hearings, Planning Commission, and/or City Council meetings.

6 Plan-check developer's improvement plans to confirm compliance with the water pressure and capacity study and required mitigations. Review project plans and specifications for technical accuracy and conformance with the City of Tracy Design Standards, Standard Plans, and Standard Specifications.

7 If requested, Consultant may be requested to inspect during construction and after construction.

8 Other tasks as assigned.

Deadlines:
Responses to Request for Quotes with delivery schedule: seven (7) calendar days
Submittal of Deliverables: By the delivery date on the Consultant provided delivery schedule. If needed, Consultant will be given a seven (7) calendar day grace period.

Staff Members:
Charles Duncan, P.E.
Elizabeth Drayer, P.E.
Jim Connell, P.E.
Amy Kwong, P.E.
Jeff Wanlass, P.E.
Jack Harbour, P.E.
Nathaniel Homan, P.E.
Roger Chu, P.E.
Tess Hoang, E.I.T.

WEST YOST ASSOCIATES

EXHIBIT B - Compensation

2020 Billing Rate Schedule

(Effective January 1, 2020 through December 31, 2020) *

POSITIONS	LABOR CHARGES (DOLLARS PER HR)
ENGINEERING	
Principal/Vice President	$298
Engineering/Scientist/Geologist Manager I / II	$283 / $295
Principal Engineer/Scientist/Geologist I / II	$257 / $272
Senior Engineer/Scientist/Geologist I / II	$230 / $241
Associate Engineer/Scientist/Geologist I / II	$198 / $212
Engineer/Scientist/Geologist I / II	$160 / $185
Engineering Aide	$92
Administrative I / II / III / IV	$81 / $102 / $123 / $135
ENGINEERING TECHNOLOGY	
Engineering Tech Manager I / II	$291 / $294
Principal Tech Specialist I / II	$268 / $279
Senior Tech Specialist I / II	$245 / $256
Senior GIS Analyst	$224
GIS Analyst	$211
Technical Specialist I / II / III / IV	$156 / $178 / $200 / $223
Technical Analyst I / II	$112 / $134
Technical Analyst Intern	$90
Cross-Connection Control Specialist I / II / III / IV	$117 / $127 / $143 / $159
CAD Manager	$178
CAD Designer I / II	$138 / $155
CONSTRUCTION MANAGEMENT	
Senior Construction Manager	$289
Construction Manager I / II / III / IV	$174 / $186 / $198 / $251
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	$152 / $169 / $188 / $196
Apprentice Inspector	$138
CM Administrative I / II	$74 / $99
Field Services	$196

- Hourly rates include Technology and Communication charges such as general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at actual cost plus 15%.
- Mileage will be billed at the current Federal Rate and Travel will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

* This schedule is updated annually

WEST YOST ASSOCIATES

2020 Billing Rate Schedule (continued)

(Effective January 1, 2020 through December 31, 2020) *

Equipment Charges

EQUIPMENT	BILLING RATES
Gas Detector	$80/day
Hydrant Pressure Gauge	$10/day
Hydrant Pressure Recorder, Standard	$40/day
Hydrant Pressure Recorder, Impulse (Transient)	$55/day
Trimble GPS – Geo 7x	$220/day
Vehicle	$10/hour
Water Flow Probe Meter	$20/day
Water Quality Multimeter	$185/day
Well Sounder	$30/day

* This schedule is updated annually

RESOLUTION 2020-161

APPROVING MASTER PROFESSIONAL SERVICES AGREEMENTS WITH WEST YOST & ASSOCIATES, BLACK WATER CONSULTING ENGINEERS, INC., AND BENNETT ENGINEERING SERVICES, INC. TO PROVIDE WATER PRESSURE AND CAPACITY ANALYSES AND ENGINEERING SERVICES FOR LAND DEVELOPMENT PROJECTS, AND AUTHORIZING THE DEVELOPMENT SERVICES DIRECTOR TO ISSUE FUTURE NOTICES TO PROCEED RELATED TO THE AGREEMENTS, FOR A NOT-TO-EXCEED AMOUNT OF $200,000 FOR EACH CONSULTANT PER CALENDAR YEAR

WHEREAS, A number of the City's Land Development Projects require water pressure and capacity analyses, and

WHEREAS, The City of Tracy requires the support of a Professional Engineer to perform these tasks to support City Staff and is recommending that we contract out these services, and

WHEREAS, In accordance with Tracy Municipal Code, Section 2.20 a Request For Proposals for water pressure and capacity analyses and engineering services was posted on the City's website, and

WHEREAS, The City received eight proposals from known firms to provide required services, and after extensive review staff selected three firms to enter into agreements to provide required services, and

WHEREAS, The terms for these agreements are for a period of three years and can be extended for an additional year by the City Manager following a written determination that Consultant has satisfactorily met all the requirements of this Agreement, and

WHEREAS, West Yost & Associates, Black Water Consulting Engineers, Inc., and Bennett Engineering Services, Inc., were found to be the most qualified consultants, and

WHEREAS, Cost of required services will be paid from Land Development Projects;

NOW, THEREFORE, BE IT RESOLVED, That the City Council of the City of Tracy, hereby approves the Master Professional Services Agreements with West Yost & Associates, Black Water Consulting Engineers, Inc., and Bennett Engineering Services, Inc., to provide water pressure and capacity analyses and engineering services for Land Development projects, and authorizes the Development Services Director to issue future Notices to Proceed related to the Agreements, with an annual not-to-exceed amount $200,000 for each consultant per calendar year.

* * * * * * * * * * * * *

The foregoing Resolution 2020-161 was adopted by the Tracy City Council on the 1st day of September, 2020, by the following vote:

AYES:	COUNCIL MEMBERS: ARRIOLA, RANSOM, VARGAS, YOUNG, RICKMAN
NOES:	COUNCIL MEMBERS: NONE
ABSENT:	COUNCIL MEMBERS: NONE
ABSTAIN:	COUNCIL MEMBERS: NONE

MAYOR

ATTEST:

CITY CLERK

CITY OF TRACY
AMENDMENT NO. 1 TO MASTER PROFESSIONAL SERVICES AGREEMENT WOOD RODGERS, INC. FOR STORM DRAINAGE ENGINEERING SERVICES FOR LAND DEVELOPMENT

This Amendment No. 1 (**Amendment**) to the Master Professional Service Agreement is entered into between the City of Tracy, a municipal corporation (**City**), and Wood Rodgers, Inc. a California Corporation (**Consultant**). City and Consultant are referred to individually as "**Party**" and collectively as "**Parties.**"

Recitals

A. The City and Consultant entered into a Master Professional Services Agreement for the Storm Drainage Engineering Services for Land Development (**Agreement**), which was approved by the City Council on August 18, 2020, under Resolution No. 2020-151.

B. The City desires to extend the term of the Agreement through the end of 2024.

C. The City also desires to expand the scope of work for the Consultant to provide programming, technical support, engineering and design support to the City to ensure compliance with the State of California Trash Amendments Program by 2030. The parties seek to amend the Agreement to increase compensation by $100,000 annually for the remainder of the Agreement term for the tasks identified in Exhibits "A" and "A-1."

D. This Amendment is being executed pursuant to Resolution No. ____ approved by Tracy City Council on _____, 2023.

Now therefore, the Parties mutually agree as follows:

1. Incorporation by Reference. This Amendment incorporates by reference all terms set forth in the Agreement, unless specifically modified by this Amendment. The terms which are not specifically modified by this Amendment will remain in effect.

2. Terms of Amendment.

A. 2.1 Term.

The term of the existing Agreement shall be extended through December 31, 2024 in accordance with Sections 2 and 13 of the Agreement.

B. 3.1 Not to Exceed Amount.

Consultants' total compensation under this Agreement shall not exceed $300,000 per calendar year.

C. Exhibits

Exhibit "A-1" Scope of Services attached hereto shall supplement Exhibit "A" of the Agreement. Consultant is responsible for completing all tasks identified in Exhibits "A" and "A-1." Exhibit "B-1" shall replace and supersede Exhibit "B".

3. Modifications. This Amendment may not be modified orally or in any manner other than by an agreement in writing signed by both parties, in accordance with the requirements of the Agreement.

4. Severability. If any term of this Amendment is held invalid by a court of competent jurisdiction, the Amendment shall be construed as not containing that term, and the remainder of this Amendment shall remain in effect.

5. Signatures. The individuals executing this Amendment represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Amendment. This Amendment shall inure to the benefit of and be binding upon the parties and their respective successors and assigns.

The Parties agree to the full performance of the terms set forth here.

City of Tracy

By: _____
Nancy Young
Title: Mayor
Date: _____

Attest:

By: _____
Adrianne Richardson, City Clerk

Consultant
Wood Rodgers, Inc.

By: _____
Jonathan Kors
Title: Vice President
Date: 6/1/2023

Federal Employer ID No. 91-1762478

By: _____
Mark Rodgers
Title: Chief Financial Officer
Date: 6/1/2023

Approved as to form

By: _____
Bijal M. Patel, City Attorney

Exhibit A-1
Scope of Services

Wood Rodgers, Inc. (Wood Rodgers) will prepare a Technical Memorandum (TM) that provides a Trash Amendment Compliance Plan (Plan) for the City of Tracy (City) in order to meet the requirements of the Statewide Trash Amendments described below. Larry Walker Associates, Inc. (LWA) will be a subconsultant to Wood Rodgers for this project in order to take advantage of LWA's experience with preparing similar plans. Wood Rodgers will guide the Plan development by leveraging our familiarity with the City's drainage system and the Citywide Storm Drainage Master Plan Update (CSDMP Update) database.

JUSTIFICATION FOR REQUIRED SERVICES

On April 7, 2015, the State Water Board adopted the Proposed Final Amendment to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) and the Proposed Final Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Statewide Trash Amendments). The goal of the Statewide Trash Amendments is to address the impacts that trash has to the surface waters of California through the establishment of a statewide narrative water quality objective and implementation of requirements to control trash, including a prohibition against the discharge of trash. The Statewide Trash Amendments became effective on December 2, 2015; full compliance with the Trash Amendments is required by December 2, 2030.

Subsequently, the State Water Board staff issued a California Water Code Section 13383 Order on June 1, 2017, for all Phase II permittees (including the City) requiring selection of a compliance track and additional supporting information. It is our expectation that the City will follow Track 1, which requires the installation, operation, and maintenance of full capture systems (FCS) for all storm drains that capture runoff from the priority land uses (PLUs) within the City's jurisdiction. Track 1 is recommended over Track 2 in order to limit uncertainty in the systems that will be needed to comply with the permit requirements.

The following Scope of Work is based on the City providing mapping of the PLUs and any existing FCS that the plan should consider, other than the retention basins that were identified in the CSDMP Update.

SCOPE OF WORK

Wood Rodgers will perform the following Tasks:

<u>Task 1 – Meetings and Coordination</u>

Wood Rodgers and LWA will perform project management, coordinate with the City, and participate in meetings.

Task 2 – Identify Potential Locations of FCS

PLU data provided by the City will be used to prepare a map of the watersheds that encompass the PLU areas. The watershed map will be overlaid with the drainage system mapping to identify potentially feasible locations for FCS. Locations tributary to existing or planned detention or retention basins will be managed at the basins. Potential locations for FCS to manage PLU areas that do not drain to or through a basin will be identified for additional evaluation.

Task 3 – Evaluation of Alternative FCS Locations

The potential FCS locations will be compared by considering the advantages and disadvantages of the distinct options. Objectives include:

a. Avoiding challenges that could result from installing FCS downstream from Byron Bethany Irrigation District (BBID) discharge points.
b. Avoiding unnecessary redundancy.
c. Avoiding locations that would be unnecessarily challenging to maintain.
d. Limiting the number of locations that require maintenance; and
e. Limiting hydraulic impacts.

A preferred set of FCS locations that meet the plan objectives will be selected.

Task 4 – Prepare Planning Level Opinions of Probable Costs

Preliminary capacity requirements for the preferred set of FCS locations will be determined. This will require running a 2-year rainfall event model for buildout conditions. Planning level Opinions of Probable Costs (OPCs) will be prepared for the FCS at the preferred locations identified in Task 3. An estimate of the potential cost of non-compliance will also be provided.

Task 5 - Prepare Technical Memorandum

A draft Technical Memorandum (TM) will be prepared that provides:

a. A description of the Statewide Trash Amendments.
b. The options for FCS locations.
c. The basis for the selection of the preferred FCS locations.
d. Information about common FCS.
e. Documentation of the basis of the OPCs developed in Task 4.
f. Information for planning how to meet future Operation and Maintenance (O&M) requirements; and
g. Recommendations for meeting the program timeline.

Comments on the draft TM will be addressed and incorporated into a final TM as appropriate.

The subject planning study does not include design-level evaluations of any potential trash capture facility sites. Wood Rodgers could investigate specific locations in more detail as an additional task, or tasks, if requested. If it is determined that installation of FCS on drainage systems receiving runoff from all PLUs within the

City would not be feasible, an amendment to this Scope of Work will be proposed in order to provide a plan to follow Track 2.

Exhibit B-1

Wood Rodgers Rate Schedule

SACRAMENTO & ROSEVILLE FEE SCHEDULE

CLASSIFICATION	STANDARD RATE
Principal Engineer/Geologist/Surveyor/Planner/GIS/LA* II	$300
Principal Engineer/Geologist/Surveyor/Planner/GIS/LA* I	$265
Senior Engineer/Geologist/Surveyor/Planner/GIS/LA* II	$240
Senior Engineer/Geologist/Surveyor/Planner/GIS/LA* I	$230
Project Engineer/Geologist/Surveyor/Planner/GIS/LA* II	$215
Project Engineer/Geologist/Surveyor/Planner/GIS/LA* I	$205
Engineer/Geologist/Surveyor/Planner/GIS/LA* II	$195
Engineer/Geologist/Surveyor/Planner/GIS/LA* I	$180
Assistant Engineer/Geologist/Surveyor/Planner/GIS/LA*	$150
Designer	$95
Senior CAD Technician/Graphics Designer II	$180
Senior CAD Technician/Graphics Designer I	$160
CAD Technician/Graphics Designer	$140
Project Coordinator	$155
Administrative Assistant	$120
1 Person Survey Crew	$235
2 Person Survey Crew	$340
3 Person Survey Crew	$435
Consultants, Outside Services, Materials & Direct Charges	Cost Plus 10%
Overtime Work, Expert Witness Testimony and Preparation	Rate Plus 50%

*LA = Landscape Architect

Blueprints, reproductions, and outside graphic services will be charged at vendor invoice. Auto mileage will be charged at the IRS standard rate, currently 65.5 cents per mile.

Fee Schedule subject to change January 1, 2024.

Exhibit B-1 Con't.

LWA, Inc. Rate Schedule

LARRY WALKER ASSOCIATES RATE SCHEDULE

EFFECTIVE JULY 1, 2022 – JUNE 30, 2023

TITLE	RATE *$/Hour*
Administrative	$ 96
Contract Coordinator	$138
AR/AP Manager	$138
Graphic Designer	$128
Senior Graphic Designer	$166
Project Staff I-C	$133
Project Staff I-B	$161
Project Staff I-A	$187
Project Staff II-B	$198
Project Staff II-A	$224
Senior Staff I	$241
Senior Staff II	$259
Associate I	$275
Associate II	$290
Vice President	$310
Executive Vice President	$325
Senior Executive	$340
President	$340

REIMBURSABLE COSTS	
Travel:	
Local mileage	Current IRS rate
Transportation	Actual expense
Auto rental	Actual expense
Fares	Actual expense
Room	Actual expense
Subsistence[1] and *per diem* meals	Current GSA rate
Report Reproduction and Copying:	
Per color copy, in-house	$0.89
Per black and white copy, in-house	$0.08
Per binding, , in-house	$1.95
Third party material preparation	Actual expense
Special Postage and Express Mail:	Actual expense
Other Direct Costs:	Actual expense
Daily Equipment Rental Rates:	
Single parameter meters & equipment	$30.00
Digital flow meter	$60.00
Multi-parameter field meters & sondes	$100.00
Dye/tracer mapping or residence time	$200.00
Multi-parameter continuous remote sensing	$40.00
Field rig (field vehicle and all equipment)	$200.00
Subcontractors:	
Actual Expense plus 10% fee	

Note: [1] Charged when overnight lodging is required. U.S. General Services Administration rates specified by location of work at gsa.gov

CITY OF TRACY
MASTER PROFESSIONAL SERVICES AGREEMENT WITH WOOD RODGERS, INC. FOR STORM DRAINAGE ENGINEERING SERVICES FOR LAND DEVELOPMENT PROJECTS

This Master Professional Services Agreement (**Agreement**) is entered into between the City of Tracy, a municipal corporation (**City**), and **Wood Rodgers, Inc.** a California corporation (**Consultant**). City and Consultant are referred to individually as "Party" and collectively as "Parties."

Recitals

A. City desires to retain Consultant to storm drainage engineering services for land development projects; and

B. On March 19, 2020, the City issued a Request for Proposals (RFP) for the Storm Drainage Engineering Services for Land Development Projects (**Project**). On April 21, 2020, Consultant submitted its proposal for the Project to the City. City has determined that Consultant possesses the skills, experience and certification required to provide the services.

C. After negotiations between the City and Consultant, the Parties have reached an agreement for the performance of services in accordance with the terms set forth in this Agreement.

D. This Agreement is being executed pursuant to Resolution No. 2020-151 approved by Tracy City Council on Aug 18, 2020.

Now therefore, the Parties mutually agree as follows:

1. <u>Scope of Work</u>. Consultant shall perform the services generally described in Exhibit "A" attached, and incorporated by reference, as directed by written Notice to Proceed by the City's Development Services Director. The services shall be performed by, or under the direct supervision of, Consultant's Authorized Representative: Jonathan Kors, P.E. Consultant shall not replace its Authorized Representative, nor shall Consultant replace any of the personnel listed in Exhibit "A," nor shall Consultant use or replace any subcontractor or subconsultant, without City's prior written consent. A failure to obtain the City's prior written consent for any change or replacement in personnel or subcontractor/subconsultant may result in the termination of this Agreement.

1.1 Non-Exclusive Agreement. The City reserves the right to contract with other consultants providing the same or similar scope of services described above during the term of this Agreement. The City further reserves the right to, assign work, at its sole discretion, to consultants other than Consultant based on City's budget, experience, and skills of consultants based on the City's specific needs.

2. <u>Time of Performance</u>. Time is of the essence in the performance of services under this Agreement and the timing requirements set forth shall be strictly adhered to unless otherwise modified in writing in accordance with this Agreement. Consultant shall begin performance, and shall complete all required services no later than the dates set forth in each individual Notice to Proceed. Any services for which times for performance are not specified in each individual Notice to Proceed shall be started and completed by Consultant in a reasonably prompt and timely manner based upon the circumstances and direction communicated by the City to the Consultant. Consultant shall submit all requests for time extensions to the City in writing no later than ten days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. City shall grant or deny such requests at its sole discretion.

2.1 Term. The term of this Agreement shall begin on July 1, 2020 and end on June 30, 2023, unless terminated in accordance with Section 6.

3. Compensation. City shall pay Consultant on a time and expense basis, at the billing rates set forth in Exhibit "B," attached and incorporated by reference for services performed under this Agreement.

3.1 Not to Exceed Amount. Consultant's total compensation under this Agreement shall not exceed $200,000 per calendar year. Consultant's billing rates shall cover all costs and expenses for Consultant's performance of this Agreement. Effective January 1, 2021, Consultant's billing rates under this Agreement may be annually increased in January of each year by the lesser of 3% or the annual increase in the Cost of Living Index – All Items, for the Sacramento Metropolitan Region. No work shall be performed by Consultant in excess of the total compensation amount provided in this section without the City's prior written approval.

3.2 Invoices. Consultant shall submit monthly invoice(s) to the City that describe the services performed, including times, dates, and names of persons performing the services.

3.2.1 If Consultant is providing services in response to a development application, separate invoice(s) must be issued for each application and each invoice shall contain the City's designated development application number.

3.2.2 Consultant's failure to submit invoice(s) in accordance with these requirements may result in the City rejecting said invoice(s) and thereby delaying payment to Consultant.

3.3 Payment. Within 30 days after the City's receipt of invoice(s), City shall make payment to the Consultant based upon the services described on the invoice(s) and approved by the City.

4. Indemnification. Consultant shall, to the fullest extent permitted by law, indemnify, defend (with independent counsel approved by the City), and hold harmless the City from and against any claims arising out of Consultant's performance or failure to comply with obligations under this Agreement, except to the extent caused by the sole, active negligence or willful misconduct of the City.

In this section, "City" means the City, its officials, officers, agents, employees and volunteers; "Consultant" means the Consultant, its employees, agents and subcontractors; "Claims" includes claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all related costs and expenses) and any allegations of these; and "Arising out of" includes "pertaining to" and "relating to".

(The duty of a "design professional" to indemnify and defend the City is limited to claims that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of the design professional, under Civ. Code § 2782.8.)

The provisions of this section survive completion of the services or the termination of this Agreement, and are not limited by the provisions of Section 5 relating to insurance.

5. Insurance. Consultant shall, throughout the duration of this Agreement, maintain insurance to cover Consultant, its agents, representatives, and employees in connection with the performance of services under this Agreement at the minimum levels set forth herein.

5.1 Commercial General Liability (with coverage at least as broad as ISO form CG 00 01 01 96) "per occurrence" coverage shall be maintained in an amount not less than $4,000,000 general aggregate and $2,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

5.2 Automobile Liability (with coverage at least as broad as ISO form CA 00 01 07 97, for "any auto") "claims made" coverage shall be maintained in an amount not less than $1,000,000 per accident for bodily injury and property damage.

5.3 Workers' Compensation coverage shall be maintained as required by the State of California.

5.4 Professional Liability "claims made" coverage shall be maintained to cover damages that may be the result of errors, omissions, or negligent acts of Consultant in an amount not less than $1,000,000 per claim.

5.5 Endorsements. Consultant shall obtain endorsements to the automobile and commercial general liability insurance policies with the following provisions:

5.5.1 The City (including its elected officials, officers, employees, agents, and volunteers) shall be named as an additional "insured."

5.5.2 For any claims related to this Agreement, Consultant's coverage shall be primary insurance with respect to the City. Any insurance maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

5.6 Notice of Cancellation. Consultant shall notify the City if the policy is canceled before the expiration date. For the purpose of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation. Consultant shall immediately obtain a replacement policy.

5.7 Authorized Insurers. All insurance companies providing coverage to Consultant shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact the business of insurance in the State of California.

5.8 Insurance Certificate. Consultant shall provide evidence of compliance with the insurance requirements listed above by providing a certificate of insurance and endorsements, in a form satisfactory to the City, before the City signs this Agreement.

5.9 Substitute Certificates. Consultant shall provide a substitute certificate of insurance no later than 30 days prior to the policy expiration date of any insurance policy required by this Agreement.

5.10 Consultant's Obligation. Maintenance of insurance by the Consultant as specified in this Agreement shall in no way be interpreted as relieving the Consultant of any responsibility whatsoever (including indemnity obligations under this Agreement), and the Consultant may carry, at its own expense, such additional insurance as it deems necessary. Failure to provide or maintain any insurance policies or endorsements required herein may result in the City terminating this Agreement.

6. Termination. The City may terminate this Agreement by giving ten days' written notice to Consultant. Upon termination, Consultant shall give the City all original documents, including preliminary drafts and supporting documents, prepared by Consultant for this Agreement. The City shall pay Consultant for all services satisfactorily performed in accordance with this Agreement, up to the date notice is given.

7. Dispute Resolution. If any dispute arises between the City and Consultant that cannot be settled after engaging in good faith negotiations, City and Consultant agree to resolve the dispute in accordance with the following:

7.1 Each Party shall designate a senior management or executive level representative to negotiate the dispute;

7.2 The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

7.3 If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiations between legal counsel. If the aforementioned process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.

7.4 The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.

7.5 The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.

7.6 The dispute resolution process is a material condition to this Agreement and must be exhausted prior to either Party initiating legal action. This dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 et seq.

8. Ownership of Work. All original documents prepared by Consultant for this Agreement, whether complete or in progress, are the property of the City, and shall be given to the City at the completion of Consultant's services, or upon demand from the City. No such documents shall be revealed or made available by Consultant to any third party without the City's prior written consent.

9. Independent Contractor Status. Consultant is an independent contractor and is solely responsible for the acts of its employees or agents, including any negligent acts or omissions. Consultant is not City's employee and Consultant shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation, unless the City provides prior written authorization. Consultant is free to work for other entities while under contract with the City. Consultant, and its agents or employees, are not entitled to City benefits.

10. Conflicts of Interest. Consultant (including its employees, agents, and subconsultants) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. If Consultant maintains or acquires such a conflicting interest, the City may terminate any contract (including this Agreement) involving Consultant's conflicting interest.

11. Rebates, Kickbacks, or Other Unlawful Consideration. Consultant warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration either promised or paid to any City official or employee. For breach of this warranty, City shall have the right, in its sole discretion, to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

12. Notices. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the other party to the addresses listed below. Communications shall be deemed to have been given and received on the first to occur of: (1) actual receipt at the address designated below, or (2) three working days after the deposit in the United States Mail of registered or certified mail, sent to the address designated below.

To City:
Development Services Department
Attn: City Engineer
333 Civic Center Plaza
Tracy, CA 95337

With a copy to:
City Attorney
333 Civic Center Plaza
Tracy, CA 95376

To Consultant:
Wood Rodgers, Inc.
Attn: Jonathan Kors, P.E.
3301 C Street, Bldg. 100-B
Sacramento CA 95816

13. Miscellaneous.

13.1 Standard of Care. Unless otherwise specified in this Agreement, the standard of care applicable to Consultant's services will be the degree of skill and diligence ordinarily used by reputable professionals performing in the same or similar time and locality, and under the same or similar circumstances.

13.2 Amendments. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both Parties.

13.3 Waivers. Waiver of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

13.4 Assignment and Delegation. Consultant may not assign, transfer or delegate this Agreement or any portion of it without the City's written consent. Any attempt to do so will be void. City's consent to one assignment shall not be deemed to be a consent to any subsequent assignment.

13.5 Jurisdiction and Venue. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Joaquin.

13.6 Compliance with the Law. Consultant shall comply with all applicable local, state, and federal laws, whether or not those laws are expressly stated in this Agreement.

13.6.1 Prevailing Wage Laws. Consultant is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates; employment of apprentices (§ 1777.5), certified payroll records (§1776), hours of labor (§1813 and §1815), debarment of contractors and subcontractors (§1777.1) and the performance of other requirements on "public works" and "maintenance" projects. If the services being performed under this Agreement are part of a "public works" or "maintenance" project, as defined in the Prevailing Wage Laws, and if the total compensation is $1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. These prevailing rates are on file with the City and are available online at http://www.dir.ca.gov/DLSR. Consultant shall defend, indemnify and hold the City, its officials, officers, employees and agents, harmless from any and all claims, costs, penalties, or interests arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

13.6.2 Non-discrimination. Consultant represents and warrants that it is an equal opportunity employer and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Consultant shall also comply with all applicable anti-discrimination federal and state laws, including but not limited to, the California Fair Employment and Housing Act (Gov. Code 12990 (a-f) et seq.).

13.7 Business Entity Status. Consultant is responsible for filing all required documents and/or forms with the California Secretary of State and meeting all requirements of the Franchise Tax Board, to the extent such requirements apply to Consultant. By entering into this Agreement, Consultant represents that it is not a suspended corporation. If Consultant is a suspended corporation at the time it enters this Agreement, City may take steps to have this Agreement declared voidable.

13.8 Business License. Before the City signs this Agreement, Consultant shall obtain a City of Tracy Business License. Consultant shall maintain an active City of Tracy Business License during the term of this Agreement.

13.9 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective successors and assigns.

13.10 Construction of Agreement. Each Party hereto has had an equivalent opportunity to participate in the drafting of this Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting Party shall not apply hereto.

13.11 Severability. If a term of this Agreement is held invalid by a court of competent jurisdiction, the Agreement shall be construed as not containing that term, and the remainder of this Agreement shall remain in effect.

13.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Consultant's proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Consultant's proposal (if any), the Exhibits shall control.

13.13 Entire Agreement. This Agreement and the attached Exhibits comprise the entire integrated understanding between the Parties concerning the services to be performed. This Agreement supersedes all prior negotiations, representations or agreements. All exhibits attached hereto are incorporated by reference herein.

14. Signatures. The individuals executing this Agreement on behalf of Consultant represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of Consultant.

[SIGNATURES ON FOLLOWING PAGE]

The Parties agree to the full performance of the terms set forth here.

City of Tracy

By: Robert Rickman
Title: Mayor
Date: 10-29-20

Attest:

Adrianne Richardson, City Clerk

Approved as to form:

for Leticia M. Ramirez, City Attorney

Consultant
Wood Rodgers, Inc.

By: Mark Rodgers
Title: Chief Executive
Date: 7/13/2020

Federal Employer Tax ID No. 91-1762478

By: Mark Rayback
Title: Secretary
Date: 7/13/2020

Exhibits:

A Scope of Work, including personnel and time of performance (See Agreement sections 1 and 2.)

B Compensation (See Agreement section 3.)

EXHIBIT A
SCOPE OF SERVICES

MASTER PROFESSIONAL SERVICES AGREEMENT WITH WOOD RODGERS, INC. FOR STORM DRAINAGE ENGINEERING SERVICES FOR LAND DEVELOPMENT PROJECTS

Consultant shall provide Professional Services for the following:

1 Conduct/perform storm drainage studies, in connection with private land development projects within CITY limits and its sphere of influence, of site-specific drainage plans. Conducted/performed storm drainage studies shall include review of the various proposed on-site and off-site storm water drainage plans, low impact development and hydro-modification plans. The Consultant may be tasked to perform the following professional services, among others:

a. Conduct/perform storm water drainage hydrologic studies and hydraulic calculations. The studies shall conform with the Citywide Storm Drainage Master Plan, any edition, its Updates, associated Specific Plan, if any, and City of Tracy Design Standards.

2 Peer-review storm drainage studies including review for technical accuracy of data and analyses methods and proposed mitigations provided by private land development projects against the items cited below. The Consultant may be tasked to perform the following professional services, among others:

b. Review hydrologic studies/reports submitted by developer to confirm technical accuracy and conformance with the Citywide Storm Drainage Master Plan, any edition, its Updates, associated Specific Plan, if any.
c. Review storm water drainage hydraulic calculations submitted by developer for technical accuracy and conformance with City of Tracy Design Standards.
d. Review project for conformance with the Manual for Stormwater Quality Control Standards for New Development and Redevelopment and verifying compliance with post-construction stormwater quality standards.

3 In both conducted/performed and peer-reviewed studies, Consultant shall identify potential trigger points requiring construction of off-site Storm Drainage Masterplan ("Program") capital improvements within the drainage basin and determine project's fair share of such capital improvements.

4 To properly document the findings of the Project's storm water drainage infrastructure system analysis, the Consultant will deliver a Technical Memorandum to the CITY summarizing the project, the methodology, document any recommended system modifications, identify potential impacts on drainage infrastructure, and recommend mitigations of those impacts.

5 Consultant may have to attend meetings, Public Hearings, Planning

Commission, and/or City Council meetings.

6 Plan-check developer's improvement plans to confirm compliance with the storm drain study and required mitigations. Review project plans and specifications for technical accuracy and conformance with the City of Tracy Design Standards, Standard Plans, and Standard Specifications.

7 If requested, Consultant may be requested to inspect during construction and after construction.

8 Other tasks as assigned.

Deadlines:
Responses to Request for Quotes with delivery schedule: seven (7) calendar days
Submittal of Deliverables: By the delivery date on the Consultant provided delivery schedule. If needed, Consultant will be given a seven (7) calendar day grace period.

Staff Members:
Jonathan Kors, P.E.
Harvey Oslick, P.E., C.F.M.
Michael Nowlan, P.E., C.F.M.
David Mueller, P.E.
Wayne Li, Ph.D., P.E.
Carlos Contreras, P.E.
Chuck Hilliard, P.E.
Evan Eyster, P.E.
Eddie Gosse, P.E.
Mitch Berggren, E.I.T.
John Carey
Monica Cedeno

EXHIBIT "B"

MASTER PROFESSIONAL SERVICES AGREEMENT WITH WOOD RODGERS, INC., FOR STORM DRAINAGE ENGINEERING SERVICES FOR LAND DEVELOPMENT PROJECTS

WOOD RODGERS

SACRAMENTO FEE SCHEDULE
Effective January 1, 2020

CLASSIFICATION	STANDARD RATE
Principal Engineer/Geologist/Surveyor/Planner/GIS/LA* II	$250
Principal Engineer/Geologist/Surveyor/Planner/GIS/LA* I	$220
Associate Engineer/Geologist/Surveyor/Planner/GIS/LA* III	$205
Associate Engineer/Geologist/Surveyor/Planner/GIS/LA* II	$195
Associate Engineer/Geologist/Surveyor/Planner/GIS/LA* I	$185
Engineer/Geologist/Surveyor/Planner/GIS/LA* III	$175
Engineer/Geologist/Surveyor/Planner/GIS/LA* II	$165
Engineer/Geologist/Surveyor/Planner/GIS/LA* I	$150
Assistant Engineer/Geologist/Surveyor/Planner/GIS/LA*	$115
CAD Technician III	$150
CAD Technician II	$130
CAD Technician I	$115
Project Coordinator	$130
Administrative Assistant	$95
1 Person Survey Crew	$210
2 Person Survey Crew	$305
3 Person Survey Crew	$390
Consultants, Outside Services, Materials & Direct Charges	Cost Plus 10%
Overtime Work	Rate Plus 50%

*LA = Landscape Architect

Blueprints, reproductions, and outside graphic services will be charged at vendor invoice. Auto mileage will be charged at the IRS standard rate, currently 57.5 cents per mile.

Fee Schedule subject to change January 1, 2021.

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION 2023-_____

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(1) DETERMINING THAT WAIVING A COMPETITIVE BIDDING PROCESS IS IN THE BEST INTEREST OF THE CITY, PURSUANT TO TRACY MUNICIPAL CODE SECTION 2.20.140(B)(6); AND

(2) APPROVING (A) AMENDMENT NO. 1 TO THE MASTER PROFESSIONAL SERVICES AGREEMENT WITH WEST YOST & ASSOCIATES FOR WATER PRESSURE AND CAPACITY ANALYSES AND ENGINEERING SERVICES, AND (B) AMENDMENT NO. 1 TO THE MASTER PROFESSIONAL SERVICES AGREEMENT WITH WOOD RODGERS FOR STORM DRAINAGE ENGINEERING SERVICES, TO EXTEND EACH AGREEMENT BY AN ADDITIONAL 18 MONTHS, THROUGH DECEMBER 31, 2024, AND INCREASE COMPENSATION FROM $200,000 PER CALENDAR YEAR TO A NOT-TO-EXCEED AMOUNT OF $300,000 PER CALENDAR YEAR.

WHEREAS, the City issued a Request for Proposals (RFP) for storm drainage engineering services on March 19, 2020; and

WHEREAS, the City and Wood Rodgers entered into a Master Professional Services Agreement (WR MPSA) on September 24, 2020, under Resolution No. 2020-151; and

WHEREAS, the City issued a RFP for water pressure and capacity analyses on July 18, 2019; and

WHEREAS, the City entered into a Master Professional Services Agreement with West Yost & Associates (WYA MPSA, and together with the WR MPSA, MPSAs) on September 1, 2020, under Resolution No. 2020-161; and

WHEREAS, the original MPSAs expired on June 30, 2023; and

WHEREAS, Wood Rodgers and West Yost & Associates (collectively, Consultants) have satisfactorily met all of the terms of the MPSAs; and

WHEREAS, Development Services Staff is working with various developers on a large number of entitlement applications, most of which include the need for storm drainage-related engineering analyses and/or water pressure and capacity analyses; and

WHEREAS, the City seeks to amend the MPSAs to extend of the term of the MPSAs from June 30, 2023 through December 31, 2024, and to increase the compensation from $200,000 to include a not-to-exceed amount of $300,000 per calendar year; and

WHEREAS, Staff is working on issuing a Request for Proposals (RFP) that will include the services in the proposed amendments, but the process of issuing the RFP, awarding contracts and taking those contracts to City Council for approval will take 6 to 9 months; and

WHEREAS, in order for the City to continue to provide the necessary analyses in the meantime, staff is asking the City Council to determine that waiving a competitive bidding process for the proposed amendments are in the best interest of the City, pursuant to Tracy Municipal Code Section 2.20.140(b)(6); now, therefore, be it

RESOLVED: That the above recitals are true and correct; and be it,

FURTHER RESOLVED: That the City Council of the City of Tracy hereby determines that waiving a competitive bidding process for the proposed amendments are in the best interest of the City, pursuant to Tracy Municipal Code Section 2.20.140(b)(6); and be it

FURTHER RESOLVED: That the City Council of the City of Tracy hereby approves Amendment No. 1 to the WYA MPSA and Amendment No. 1 to the WR MPSA; and be it

FURTHER RESOLVED: That, after review and approval by the City Attorney's Office, the City authorizes the execution of both amendments to the MPSAs and authorizes any and all actions that may be necessary or advisable to effectuate the purposes of this Resolution.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on the 15th day of August 2023 by the following vote:

AYES:	COUNCILMEMBERS:
NOES:	COUNCILMEMBERS:
ABSENT:	COUNCILMEMBERS:
ABSTENTION:	COUNCILMEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST: _____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of
the City of Tracy, California

August 15, 2023

Agenda Item 3.A

RECOMMENDATION

The Planning Commission recommends that the City Council conduct a public hearing and, upon conclusion, introduce an Ordinance:

1) Certifying an Environmental Impact Report, Adopting a Mitigation Monitoring and Reporting Program, and making findings of fact and a statement of overriding considerations for the annexation and future development of industrial buildings on the 191.18-acre property located at the northeast corner of Grant Line and Paradise Roads (Assessor's Parcel Numbers 213-170-14, -24, -25, -26, -27, And -48, collectively, the "Property") in accordance with the California Environmental Quality Act;

2) Amending the Northeast Industrial ("NEI") Specific Plan to add the Property to the NEI Specific Plan Area with a land use designation of light industrial (SPA22-0003);

3) Approving the prezoning of the Property to NEI Specific Plan Zone (AP20-0003); and

4) Approving the submittal of a petition to the San Joaquin County Local Agency Formation Commission for annexation of the Property to the City of Tracy.

EXECUTIVE SUMMARY

The Planning Commission recommends that the City Council adopt an Ordinance effectuating the various actions stated in the title above.

The proposed Northeast Industrial (NEI) Specific Plan land use and prezoning designations would allow development of the Property with approximately 3.3 million square feet of warehouse and related uses, and the Environmental Impact Report (EIR) evaluates the potential environmental effects from this level of development. On January 25, 2023, the Planning Commission considered the EIR and voted 4 to 0 (one member was absent) to recommend that the City Council certify the EIR as adequate and in full compliance with California Environmental Quality Act (CEQA) requirements and approve the applications noted above.

BACKGROUND AND LEGISLATIVE HISTORY

The Property has been located within the City's Sphere of Influence (SOI) since the July 1993 General Plan Update (Attachment A). In the 30 years since the Property has been within the SOI, it has been designated Industrial by the City's General Plan. Lands within the City's SOI can be pursued for annexation into the City limits and, upon approval of annexation by the San Joaquin County LAFCo (LAFCo), become the subject of development applications presented to the Planning Commission and City Council. In 2019, LAFCo approved the City's Municipal Services Review, which shows the Property is located within the 10-year planning horizon. LAFCo policies require 10 and 30-year "horizons" in an effort to plan for and evaluate upcoming development within the City's SOI. LAFCo's policies allow for the annexation of lands within both the 10- and 30-year horizons, with lands in the 10-year horizon anticipated (though not required) to be annexed first, as landowner demand for development of properties is not controlled by the City.

When annexing property into the City, pre-zoning must be established to determine the zoning designation that will take effect upon annexation approval by LAFCo. The proposed zoning is the City's existing NEI Specific Plan Zone, as set forth in Tracy Municipal Code Section 10.08.3022. Because the Property is not yet within the NEI Specific Plan area, the addition of this Property to the NEI Specific Plan Zone would also require an NEI Specific Plan amendment (Attachment B), revising the boundary map of the Specific Plan area to include the Property and assigning the Property a land use designation of Light Industrial. Any future development of the Property would be required to comply with the design and development requirements of the NEI Specific Plan.

On January 25, 2023, the Planning Commission held a public hearing and voted 4 to 0, with one member absent, to recommend that the City Council adopt an ordinance to certify the EIR, amend the NEI Specific Plan, pre-zone the Property, and authorize the submittal of a petition to LAFCo to annex the Property to the City.

ANALYSIS

Project Proposal

The proposed Project would establish land use and zoning designations for the Property that would govern development of the Property upon its annexation to the City. The proposed land use and zoning designations would allow for development of up to 3,352,320 square feet of warehouse and distribution and related uses on the Property.

The Property consists of six (6) separate parcels totaling approximately 191.18 acres. The six parcels are owned by three different parties: the Tracy Alliance Group owns two parcels totaling approximately 122.44 acres; Suvik Farms, LLC, owns three parcels totaling approximately 46.61 acres; and Zuriakat owns one parcel of approximately 22.17 acres. All Property owners have signed the City applications. The Property is within unincorporated San Joaquin County adjacent to the City's northeastern City limits and adjacent to the City's NEI Specific Plan area (Attachment A). Any development of the Property in the City would require approval of annexation into the City by the San Joaquin LAFCo, an amendment to the NEI Specific Plan, pre-zoning, a Tentative Parcel Map or Lot Line Adjustment(s) to create the final lot configurations, and one or more Development Review Permits. Because the applicants have not yet determined the ultimate lot configurations or finalized any development plans, any applications for tentative maps, lot line adjustments or development review permits would be processed at a later date by City staff.

Land use, Zoning and Specific Plan

The subject Property is within the City's SOI, with a General Plan land use designation of Industrial. The applicants propose to annex the Property into the City Limits, amend the NEI Specific Plan to incorporate the Property and assign it a land use designation of Light Industrial, and assign it a zoning designation of NEI Specific Plan Zone. This zoning for the site is logical as it is adjacent to the existing NEI Specific Plan area and all the adjacent properties are developed with warehouses, as is proposed for the Property. This is also consistent with the General Plan designation of Industrial, which was assigned to the Property when it was first added to the SOI in 1993 and has remained since that time. The proposed revisions to bring the Property within the coverage of the NEI Specific Plan can be found in Attachment B. The NEI Specific Plan is the principal planning document for the area, and approximately 80% of the

existing Specific Plan area is already developed. In accordance with the City's General Plan policies, including Land Use Objective 2.3, the annexation and development of this acreage is consistent with the expansion of the City's industrial base. Annexation and development of the Property is a logical extension of the City limits, has been planned as a part of the City's SOI for 30 years, and has been anticipated by the City's infrastructure planning as a part of its Infrastructure Master Plans.

Timing of Development

With the Property divided among three property owners, staff expects development of the Property to occur in three phases, with the Tracy Alliance Group expected to develop its portion of the Property first. Based on preliminary site plans provided by the Group, this first phase is expected to include three warehouse buildings totaling approximately 1.8 million square feet on the Group's 122.44 acres (Attachment C). Staff has no specific information about the timing of development on the Suvik Farms and Zuriakat parcels.

CEQA DETERMINATION

The Project is subject to the environmental review requirements of CEQA. On August 28, 2020, the City published a Notice of Preparation (NOP) for the EIR, to solicit comments from responsible agencies, various City departments, and the public regarding what areas and issues should be studied in the EIR. A scoping meeting for that NOP was held by the Planning Commission on September 9, 2020, after which the EIR analysis commenced. On April 20, 2022, the City published a Notice of Availability for the Draft EIR (Attachment D), notifying the public of its publication and of opportunities for public review and comment, and a public hearing to solicit comments was held on May 25, 2022. The public comment period closed on June 3, 2022. On January 25, 2023, the Planning Commission considered the EIR and voted 4 to 0 (one member was absent) to recommend that the City Council certify the EIR as adequate and in full compliance with CEQA requirements.

During the public comment period for the Draft EIR, the City received six written comment letters, and one verbal comment at the Planning Commission hearing. Five (5) additional comment letters were received after the close of the public comment period. Two were received in August 2022, shortly after the close of the public comment period. Two additional comment letters, both from the Sierra Club, were received in February 2023, eight months after the close of the public comment period and several weeks after the Planning Commission's January 25 hearing. The fifth comment letter, from the law firm of Shute Mihaly & Weinberger on behalf of the Sierra Club, was received April 13, 2023. Written responses have been prepared to all comments, including the verbal comment and all late comments, and are included in the Final EIR (Attachment E). In response to the Sierra Club's February 2023 letters, Mitigation Measure AIR 1.e was revised, at the request of the Sierra Club, to add signage requirements to control truck traffic entering and exiting the project site and to advise truck drivers that truck traffic to and from the project site is not permitted in the community of Banta, to the east of the project site. These additional mitigation measures do not change the analyses or any of the conclusions in the EIR and do not require recirculation of the Draft EIR under applicable CEQA requirements. In addition to the CEQA mitigation measures but distinct therefrom, the Mitigation Monitoring Program (MMRP, Attachment G) also sets forth certain additional measures/design features for which the project applicants have voluntarily agreed to incorporate and/or otherwise implement as enforceable conditions of approval on any future Development Review Permits issued for the Property. These conditions of approval will implement the requirements of the

EIR, including both the EIR mitigation measures and the additional, voluntary measures agreed to by the project applicants.

The analyses of the potential environmental effects as noted in the Draft and Final EIRs results in the conclusion that some impacts of the proposed Project are potentially significant and unavoidable. These include the following:

- Project-level conversion of prime farmland
- Cumulative conversion of prime farmland
- Project-level impact related to implementation of the applicable air quality plan
- Project-level impact related to cumulatively considerable net increase of reactive organic gases and carbon monoxide during construction, and reactive organic gases and oxides of nitrogen during operation
- Project-level impact related to exposing sensitive receptors to substantial pollutant concentrations
- Cumulative air quality impact
- Project-level vehicle miles traveled (VMT) impact
- Cumulative VMT impact

The State Guidelines for CEQA provide that "no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more potentially significant environmental effects of the project unless the public agency makes one or more written findings for each of those potentially significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

(1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

(3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR." (Guidelines, § 15091).

The required findings must be supported by substantial evidence in the record.

CEQA requires that a lead agency (the City) balance the benefits of a project against its unavoidable environmental risk in determining whether to approve the project. If the benefits outweigh the unavoidable adverse effects, those effects may be considered "acceptable" pursuant to CEQA Guidelines Section 15093(a). CEQA requires that a lead agency support, in writing, the specific reasons for considering a project acceptable when significant impacts are infeasible to mitigate. Those reasons must be based on substantial evidence in the EIR or elsewhere in the administrative record pursuant to CEQA Guidelines Section 15093(b). The lead agency's written reasons are referred to as a Statement of Overriding Considerations. These required findings and the Statement of Overriding Considerations, referred to herein as the "CEQA Findings", can be found in Attachment F. In addition, as required by Section 15097 of CEQA's implementing regulations, the City has prepared a Mitigation Monitoring and Reporting Program ("MMRP") to ensure that, if the Project is approved, the mitigation measures in the EIR will be implemented appropriately. The MMRP also sets forth the additional, voluntary measures agreed to by the project applicants, to facilitate the City's imposition of

these measures as conditions of approval on any future Development Review Permits. The MMRP can be found in Attachment G.

PUBLIC OUTREACH / INTEREST

This item was duly noticed in the local newspaper and public hearing notices were mailed to all owners of property within 300 feet of the subject site. There was additional outreach throughout the CEQA process where, at each stage, the various portions of the project's CEQA review (NOP, DEIR, FEIR) were posted with the State Office of Planning and Research, the San Joaquin County Clerk, posted on the City's website, and mailed/emailed to all interested parties on the Tracy Alliance and overall CEQA interested parties lists.

The Planning Commission met and considered this agenda item on January 25, 2023. After hearing from staff, the applicant, and various interested parties, voted 4-0 (with one member absent) to recommend that City Council certify the EIR and approve the applications.

COORDINATION

This development application was reviewed by multiple City Departments and the South San Joaquin County Fire Authority as part of the City's normal application review process. As a part of the Project review, the EIR was also provided to the State Office of Planning and Research, various State and County agencies, posted at the San Joaquin County Clerk's office and on the City's website. This staff report was prepared by the Development Services Planning Division.

FISCAL IMPACT

This agenda item will not require any expenditure of funds. A Cost Recovery Agreement was executed with the applicants at the time of application, with the applicants reimbursing the City for all the costs associated with the review of the applications, including the EIR.

ACTION REQUESTED OF THE CITY COUNCIL

The Planning Commission recommends that the City Council approve an Ordinance in substantially the form of Exhibit 1 to Attachment H, to:

1. Certify an Environmental Impact Report (EIR), adopt a MMRP, and make the CEQA Findings for the annexation and future development of industrial buildings on the 191.18-acre Property located at the northeast corner of Grant Line and Paradise Roads (Assessor's Parcel Numbers 213-170-14, -24, -25, -26, -27, and -48) in accordance with the CEQA; and

2. Amend the NEI Specific Plan to add the Property to said specific plan with a land use designation of Light Industrial (SPA22-0003); and

3. Approve the prezoning of the property to Northeast Industrial Specific Plan Zone (AP20-0003); and

4. Approve the submittal of a petition to the San Joaquin County LAFCo to annex the Property to the City of Tracy.

Prepared by: Victoria Lombardo, Senior Planner

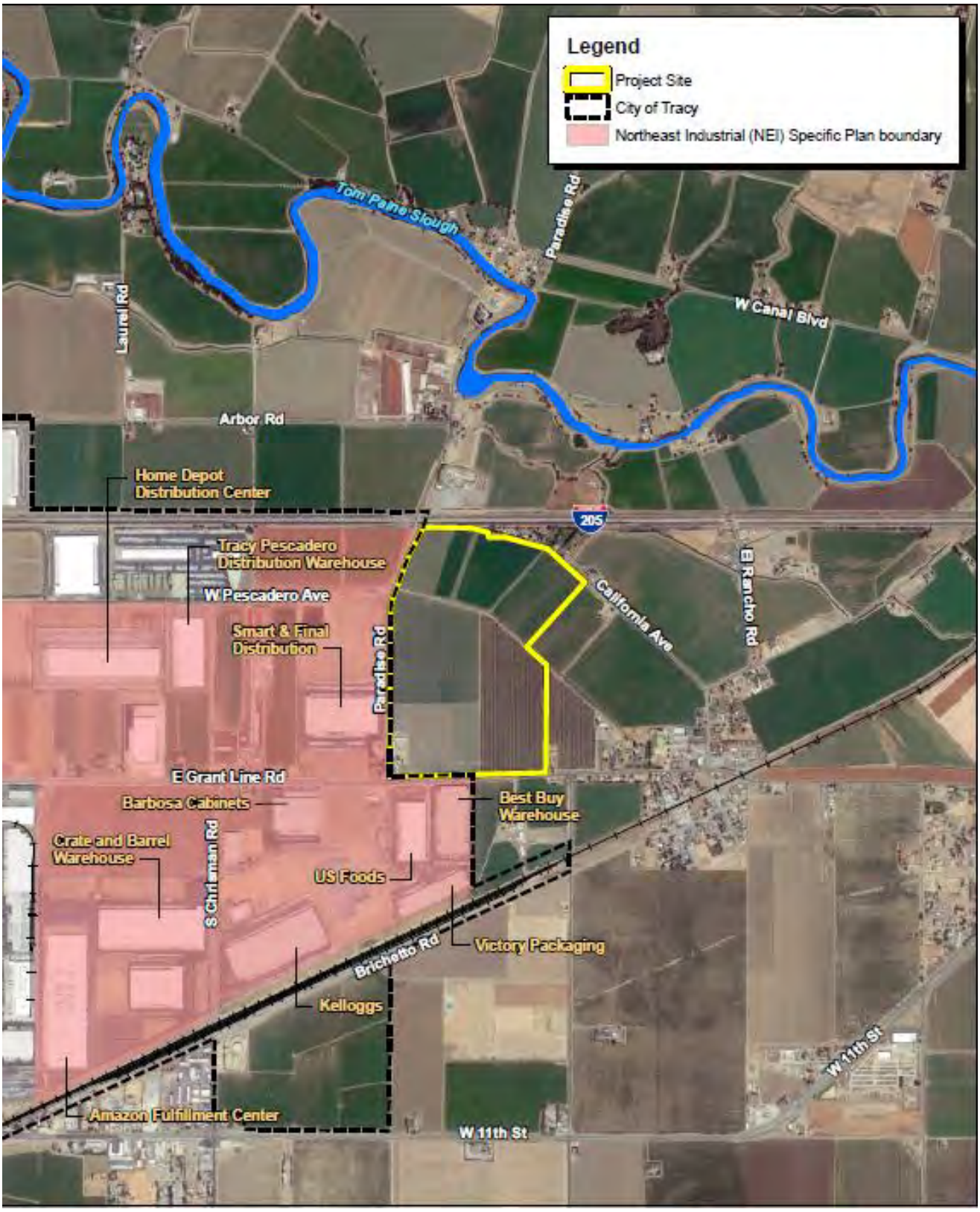
Reviewed by: Bill Dean, Assistant Director of Development Services
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

ATTACHMENTS

Attachment A – Location Map
Attachment B – NEI Specific Plan Amendment
Attachment C – Draft Site Plan for Alliance Property
Attachment D – Draft EIR, including the Notice of Preparation
Attachment E – Final EIR
Attachment F – CEQA Findings
Attachment G – CEQA MMRP
Attachment H – Proposed City Council Ordinance

Attachment A: Location Map



Attachment B

City of Tracy
NORTHEAST INDUSTRIAL SPECIFIC PLAN

July 17, 2012
(Amended _____, 2023)

TABLE OF CONTENTS

INTRODUCTION	1
PLANNING AREA LOCATION	1
Location	1
Surrounding Land Uses	1
Land Ownership	1
EXISTING PLANNING AREA CONDITIONS	1
Site Features	1
Existing Roadway Network	2
RELATIONSHIP TO TRACY'S GENERAL PLAN	10
General Plan Land Use Designations	10
Tracy's Growth Strategy	10
General Plan Goals Furthered by Northeast Industrial Area Development	10
PROJECT CHARACTERISTICS	12
Project Objectives	12
Land Use Designations	12
Light Industrial Land Uses (LI)	12
Existing Agricultural and Residential Uses	13
General Commercial Land Uses (GC)	13
Right to Farm Provisions	13
Mineral Extraction	13
CIRCULATION AND TRANSPORTATION	15
PUBLIC SERVICES AND INFRASTRUCTURE	19
Wastewater Collection and Disposal	19
Storm Drainage	21
Water Supply and Distribution	23
Police Protection	23
Fire Protection	23
Other Utilities	23
DESIGN GUIDELINES	25
Streetscapes	25
Recommended Trees for Major Streets	25
Street Lighting	26
Building FAR and Height	26
Building Setbacks	26
Parking and On-Site Vehicular Circulation	28
Loading and Unloading Spaces	28
Driveway Standards	31
Freeway Interface	31
Building Architecture	34
Signs	34
Landscaping	35
Screening and Storage	36
Development Review Process	36
Environmental Performance Standards	36

Use Restrictions 36
Hazardous Wastes and Water Pollutants 37
Mineral Extraction 37
Dairy Uses 37
Permitted and Conditionally Permitted Uses 37
Figure 1: Surrounding Land Uses 3
Figure 2a: Land Owners 4
Figure 2b: Land Owners 5
Figure 3: Aerial Photograph 8
Figure 4: Existing Site Conditions 9
Figure 5: Proposed Land Uses 14
Figure 6: Proposed Road Network 16
Figure 7A: Roadway Sections 17
Figure 7B: Roadway Sections 18
Figure 8: Master Plan Sewer 20
Figure 9: Master Plan Storm Drain System 22
Figure 10: Master Plan Water System 24
Figure 11: Setback Guidelines 27
Figure 12: Light Manufacturing/R&D Prototype 30
Figure 13: Commercial Prototype 32
Figure 14: Warehouse Prototype 33
Table 1: Permitted and Conditional Industrial and Commercial Uses 38

INTRODUCTION

The 1,061-acre Northeast Industrial Area Specific Plan aims to develop a well-planned industrial zone that will attract businesses to Tracy, and provide local employment opportunities. The Specific Plan anticipates a mixture of industrial uses, including rail-dependent industries and "flex-tech" light industrial.

PLANNING AREA LOCATION

Location

The Northeast Industrial planning area lies along the northeast boundary of the City of Tracy. The area is generally bounded to the north by 1-205, to the south by the Southern Pacific Railroad tracks, to the east by Banta Road, and the west by MacArthur Drive. Grant Line Road bisects the area.

Surrounding Land Uses

Presently, properties along MacArthur Drive directly west of the site are developed with industrial uses, such as the U.S. Cold Storage facility. North of the site are industrial and commercial uses, including the Tracy Outlets at MacArthur Drive and Pescadero Avenue. The Yellow Freight Company is also located to the north, between the site and 1-205. Agricultural uses are found on lands to the east.

Lands directly to the north and west of the site are included in the I-205 Corridor Specific Plan and the 1988 Industrial Areas Specific Plan. To the east is the residential Banta area of the county. The project site in the context of the existing industrial and commercial uses, and existing specific plan areas is shown in Figure 1.

Land Ownership

The Northeast Industrial planning area is currently made up of 67 properties, with a variety of owners. Parcels range in size from small half acre home sites to large agricultural and industrial holdings. The assessor's parcel numbers and ownership of the area is shown in Figure 2a and 2b.

EXISTING PLANNING AREA CONDITIONS

Site Features

Land uses within the Northeast Industrial Area are currently light industrial and agricultural, with a number of dairy operations and rural residences remaining. Few other significant site features are present. The topography is relatively level.

A Westside Irrigation District (WSID) supply or tailwater ditch crosses the area. Two properties near I-205 are located just inside the FEMA 100 year flood line found in the vicinity of the I-205/Paradise Road overcrossing. The 100-year floodplain impacts on the NEI Specific Plan area would only result from the unlikely event of a levee failure along the San Joaquin River or Paradise Cut. Furthermore, the volume of the breach flow would need to be sufficient to inundate over 10 square miles prior to flows reaching the NEI area, which is an extreme event. If flood flows reached the NEI, they would fill available storage in the stormwater detention basin below the flood level and any additional flood flow volumes would be pumped into the Eastside Channel. Furthermore, the City’s Municipal Code (Title 9 Building Regulations, Chapter 9.52 Floodplain Regulations),

would require all new construction and substantial construction pertaining to buildings have the lowest floor, including basement, elevated to or above the base flood elevation.

The existing conditions of the planning area are shown on Figures 3 and 4.

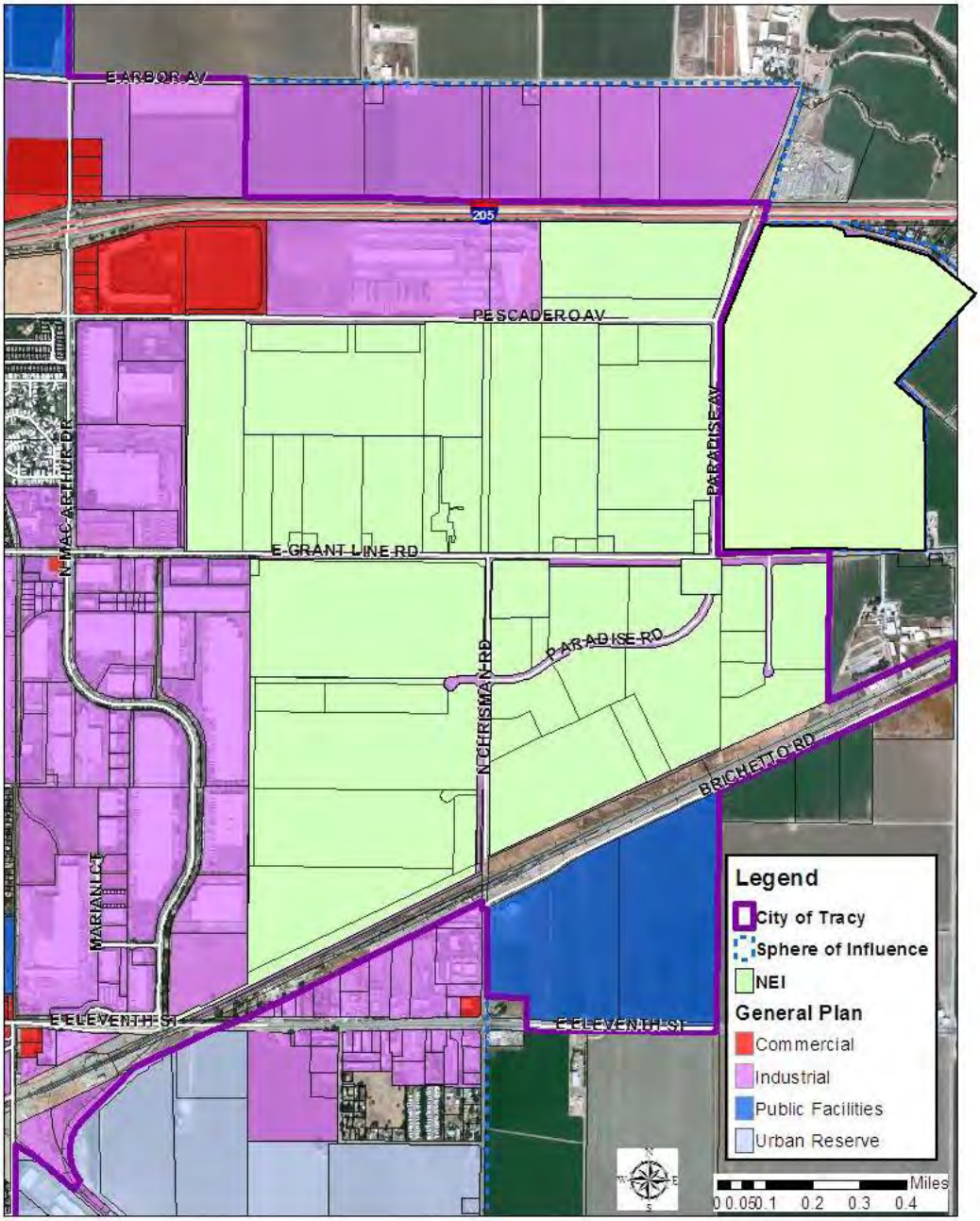
None of the parcels are under Williamson Act contracts, except for the Suvik Farms parcels (Parcel Numbers 64, 65 and 66 on Figure 2b). The Suvik Farms parcels are covered by an active Williamson Act contract. Pursuant to the applicable provisions of the California Government Code, the Suvik Farms landowners initiated a Notice of Nonrenewal in 2017 for the contract, beginning a nine-year process to formally expire the contract. Based on the date of the Notice of Nonrenewal, the contract will expire on August 21, 2026. Should development of the Suvik Farms parcels be pursued prior to the Williamson Act contract expiration date, the applicant for the development of the Suvik Farms parcels would be required to petition the City Council for cancellation. So long as the cancellation occurs prior to urban development, then no conflicts would occur.

Existing Roadway Network

The Plan area is served by a number of existing roadways, some of which have been improved to meet the circulation needs of the NEI area, and others that will be constructed or improved as traffic demand requires.

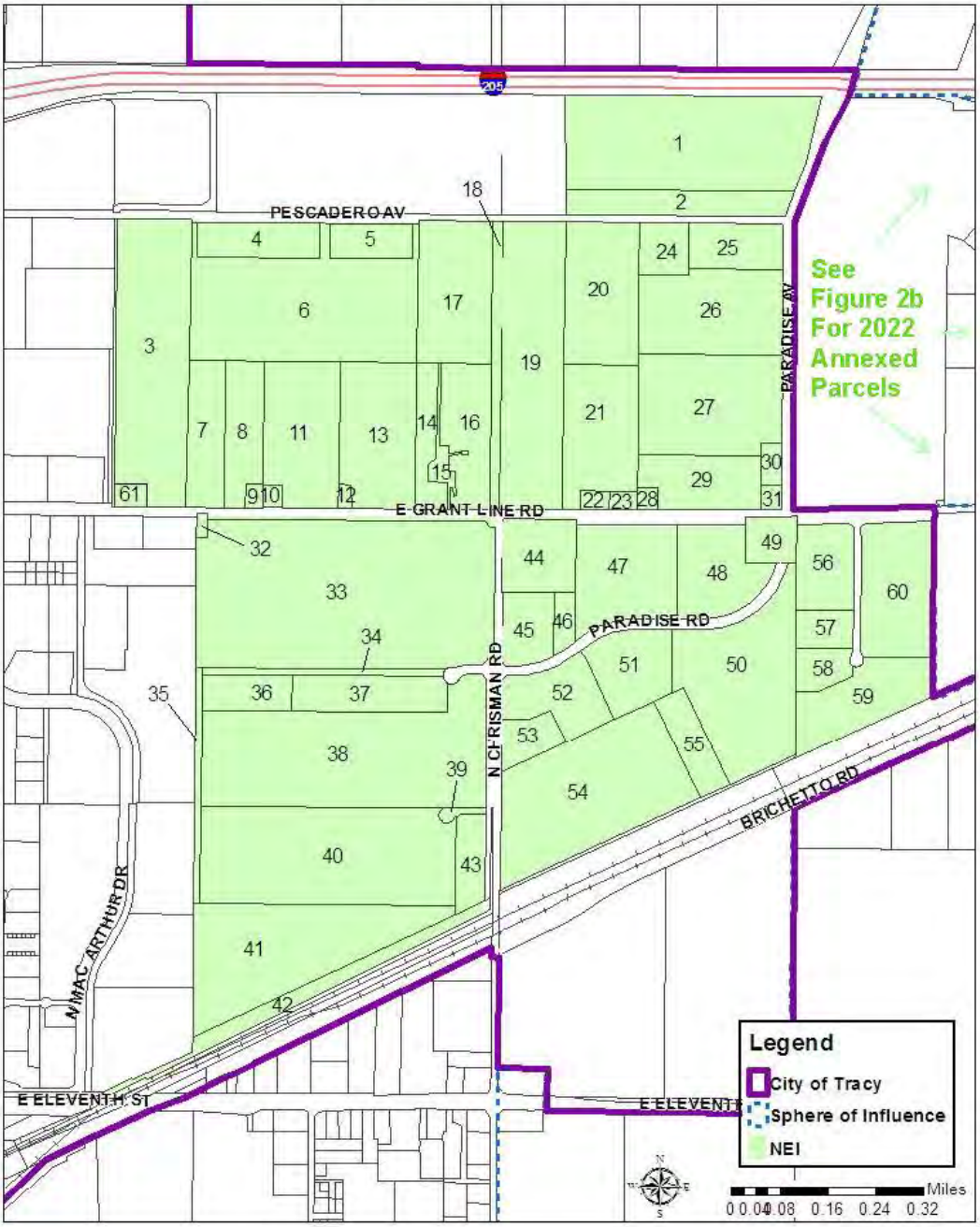
Regional access for the area is provided by Interstate 205 (I-205) to the north and Interstate 5 (I-5) to the east. I-205 is an east-west freeway which extends from I-5 west to I-580 with I-580 continuing west into the Bay Area. I-5 is a north-south freeway which extends throughout California. Currently, Plan area access to I-205 is via an interchange at MacArthur Drive. I-5 access is via the full access interchange at Kasson Road (an extension of Grant Line Road). I-5 access is also available (to/from the north only) via an interchange at Eleventh Street. The primary local roadways serving the area are MacArthur Drive, Pescadero Avenue, East Grant Line Road, Chrisman Road and Paradise Road.

Surrounding Land Use Designations Figure 1



Land Owners

Figure 2a



LAND OWNERS

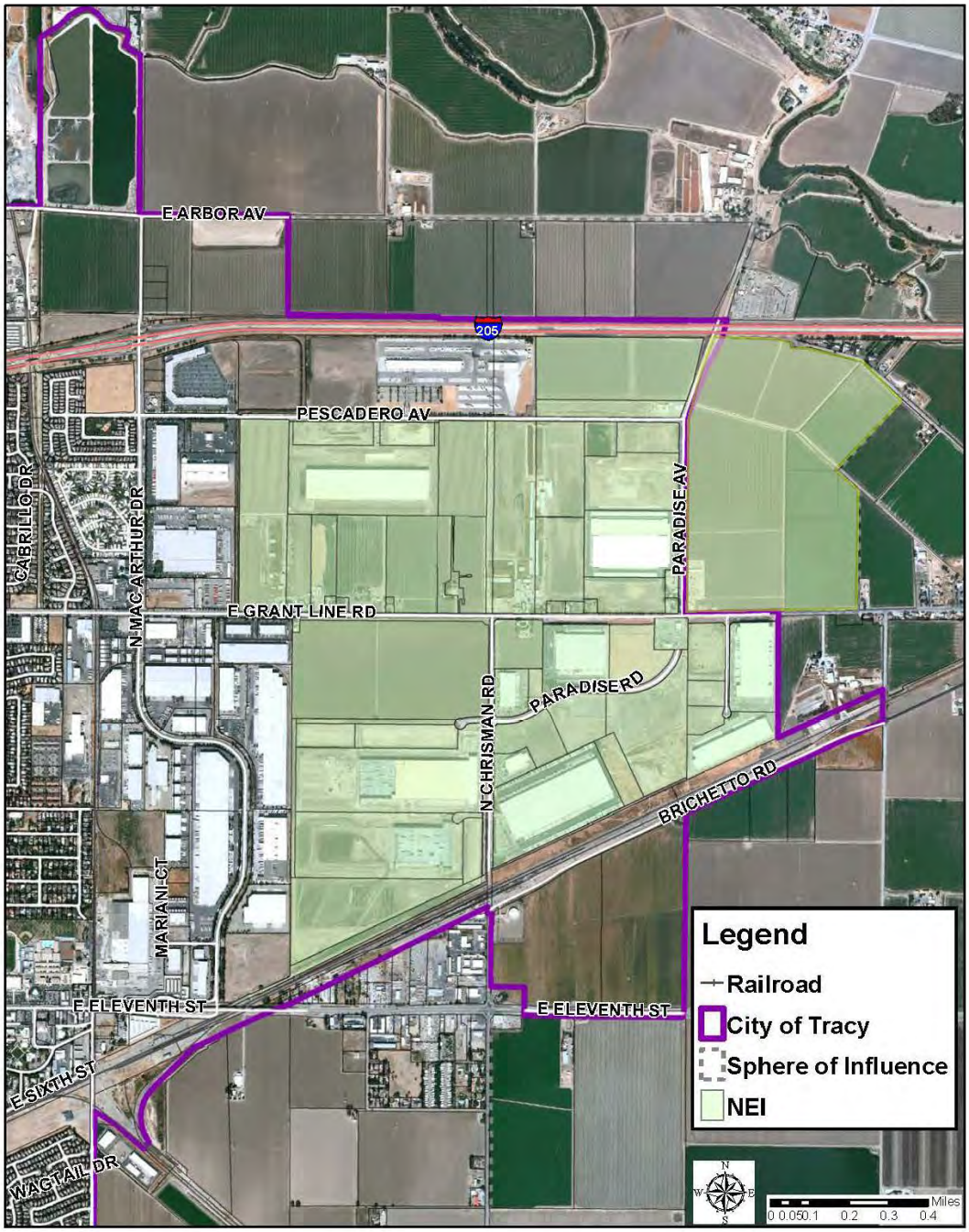
2022 Annexed Parcels Figure 2b

Number	APN	OWNER	LOT SIZE (ACRES)
1	213-060-12	RADOS PROPERTIES CALIF LAND LLC	42.42
2	213-060-13	HALEY DOROTHY TRUSTEE	9.78
3	213-070-81	PIMENTEL VELMA C	35.95
4	213-070-75	PONY UP TRACY LLC	7.68
5	213-070-74	OLD GOLDEN OAKS LLC	5.35
6	213-070-73	US INDUSTRIAL REIT CONTAINER III	44.03
7	213-070-22	PIMENTEL VELMA C	9.79
8	213-070-28	MATTSON HELENE A	9.1
9	213-070-29	MATTSON HELENE A	0.689
10	213-070-19	ROBERTSON STANLEY & B	0.703
11	213-070-20	SILVA BERNARDINE M	18.88
12	213-070-18	ENDER WENDELL F & M L	0.519
13	213-070-40	PIMENTEL JOSEPH L	18.99
14	213-070-41	MARTY MARILYN	6.32
15	213-070-17	MARTY MARILYN	2.27
16	213-070-39	MARTY MARILYN	11.41
17	213-070-06	TRACY PESCADERO INDUSTRIAL PARK	19.46
18	213-070-48	SILVA MARIA O	5.34
19	213-070-49	SILVA MARIA O	33.86
20	213-070-08	SILVA MARIA O	19.55
21	213-070-51	SILVA MARIA O	17.55
22	213-070-52	SILVA MARIA O	1.005
23	213-070-53	SILVA MANUEL H	1.005
24	213-070-76	PROLOGIS LOGISTICS SERVICES INC	4.8
25	213-070-77	PROLOGIS LOGISTICS SERVICES INC	8.19
26	213-070-78	PROLOGIS LOGISTICS SERVICES INC	22.08
27	213-070-79	PROLOGIS LOGISTICS SERVICES INC	25.15
28	213-070-13	ENDER ALVETA F	0.839
29	213-070-80	PROLOGIS LOGISTICS SERVICES INC	11.3
30	213-070-44	RUSE JOSEPH T & PATRICIA A	1.619
31	213-070-45	ENDER BUDDY C	0.9
32	250-020-15	COSTA ROBERT J SR & EVELYN M	0.5
33	250-020-14	ROCHA MANUEL TOSTE JR	79.03
34	250-020-79	CATELLUS CORPORATE CTR TRACY LLC	3.17
35	250-020-82	CATELLUS CORPORATE CTR TRACY LLC	2.87
36	250-020-80	CATELLUS CORPORATE CTR TRACY LLC	5.8
37	250-020-81	CATELLUS CORPORATE CTR TRACY LLC	10.08
38	250-020-83	CATELLUS CORPORATE CTR TRACY LLC	52.13
39	250-020-84	CATELLUS CORPORATE CTR TRACY LLC	0.773
40	250-020-85	CATELLUS CORPORATE CTR TRACY LLC	44.44
41	250-020-87	CATELLUS CORPORATE CTR TRACY LLC	33.53
42	250-010-05	UNION PACIFIC RAILROAD COMPANY	9.18
43	250-020-86	CATELLUS CORPORATE CTR TRACY LLC	5
44	250-030-10	SILVA FRANK I & MARY L	9.28
45	250-030-29	1851 E PARADISE ROAD PARTNERS LLC	6.56
46	250-030-30	BIG 4 GROUP LLC	2.17
47	250-030-27	BARBOSA INVESTMENT GROUP LTD PTP	17.73
48	250-030-28	BARBOSA INVESTMENT GROUP LTD PTP	12.59
49	250-030-02	TRACY CITY OF	4.24
50	250-030-26	HEADLANDS REALTY CORP	31.17
51	250-030-25	HEADLANDS REALTY CORP	10.51
52	250-030-24	TRACY LOGISTICS CENTER PARTNERS LLC	10.48
53	250-030-23	TRACY LOGISTICS CENTER PARTNERS LLC	4.48
54	250-030-18	TCE TRACY LLC	37.96
55	250-030-19	AMB HOLDCO LLC	6.35
56	250-280-09	AMB PROPERTY LP	8.81
57	250-280-08	AMB PROPERTY LP	3.96
58	250-280-07	AMB PROPERTY LP	3.89
59	250-280-06	AMB PROPERTY LP	14.14
60	250-280-10	AMB PROPERTY LP	17.8
61	213-070-82	CITY OF TRACY	1.089

62	213-170-27	TRACY ALLIANCE GROUP, LLC	122.39
63	213-170-48	PACIFIC T&T COMPANY	0.05
64	213-170-24	SUVIK FARMS	31.67
65	213-170-25	SUVIK FARMS	11.70
66	213-170-26	SUVIK FARMS	3.24
67	213-170-14	ZURIAKAT	22.17

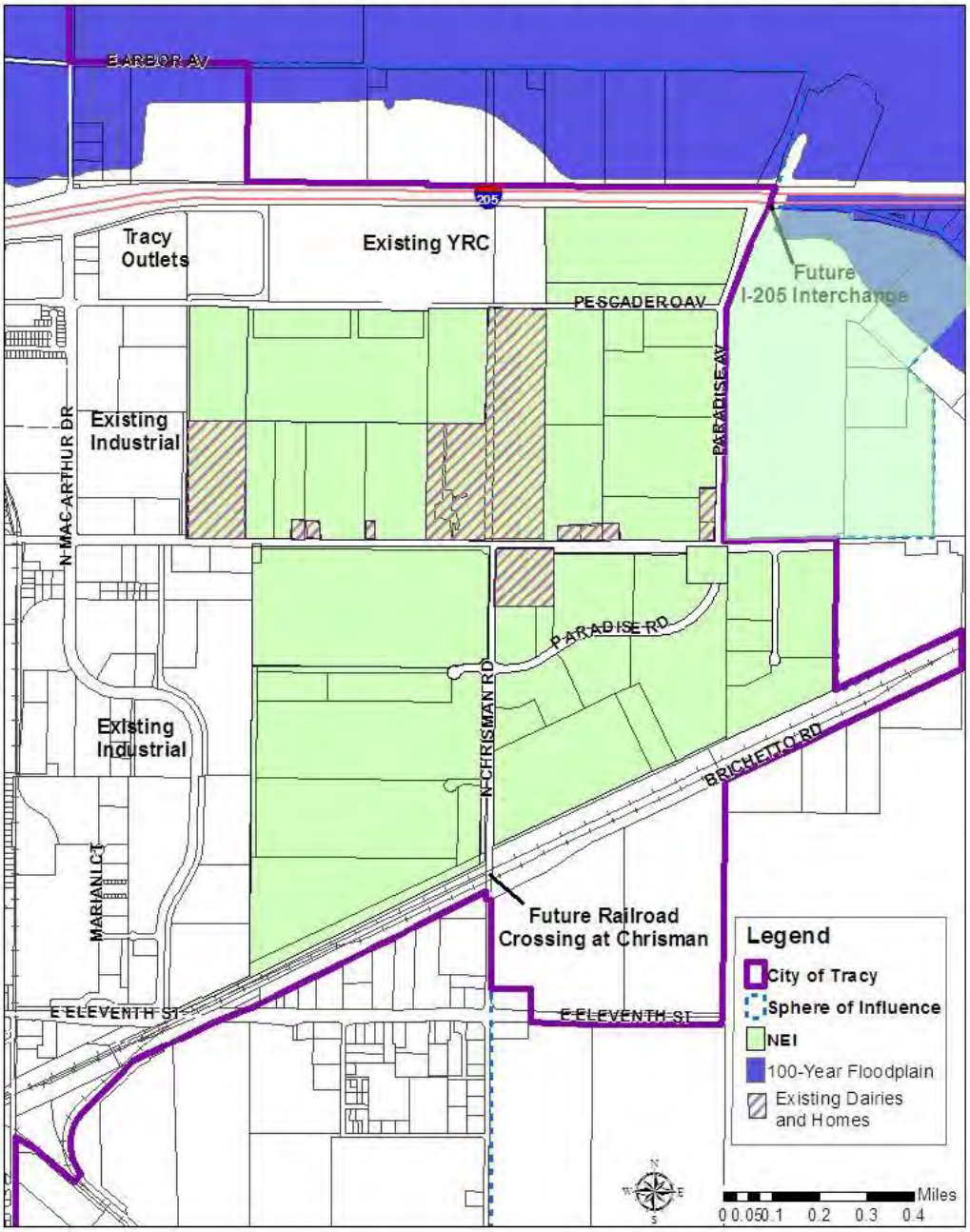
Aerial

Figure 3



Existing Site Conditions

Figure 4



RELATIONSHIP TO TRACY'S GENERAL PLAN

General Plan Land Use Designations
The City of Tracy General Plan designates the entire Northeast Industrial area for Industrial land uses. Specific uses allowed in the industrial category range from flex/office space to manufacturing to warehousing and distribution. Ancillary uses, such as restaurants, consumer services, and parks may be allowed to serve the daily needs of the workers.

Tracy's Growth Strategy
The City of Tracy has embraced a "balanced growth" strategy, seeking to direct growth in an efficient, cost-effective manner, balancing land uses and appropriate use of the land with well-planned and utilized infrastructure. This strategy seeks to improve the jobs/housing balance and to encourage development of employment opportunities and capitalize on freeway interchanges with industrial, retail, and service-related development.

The northeastern sector of Tracy has been designated as one area in which the City's industrial growth will occur. Adjacent to existing industrial development and with direct access to the I-205 freeway and rail transportation, the Northeast Industrial area is ideally situated to attract and support business without the need for major infrastructure expenditures.

General Plan Goals Furthered by the Northeast Industrial Area Development
The Northeast Industrial Specific Plan proposes development consistent with the General Plan. It furthers many of the Goals and Policies stated in the General Plan and it implements many of the Actions set forth in the General Plan. Following is a summary of General Plan Goals, Policies, and Actions to which the Northeast Industrial Specific Plan contributes.

Land Use

Objective LU-1.1 Establish a clearly defined urban form and city structure.

Policy P1: New development and redevelopment in existing areas shall be organized as a series of residential Neighborhoods, Employment Areas, Corridors, Village Centers, the Downtown and the I-205 Regional Commercial Area.

- Employment Areas are the job-centers of the city and include office districts, retail centers and industrial areas.

Objective LU-2.3 Expand the City's industrial base.

Policy P1: The Northeast Industrial Area should contain a mix of heavy industrial, light industrial, warehouse, and distribution users to maximize rail and highway access on large parcels of land. The Northeast Industrial Area should also contain commercial uses and services to meet the daily needs of workers.

Objective LU-6.2 Ensure land use patterns that minimize conflicts between transportation corridors and neighboring uses.

Policy P1: Uses that are compatible with the noise, air quality and traffic impacts associated with freeways, such as auto-oriented commercial and industrial uses, should be located near and along freeway corridors whenever possible.

Economic Development

Objective ED-4.1 Ensure an adequate, balanced supply of all land uses for future economic development.

Action A1: Monitor current and future land supply needs for industrial, office and retail growth.

Objective ED-6.3 Promote expansion in the Northeast Industrial Area.

Policy P1: The City shall encourage and facilitate the development and buildout of the entire 870-acre Northeast Industrial Area.

Policy P2: The City shall direct business attraction efforts to manufacturing uses, rather than warehouse distribution facilities, due to their higher employment densities.

Policy P3: Developers should consider flexible facility design and construction types that can accommodate future manufacturing uses with higher employment densities.

Policy P4: The City should support efforts to attract private developers and equity investors to participate in the development of the area.

Community Character

Objective CC-11.2 Encourage attractive design in Employment Areas.

Policy P1: Development in Employment Areas should adhere to high-quality design standards.

Policy P4: Building setbacks for office buildings or office portions of industrial buildings should be minimized to ensure that buildings define the edges of the street.

Policy P6: Loading facilities in Employment Areas should be screened from view from public streets to the extent possible.

Policy P9: Fencing visible from the public right-of-way shall be visually appealing when used in industrial and commercial developments.

Objective CC-11.3 Minimize the impact of parking on the pedestrian environment in Employment Areas.

Policy P1: The impact of parking in Employment Areas on the pedestrian environment should be minimized with attractive landscaping.

Policy P2: Parking lots should be set back from the street with a landscaped buffer wherever possible.

Circulation

Objective CIR-1.4 Protect residential areas from commercial truck traffic.

Policy P1: Significant new truck traffic generating uses shall be limited to locations along designated truck routes, in industrial areas or within ¼-mile of freeways.

PROJECT CHARACTERISTICS

Project Objectives
The objectives of the project are:

- To develop the Northeast Industrial Area as a high-quality industrial and commercial site of significant benefit to the City of Tracy and the nearby region.
- To develop a well-planned site that will attract businesses to Tracy, providing local employment opportunities.
- To develop the Northeast Industrial Area for primarily mixed industrial uses, including rail-dependent industries.
- To minimize project-related impacts to Tracy's transportation network.
- To provide a flexible phasing program that allows market forces to dictate reasonable growth increments, while ensuring that agricultural properties are allowed to remain until ready to develop.
- To create a project consistent with the goals of the General Plan.
- To integrate the Northeast Industrial Area into the development pattern of the City of Tracy.
- To integrate mitigation for environmental impacts into the design of the project.

Land Use Designations
The Northeast Industrial Area will consist primarily of light industrial land uses. In addition, general commercial land uses are planned at major intersections along Pescadero Avenue and Grant Line Road. Figure 5 shows the configuration of the land uses in the planning area.

The development prototypes included in the Design Guidelines indicate possible site planning scenarios for environmental impact analysis.

Light Industrial Land Uses (LI)
Light Industrial land uses cover approximately 990 acres of the planning area. Assuming a Floor Area Ratio (FAR) of 0.5, approximately 21.6 million square feet of light industrial, warehouse and manufacturing facilities would be provided. Light industrial land uses would be compatible with existing industrial land uses to the west and north, as well as with freeway noise, and rail noise and vibration.

Several types of light industrial land uses are appropriate in the Northeast Industrial Area. It is anticipated that warehousing and distribution businesses with low employee densities will be the predominant development type. This development pattern is similar to those that have located in Tracy in recent years. The southern portion of the Planning Area is appropriate to uses that require rail access.

The City of Tracy is also interested in attracting higher employee density businesses to the area. It is anticipated that there may be a future demand for a "Flex-Tech" development that would accommodate research & development businesses and call centers.

The light industrial zone may also be appropriate for service commercial businesses with little pedestrian traffic, that are not necessarily compatible with general commercial land uses, such as automotive supply and plumbing stores. Commercial development may be permitted on sites designated Light Industrial without the site being redesignated General Commercial if:

1. The site is a minimum of one acre and located on the northwest or southwest corners of Pescadero Avenue and Paradise Road or the northwest or southwest corners of Grant Line Road and Paradise Road.
2. The site has City Engineer-approved access from at least two streets.
3. The proposal is for a convenience retail or general commercial service use to the industrial area, such as restaurants, hotels, or convenience stores and service stations.
4. 15,000 square feet of retail within an industrial warehouse located on the southwest corner of Chrisman Road and Paradise Road.

A variety of parcel sizes are foreseeable, probably ranging from 5 to 50 acres, depending upon the type of industrial user attracted to the area. Since market forces will dictate that eventual parcel size, the Specific Plan does not reflect an exact parcelization plan.

Existing Agricultural and Residential Uses
The parcels containing former dairy operations; existing agricultural operations, and/or former or existing residences, may remain in operation until ready to develop. The planned light industrial land uses will be compatible with these properties. (The agricultural lands are subject to the City's Right to Farm Ordinance, discussed below)

General Commercial Land Uses (GC)
Three parcels of general commercial, totaling 45.5 acres are provided within the planning area. These commercial sites are intended to expand upon the existing commercial uses adjacent to the I-205/ MacArthur Drive interchange, take advantage of the freeway-oriented traffic circulation of the site, and serve the local industrial community. The largest parcel (25.5 acres) is located in the northwest comer of the project along Pescadero Avenue. This parcel provides for potential factory outlet expansion or other interstate-related commercial uses. General Commercial land uses provide for service commercial oriented land uses, such as animal shelters, who’s land use characteristics are compatible with industrial uses.

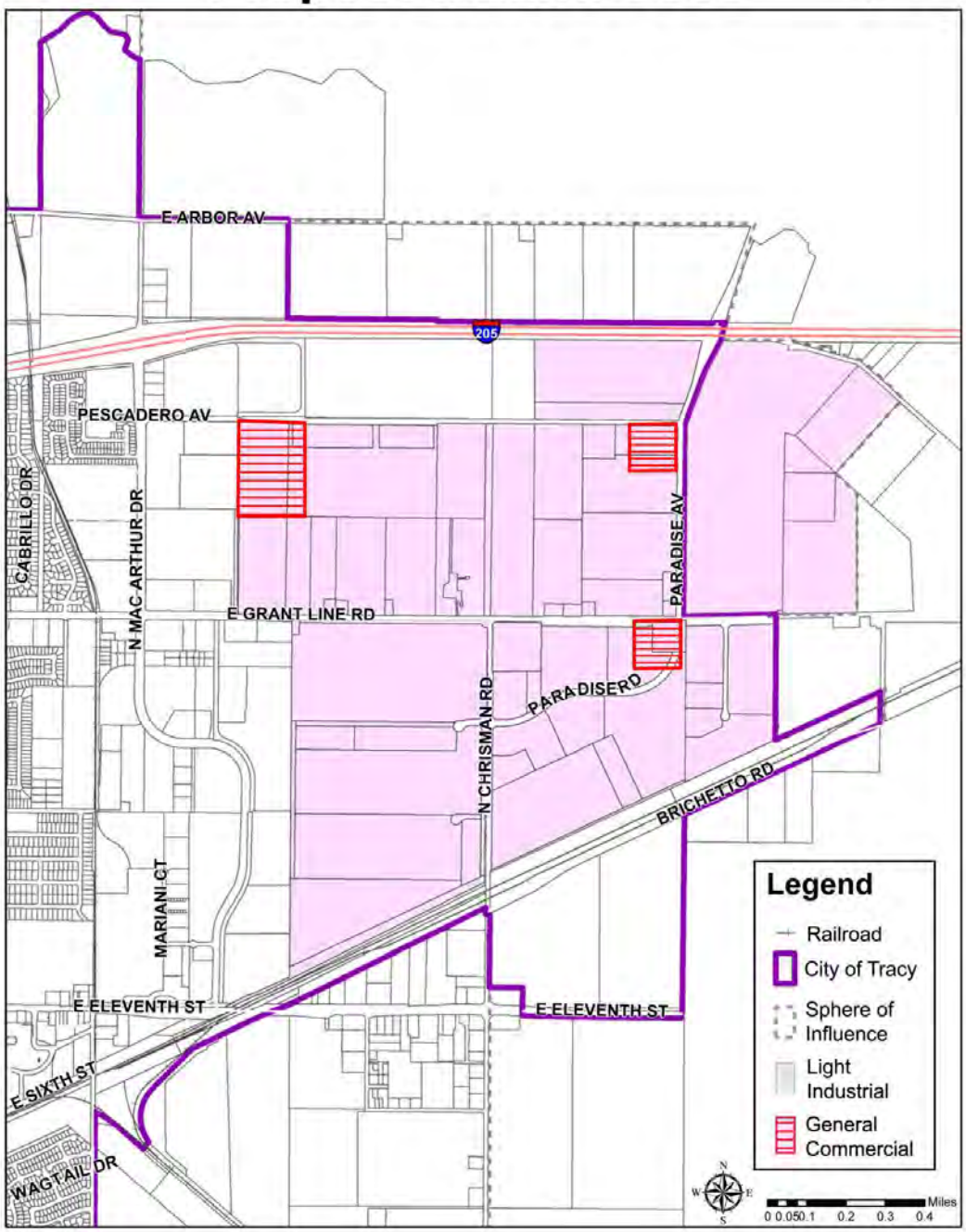
Right to Farm Provisions
Agricultural operations currently exist within the Northeast Industrial planning area. This Specific Plan intends to allow the continued operation of these existing agricultural uses until such time as the owners wish to convert their property to nonagricultural uses.

When nonagricultural land uses move into areas near to pre-existing agricultural operations, the agricultural operations frequently become the subject of nuisance complaints. Chapter 10.24 of the Tracy Municipal Code, the Right to Farm Ordinance, declares that farming operations are not a nuisance, and recognizes the right to farm within the incorporated City. Agricultural and dairy operations are included in the Permitted Uses (page 36) for both the Light Industrial and General Commercial land use designations.

Mineral Extraction
A number of the parcels in the Northeast Industrial planning area have mineral rights that are owned by different owners than the underlying land. It is possible that these owners may choose to exercise these rights at some time in the future. As such, mineral extraction is included as a Conditionally Permitted use within the Light Industrial land use designation. Any mineral extraction operation will be unobtrusive, and will be a subsidiary use to the primary use of the parcel.

Proposed Land Uses

Figure 5



CIRCULATION AND TRANSPORTATION

The Northeast Industrial Specific Plan provides for efficient circulation by automobiles and trucks. The proposed land use mix, street geometry, and proximity to the interstate freeway system will minimize project-related impacts to Tracy's transportation network.

The distribution, location and extent of the roadway improvements within the Specific Plan area shall be subject to the NEI Phase I Finance and Implementation Plans, dated December 1999 (Resolution Numbers 99-462 and 99-485), April 1, 2003 (Resolution Number 2003-100), January 4, 2005 (Resolution Number 2005-023), February 21, 2006 (Resolution Number 2006-069), and April 15, 2008 (Resolution Number 2008-065), and the NEI Phase II Finance and Implementation Plans, dated January 2006 (Resolution Number 2006-038) and January 15, 2008 (Resolution Number 2008-010). All future roadway improvements will also be subject to any revisions or updates to the NEI Finance and Implementation Plans, and subject to the development impact fees as established in those plans. Figures 6 and 7A and 7B show the original roadway network and street sections for the Specific Plan, which will be modified by the Finance and Implementation Plan process.

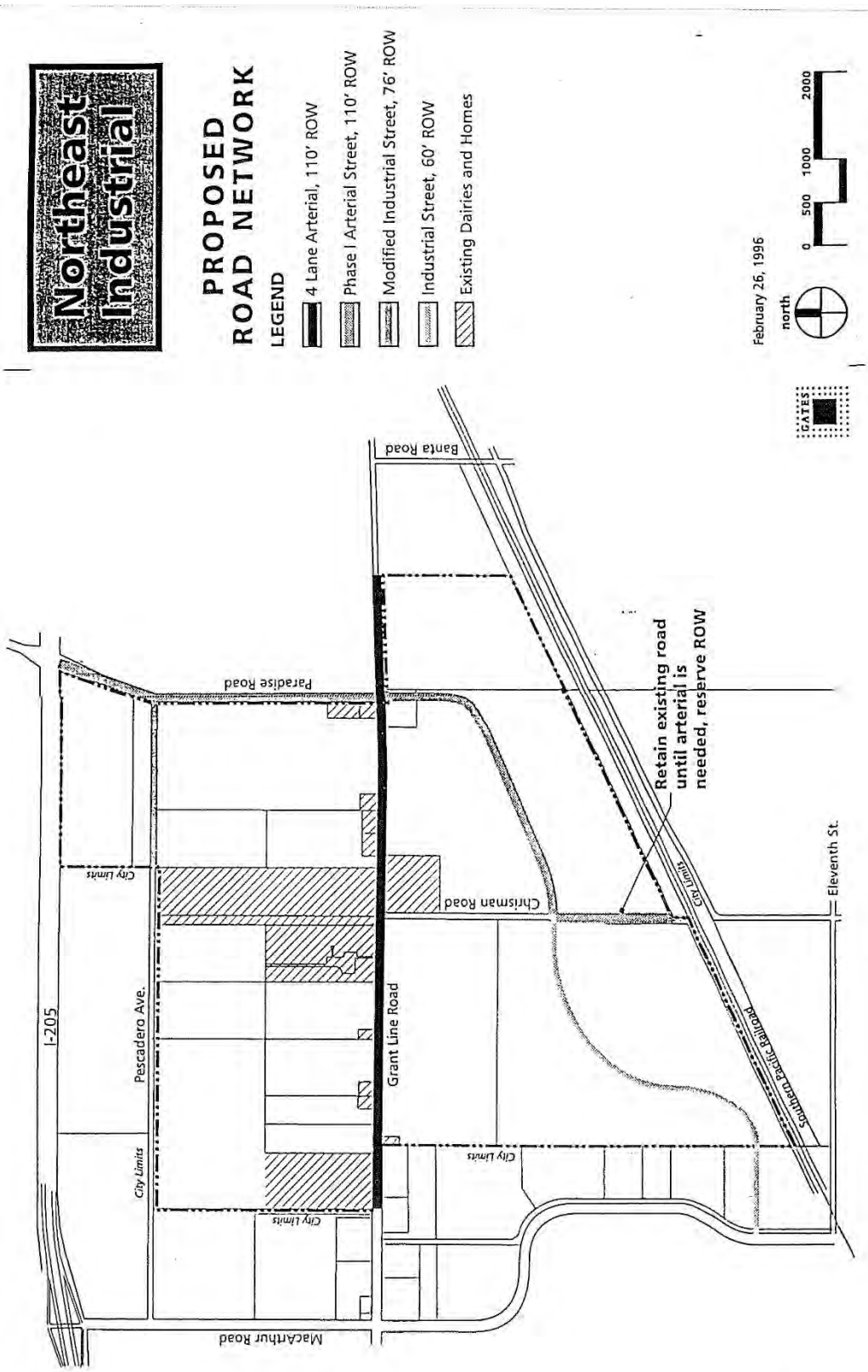
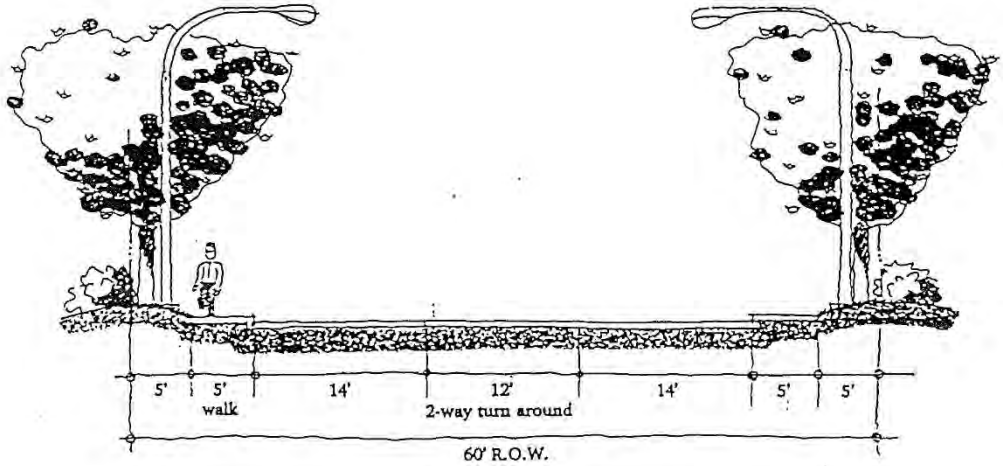
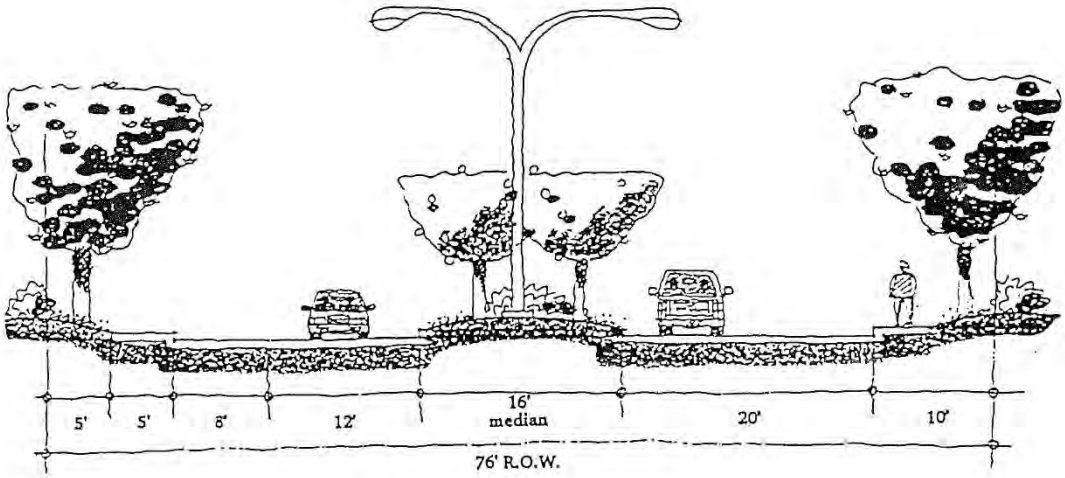

Northeast Industrial
PROPOSED ROAD NETWORK
LEGEND
4 Lane Arterial, 110' ROW
Phase I Arterial Street, 110' ROW
Modified Industrial Street, 76' ROW
Industrial Street, 60' ROW
Existing Dairies and Homes
February 26, 1996
north
0 500 1000 2000
GATES
Banta Road
Paradise Road
Retain existing road until arterial is needed, reserve ROW
City Limits
Chrisman Road
Eleventh St.
I-205
Pescadero Ave.
Grant Line Road
Southern Pacific Railroad
MacArthur Road

Figure 6



Industrial Street



Modified Industrial Street Section

STREET CROSS SECTIONS

Northeast Industrial

0 5 10

February 26, 1996

GATES

Figure 7A

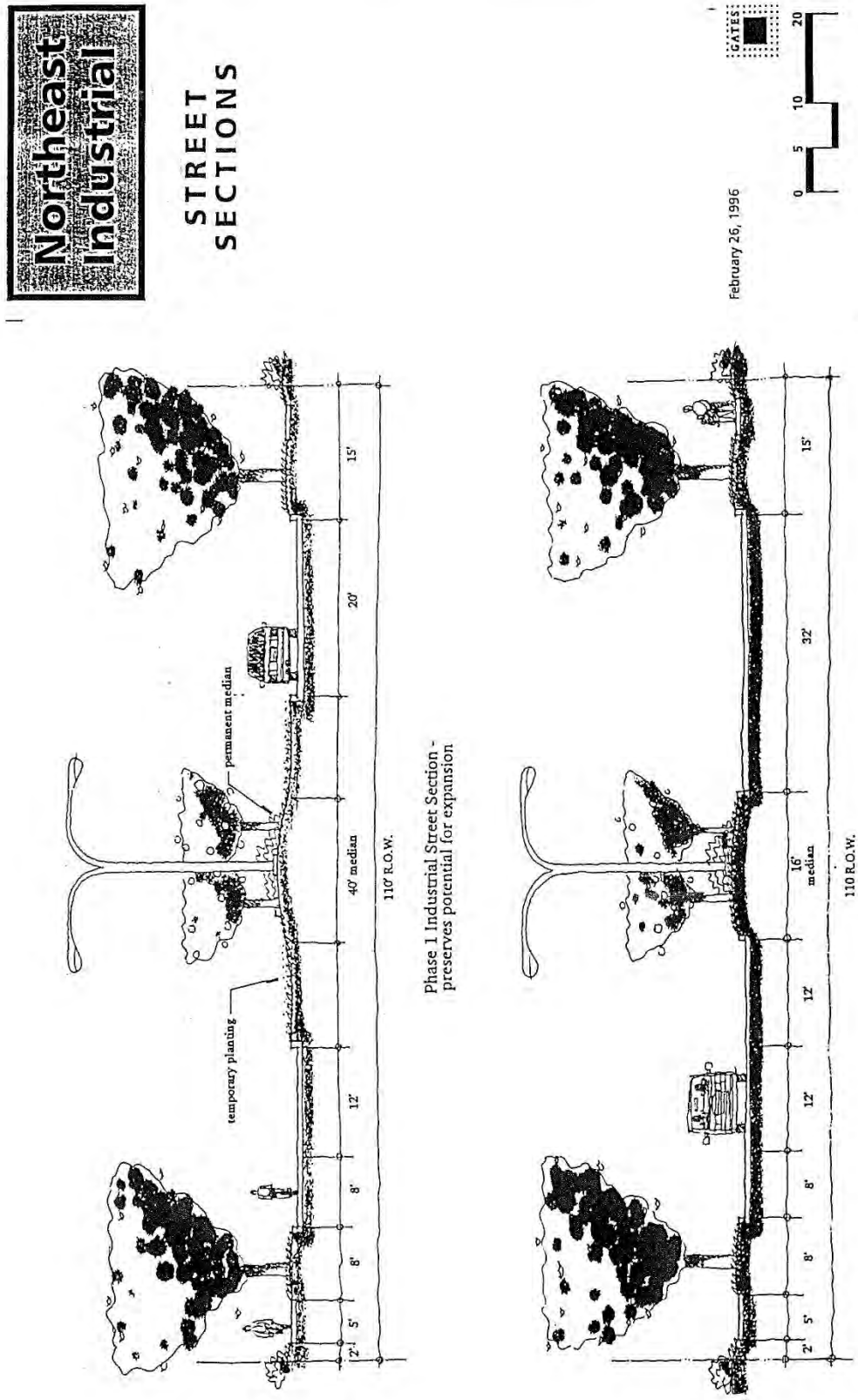

Northeast Industrial
STREET SECTIONS
February 26, 1996
GATES
0 5 10 20
permanent median
temporary planting
40' median
110' R.O.W.
2' 5' 8' 8' 12' 20' 15'
Phase 1 Industrial Street Section - preserves potential for expansion
16' median
110 R.O.W.
2' 5' 8' 8' 12' 12' 32' 15'
Arterial Street

Figure 7B

PUBLIC SERVICES AND INFRASTRUCTURE

Wastewater Collection and Disposal

The distribution, location and extent of the wastewater conveyance treatment and discharge within the Specific Plan area shall be subject to the NEI Phase I Finance and Implementation Plans, dated December 1999 (Resolution Numbers 99-462 and 99-485), April 1, 2003 (Resolution Number 2003-100), January 4, 2005 (Resolution Number 2005-023), February 21, 2006 (Resolution Number 2006-069), and April 15, 2008 (Resolution Number 2008-065), and the NEI Phase II Finance and Implementation Plans, dated January 2006 (Resolution Number 2006-038) and January 15, 2008 (Resolution Number 2008-010). All future wastewater improvements will also be subject to any revisions or updates to the NEI Finance and Implementation Plans, and subject to the development impact fees as established in those plans. Figure 8 shows the master sewer plan for the Specific Plan, which will be modified by the Finance and Implementation Plan process.

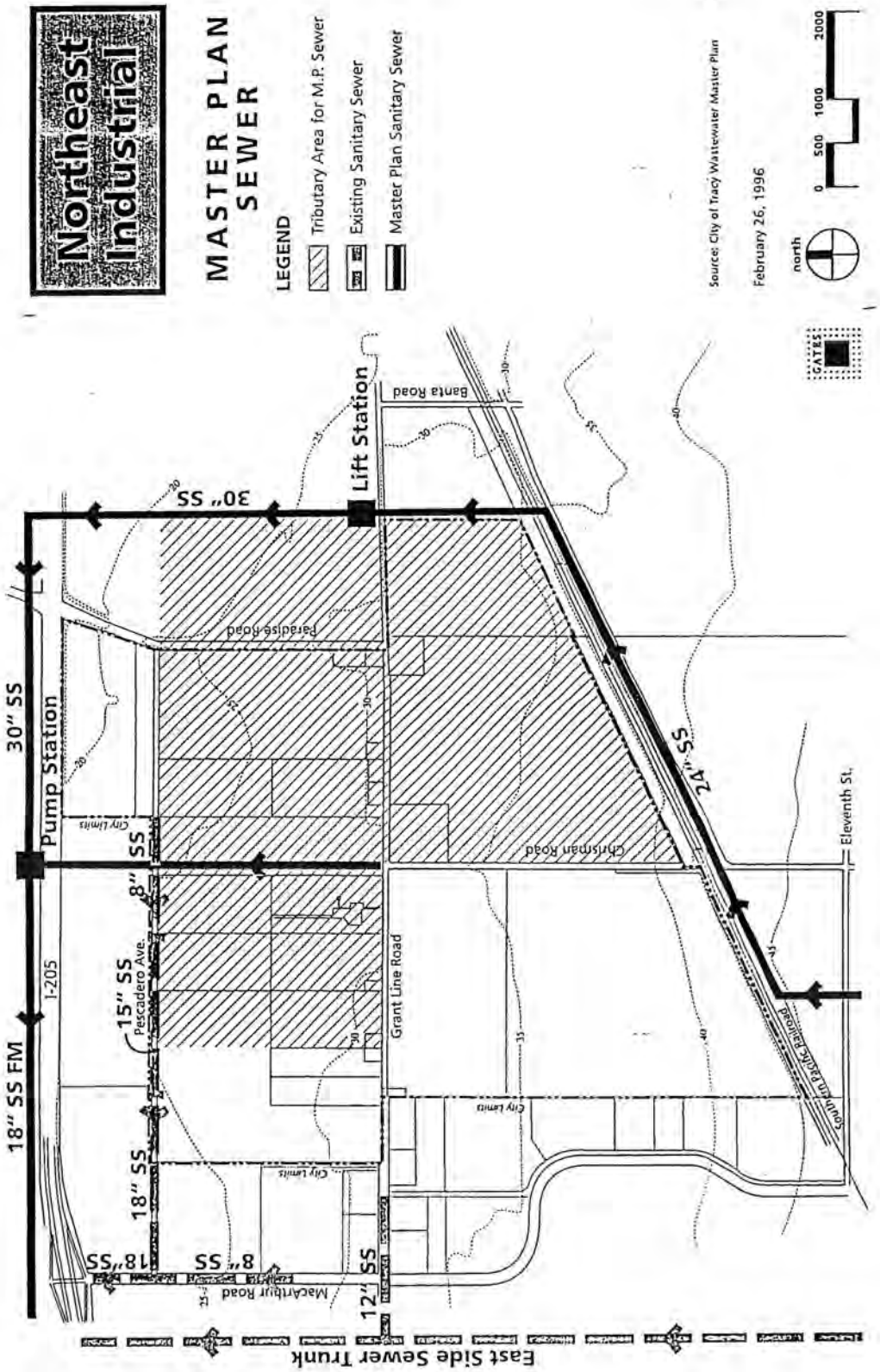

Northeast Industrial
MASTER PLAN SEWER
LEGEND
Tributary Area for M.P. Sewer
Existing Sanitary Sewer
Master Plan Sanitary Sewer
Source: City of Tracy Wastewater Master Plan
February 26, 1996
north
0 500 1000 2000
GATES
Lift Station
30" SS
Pump Station
30" SS
18" SS FM
I-205
15" SS
Pescadero Ave.
8" SS
18" SS
18" SS
8" SS
12" SS
24" SS
Santa Road
Paradise Road
Christman Road
Grant Line Road
Eleventh St.
Union Pacific Railroad
MacArthur Road
City Limits
East Side Sewer Trunk

Figure 8

Storm Drainage

The distribution, location and extent of the storm drainage improvements within the Specific Plan area shall be subject to the NEI Phase I Finance and Implementation Plans, dated December 1999 (Resolution Numbers 99-462 and 99-485), April 1, 2003 (Resolution Number 2003-100), January 4, 2005 (Resolution Number 2005-023), February 21, 2006 (Resolution Number 2006-069), and April 15, 2008 (Resolution Number 2008-065), and the NEI Phase II Finance and Implementation Plans, dated January 2006 (Resolution Number 2006-038) and January 15, 2008 (Resolution Number 2008-010). All future storm drainage improvements will also be subject to any revisions or updates to the NEI Finance and Implementation Plans, and subject to the development impact fees as established in those plans. Figure 9 shows the original storm drainage master plan for the Specific Plan, which will be modified by the Finance and Implementation Plan process.

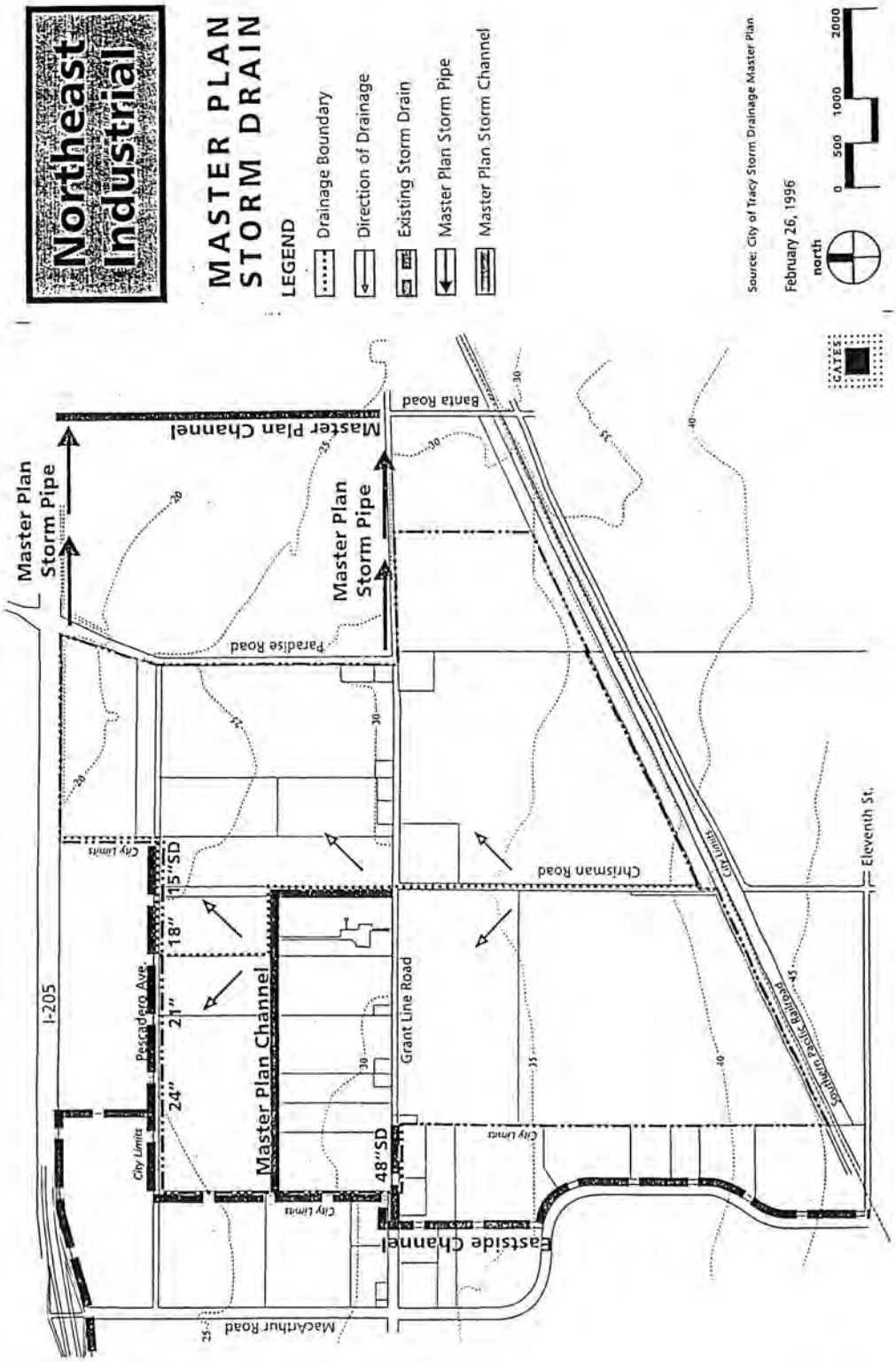

Northeast Industrial
MASTER PLAN STORM DRAIN
LEGEND
Drainage Boundary
Direction of Drainage
Existing Storm Drain
Master Plan Storm Pipe
Master Plan Storm Channel
Source: City of Tracy Storm Drainage Master Plan
February 26, 1996
north
0 500 1000 2000
GATES
Master Plan Storm Pipe
Master Plan Storm Pipe
Master Plan Channel
Eastside Channel
Santa Road
Paradise Road
Chrisman Road
Grant Line Road
Pescadero Ave.
MacArthur Road
I-205
Eleventh St.
Southern Pacific Railroad
City Limits
15"SD
18"
21"
24"
48"SD

Figure 9

Water Supply and Distribution

The distribution, location and extent of the water improvements within the Specific Plan area shall be subject to the NEI Phase I Finance and Implementation Plans, dated December 1999 (Resolution Numbers 99-462 and 99-485), April 1, 2003 (Resolution Number 2003-100), January 4, 2005 (Resolution Number 2005-023), February 21, 2006 (Resolution Number 2006-069), and April 15, 2008 (Resolution Number 2008-065), and the NEI Phase II Finance and Implementation Plans, dated January 2006 (Resolution Number 2006-038) and January 15, 2008 (Resolution Number 2008-010). All future water improvements will also be subject to any revisions or updates to the NEI Finance and Implementation Plans, and subject to the development impact fees as established in those plans. Figure 10 shows the original water master plan for the Specific Plan, which will be modified by the Finance and Implementation Plan process.

Police Protection
Police services to the project will be provided by the City of Tracy Police Department.

Fire Protection
The planning area is located within the boundaries of the Tracy Fire Department. The Tracy Fire Department will provide fire protection service and paramedic ambulance service to the planning area.

Other Utilities
Pacific Gas and Electric (PG&E) will provide electricity and natural gas to the planning area. Comcast and/or AT&T will provide telephone/internet service to the planning area.

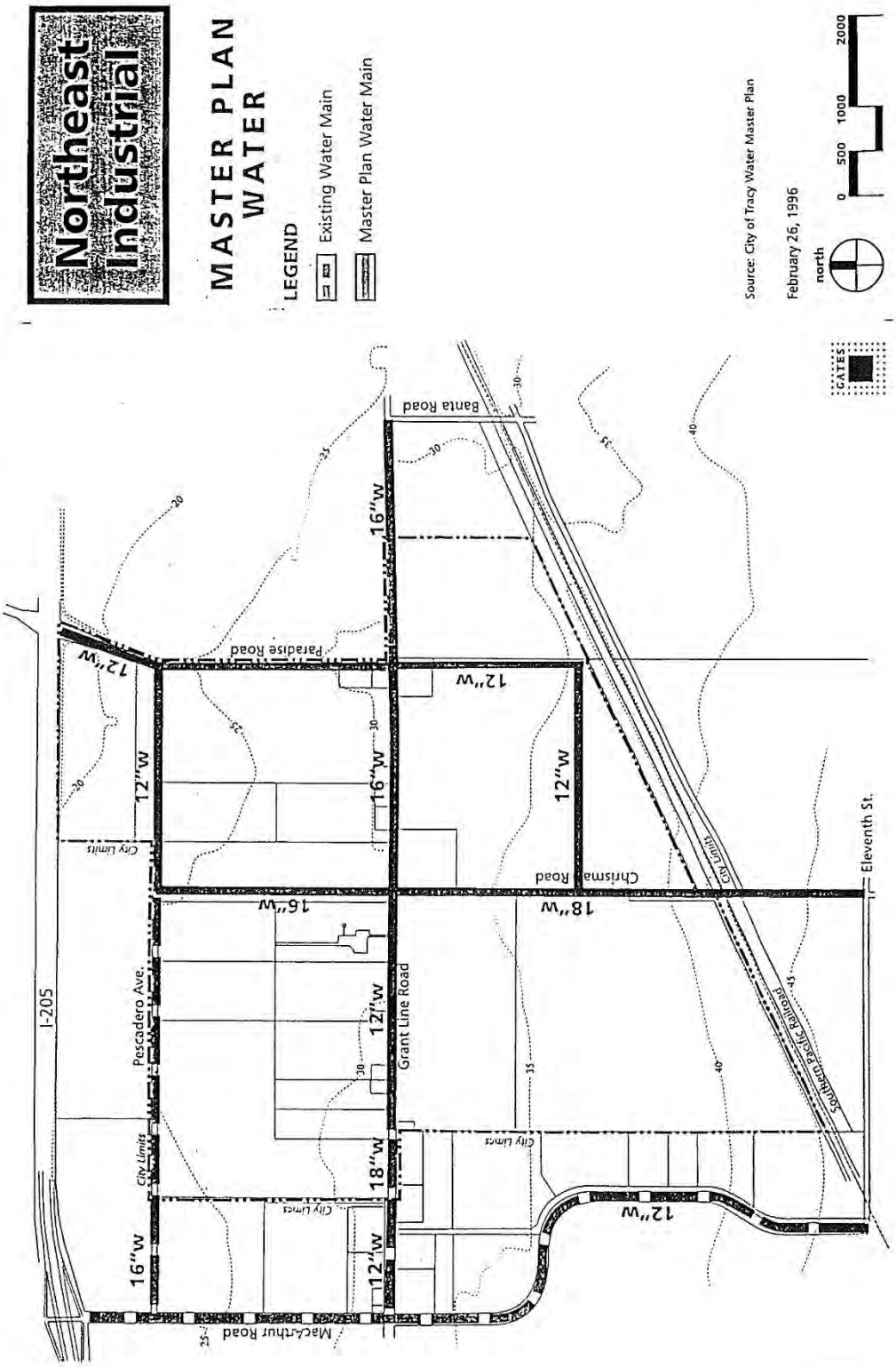

Northeast Industrial
MASTER PLAN
WATER
LEGEND
Existing Water Main
Master Plan Water Main
Source: City of Tracy Water Master Plan
February 26, 1996
north
0 500 1000 2000
GATES
Banta Road
Paradise Road
Christmas Road
Eleventh St.
Grant Line Road
Pescadero Ave.
I-205
MacArthur Road
City Limits
Southern Pacific Railroad
16"W
12"W
18"W

Figure 10

DESIGN GUIDELINES

The Specific Plan includes design guidelines and development standards to guide site planning and architecture. These design guidelines are similar to those adopted in the Industrial Areas and I-205 Corridor Specific Plans, which are adjacent to the planning area.

Streetscapes

1. The design of the streetscape should integrate, in a consistent and creative manner, plant materials, paths, berming, lighting, and signage to produce an attractive and functional environment.
2. All landscaping should employ a mix of trees, shrubs, groundcovers and turf, where appropriate. The plant palette should be relatively limited and applied in groupings of similar species rather than a few plans of many different species planted together. The use of water conserving plantings, such as California natives and drought tolerant trees, shrubs, and turf is encouraged, and compliance with the state's water efficient landscape guidelines is required.
3. The use of lawn substitutes is encouraged in all medians and for parkways. The use of turf should be minimized and reserved for areas of high use or visibility and temporary median planting in anticipation of future street widths.
4. Automatic irrigation is required for all landscape areas. Plants should be watered and maintained on a regular basis. Irrigation systems should be designed so as not to overspray walks, buildings, and parking areas, etc. The use of water conserving systems, such as drip irrigation for shrub and tree planting, is encouraged.
5. Tree plantings should reflect street hierarchy with larger trees along arterial streets and smaller trees on industrial streets. Tree plantings shall be symmetrical and of the same species in the parkways on both sides of the streets. One tree species or mixture of species shall be planted consistently at regular intervals along the entire length of a street. Spacing interval shall be no greater than 40 feet on center. Where trees are planted in medians, the plantings shall be continuous and at regular intervals. Spacing of median trees shall be no greater than 30 feet on center. Different tree species shall be planted at intersections to highlight these areas.
6. Adequate sight lines shall be maintained at all times

Recommended Trees for Major Streets

The following list identifies recommended trees for the major streets that form the framework of the area:

Street	***Parkway***	***Median***
Grant Line Rd	Pistacia chinensis	Prunus serrulata cvs.
	Chinese Pistache	Flowering Cherry
Paradise Rd/ Loop Rd	Celtis sinensis	Pyrus calleryana 'Bradford'
	Chinese Hackberry	Bradford Pear
Pescadero Ave	Fraxinus oxycarpa 'Raywoodii'	Pyrus calleryana 'Aristocrat'
	Raywood Ash	Aristocrat Pear

Select one of the following street trees for use on each industrial road:

Botanical Name	***Common Name***
Eucalptus gunnii	Cider Gum
Fraxinus oxycarpa 'Raywoodii'	Raywood Ash
Fraxinus uhdei	Evergreen Ash
Platanus acerifolia	Sycamore

Street Lighting

1. Illumination standards for arterial and industrial streets should reflect the different right-of-way widths and functions.
2. Light fixtures and standards shall meet all safety standards and shall be employed throughout the length of the street. It is recommended that one lighting fixture style be employed for use on all streets. Where possible, light standards shall be located in medians.

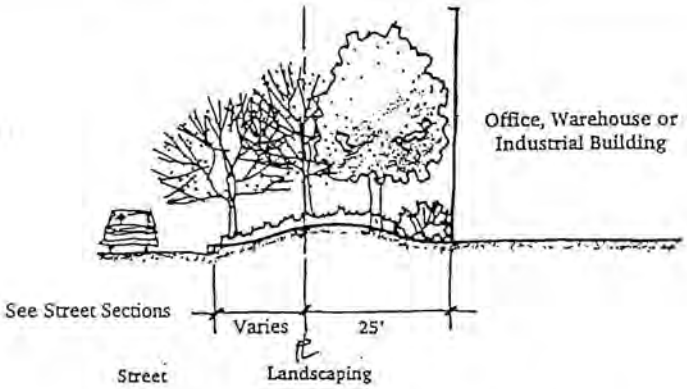
Building Floor Area Ratio and Height

Land Use	*Max. Floor Area Ratio*	*Max. Building Height*
General Commercial	0.35	46 ft.
Office	0.35	60 ft.
Light Industrial	0.50	60 ft.

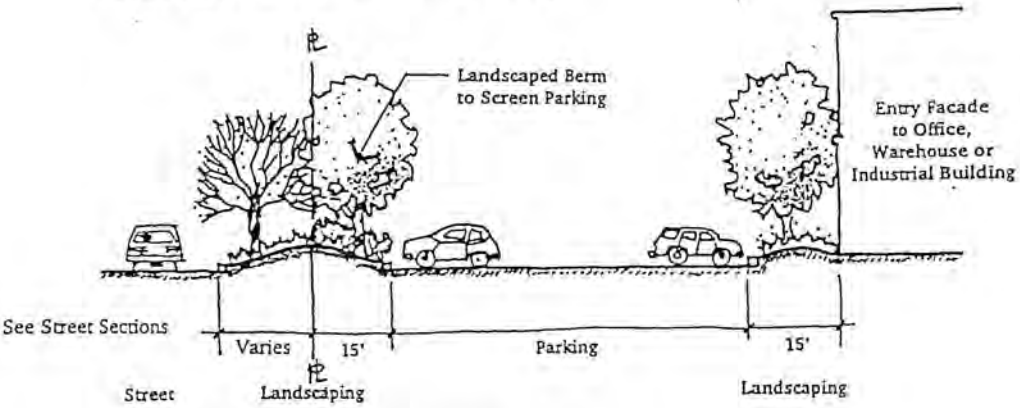
Building Setbacks

The following shall be the minimum building and parking setbacks required for all building types. Figure 14 illustrates these guidelines.

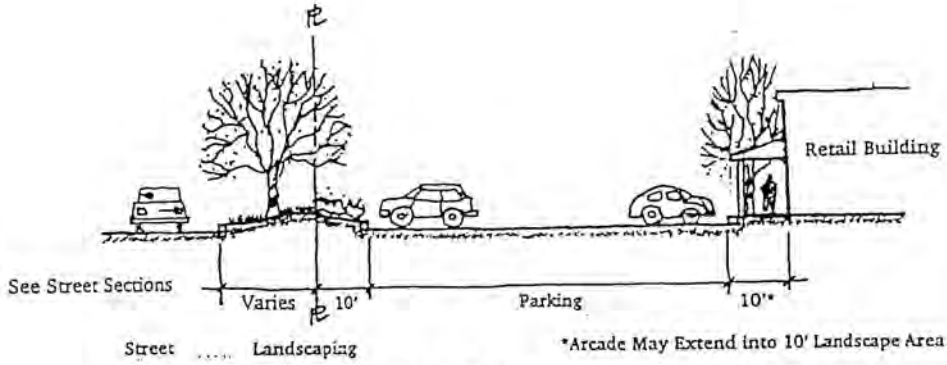
1. Building setback from any property line adjacent to a street or Caltrans right-of-way shall be 25 feet minimum. Rear and side yard building setbacks from property lines not adjacent to a street or Caltrans right-of-way shall be 15 feet minimum.
2. A 5 foot wide landscape setback is required along property lines not adjacent to a right-of-way. On the property lines perpendicular to the street frontage on industrial streets, the landscaped setback is only required to a point 150 feet onto the parcel from the street right-of-way or 50 feet back of building face, whichever is greater.
3. Parking setback from any property line along a public street or the Caltrans right-of-way for commercial land uses shall be 10 feet and for industrial uses shall be 15 feet.
4. Parking shall not be permitted within 10 feet of the building entry face of any commercial structure. In the event the building has an arcade or other shade structure along this frontage, the structure can be located within this required setback. Parking shall not be permitted within 15 feet of the office face or portion of a building. On industrial buildings, a 15 foot setback to the parking area shall be provided at building entries.
5. Commercial buildings shall be sited so as to create and enhance the streetscape. This can only be accomplished if all or a portion of the buildings are located near the street. On commercial sites of over 4 acres, at least one building must be located with a minimum setback from public-right-of-way to building face of 50 feet. On corner sites adherence to this requirement is encouraged on both frontages, however, only required on the major street frontage.



Front Yard Setback: Without Parking



Front Yard Setback: With Parking



Front Yard Setback: With Parking

0 10 20 40

SETBACK GUIDELINES

February 26, 1996

Northeast Industrial

GATES

Figure 11

Parking and On-Site Vehicular Circulation

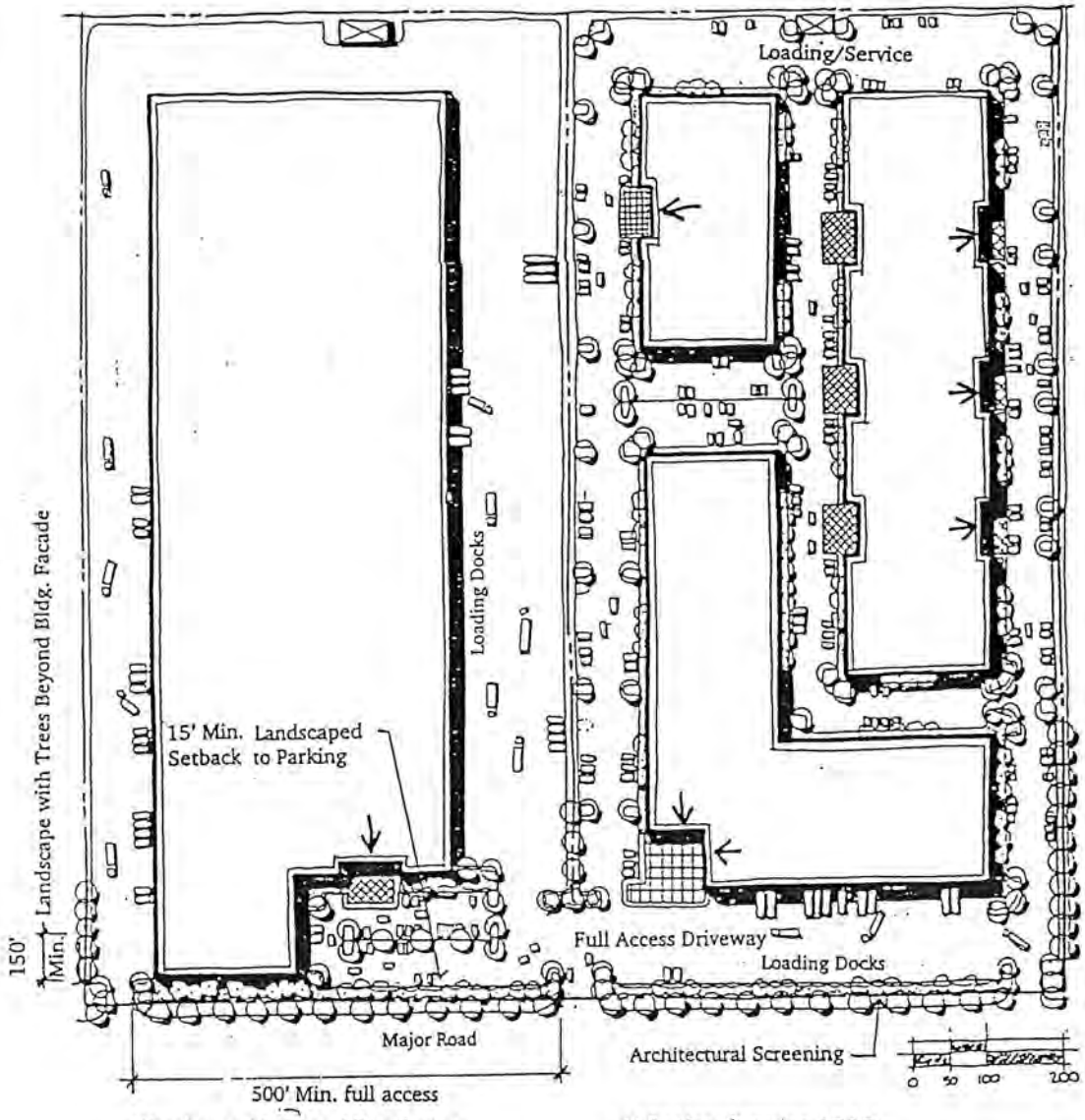
1. Parking, on-site circulation, and loading area standards shall be as required by the provisions of Title 10, Article 26, Off-Street Parking Requirements of the Tracy Municipal Code unless modified below or as part of the Development Review approval. Portions of off-street parking requirements are summarize below.
2. Parking lots containing 10-20 spaces may include a maximum of 20% of the total number of spaces for compact cars. These spaces shall be designed and marked in accordance with City standards and distributed throughout the lot. Parking areas containing 20 or more spaces may include a maximum of 30% of the total number of spaces for compact cars.
3. Minimum off-street parking standards:

Uses	***Minimum Parking Spaces Required***
Retail	One space per 250 square feet of gross floor area
Vehicle sales and rentals, including recreational vehicles and mobile homes	One space per 250 square feet of gross floor area plus one space per vehicle for sale or stored on lot.
Office: business, professional (not including medical or dental), banks	One space per 250 square feet of gross floor area
Dental and medical clinics or office	One space per 200 square feet of gross floor area
Motor vehicle repair garages	One space per 600 square feet of gross floor area; repair stalls not counted as parking spaces
Cafes, restaurants, and other establishments for the sale and consumption of food and beverages	Dining: one space per 45 square feet of customer area and one space per 250 square feet of all other area, plus additional spaces connected to uses such as drinking establishments. Drinking bars, cocktail lounge: one space per 35 square feet of drinking, bar, lounge area.
Manufacturing	One space per 600 square feet of gross floor area, or if the number of employees on the maximum work shift can be verified, one space per one employee on the maximum work shift
Warehouses/Storage and Distribution	One space per 1,000 square feet of the first 20,000 square feet of gross floor area, plus one space per 2,000 square feet of the second 20,000 square feet of gross floor area, plus one space per 4,000 square feet of the remaining square feet of gross floor area.

Loading and Unloading Spaces

1. Sufficient off-street loading and unloading spaces shall be provided on each site, and adequate provisions and space shall be made for maneuvering freight vehicles and handling all freight. All loading activity, including turnaround and maneuvering, shall be made on site.
2. In commercial areas, truck loading areas and docks shall not be permitted between building(s) and the public street unless enclosed with architectural screen of material similar to building.
3. In industrial areas, truck loading areas and docks shall not be permitted between building(s) and the street unless the building(s) are set back from the curb a minimum of 125 feet and doors are screened by landscaping, berms, and/or fences.

4. Buildings, structures, and loading facilities shall be designed and placed upon the site so that vehicles, whether rear loading or side loading, may be loaded or unloaded at any loading dock, door, or area without extending beyond the property line.



Warehouse / Storage / Distribution
Example:
10 acres (gross)
FAR 0.50 max.
213,000 s.f.
73 Parking Stalls

Light Manufacturing / R&D
Example:
10 acres (gross)
FAR 0.50 max.
193,000 s.f.
429 Parking Stalls

LIGHT MANUFACTURING / R&D PROTOTYPE

Northeast Industrial

February 26, 1996

GATES

Figure 12

Driveway Standards

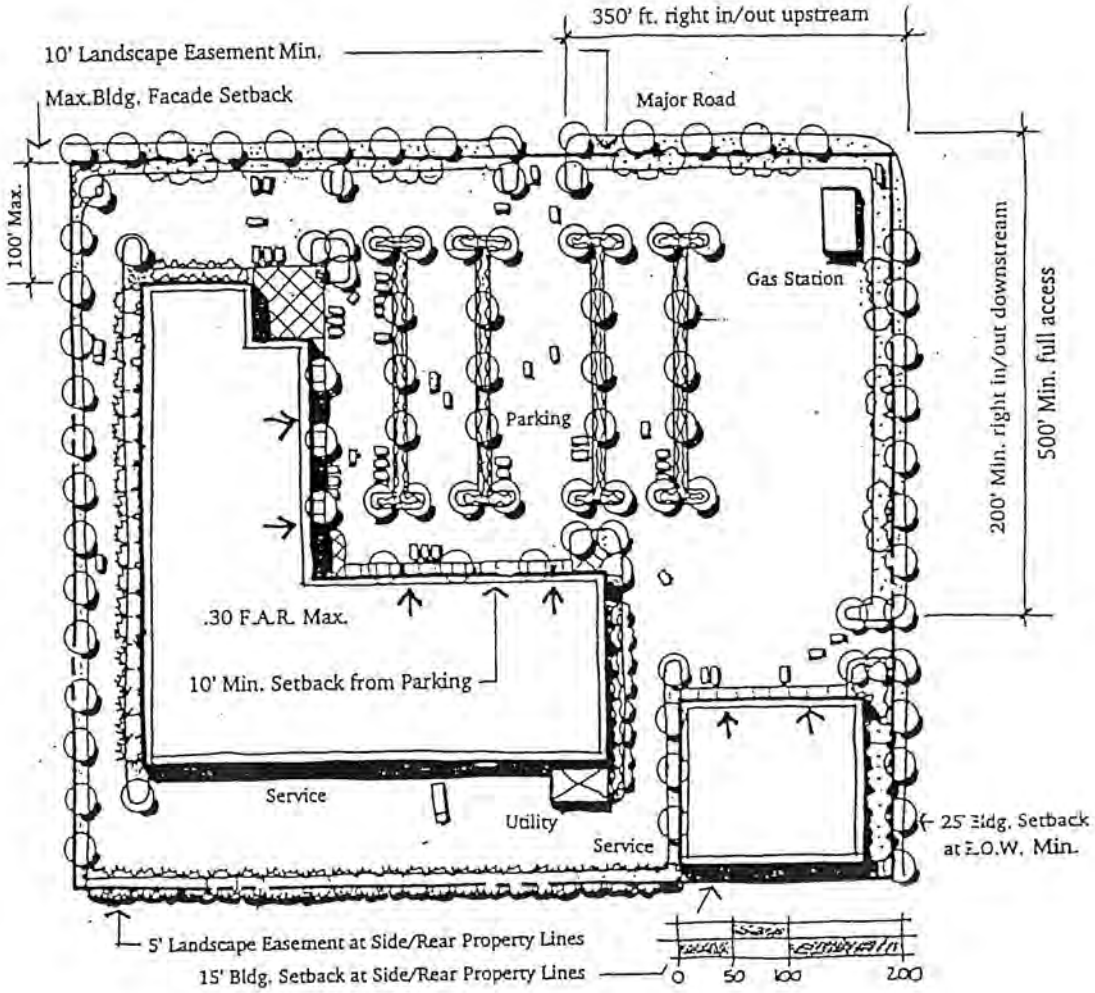
Driveways should be carefully located so as not to impede the primary function of the streets, which is to carry through traffic. It should be noted that these spacing guidelines are minimum values. The goal should be to exceed them where possible.

1. Individual industrial parcels on major arterial streets may have driveways, but they should be carefully located so as not to impede the traffic efficiency. In general, parcels with frontage on the major arterials should have their entryway on side streets if possible. If a parcel's only frontage is on the major arterial, every effort should be made to consolidate access at a single driveway. Spacing standards for driveways on major arterials shall be as follows:
    a. Full access driveways , 500 ft. minimum
    b. Partial access driveways (right in/out, left turn in), 500 ft. minimum
    c. Right turn in and out, 350 ft. minimum upstream from an intersection
    d. Right turn in and out, 200 ft. minimum downstream from an intersection
2. On industrial streets, spacing for full access driveways is 450 feet, minimum. "T" intersections are encouraged over four-way intersections. Every effort should be made to consolidate driveways.
3. No driveway shall be located closer than 200 feet to the radius return point at intersections.
4. Driveways shall be a minimum of 25 feet wide. Subsequent development shall demonstrate driveway width and placement can accommodate truck turning movement and clearing without blocking roadways.
5. Driveway width modifications may be approved with shared (ganged) driveways. Ganged driveways which serve two adjacent sites will be required to install landscaped islands along parking adjacent to the gang driveway and a landscape zone at the end of the common drive will act as a terminus to the view line down the ganged driveway.
    a. Full curb returns (as opposed to a standard driveway) shall be utilized for entries to all sites of over ten acres in size or for common driveways that serve two adjacent sites that together total more than ten acres.
6. Access driveways shall provide adequate length to accommodate off-street vehicle stacking needs during times of peak use.
7. Parcel entry should be clear, attractive, and inviting; circulation should direct employee and visitor traffic clearly through the site to main building entries and drop-off points and service trucks to loading.
8. In commercial areas, vehicular entries to the site shall be well defined and recognizable to motorists. Improvements should include accent paving, signs, special plantings, and lighting. Such improvements shall not block motorists' sight lines to oncoming traffic.

Freeway Interface

The control of views of Tracy from I-205 is critical for the establishment of a quality image for the community.

1. Locate services and storage areas to minimize visibility from I-205.
2. All freeway setback zones shall be planted with a combination of trees, shrubs, and groundcover. Automatic irrigation is required of all planted area. Use large scale trees, from a 24-inch box minimum, grouped in single species clusters. Mass trees to avoid blocking views of commercial signage while providing at least one tree per 1,500 square feet of setback area. Plant shrubs in an informal hedge near the property line with gaps between hedges of 50 feet maximum. Install from 5 gallon cans, minimum, in single species clusters at least 100 feet long. Hydroseed or otherwise install permanent groundcover in all places not planted with shrubs.



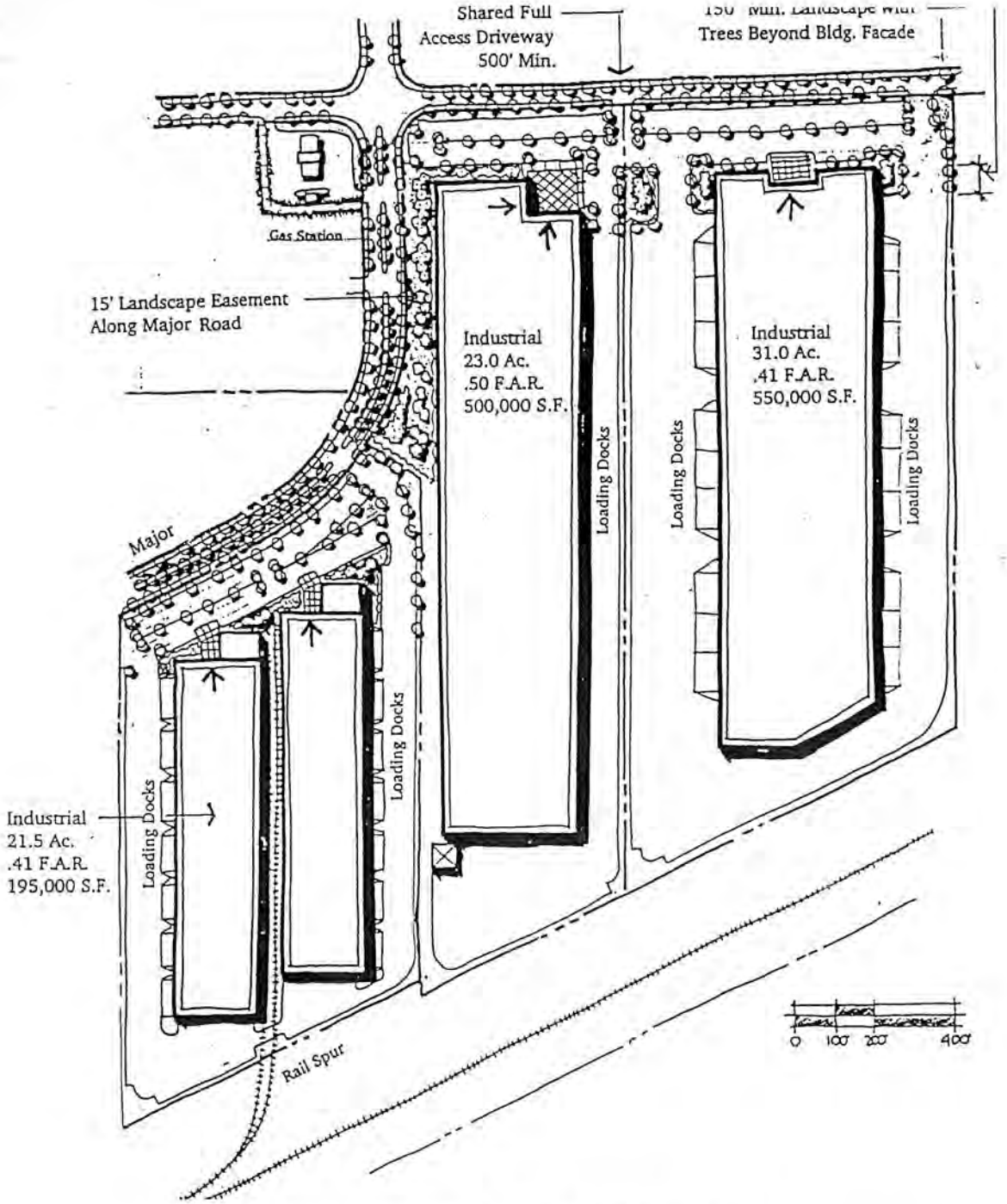
COMMERCIAL PROTOTYPE

Northeast Industrial

February 26, 1996

GATES

Figure 13



WAREHOUSE PROTOTYPE

Northeast Industrial

February 26, 1996

GATES

Figure 14

Building Architecture

1. Use of creative building design and construction techniques is encouraged. Special attention should be given to that portion of the building visible from adjacent roadways or public parking areas.
2. Large buildings should have facades that include variations in massing, form, and texture. Continuous surface treatments of a single material should be minimized. Architecture should be used to highlight building entries.
3. Any accessory buildings and enclosures, whether attached or detached from the main building, shall be of similar compatible design and materials.
4. Continuous arcades along the front of commercial buildings are encouraged as they provide the pedestrian protection from the weather, reduce solar gain, and can serve to enhance the character of what might otherwise be simple, formless structures. When more than one building is to be developed on a commercial site, the buildings should be designed to relate to one another as a total composition with well thought out relationships to one another.

Signs

1. Signs must conform to the requirements of Signs, Title 10, Article 35 of the Tracy Municipal Code as modified herein.
2. A site sign program should be integrated into a total design concept for a site and its buildings. The primary goal of the project sign system is to provide information and identification. When more than one sign is permitted, all signs shall be of similar style, shape, and materials.
3. All signs must be approved prior to installation, and should be designed in a manner that coordinates the sign designs and locations with the site plan and building architecture for each project. The sign plans should include:
    a. **Detatched Business Identification Signs:** One such monument sign (as defined by the Tracy Municipal Code) shall be allowed for each street frontage of the site. These signs may only contain the symbol and/or name of the business and its street address. The sign shall be free standing, may be double-sided, and shall be set back a minimum of 5 feet from the public right-of-way. Sign area shall not exceed 32 square feet per frontage and sign shall not exceed 6 feet in height from finished grade. Signs should generally be oriented perpendicular to approaching traffic.
    b. **Wall signs:** On large single tenant buildings, signs should be located immediately above or adjacent to the primary building entrance. No sign shall extend above dominant roof lines. The area of any single sign shall not exceed 100 square feet. Total area shall not exceed one-half square foot of sign per lineal foot of business being served.

        On smaller multi-tenant buildings, signs should be located at the frontage of each individual lessee. The area of any single sign shall not exceed 100 square feet nor more than 75 percent of the tenant frontage. Capital letters shall be no more than 2.5 feet in height and lower case letters no more than 1.5 feet in height. When individually-lettered wall signs comprise over 50 percent of the sign area of all sign types, total sign area shall not exceed 1.2 square feet per lineal foot of business being served. When comprising less than 50 percent of the total sign area, the maximum sign area shall be one-half square foot per lineal foot of business being served.
    c. **Directional Signs:** Signs required or desired to assist patrons in accessing the facility shall be located in the site parking areas. The design of such signs shall be simple and easily legible.

There is no limit to the number of signs provided on a site; however, no single sign shall exceed 6 square feet in area, except that vehicular "stop" signs shall be mounted per State standards.

4. A sign may be illuminated provided that no flashing, traveling, animated, or intermittent illumination shall be used. Such illumination shall be confined to the area of the sign except when such illumination is back lighting for an otherwise non-illuminated sign. No sign illumination shall cast a glare which is visible from any street.
5. Signs should be constructed with quality materials and in a craftsman-like manner to ensure both an attractive appearance and durability.

Landscaping

Minimum on-site landscaping requirements shall be established by Off-Street Parking Requirements (Title 10, Article 26 of the Tracy Municipal Code), except as modified below.

Summary of Requirements	***Commercial***	***Industrial***
Landscaped frontage setback	10 feet	15 feet
Minimum number of trees in parking area	1 tree per 5 spaces	1 tree per 10 spaces
Percentage of landscaping in parking areas:		
0 - 15 cars	5%	5%
16 - 30 cars	10%	5%
31-60 cars	15%	7½%
Over 60 cars	20%	10%

1. While commercial uses benefit from a well-landscaped parking area and visibility from the street, views of industrial uses benefit from a more generously landscaped streetscape. Thus, parking lot landscaping requirements for industrial uses may be reduced as specified in the Off-Street Parking Requirements in order to create a large landscape setback along the street. These provisions allow the reduction of 50 percent of the required landscaping based on the provision of a 15 foot landscape setback along the street frontage. The 15 foot strip may be included in the calculation of the total parking lot landscaping requirement. The remainder of the landscaping requirement must be distributed over the lot(s) to provide shade and landscape building frontage. Canopy trees shall be evenly distributed throughout the parking area to provide shade.
2. On-site landscaping along rights-of-way between property lines and buildings, parking lots, or vehicular circulation improvements shall be installed by the property owner. This landscaping shall be designed as an extension of the adjacent public right-of-way landscaping. Completion of landscaping on the site shall be simultaneous with completion of the building and other improvements on the site.
3. Landscaping shall not obstruct sight lines at street or driveway intersections.
4. In place of the wheel stops at parking lots, landscape areas and pedestrian walkways may be extended not more than 2 feet into required parking spaces, to include a 6" concrete curb. In such cases, no credit toward parking lot landscape requirements shall be given for the resulting additional landscaping.
5. Screening of the parking area from public rights-of-way in industrial areas shall be provided with a 2½ to 3 foot high element, measuring from the top of the parking area pavement. Screening may consist of one or a combination of the following:
    a. Berms landscaped with ground cover, trees, and shrubs;
    b. Solid, low profile, decorative masonry walls;
    c. Evergreen shrubbery which, when solely used as screening, shall be continuously maintained to provide solid screening.

6. Generous landscaping screening is required adjacent on all street frontages for industrial areas. These areas should be landscaped with a combination of trees, shrubs, and ground cover to soften views of parking areas.
7. Tree planting and selection and massing should be compatible with streetscape plantings. Provide minimum 1 tree per 400 square feet of landscape setback. The plant palette should be relatively limited and applied in groupings of similar species rather than a few plants of many different species planted together.
8. The use of water conserving plantings, such as California natives and drought tolerant trees, shrubs, and turf is encouraged. The use of turf in the narrow planting islands is discouraged.
9. Live plant materials shall be used in all landscaped areas. The use of gravel, colored rock, bark, and other similar materials are not acceptable as a sole groundcover material.
10. All trees shall be of 24 inch box size minimum at planting with a minimum branching height 5 years after installation of 10 feet above road or parking surfaces and 6 feet at pedestrian areas. Shrubs shall be of 5 gallon size minimum with a maximum on-center spacing of 24 inches. Likewise, groundcover may be planted at 1 gallon size minimum with a maximum spacing of 12 inches on center.
11. Automatic irrigation is required for all landscaped areas. Irrigation systems shall be designed so as not to overspray walks, buildings, and parking areas.

Screening and Storage

1. All exterior trash areas, storage structures, and service areas shall be screened from public view with a wall or fence of a minimum height of 8 feet above the street curb level. Storage areas shall be set back a minimum of 50 feet from streets, unless fully enclosed in an architecturally compatible enclosure.
2. No storage areas are allowed within the landscape easements, front setbacks, or side or rear yard landscaped buffers.
3. Roof-mounted equipment shall be screened from street view. Pad-mounted transformers, utility connections, and meter boxes shall be screened and integrated into the site plan.
4. The design of masonry walls, fencing, trash enclosures, and similar accessory site elements should be compatible with the architecture of the building and should use similar materials. Where masonry walls are along property frontage, they should enhance the entrance to the property and should not impair traffic safety by obscuring views. Long expanses of wall surfaces should be architecturally designed to prevent monotony.
5. The use of chain link fences shall be discouraged, and no chain link fences shall be visible from any public right-of-way.

Development Review Process

All development in the NEI shall be subject to the requirements of Tracy Municipal Code Article 30, Development Review (TMC Sections 10.08.3920 through 10.08.4110).

Environmental Performance Standards

Use Restrictions

No use shall be permitted to exist or operate on any lot which:

1. Emits dust, sweepings, dirt, cinders, fumes, odors, radiation, gases and vapors, or discharges liquid or solid wastes or other harmful matter into the atmosphere or any body of water which may, according to the appropriate agency, adversely affect the health and safety persons within the area or the health and safety of persons in adjacent areas or the use of adjacent properties.

2. Discharges waste or any harmful substance, as defined by the Municipal Code, into any public sewer or storm drainage system.
3. Produces intense glare or heat, unless such use is performed only within an enclosed or screened area, and then only in such manner that glare or heat emitted will not be discernible from any exterior lot line.
4. Creates a sound pressure level in violation of any regulation of any public body having jurisdiction. This requirement shall also be applicable to the disposal of trash and waste materials.
5. Allows the visible emissions of smoke (outside any building) other than the exhausts emitted by motor vehicles or other transportation facilities or any emissions in violation of any regulation of any public body having jurisdiction. This requirement shall also be applicable to the disposal of trash and waste materials.
6. Creates a ground vibration that is perceptible, without instruments, at any point along any of the exterior lot lines.

Hazardous Wastes and Water Pollutants

1. All new industries locating with the area will be required to obtain a Discharge Permit from the Director of Utilities prior to occupancy. This permit shall establish the amount and quality of wastes allowed to be discharged into the City's sanitary sewer.
2. The quality of wastewater entering the city sewage system from the proposed uses shall be measured by the Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) levels referenced in the local Water Quality Control Board 208 Plan. Users that are not expected to comply with these standards will be required to provide on-site pretreatment facilities.
3. The storage and distribution of hazardous materials shall be subject to the rules of the San Joaquin County Health District.
4. Industries regularly using significant quantities of hazardous chemicals as defined by State Law in the course of their operations shall be required to obtain a Conditional Use Permit.

Mineral Extraction

1. Mineral extraction shall only be permitted as a subsidiary use to main use of the site.
2. Locate equipment, storage, and facilities for mineral extraction to avoid visibility from the public street.

Dairy Uses

1. With development applications for an individual site, provide information demonstrating provisions of adequate buffers between proposed development and adjacent existing dairy uses.
2. Existing dairy uses are exempted from the Environmental Performance Standards.

Permitted and Conditionally Permitted Uses

The following table indicates uses which are to be permitted and permitted subject to Conditional Use Permits in the Northeast Industrial area. The land use designations are abbreviated as follows:

LI: Light Industrial
GC: General Commercial

The uses shown in Table 18 as Permitted ("P") are those that are deemed acceptable anywhere in the assigned land use designation. They are uses that, when developed in conformance with this Plan, will not require special conditions in order to avoid negative impacts.

The uses shown as Conditionally Permitted ("C") are of two types. Some of these uses are not acceptable in every location within a land use but are acceptable in certain locations. Other uses may require special conditions to make them acceptable at particular locations, due to their potential negative impacts on existing or planned uses. This may be because of their potential nuisance aspects, such as noise or hazardous wastes.

Where neither a "P" or "C" is shown for a particular land use district, that use is not allowed.

Table 1: Permitted and Conditionally Permitted Land Uses

Land Uses	***LI ●***	***GC***
Agricultural, including dairies	P ◊	P ●, ◊
Accessory uses and structures; not including warehouses located on the same site as a permitted use	P	P
Administrative, executive, research, medical offices	P	P
Call centers	P	P
Accessory uses and structures located on the same site as a conditional use	C	C
Warehousing and distribution facilities	P	
Manufacturing, repair, assembly, or packaging of products from previously prepared materials, such as cloth, plastic, leather, or semi-precious metals or stones, but not including such operations as saw or planing mills, any manufacturing involving primary production of wood, metal, or chemical products from raw materials	P	
Manufacture of food products, pharmaceuticals, biotechnology products and the like, but not including fish or meat products, sauerkraut, vinegar, or the like, or rendering or refining of fats and oils.	P	
Laboratories, including chemical, physical materials testing, electronic, agricultural, photographic film processing, and general research	P	
Electrical industrial apparatus manufacturing, service, and repairs, including motors, generators, welding equipment, electrical transmission and distribution equipment, and turbines and pumps.	P	
Manufacture, repair of optical electronic, timing, and measuring instruments	P	
Dairy products plants	P	
Machine shops	P	
Heating, plumbing, and ventilating equipment manufacturing, servicing, repairs	P	
Refrigerator, furnace, water heater, and other household appliance manufacturing, service and repairs, not incidental to retail sales	P	

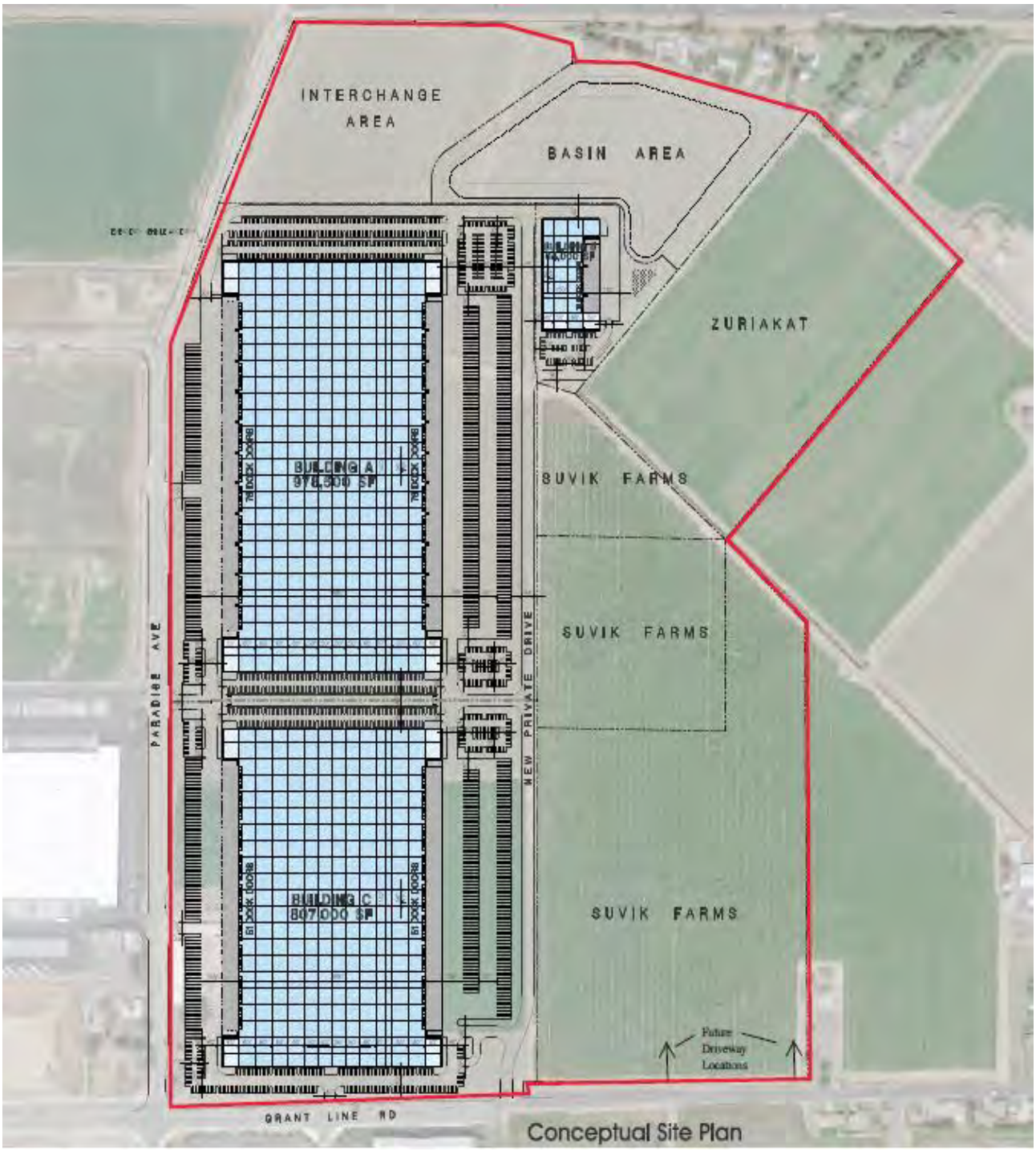
Furniture and cabinet assembling whose activities are carried on entirely within an enclosed building and which have no construction yards on the lot	P	
Parcel delivery service and vehicle storage inside and outside the building	P	
Truck terminals	P	
Mini storage	P	
Equipment storage	P	
Janitorial services and supplies	P	
Printing, including lithographing, engraving, and other such similar reproduction services	P	
Automotive supply stores	C	
Rental yards, including the rental of hand tools, garden tools, power tools, trucks, trailers, and other similar equipment	C	
Building materials sales, lumberyards (outside storage)	C	
Repair, painting, and body work for automotive, motorcycle, and farm machinery	C	
Boat sales, service, repair	C	
Service stations, provided all operations except sales of gas and oil are conducted within an enclosed building. Sales shall be limited to petroleum products and automotive accessories, and retail products typically found in a convenience store.	C	
Wholesale trade business	C	
Intermediate manufacturing uses involving the processing of raw materials, including food and paper processing, wineries, and concrete mixers	C	
Mineral and hydrocarbon extraction	C	
Recycling (collection and sorting)	C	
Outlet stores and centers		P
Warehouse retail, including furniture, office supply, sporting goods, or wholesale merchandising		P
Hardware stores, including garden centers		P
Home improvement and interior decorating stores, including carpet, drapery, floor covering, paint, glass, and wallpaper shops		P
Garden centers, including plant nurseries and retail sales		P
Sporting goods and toy stores		P
Specialty retail stores selling those items and services normally sold in department stores (including clothing, shoes, and accessories)		P
Shoe and clothing repair		P
Food markets, convenience markets		P
Liquor stores		P
Drug stores and prescription pharmacies		P
Restaurants, including fast food		P

Art galleries and artists supply stores		P
Barbershops, beauty shops, and hairstylists		P
Financial institutions, including banks, savings and loan offices, finance companies, credit unions, and related services		P
Refrigerator, furnace, water heater, and other household appliance sales including repair, provided repair services are incidental to retail sales.		P
Laundries and dry cleaners		P
Photocopying and related duplicating services, not including printing, lithographing, engraving, or such similar reproduction services		P
Pet and bird stores with incidental veterinary services		P
Animal Shelters		P
Video stores, sales, and rental		P
Automobile and motorcycle sales and rental, including new and used sales		C
Bars without significant food service		C
Building materials sales (no outside storage)		C
Miniature golf		C
Service stations, provided all operations except sales of gas and oil are conducted within an enclosed building. Sales shall be limited to petroleum products and automotive accessories, and retail products typically found in a convenience store.		C

●: Subject to compliance with the Environmental Performance Standards. Note that as defined by State law, any business using significant quantities of hazardous materials requires a Conditional Use Permit.

◊: Existing dairy operations are exempt from the Environmental Performance Standards.

Attachment C: Overall Site Plan



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Attachment D

DRAFT
Environmental Impact Report
Tracy Alliance Project
City of Tracy, San Joaquin County, California

State Clearinghouse Number 2020080524

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Table of Contents

Acronyms and Abbreviations xi

Executive Summary ..... ES- 1
Purpose ES-1
Project Summary ES-1
Significant Unavoidable Adverse Impacts ES-3
Summary of Project Alternatives ES-5
Areas of Controversy ES-6
Public Review of the Draft EIR ES-7
Executive Summary Matrix ES-8

Chapter 1: Introduction 1-1
1.1 - Project Overview 1-1
1.2 - Environmental Review Process 1-2
1.3 - Purpose and Legal Authority 1-4
1.4 - Draft EIR Document Organization 1-8
1.5 - Documents Incorporated by Reference 1-11

Chapter 2: Project Description 2-1
2.1 - Overview 2-1
2.2 - Project Location and Setting 2-2
2.3 - Project Objectives 2-5
2.4 - Project Components 2-5
2.5 - Required Actions and Approvals 2-18
2.6 - Intended Uses of This Draft EIR 2-19

Chapter 3: Environmental Impact Analysis 3-1
Environmental Topics Addressed in this Draft EIR 3-1
Format of the Environmental Analysis 3-1
3.1 - Aesthetics 3.1-1
3.2 - Agriculture and Forestry Resources 3.2-1
3.3 - Air Quality 3.3-1
3.4 - Biological Resources 3.4-1
3.5 - Cultural Resources 3.5-1
3.6 - Energy 3.6-1
3.7 - Geology and Soils 3.7-1
3.8 - Greenhouse Gas Emissions 3.8-1
3.9 - Hazards and Hazardous Materials 3.9-1
3.10 - Hydrology and Water Quality 3.10-1
3.11 - Land Use and Planning 3.11-1
3.12 - Noise 3.12-1
3.13 - Public Services 3.13-1
3.14 - Transportation 3.14-1
3.15 - Tribal Cultural Resources 3.15-1
3.16 - Utilities and Service Systems 3.16-1
3.17 - Wildfire 3.17-1

Chapter 4: Effects Found not to be Significant 4-1
4.1 - Introduction 4-1
4.2 - Environmental Effects Found not to be Significant 4-1

Chapter 5: Other CEQA Considerations 5-1
5.1 - Significant Unavoidable Impacts 5-1
5.2 - Growth-inducing Impacts 5-3
5.3 - Significant Irreversible Environmental Changes 5-4

Chapter 6: Alternatives to the Proposed Project 6-1
6.1 - Introduction 6-1
6.2 - Significant Unavoidable Impacts 6-1
6.3 - Alternative Eliminated from Further Consideration 6-4
6.4 - Alternatives to the Proposed Project 6-5
6.5 - Project Objectives 6-6
6.6 - Alternative 1—No-Project Alternative 6-7
6.7 - Alternative 2—Outside Storage Allowable Use Alternative 6-12
6.8 - Alternative 3—Agricultural Protection Alternative 6-19
6.9 - Environmentally Superior Alternative 6-25

Section 7: Persons and Organizations Consulted/List of Preparers 7-1
7.1 - Persons and Organizations Consulted 7-1
7.2 - Project Sponsor and Sponsor Consultants 7-2
7.3 - City of Tracy Consultants 7-2

List of Appendices

Appendix A: Environmental Impact Report Public Involvement

Appendix B: Air Quality and Greenhouse Gas Emissions Supporting Information

Appendix C: Biological Resources Supporting Information
C.1 - Biological Resources Assessment

Appendix D: Cultural and Tribal Cultural Resources Supporting Information
D.1 - Cultural Resources Assessment

Appendix E: Energy Supporting Information

Appendix F: Geology and Soils Supporting Information
F.1 - Geotechnical Engineering Report
F.2 - Paleontological Records Search

Appendix G: Hazards and Hazardous Materials Supporting Information
G.1 - Phase I Environmental Site Assessment–Tracy Alliance Parcels
G.2 - Limited Site Investigation Tracy Alliance Parcels
G.3 - Phase I Environmental Site Assessment Suvik Farms and Zuriakat Parcels

Appendix H: Hydrology and Water Quality Supporting Information
H.1 - Flood Protection Technical Memorandum
H.2 - Hydrology Report

Appendix I: Noise Supporting Information

Appendix J: Transportation Supporting Information
J.1 - Tracy Alliance Project Vehicle Miles Traveled Analysis Memorandum
J.2 - Transportation Impact Analysis

Appendix K: Utilities Supporting Information
K.1 - Water Supply Assessment

List of Tables

Table ES-1: Executive Summary Matrix ..... ES- 9
Table 1-1: Summary of EIR Scoping Comments 1-4
Table 2-1: Existing Parcels 2-2
Table 2-2: Proposed Development Summary 2-6
Table 2-3: Required Parking 2-8
Table 2-4: Summary of Applicable Landscaping Requirements 2-13
Table 2-5: Phasing and Construction 2-17
Table 3-1: Cumulative Projects 3-5
Table 3.3-1: Air Quality Monitoring Summary 3.3-2
Table 3.3-2: Air Quality Index and Health Effects 3.3-3
Table 3.3-3: San Joaquin Valley Air Basin Attainment Status 3.3-5
Table 3.3-4: Description of Air Pollutants 3.3-7
Table 3.3-5: San Joaquin Valley Air Pollution Control District Significance Thresholds 3.3-26
Table 3.3-6: Anticipated Construction Schedule 3.3-31
Table 3.3-7: Unmitigated Annual Construction Emissions (Sequential and Concurrent Phasing) 3.3-32
Table 3.3-8: Mitigated Annual Construction Emissions (Sequential and Concurrent Phasing) 3.3-34
Table 3.3-9: Mitigated Daily Construction Emissions (Sequential and Concurrent Phasing) 3.3-36
Table 3.3-10: Operational Vehicle Trips 3.3-38
Table 3.3-11: Existing Annual Operational Emissions 3.3-38
Table 3.3-12: Unmitigated Annual Operational Emissions 3.3-39
Table 3.3-13: Project Phase Share of Unmitigated Operational Emissions 3.3-40
Table 3.3-14: Mitigated Daily Operational Emissions 3.3-41
Table 3.3-15: Unmitigated and Mitigated Construction DPM Emissions by Phase 3.3-44
Table 3.3-16: Estimated Health Risks and Hazards—Unmitigated Construction (Sequential Phasing) 3.3-45
Table 3.3-17: Estimated Health Risks and Hazards—Mitigated Construction (Sequential Phasing) 3.3-46
Table 3.3-18: Mitigated Operational DPM Emissions (Phase 1 Only) 3.3-47
Table 3.3-19: Estimated Health Risks and Hazards—Phase 1 Operation 3.3-48

Table 3.3-20: Screening Levels for Potential Odor Sources....3.3-52
Table 3.5-1: Recorded Cultural Resources On-site or within a 0.50-mile Radius of the Project Site....3.5-8
Table 3.5-2: Previous Investigations within 0.5-mile of the Project Site....3.5-9
Table 3.6-1: Estimated Annual Project Energy Consumption....3.6-23
Table 3.7-1: Soil Corrosivity Test Results....3.7-3
Table 3.8-1: Description of Greenhouse Gases....3.8-2
Table 3.8-2: Construction GHG Emissions–Phase 1....3.8-36
Table 3.8-3: Construction GHG Emissions–Phase 2....3.8-36
Table 3.8-4: Construction GHG Emissions–Phase 3....3.8-37
Table 3.8-5: Summary of Applicable Greenhouse Gas Regulations....3.8-39
Table 3.8-6: Project Operational Greenhouse Gases 2023–Phase 1....3.8-40
Table 3.8-7: Project Operational Greenhouse Gases 2024–Phase 2....3.8-41
Table 3.8-8: Project Operational Greenhouse Gases 2025–Phase 3....3.8-41
Table 3.8-9: Project Operational Greenhouse Gases 2030–Phase 1....3.8-43
Table 3.8-10: Project Operational Greenhouse Gases 2030–Phase 2....3.8-44
Table 3.8-11: Project Operational Greenhouse Gases 2030–Phase 3....3.8-44
Table 3.8-12: Consistency with SB 32 2017 Scoping Plan Update....3.8-50
Table 3.9-1: Federal Databases....3.9-26
Table 3.9-2: Federal Databases Summary Table....3.9-27
Table 3.9-3: Federal Databases Listed Facilities....3.9-28
Table 3.10-1: Percolation Test Results....3.10-25
Table 3.10-2: City of Tracy Historical Groundwater Production....3.10-27
Table 3.10-3: City of Tracy Projected Future Groundwater Production in Normal and Dry Years....3.10-29
Table 3.11-1: Age and Square Footage of Existing Structures....3.11-2
Table 3.11-2: Permitted and Conditionally Permitted Land Uses for the Light Industrial Land Uses Designation....3.11-10
Table 3.11-3: General Plan Consistency Analysis....3.11-21
Table 3.12-1: Sound Terminology....3.12-2
Table 3.12-2: Typical Construction Equipment Maximum Noise Levels, L_{max}....3.12-4
Table 3.12-3: Vibration Levels of Construction Equipment....3.12-6
Table 3.12-4: Background Traffic Noise Levels....3.12-8
Table 3.12-5: Federal Transit Administration Construction Vibration Impact Criteria....3.12-11

Table 3.12-6: Traffic Noise Increase Summary 3.12-22
Table 3.13-1: Incoming Calls to the Communications Unit (2017 and 2018) 3.13-3
Table 3.14-1: Signalized and Unsignalized Intersection LOS Criteria 3.14-3
Table 3.14-2: Traffic Count Data References 3.14-5
Table 3.14-3: Minimum Off-Street Parking Requirements 3.14-18
Table 3.14-4: Projects Included in Background Conditions 3.14-23
Table 3.14-5: Trip Generation 3.14-25
Table 3.14-6: Transportation Demand Management Measures 3.14-30
Table 3.14-7: Background Plus Project Conditions Intersection Level of Service (Project at Full Buildout) 3.14-41
Table 3.14-8: Background Plus Project Conditions Intersection Level of Service (without Suivak Farms and Zuriakat Parcels) 3.14-44
Table 3.14-9: Recommended Improvements for Background Plus Project Conditions Intersection Level of Service 3.14-45
Table 3.14-10: Cumulative Plus Project Conditions Intersection Level of Service 3.14-48
Table 3.14-11: Improved Cumulative Plus Project Conditions Intersection Level of Service 3.14-51
Table 3.16-1: Historical Allocations for United States Bureau of Reclamation Central Valley Water Project Water Supplies 3.16-4
Table 3.16-2: Summary of Existing and Additional Planned Future Water Supplies 3.16-10
Table 3.16-3: Historical Potable Water Demand 3.16-11
Table 3.16-4: Summary of Future Projected Water Production 3.16-12
Table 3.16-5: City of Tracy Projected Future Groundwater Production in Normal and Dry Years 3.16-13
Table 3.16-6: Estimated Annual Water Demand for the Proposed Project 3.16-14
Table 3.16-7: Water Supply Reliability in Normal, Single Dry, and Multiple Dry Years 3.16-37
Table 3.16-8: Projected Existing and Additional Planned Future Water Supplies Available in Normal Years at Buildout 3.16-40
Table 3.16-9: Projected Existing and Additional Planned Future Water Supplies Available in a Single Dry Year at Buildout (2045) 3.16-42
Table 3.16-10: Projected Existing and Additional Planned Future Water Supplies Available in Multiple Dry Years at Buildout (2045) 3.16-45
Table 3.16-11: Summary of Buildout Total Water Demand Versus Supply During Hydrologic Normal, Single Dry, and Multiple Dry Years 3.16-47
Table 6-1: Summary of Alternatives Impacts 6-26

List of Exhibits

Exhibit 2-1: Regional Location Map 2-21
Exhibit 2-2: Local Vicinity Map 2-23
Exhibit 2-3: Project Parcel Map 2-25
Exhibit 2-4a: Existing Site Conditions 2-27
Exhibit 2-4b: Existing Site Conditions 2-29
Exhibit 2-4c: Existing Site Conditions 2-31
Exhibit 2-4d: Existing Site Conditions 2-33
Exhibit 2-4e: Existing Site Conditions 2-35
Exhibit 2-5: San Joaquin County General Plan Land Use and Zoning Designations 2-37
Exhibit 2-6: City of Tracy General Plan Designation 2-39
Exhibit 2-7a: Comprehensive Site Plan 2-41
Exhibit 2-7b: Tracy Alliance Parcels Site Plan 2-43
Exhibit 2-7c: Conceptual Plan for Future Interchange Area 2-45
Exhibit 2-8a: Proposed Annexation 2-47
Exhibit 2-8b: Proposed NEI Specific Plan Land Use Designation 2-49
Exhibit 2-8c: Proposed City of Tracy Zoning Designation 2-51
Exhibit 2-9: Preliminary Utility Plan 2-53
Exhibit 2-10a (part 1 of 4): Preliminary Grading and Drainage Plan 2-55
Exhibit 2-10a (part 2 of 4): Preliminary Grading and Drainage Plan 2-57
Exhibit 2-10a (part 3 of 4): Preliminary Grading and Drainage Plan 2-59
Exhibit 2-10a (part 4 of 4): Preliminary Grading and Drainage Plan 2-61
Exhibit 2-10b: Preliminary Stormwater Control Plan 2-63
Exhibit 3-1: Cumulative Projects Map 9
Exhibit 3.1-1: Designated California Scenic Highways and Entry Corridors 3.1-23
Exhibit 3.2-1: Important Farmland Map 3.2-13
Exhibit 3.2-2: Soils Map 3.2-15
Exhibit 3.2-3: County Williamson Act Contracts 3.2-17
Exhibit 3.4-1: Biological Resources 3.4-35
Exhibit 3.4-2: CNDDB-Recorded Occurrences Within 5 Mile Radius 3.4-37
Exhibit 3.7-1: Regional Earthquake Fault Map 3.7-19
Exhibit 3.9-1a: Site Overview and Boring Locations (B-1 and B-2), Tracy Alliance Parcels 3.9-37
Exhibit 3.9-1b: Location of RECs, CECs, and Soil Boring Locations, Tracy Alliance Parcels 3.9-39

Exhibit 3.9-2: Location of Aboveground Fertilizer Tank, Zuriakat and Suvik Farms Parcels..... 3.9-41

Exhibit 3.10-1: Drainage Downstream from the Project Site and Location of On-site Stormwater Detention Basin and NEI Detention Basin 3.10-43

Exhibit 3.10-2: FEMA Flood Map..... 3.10-45

Exhibit 3.10-3: Regional Flooding below Project Site..... 3.10-47

Exhibit 3.12-1: Land Use Compatibility for Community Noise Environment..... 3.12-33

Exhibit 3.14-1: Background Conditions Study Area and Intersections 3.14-55

Exhibit 3.14-2: Cumulative Conditions Study Area and Intersections..... 3.14-57

Exhibit 3.14-3: Background Conditions Traffic Control and Geometry 3.14-59

Exhibit 3.14-4: Background Conditions Peak-Hour Traffic Volumes..... 3.14-61

Exhibit 3.14-5: Background Plus Project Conditions Passenger Car Trip Distribution..... 3.14-63

Exhibit 3.14-6: Background Plus Project Conditions Truck Trip Distribution 3.14-65

Exhibit 3.14-7: Background Plus Project Conditions Passenger Car Trip Assignment..... 3.14-67

Exhibit 3.14-8: Background Plus Project Conditions Truck Trip Assignment 3.14-69

Exhibit 3.14-9: Cumulative Plus Project Conditions Passenger Car Trip Distribution..... 3.14-71

Exhibit 3.14-10: Cumulative Plus Project Conditions Truck Trip Distribution 3.14-73

Exhibit 3.14-11: Cumulative Plus Project Conditions Passenger Car Trip Assignment..... 3.14-75

Exhibit 3.14-12: Cumulative Plus Project Conditions Truck Trip Assignment 3.14-77

Exhibit 3.14-13: Interim NEI Truck Route Map..... 3.14-79

Exhibit 3.14-14: Ultimate NEI Truck Route Map 3.14-81

Exhibit 3.14-15: Background Plus Project Conditions Traffic Control and Geometry 3.14-83

Exhibit 3.14-16: Background Plus Project Conditions Peak-hour Traffic Volumes (for Full Project) 3.14-85

Exhibit 3.14-17: Cumulative Conditions Traffic Control and Geometry 3.14-87

Exhibit 3.14-18: Cumulative Conditions Peak-hour Traffic Volumes..... 3.14-89

Exhibit 3.14-19: Cumulative Plus Project Conditions Traffic Control and Geometry 3.14-91

Exhibit 3.14-20: Cumulative Plus Project Conditions Peak-hour Traffic Volumes..... 3.14-93

Exhibit 3.16-1: City of Tracy Historical Potable Water Supplies 3.16-65

Exhibit 3.16-2: City of Tracy Existing and Planned Future Potable Water Supplies vs. Projected Demand–Buildout (2045)..... 3.16-67

Exhibit 3.16-3: Peak-hour Results 3.16-69

Exhibit 3.16-4: Fire Flow Results 3.16-71

Exhibit 3.16-5: Fire Flow Results with WSA Recommended Improvements..... 3.16-73

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius (Centigrade)
°F	degrees Fahrenheit
$\mu g/m^3$	micrograms per cubic meter
AAQA	Ambient Air Quality Analysis
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACE	Altamont Corridor Express
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ACP	Alternative Compliance Plan
ADA	Americans with Disabilities Act
ADL	Aerially Deposited Lead
ADT	Average Daily Traffic
AFY	acre-feet per year
AIA	Airport Influence Area
AIC	Archaeological Information Center
AICUZ	Air Installation Compatibility Use Zone
AIRFA	American Indian Religious Freedom Act
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
APCD	Air Pollution Control District
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQGGP	Air Quality Guidelines for General Plans
AQI	Air Quality Index
AQMD	Air Quality Management District
AQP	Air Quality Plan
ARB	California Air Resources Board
ARPA	Archaeological Resources Protection Act
ASR	Aquifer Storage and Recovery
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measures
BAU	Business as Usual
BBID	Byron-Bethany Irrigation District

BCID	Banta-Carbona Irrigation District
BERD	Built Environment Resources Directory
bgs	below ground surface
BMO	Basin Management Objectives
BMP	Best Management Practice
BOD	Biochemical Oxygen Demand
BP	Before Present
BPS	Best Performance Standards
BRA	Biological Resources Assessment
BTU	British Thermal Unit
BVOC	biogenic volatile organic compound
CA FID	California Facility Inventory Database
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Health and Safety Administration
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CAPCOA	California Air Pollution Control Officers Association
CASGEM	California Statewide Groundwater Elevation Monitoring Program
CBC	California Building Standards Code
CCAA	California Clean Air Act
CCAP	Climate Change Action Plan
CCHSL	California Human Health Screening Level
CCIC	Central California Information Center
CCR	California Code of Regulations
CCTS	Central California Taxonomic System
CDF-FRAP	California Department of Forestry-Fire and Resource Assessment Program
CDFW	California Department of Fish and Wildlife
CDNA	California Digital Newspaper Archive
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Resource Conservation and Recovery Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System

CERS	California Environmental Reporting System
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFL	compact fluorescent light
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH	chlorinated herbicides
CH_4	methane
CHL	California Historical Landmarks
CHRIS	California Historical Resources Information System
CIP	Capital Improvement Program
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	compressed natural gas
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Inventory
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COG	Council of Governments
CPHI	California Points of Historical Interest
CPT	cone penetration test
CPUC	California Public Utilities Commission
CREC	Controlled Recognized Environmental Conditions
CRHR	California Register of Historical Resources
CTR	California Toxics Rules
CUPA	Certified Unified Program Agency
CVP	Central Valley Project
CWA	Clean Water Act
dB	decibel
dBA	A weighted decibel
dBA/DD	dbA per each doubling of the distance
DCE	Design, Community & Environment
DET	Detention Basin
DGWTP	DeGroot Water Treatment Plant
DMC	Delta-Mendota Canal
DPM	diesel particulate matter

DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIA	United States Energy Information Administration
EIR	Environmental Impact Report
EOC	Emergency Operations Center
EPA	United States Environmental Protection Agency
ERNS	Emergency Response Notification System
ESCP	Erosion and Sediment Control Plan
ESL	Environmental Screening Level
EVA	Emergency Vehicle Access
FAA	Federal Aviation Administration
FAR	floor area ratio
FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GAMAQI	Guide for Assessing and Mitigating Air Quality Impacts
GHG Rx	Greenhouse Gas Reduction Exchange
GHG	greenhouse gas
GMP	Groundwater Management Plan
gpd	gallons per day
gpm	gallons per minute
GPRS	Ground Penetrating Radar Services
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GVWR	gross vehicle weight rating
GWh	gigawatt-hours
GWh/y	gigawatt-hours per year
GWP	global warming potential
HAZNET	Hazardous Waste Tracking System
HCD	California Department of Housing and Community Development
HCM	Highway Capacity Manual
HFC	hydrofluorocarbon
HHD	heavy-heavy-duty
HMBP	Hazardous Materials Business Plan
HMP	Hazard Mitigation Plan

HMUPA	Hazardous Materials Unified Program Agency
HOV/HOT	High Occupancy Vehicle/High Occupancy Toll
HRA	Health Risk Assessment
HRI	California Historic Resources Inventory
HSC	Health and Safety Code
HVAC	heating, ventilation, and air conditioning
HWCL	Hazardous Waste Control Law
IC/EC	Institutional Control/Engineering Control
ICC	International Code Council
IM	Improvement Measure
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ITS	Intelligent Transportation Systems
JJWTP	John Jones Water Treatment Plant
kBTU	kilo-British Thermal Unit
LAFCo	Local Agency Formation Commission
LBP	lead-based paint
LCFS	Low Carbon Fuel Standard
L_{dn}	day/night average sound level
LED	light emitting diode
L_{eq}	equivalent sound level
LEV	Low Emission Vehicle
LI	Light Industrial
LID	Low Impact Development
L_{max}	maximum noise level
LOP	Local Oversight Program
LOS	Level of Service
LRA	Local Responsibility Area
LUST	Leaking Underground Storage Tank
M&I	Municipal and Industrial
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mgd	million gallons per day
MIR	Maximally Impacted Sensitive Receptor
MLD	Most Likely Descendant
MM	Mitigation Measure

MMI	Modified Mercalli Intensity
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
mpg	miles per gallon
mph	miles per hour
MRF	Tracy Material Recovery Facility and Solid Waste Transfer
MS4	Municipal Separate Storm Sewer System Permit
MSL	mean sea level
MSR	Municipal Services Review
MT	metric tons
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
MW	megawatt
MWELO	Model Water Efficient Landscape Ordinance
MWh	megawatt-hour
MXD	mixed-use development
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NEHRP	National Earthquake Hazards Reduction Program
NEI	Northeast Industrial
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NF_3	nitrogen trifluoride
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NOC	Notice of Completion
NOP	Notice of Preparation
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places

NSR	New Source Review
NTR	National Toxics Rules
NWIC	Northwest Information Center
O&M	Operations and Management
O_3	ozone
OCP	organochlorine pesticides
OEHHA	California Office of Environmental Health Hazard Assessment
OHP	California Office of Historic Preservation
ONAC	Federal Office of Noise Abatement and Control
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PEA	Preliminary Endangerment Assessment
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
Phase I ESA	Phase I Environmental Site Assessment
PM_x	particulate matter
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resource Code
PV	photovoltaics
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RL	reporting limits
RMP	Risk Management Plan
rms	root mean square
ROG	reactive organic gases
RPS	renewables portfolio standard
RTD	Regional Transit District
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SCADA	Supervisory Control and Data Acquisition

SCP	Stormwater Control Plan
SCS	Sustainable Communities Strategy
SCWSP	South County Water Supply Project
SDMP	Storm Drainage Master Plan
SEMS	Standardized Emergency Management System
SF_6	sulfur hexafluoride
SFHA	Special Flood Hazard Area
SFPUC	San Francisco Public Utilities Commission
SGMA	Sustainable Groundwater Management Act
SJCOG	San Joaquin Council of Governments
SJMSCP	San Joaquin County Multi-Species Habitat Conservation and Open Space Plan
SJRRC	San Joaquin Regional Rail Commission
SLIC	Spills, Leaks, Investigation and Cleanup
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	sulfur dioxide
SOI	Sphere of Influence
South Coast AQMD	South Coast Air Quality Management District
South County Fire	South San Joaquin County Fire Authority
SPCC	Spill Prevention, Control, and Countermeasure
SR	State Route
SRA	State Responsibility Area
SRI	Solar Reflectance Index
SSJID	South San Joaquin Irrigation District
State Water Board	California State Water Resources Control Board
SWEEP	State Water Efficiency and Enhancement Program
SWMP	Storm Water Management Plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRU	Stored Water Recovery Unit
TAC	toxic air contaminants
TCM	transportation control measures
TDM	Transportation Demand Management
TDS	total dissolved solids
Tg	teragram
therms/y	therms per year
TIA	Transportation Impact Analysis
TMA	Transportation Management Association
TMDL	Total Maximum Daily Load

TOD	Transit Oriented Development
TPH	Total Petroleum Hydrocarbons
TSDF	Treatment, Storage and Disposal Facility
TSS	Total Suspended Solids
TUSD	Tracy Unified School District
TWMP	Tracy Wastewater Master Plan
UBC	Uniform Business Code
UCMP	University of California Museum of Paleontology
ULOP	Urban Level of Flood Protection
USACE	United States Army Corps of Engineers
USBR	United States Bureau of Reclamation
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
V/C	volume to capacity ratio
Valley Air District	San Joaquin Valley Air Pollution Control District
VC	Village Center
VCP	Voluntary Cleanup Act
VMT	Vehicle Miles Traveled
VOC	volatile organic compound
WDO	Water Demand Offset
WDR	Waste Discharge Requirements
WSA	Water Supply Assessment
WSCP	Water Shortage Contingency Plan
WSD	Water Storage District
WSID	West Side Irrigation District
WSMP	Water System Master Plan
WUI	wildland urban interface
WWMP	Wastewater Master Plan
WWTP	Wastewater Treatment Plant
ZEV	Zero-Emission Vehicle

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EXECUTIVE SUMMARY

Purpose

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the Tracy Alliance Project (State Clearinghouse No. 2020080524). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.).

The purpose of this Draft EIR is to inform decision makers, representatives of trustee and responsible agencies, the public, and other interested organizations of the potential environmental effects that may result from implementation of the Tracy Alliance Project (proposed project). This Draft EIR describes potential impacts relating to a wide variety of environmental issues and methods by which these impacts can be feasibly mitigated or avoided.

Project Summary

Project Location

The project site is located at the northeast corner of Grant Line Road and Paradise Road (see Exhibit 2-2). The site is within unincorporated San Joaquin County land, adjacent to the northeastern city limits and within the City of Tracy's Sphere of Influence (SOI). The project site is directly east of the City's NEI Specific Plan boundary. The site is bound by I-205 to the north, California Avenue to the northeast, Grant Line Road to the south, and Paradise Road to the west.

Project Description

The proposed project consists of the development of up to 3,352,320 square feet of warehouse and distribution and related uses on a total of approximately 191.18 acres. The site consists of six parcels under ownership by three separate parties: the Tracy Alliance Group owns two parcels (totaling approx. 122.44 acres), Suvik Farms, LLC owns three parcels (totaling approx. 46.61 acres), and Zuriakat owns one parcel (approx. 22.17 acres).

Development on the Tracy Alliance parcels would consist of approximately 1,849,500 square feet of warehouse and distribution space located in three buildings (Building A, Building B, and Building C), as well as an approximately 12.44-acre stormwater basin with pump station that would be City-owned and managed. Approximately 12.51 acres of the Tracy Alliance land would be reserved to accommodate a portion of a planned interchange at Paradise Road and Interstate 205 (I-205). However, the potential impacts of constructing this future interchange would undergo a separate environmental review process pursuant to the CEQA and National Environmental Policy Act (NEPA), once funding is programmed and available and once the ultimate design of the interchange is finalized; accordingly, the construction of the interchange is not considered part of the proposed project. In addition to the proposed development on the Tracy Alliance parcels, the Suvik Farms Parcel and Zuriakat Parcel would both be developed with light industrial uses. The Suvik Farm Parcel

would have a maximum building square footage of 1,023,660 square feet on a land area of 2,047,320 gross square feet (50 percent Floor Area Ratio [FAR]) and the Zuriakat Parcel would have a maximum building square footage of 479,150 square feet on a land area of 958,320 gross square feet (50 percent FAR). The foregoing assumptions of maximum development capacity are based on the maximum allowable density per acre identified in the NEI Specific Plan.

The proposed project also includes demolition of 11 existing residential and agricultural buildings on approximately four acres located at the southwestern corner of the Tracy Alliance parcels, removal of existing trees and crops, construction of on- and off-site roadway improvements, and grading of approximately 500,000 cubic yards, which would be balanced on-site. Of the 500,000 cubic yards of material graded, approximately 300,000 cubic yards would occur on the Tracy Alliance parcels, approximately 150,000 cubic yards would occur in development of the Suvik Farms parcels, and approximately 50,000 cubic yards would occur in development of the Zuriakat parcel.. The proposed project would include ample landscaping consistent with all applicable City requirements; for example, in connection with the individual development proposal for the Tracy Alliance Parcels, the relevant site plan reflects approximately 110,000 square feet of landscaped areas. The proposed project would also include sufficient on-site parking for both vehicles and trailer spaces consistent with all applicable City requirements; for example, in connection with the individual development proposal for the Tracy Alliance Parcels, the relevant site plan reflects approximately 1,134 automobile parking spaces, and approximately 572 trailer parking spaces.

The proposed project would also include off-site roadway improvements, consisting of a westbound right turn lane at the intersection of Grant Line Road and North MacArthur Drive with a right-turn overlap of the signal phase as well as an additional second westbound left turn lane at the intersection of Chrisman Road and Eleventh Street.

The City of Tracy General Plan designates the project site as Industrial. As discussed more fully in this Draft EIR, the proposed project would be consistent with the planned industrial uses under the City's land use vision for the project site and vicinity. In connection therewith, the co-applicants for the proposed project are seeking an amendment to the Northeast Industrial (NEI) Specific Plan to incorporate the project site into its boundary (as well as any other conforming amendments necessary to ensure consistency). As an employment-generating use, the proposed project is expected to employ approximately 1,871 people.

Chapter 2, Project Description, provides a complete description of the proposed project.

Project Objectives

The quantifiable objectives of the Tracy Alliance Project include the following:

- Development of approximately 167 acres of industrial uses (building and parking areas and related improvements).
- Development of approximately 12.44 acres of public facilities (storm basin).
- Reserve approximately 12.51 acres for future planned interchange at Paradise Road and I-205.

- Build a maximum of 3,352,320 square feet of employment-generating industrial uses.

Additional qualitative objectives for the Tracy Alliance Project are as follows:

- **Employment Opportunities:** Provide for local and regional employment opportunities that take advantage of the project site's high level of accessibility, allow for the expansion of the City's economic base, help improve the jobs/housing balance, and reduce the commute for regional residents.
- **Transportation:** Provide an efficient circulation system, including reserving land for a future planned interchange at Paradise Road and I-205 (construction of the interchange would not be completed as part of the proposed project).
- **Public Facilities and Services:** Provide infrastructure and services to serve the proposed project that meet applicable City standards and integrate with existing and planned facilities.
- **Phasing:** Establish a logical phasing plan designed to ensure that each phase of development would include necessary public improvements required to meet applicable City standards.

Significant Unavoidable Adverse Impacts

The proposed project would result in the following significant unavoidable impacts:

- **Project-Level Conversion of Prime Farmland:** Although the proposed project is consistent with the site's General Plan designation and conversion of the project site to industrial use was envisioned as part of buildout under the General Plan, development consistent with the proposed project would result in the loss of agricultural land and would result in conversion of Prime Farmland to urban uses. The project applicant would be required to pay applicable Agricultural Mitigation Fees in connection with individual development proposals as implemented by Mitigation Measure (MM) AG-1. No other feasible mitigation is available to further reduce this impact. According, even with the payment of fees and adherence to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), the proposed project would result in significant and unavoidable impacts related to the conversion of Farmland as identified by Farmland Mapping and Monitoring Program (FMMP) mapping to non-agricultural use.

- **Cumulative Conversion of Prime Farmland:** Much of the Northeast Industrial (NEI) Specific Plan area consists of Prime Farmland that would be converted to non-agricultural uses with implementation of the relevant cumulative projects. Like the proposed project, any of the cumulative projects that would convert Prime Farmland to non-agricultural uses would pay the Agricultural Mitigation Fee. The development of the proposed project would result in the loss of approximately 188 acres of Prime Farmland, which would result in a project-level significant and unavoidable impact, which would also result in a cumulative considerable contribution to the cumulative impact that would be significant and unavoidable.

- **Project-Level Impact Related to Implementation of the Applicable Air Quality Plan:** The proposed project is consistent with the site's General Plan designation which means the

proposed industrial use was accounted for in the Air Quality Plan (AQP) land use projections. However, the proposed project could create a localized violation of State or federal air quality standards, significantly contribute to cumulative non-attainment pollutant violations, and expose sensitive receptors to substantial pollutant concentrations. The proposed project would be required to implement MM AIR-1 through MM AIR-4; however, because full implementation of the mitigation cannot be guaranteed due to potential technical and/or financial infeasibility, the proposed project's potentially significant impact is conservatively identified as significant and unavoidable. Therefore, the proposed project is inconsistent with Criterion 1 of the AQP even after the incorporation of mitigation. The impact would be significant and unavoidable.

- **Project-Level Impact Related to Cumulatively Considerable Net Increase of reactive organic gases (ROG) and carbon monoxide (CO) During Construction, and ROG and oxides of nitrogen (NOX) During Operation:** The construction schedule for the proposed project assumed that none of the three project phases would overlap. In this scenario, after the incorporation of MMs AIR-1a and AIR-1b, construction of the proposed project may not exceed the San Joaquin Valley Air Pollution Control District (Valley Air District) daily emission screening levels for an Ambient Air Quality Analysis (AAQA), pursuant to District Rule 2201. However, the potential remains for project phases to be constructed concurrently. If the three phases of construction occur concurrently, emissions of ROG and CO would exceed the Valley Air District's significance thresholds if all three project phases were constructed concurrently. As such, this impact would remain significant and unavoidable after implementation of identified mitigation.

  During operation, unmitigated emissions would exceed Valley Air District thresholds of significance for ROGs and NO_X. Therefore, MM AIR-1c and MM AIR-1d would be required to mitigate operational emissions to below Valley Air District thresholds. However, the full implementation of MM AIR-1c and MM AIR-1d cannot be guaranteed during project operation; therefore, the reasonable worst-case operational emissions would exceed the Valley Air District's significance thresholds for ROG and NO_X and this impact would remain significant and unavoidable.

- **Project-Level Impact Related to Exposing Sensitive Receptors to Substantial Pollutant Concentrations:** During construction, if all three project phases were constructed concurrently, the proposed project would expose sensitive receptors to CO and diesel particulate matter (DPM) emissions that exceed applicable thresholds even with mitigation incorporated. During operation, the proposed project would expose sensitive receptors to ROGs, NO_X, and DPM levels that exceed applicable thresholds even after incorporation of identified mitigation resulting in a significant and unavoidable impact.

- **Cumulative Air Quality Impact:** The proposed project would exceed the identified construction or operational significance thresholds; therefore, its emissions would also be cumulatively considerable.

- **Project-Level Vehicle Miles Traveled (VMT) Impact:** The proposed project's VMT would result in a significant impact given that the location-based, service-estimated average one-way trip length for automobile trips generated by the proposed project is more than 20 miles, and the proposed project would be in excess of 15 percent threshold required to mitigate VMT impacts. The proposed project would be required to implement MM TRANS-1, which would require the applicant to prepare a project-specific Transportation Demand Management (TDM Program in consultation with the City of Tracy) to reduce project-generated VMT. However, even with incorporation of MM TRANS-1, which would partially reduce VMT impacts, the impact would remain significant and unavoidable.

- **Cumulative VMT Impact:** Cumulative projects would be required to comply with applicable State and local laws and regulations that seek to reduce VMT. If found to result in significant VMT impacts, each cumulative project would be required to implement site-specific TDM measures that would reduce VMT and encourage alternative modes of transportation, such as transit, bicycle use, and walking. Cumulative projects would also be required to include facilities based on future transportation studies prepared for that project and pay into the City's VMT banking program once established. However, even with implementation of all available feasible mitigation, the cumulative VMT would still exceed City standards and would be significant and unavoidable. In addition, as described in Impact TRANS-1, the proposed project's impacts would be significant and unavoidable even with the implementation of mitigation. As such, the proposed project would have a cumulatively considerable contribution to a cumulative impact and in conjunction with other projects, would have a significant and unavoidable impact with respect to VMT. The proposed project's contribution would be cumulatively considerable.

Summary of Project Alternatives

Below is a summary of the alternatives to the proposed project considered in Section 6, Alternatives to the proposed project.

No Project (No Build) Alternative

Under this alternative, development of the project site would not occur, and the project site would remain in its current existing condition.

Outside Storage Allowable Use Alternative The Outside Storage Allowable Use Alternative contemplates a reduction in building square footages, an increase in outside storage areas, and the preservation of 25 percent of the existing agricultural operations (approximately 48 acres). This alternative contemplates a combination of "Equipment Storage Yards," which is a Permitted Use under the NEI Specific Plan and/or "Building Materials Sales, Lumberyards (outside storage)," which is a Conditional Use permitted under the NEI Specific Plan. The project site would be developed in such a way to protect some of the on-site Prime Farmland by reducing the overall footprint of the developed areas. The outside storage uses would require less building coverage and the number of employees would be reduced as compared to the proposed project.

Agricultural Protection Alternative

Under this alternative, the proposed project would be developed in such a way as to protect some of the on-site Prime Farmland by reducing the overall footprint of the developed areas while maintaining a buffer between existing units along California Avenue. The northern half (approximately 11 acres) of the Zuriakat Parcel would remain in agricultural production.

Areas of Controversy

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies, other interested organizations, and the public, and it must also identify issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

A Notice of Preparation (NOP) for the proposed project was issued on August 28, 2020. The NOP describing the proposed project and issues to be addressed in the EIR was distributed to the State Clearinghouse, responsible and trustee agencies, and other interested organizations, and the public for a 30-day public review period extending from August 28, 2020 through September 30, 2020. The NOP identified the potential for significant impacts on the environment related to the following topical areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Disagreement Among Experts

This Draft EIR contains substantial evidence to support all the conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the City of Tracy is not aware of any disputed conclusions at the time of this writing. Both CEQA and case law applying the statutory requirements under CEQA provide the standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information to allow the public and decision makers to make an informed judgment about the environmental consequences of the proposed project. However, the lead agency retains the discretion to elect to rely on expert(s) retained in connection with the preparation of the EIR and related technical analyses, and a decision to do so should be incorporated into the relevant CEQA findings.

Potentially Controversial Issues

Based on NOP comments, below is a list of potentially controversial issues that may be raised during the public review and hearing process of this Draft EIR:

- There is a potential for the proposed project to result in the release of hazardous wastes/substances. Soil sampling, surveying of buildings that would be demolished for lead, and evaluation of former agricultural lands are recommended.
- The proposed project would be located in Prime Agricultural Land.
- Potential impacts to unknown cultural resources on the project site will need to be evaluated.
- Consistency with the San Joaquin Council of Governments (SJCOG) will need to be evaluated.
- Additional truck traffic could have significant cumulative health effects on nearby sensitive receptors.
- Additional truck traffic could have significant noise impacts on nearby sensitive receptors.
- Additional VMT would affect the surrounding community.
- The proposed project must comply with RWQCB regulations, policies, and permits.
- The proposed project must comply with the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).

It is also possible that evidence will be presented during the 45-day, statutory Draft EIR public review period that may create disagreement. Decision makers would consider this evidence during the public hearing process.

As noted above, in rendering a decision on a project where there is disagreement among experts, the decision makers are not obligated to select the most environmentally preferable viewpoint. Decision makers are vested with the ability to choose whatever viewpoint is preferable, based on substantial evidence in the record, and need not resolve a dispute among experts. In their proceedings, decision makers must consider comments received concerning the adequacy of the Draft EIR and address any objections raised in these comments. However, decision makers are not obligated to follow any directives, recommendations, or suggestions presented in comments on the Draft EIR, and can certify the Final EIR by choosing to rely on experts retained in connection with the preparation of the EIR without needing to resolve disagreements among experts.

Public Review of the Draft EIR

Upon completion of the Draft EIR, the City of Tracy filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (Public Resources Code, Section 21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested organizations, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the City of Tracy offices and the Tracy Library. The address for each location is provided below:

City of Tracy
Development Services Department
333 Civic Center Plaza
Hours:
Monday-Thursday: 8:00AM-6:00PM
Friday: 8:00AM-5:00PM

Tracy Branch Library
20 East Eaton Avenue
Tracy, CA 95376

Agencies, interested organizations, and members of the public have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR should be addressed to:

Victoria Lombardo, Senior Planner
Development Services Department
333 Civic Center Plaza
Tracy, CA 95376
Phone: 209.831.6428

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the City of Tracy on the proposed project, at which the certification of the Final EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision makers for the proposed project.

Executive Summary Matrix

Table ES-1 below summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project. The table is intended to provide an overview; narrative discussions for the issue areas are included in the corresponding section of this EIR. Table ES-1 is included in the EIR as required by CEQA Guidelines Section 15123(b)(1).

Table ES-1: Executive Summary Matrix

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Section 3.1—Aesthetics			
Impact AES-1: The proposed project would not have a substantial adverse effect on a scenic vista.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact AES-2: The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact AES-3: The proposed project is in an urbanized area. The proposed project would not conflict with applicable zoning and other regulations governing scenic quality.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact AES-4: The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Section 3.2—Agriculture and Forestry Resources			
Impact AG-1: The project would convert Farmland pursuant to the FMMP, to non-agricultural use.	Potentially Significant	**MM AG-1: Payment of Agricultural Mitigation Fees** At the time of issuance of building permits for each individual development proposal, the relevant applicant(s) for the subject development proposal shall pay the applicable Agriculture Mitigation Fee in accordance with Chapter 13.28 of the Municipal Code.	Significant and Unavoidable

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact AG-2: The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact AG-3: The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.	No impact	No mitigation is necessary.	No impact
Impact AG-4: The project would not result in the loss of forest land or conversion of forest land to non-forest use.	No impact	No mitigation is necessary.	No impact
Impact AG-5: The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Cumulative Impact	Potentially Significant Impact	MM AG-1	Significant and Unavoidable
Section 3.3—Air Quality			
Impact AIR-1: The proposed project could conflict with or obstruct implementation of the applicable air quality plan.	Potentially Significant Impact	**MM AIR-1a**: **NO_X Reduction Measures** Prior to the issuance of grading or building permits for each individual development proposal within the project site, the relevant applicant for each development proposal shall provide documentation to the City of Tracy demonstrating the following NO_X reduction measures would be adhered to during construction activities for the relevant development proposal: • For all construction equipment and vehicles used during project construction that are equal to or	Significant and Unavoidable

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		greater than 250 horsepower, the contractor shall use construction equipment and vehicles that meet the United States Environmental Protection Agency (EPA) Tier 4 Final engine standards; • For all construction equipment and vehicles used during project construction that are less than 250 horsepower, the contractor shall use electric construction equipment and vehicles to the extent feasible, with the exception of handheld generator sets; and • All generator sets utilized during project construction shall be limited to 5 horsepower and shall only be used to power handheld power tools. The construction contractor shall maintain reasonable records concerning its efforts to comply with this requirement, including equipment lists. Documentation that each relevant applicant provides to the City shall include, but is not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number. **MM AIR-1b: "Super-Compliant" Architectural Coatings** Prior to the issuance of grading or building permits for each individual	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		development proposal within the project site, the relevant applicant for each development shall provide the City with documentation demonstrating the use of "Super-Compliant" architectural coatings, as defined by the South Coast Air Quality Management District (South Coast AQMD), during construction of the proposed project. "Super-Compliant" architectural coatings, as defined by the South Coast AQMD, are paints which do not exceed 10 grams of reactive organic gas (ROG) per liter of paint. **MM AIR-1c**: **"Zero-VOC" Consumer Products** The consumer products purchased by the building occupant(s) or by the cleaning business contracted by the building occupant(s) for on-site use shall consist of water-based or "zero volatile organic compound [VOC]" consumer products, to the maximum extent feasible. "Consumer products," as referred to in this mitigation measure, shall include detergents, cleaning compounds, polishes, and floor finishes. "Consumer products," as referred to in this mitigation measure, shall not include parking lot degreasers, architectural coatings, pesticides, or fertilizers. **MM AIR-1d**: **Clean Truck Fleet** Prior to the issuance of the certificate of occupancy for each individual development proposal within the project	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating the use of a clean truck fleet that meets the California Air Resources Board's adopted 2013 Optional Low-NO_X Standard of 0.02 gram of nitrogen oxide (NO_X) per brake horsepower hour for all heavy-duty trucks during operation of the proposed project, to the maximum extent feasible. If the relevant applicant does not own the truck fleet that will be used during operation of the subject individual development, the relevant applicant shall provide the City with reasonable documentation from the truck fleet owner demonstrating that trucks utilized for operation of the subject individual development will meet the California 2013 Optional Low-NO_X Standard, to the maximum extent feasible. If any change occurs where a new truck fleet is utilized during operation of the subject individual development, the relevant applicant shall provide the City with reasonable documentation demonstrating that the new truck fleet meets the California 2013 Optional Low-NO_X Standard of 0.02 gram per brake horsepower hour, to the maximum extent feasible.	
Impact AIR-2: The proposed project could result in a cumulatively considerable net increase of any criteria pollutant for which the region is in nonattainment under an	Potentially Significant	MM AIR-1a through MM AIR-1d	Significant and Unavoidable

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
applicable federal or State ambient air quality standard.			
Impact AIR-3: The proposed project could expose sensitive receptors to substantial pollutant concentrations.	Potentially Significant	MM AIR-1d	Significant and Unavoidable
Impact AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Less Than Significant	No mitigation is necessary.	Less than Significant
Cumulative Impact	Potentially Significant Impact	MM AIR-1a through MM AIR-1d	Significant and Unavoidable
Section 3.4—Biological Resources			
Impact BIO-1: The project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.	Potentially Significant	**MM BIO-1a: Song Sparrow and Tricolored Blackbird Mitigation** Implementation of the following avoidance and minimization measures would avoid or minimize potential effects to song sparrow and tricolored blackbird as a result of project implementation within the Zuriakat parcel in and adjacent to the project site. These measures shall be implemented for construction work that occurs during the nesting season (February 1 through August 31): • If construction or habitat removal is proposed during the breeding/nesting season (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for song sparrow and tricolored blackbird within potential nesting habitat of the construction area, (special attention should be paid to the cattail marsh within the Zuriakat parcel) including a	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		500-foot survey buffer for tricolored blackbird and a 75-foot survey buffer for song sparrow, no more than 7 days prior to the start of ground disturbing activities in the construction area. If no active nests are detected within the construction area on the project site or within the relevant buffer survey area, then no additional measures are required. • If an active nest is located during pre-construction surveys, the California Department of Fish and Wildlife (CDFW) (as appropriate) shall be notified (as appropriate) regarding the status of the nest. A setback of 500 feet (for tricolored blackbird) and 75 feet (for song sparrow) shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Furthermore, construction activities shall be restricted in the construction area as necessary to avoid disturbance of the nest until it is abandoned, or a qualified Biologist deems disturbance potential to be minimal. Restrictions shall include consultation with a qualified Biologist to determine appropriate buffer zones or alteration	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		of the construction schedule in the relevant area. - A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. **MM BIO-1b: Swainson's Hawk** **Foraging:** Prior to any activities that would result in ground disturbance to the project site, the relevant applicant(s) for the subject development on any portion of the project site shall each ensure **c**overage of the relevant portion(s) of the project site under the SJMSCP and pay the applicable fee purchase adequate mitigation through the SJMSCP for 140.59 acres of potential foraging habitat (recommended) or alternatively provide applicant-responsible compensatory mitigation at a 1:1 ratio (such as procurement of credits through a mitigation bank or dedicated of a conservation easement). **Nesting:** The following measures shall be implemented for construction work during the nesting season (February 1 through August 31): • Implementation of the following avoidance and minimization measures would avoid or minimize potential	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		effects to Swainson's hawk as a result of project implementation and adjacent to the project site. These measures shall be implemented for construction work that occurs during the nesting season (February 1 through August 31): - If construction or habitat removal is proposed during the breeding/nesting season (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for Swainson's hawk within the construction area, (special attention should be paid to trees with past recorded occurrences) including a 0.5 mile foot survey buffer, no more than 7 days prior to the start of ground disturbing activities in the construction area. If no active nests are detected within the construction area site or within the buffer survey area, then no additional measures are required. - If active Swainson's hawk nests are found within the construction area or the 0.5 mile survey buffer of the project site, a qualified Biologist shall determine what nest avoidance buffers may be necessary so that construction related activities do not cause nest abandonment.	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		The avoidance buffer shall be submitted to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) for approval. The qualified Biologist shall monitor construction activities to ensure construction activities do not result in adverse effects to the nest, fledglings, or adults. The Biologist shall submit a memorandum documenting construction compliance to the appropriate agencies. **MM BIO-1c**: **Burrowing Owl** • A qualified Biologist shall conduct a pre-construction survey no later than 30 days prior to commencement of any ground-disturbing construction activities on the construction area. The survey shall be conducted in accordance with the *Staff report on Burrowing Owl Mitigation.*[1] All suitable habitats within the construction area site and adjacent buffer (within 500 feet) shall be surveyed. If no burrowing owl are detected during the surveys, then no additional measures are required. • If pre-construction surveys during the breeding season (February 1- August 31) detect active burrows within the	

[1] California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. March 7. Website: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline=true. Accessed on April 29, 2020.

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		construction area or near the adjacent buffer survey area site, a qualified Biologist shall establish and delineate an appropriate buffer zone around the nest until the breeding season is over as determined by the Biologist. Buffer areas shall be established using the guidelines within the *Staff report on Burrowing Owl Mitigation*. • If pre-construction surveys detect active burrows during the non-breeding season (September 1- January 31) the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) allows for eviction or passive relocation of owls. A passive relocation plan shall be prepared and submitted to SJMSCP for approval. **MM BIO-1d: San Joaquin Kit Fox Measures to protect San Joaquin kit fox shall consist of the following:** • A qualified Biologist shall conduct a pre-construction survey of the construction area and a 200-foot buffer, between 14 and 30 days prior to the commencement of ground disturbance. If the surveys do not identify any San Joaquin kit fox activity or locate any potential dens, then no further measures are necessary. • If the survey identifies potential dens (potential dens are defined as burrows at least 4 inches in diameter that open up within 2 feet), den entrances shall be dusted for 3 calendar days to	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		register track of any San Joaquin kit fox present. If no San Joaquin kit fox activity is identified, potential dens may be destroyed. If San Joaquin kit fox activity is identified, then dens shall be monitored by a qualified Biologist to determine if occupation is by an adult fox only or is a natal den (natal dens usually have multiple openings). • If the den is occupied by an adult only, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den until the Biologist determines that the den has been vacated. Where San Joaquin kit fox are identified, the provisions of the United States Fish and Wildlife Service's published *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance*[2] shall apply (except that preconstruction survey protocols shall remain as established in this paragraph). These standards include provisions for educating construction workers regarding the San Joaquin kit fox and keeping heavy equipment operating at safe speeds.	

[2] United States Fish and Wildlife Service (USFWS). 1999. Standardized recommendations for protection of the San Joaquin Kit Fox Prior to or during ground disturbance. Website: https://www.fws.gov/ventura/docs/species/protocols/sjkf/sanjoaquinkitfox_protection.pdf. Accessed April 29, 2020.

		MM BIO-1e: **Migratory Birds** • To prevent significant impacts to Migratory Bird Treaty Act (MBTA)-protected birds, nesting raptors, and their nests, removal of trees shall be limited to only those necessary to feasibly construct the proposed project as shown on the individual development plans approved by the City pursuant to the mapping and/or development review process. • If any tree removal is necessary, then it should occur outside the nesting season between September 1 through January 31 to the extent feasible. If trees cannot feasibly be removed outside the nesting season, preconstruction surveys shall be conducted no more than 7 days prior to tree removal to verify the absence of active nests. • If an active nest is located during pre-construction surveys, the United States Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW) (as appropriate) shall be notified regarding the status of the nest. Construction activities shall be restricted in the construction area as necessary to avoid disturbance of the nest until it is abandoned, or the agencies deem disturbance potential to be minimal. Restrictions shall consist of the include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around an	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		active raptor nest and an appropriate radius around an active migratory bird nest depending on the species) or alteration of the construction schedule. • A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. **MM BIO-1f**: **Roosting Bats** • A qualified wildlife Biologist shall conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine if bat species are roosting near the construction area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.). • Visual surveys shall include trees within 0.25 mile of project construction activities. Not more than two weeks prior to building demolition, the Tracy Alliance parcel applicants for development on any project parcel, shall ensure that a qualified Biologist (i.e., one familiar with the identification	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		of bats and signs of bats) survey buildings proposed for demolition for the presence of roosting bats or evidence of bats. If no roosting bats or evidence of bats are found in the structure, demolition may proceed. If the Biologist determines or presumes bats are present (if there are site access issues or structural safety concerns), the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Building demolition of the subject structure shall only commence after the Biologist verifies seven to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid significant impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts shall also be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).	
Impact BIO-2: The proposed project would not have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the	Less Than Significant	No mitigation is necessary.	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.			
Impact BIO-3: The project could have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Potentially Significant	**MM BIO-3**: **Conduct Delineation of Potentially Jurisdictional Aquatic Resources (Channels & Wetlands)** The applicant(s) for development on any project parcel shall complete a formal jurisdictional delineation to document and quantify the full extent of potentially jurisdictional waters for the relevant project parcel(s) in coordination with the applicable regulatory agencies. The applicant(s) for development on any project parcel shall also coordinate, to the extent required under applicable laws and regulations, with the applicable regulatory agencies (United States Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB], and/or California Department of Fish and Wildlife [CDFW]) to determine whether the irrigation/drainage channels and/or cattail marsh on the project site is protected under Section 404 and 401 of the Clean Water Act (CWA) and/or Section 1602 of the California Fish and Game Code. **Obtain CWA Sections 401 and 404 Permits Prior to Construction** • Prior to the fill of any potentially jurisdictional waters within the project site, the relevant project applicant(s) for the subject project parcel(s) shall consult with the USACE and Regional	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Water Quality Control Board, to the extent required under applicable laws and regulations, to determine the extent, if at all, that waters of the United States and State may be impacted by the proposed project. • If required, the relevant applicant(s) for development of the subject project parcel(s) shall obtain a Section 404 CWA permit for impacts to waters of the United States. That same applicant, for development of the subject project parcel(s), will also obtain a Section 401 Water Quality Certification from the RWQCB, if required. Any such required permit and certification shall be obtained prior to issuance of grading permits for the implementation of the individual development proposal on the subject project parcel(s). • The applicant(s) for development on any project parcel shall design the project to result in no net loss of functions and values of waters of the United States and State by incorporating impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as set forth in the subject Section 404 permit and 401 water quality certification. • Compensatory mitigation may consist of (1) obtaining credits from a mitigation bank; (2) making a payment to an in-lieu fee program that would conduct wetland, stream, or other aquatic resource restoration, creation,	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		enhancement, or preservation activities; and/or (3) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This final type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). This project/permit applicant shall retains responsibility for the implementation and success of the mitigation approach. **Obtain Approval of and File Notification of Streambed Alteration Agreement Prior to Construction** The applicant(s) for development on any project parcel shall ensure that the cattail marsh is not obstructed and human intrusion into the area is minimized. In compliance with Section 1600 of the California Fish and Game Code, the relevant applicant(s) of an individual development proposal within the project site shall obtain approval and file a notification of a Streambed Alteration Agreement prior to conducting any construction activities within irrigation/drainage channels that qualify as streams under CDFW jurisdiction (i.e., those having bed and bank and at least periodical flow) if and to the extent required under applicable laws and	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		regulations. Those same applicant(s) shall implement all mitigation measures imposed by the CDFW related to the subject Streambed Alteration Agreement, which may include but not be limited to the implementation of erosion and bank stabilization measures, riparian habitat enhancement, and/or restoration and revegetation of the stream corridor habitat at no less than a 1:1 ratio, as determined by the CDFW.	
Impact BIO-4: The project would not substantially interfere with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact BIO-5: The project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	No impact	No mitigation is necessary.	No impact
Impact BIO-6: The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Cumulative Impacts	Potentially Significant	MM BIO-1a through MM BIO-1f and MM BIO-3	Less Than Significant
Section 3.5—Cultural Resources			
Impact CUL-1: The project could cause a substantial adverse change in the	Potentially Significant	**MM CUL-1**: **Archaeological Spot-Monitoring and Halt of Construction**	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
significance of a historical resource as defined in Section 15064.5.		**Upon Encountering Historical or Archeological Materials** An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology shall inspect the site once grubbing and clearing are complete for the purpose of determining whether there are any previously undiscovered resources onsite, and prior to any grading or trenching into previously undisturbed soils. This shall be followed by regular periodic or "spot-check" archaeological monitoring as determined by the Archaeologist. If the Archaeologist believes that a reduction in monitoring activities is prudent, then a letter report detailing the rationale for making such a reduction and summarizing the monitoring results shall be provided to the City of Tracy for concurrence. In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers shall avoid altering the materials until an Archaeologist has evaluated the situation. The applicants for the development of the Tracy Alliance, Suvik Farms, and Zuriakat parcels shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		shell artifacts, or features including hearths, structural remains, or historic dumpsites. The Archaeologist shall evaluate any finding(s) and determine whether they are significant, and if so, shall make recommendations concerning appropriate measures that will be implemented to protect the significant resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered significant resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and shall be submitted to the City of Tracy, the Northwest Information Center (NWIC), and the California Office of Historic Preservation (OHP), as required.	
Impact CUL-2: The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	Potentially Significant	MM CUL-1	Less Than Significant
Impact CUL-3: The project could disturb human remains, including those interred outside of formal cemeteries.	Potentially Significant	**MM CUL-3**: **Stop Construction Upon Encountering Human Remains** In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during the course of project construction, there is accidental discovery or	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		recognition of any human remains, the following steps shall be taken: 1. There shall be no further excavation or disturbance within 100 feet of the remains until the county coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98. 2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission. • The descendant identified fails to make a recommendation. • The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains: • When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicants for the development of the Tracy Alliance, Suvik Farms, and Zuriakat parcels may each develop a plan with respect to their individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Cumulative Impacts	Potentially Significant	MM CUL-1 and MM CUL-3	Less Than Significant
Section 3.6—Energy			
Impact ENER-1: The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact ENER-2: The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation is necessary.	Less Than Significant
Section 3.7—Geology and Soils			
Impact GEO-1: The proposed project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving: i.) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii.) Strong seismic ground shaking. iii.) Seismic-related ground failure, including liquefaction. iv) Landslides.	Potentially Significant	**MM GEO-1: Prepare Grading and Construction Plans that Incorporate Geotechnical Engineering Report Recommendations** Prior to issuance of the grading permits for the proposed project, development of the final grading, foundation, and construction plans shall incorporate the site-specific earthwork, foundation, floor slab, lateral earth pressure, and pavement design recommendations, as detailed in the Geotechnical Engineering Report prepared by Terracon dated January 30, 2019. The applicant(s) for development of individual development proposal(s) within the project site shall each coordinate with a City-approved Geotechnical Engineer and Engineering Geologist to tailor the grading and	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		foundation plans for the relevant development proposal, as needed, to reduce risk related to known soil and geologic hazards. The final grading and construction plans for the relevant development proposal shall be reviewed by the City-approved Geotechnical Engineer to confirm compliance with this MM GEO-1. Grading operations shall meet the applicable requirements of the recommendations included in the Geotechnical Engineering Report prepared by Terracon on January 30, 2019. During construction, the City-approved Geotechnical Engineer shall monitor construction of the relevant development proposal to ensure the earthwork operations are properly performed in accordance with the foregoing recommendations.	
Impact GEO-2: The proposed project would not result in substantial soil erosion or the loss of topsoil.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact GEO-3: The project could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.	Potentially Significant	MM GEO-1	Less Than Significant
Impact GEO-4: The project could be located on expansive soil, as defined in	Potentially Significant	MM GEO-1	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.			
Impact GEO-5: The proposed project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	No impact	No mitigation is necessary	Less Than Significant
Impact GEO-6: The proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Potentially Significant	**MM GEO-6**: **Inadvertent Discovery of Paleontological Resources During Project Construction** In the event a fossil is discovered during construction for the proposed project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist in accordance with Society of Vertebrate Paleontology standards. The applicants for development of individual proposals within the project site shall each include a standard inadvertent discovery clause in every proposed project-related construction contract to inform their respective contractors of this requirement. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and implement a data recovery plan that is consistent with the applicable Society of Vertebrate Paleontology standards. Any recovered fossil should be deposited in an appropriate repository, such as the	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		UCMP, where it will be properly curated and made accessible for future studies.	
Cumulative Impacts	Potentially Significant	MM GEO-1 and MM GEO-6	Less Than Significant
Section 3.8—Greenhouse Gas Emissions			
Impact GHG-1: The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact GHG-2: The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation is necessary.	Less Than Significant
Section 3.9—Hazards and Hazardous Materials			
Impact HAZ-1: The proposed project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Potentially Significant	**MM HAZ-1a**: **Conduct Soil Sampling (Tracy Alliance, Zuriakat, and Suvik Farms parcels)** Prior to the issuance of grading permits, the relevant applicant for an individual development proposal within the project site shall provide evidence of soil testing within the project boundary to confirm presence or absence of hazardous compounds such as lead and arsenic. The testing shall be conducted pursuant to a San Joaquin Environmental Health-approved sampling plan. If hazardous levels of hazardous compounds are found, excavated soils shall be sent off-site for disposal and any affected soils	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		encountered should be properly characterized, treated and/or disposed of in accordance with applicable local, State, and federal laws and regulations. The relevant applicant shall complete any residual soil remediation in connection with the relevant individual development proposal to the satisfaction of San Joaquin Environmental Health, as evidenced by the submittal of a no further action letter. In addition, if hazardous contaminants related to the former agricultural use of the site (such as lead or arsenic) are found, a construction worker health and safety plan shall be prepared and shall be implemented during construction of the relevant individual development proposal. **MM HAZ-1b**: **Proper Disposal and Decommission of Underground Storage Tanks, Aboveground Storage Tanks, and Unlabeled Drums (Tracy Alliance Parcel only)** If any of the reported underground storage tanks (USTs) or aboveground storage tanks (ASTs) are discovered during excavation activities, the applicant for the development of the Tracy Alliance parcels shall dispose of and decommission the USTs and ASTs in accordance with applicable laws and regulations of the Local Oversight Program (LOP) and the American Petroleum Institute Standards, respectively. The unlabeled drums and containers observed during the site reconnaissance for the Phase I	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Environmental Site Assessment (Phase I ESA) for the Tracy Alliance parcels shall be characterized and disposed of in accordance with applicable local, State, and federal laws and regulations. **MM HAZ-1c: Conduct Asbestos and Lead Surveys Prior to Demolition (Tracy Alliance Parcel only)** Prior to the issuance of demolition permits for the existing buildings, the applicant for the development of the Tracy Alliance parcels shall retain a licensed professional to conduct asbestos and lead paint surveys. These surveys shall be conducted prior to the disturbance or removal of any suspect asbestos-containing materials and lead-based paint, and these materials shall be characterized for asbestos and lead by a reliable method. All activities involving asbestos-containing materials and lead-based paint shall be conducted in accordance with applicable laws and regulations, and all removal shall be conducted by properly licensed abatement contractors. **MM HAZ-1d**: **Dust Mitigation and Soil Evaluation (Tracy Alliance, Zuriakat, and Suvik Farms parcels)** During any grading or excavation activities in connection with an individual development proposal within the project site, relevant development personnel shall be made aware to look for unusual	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		conditions suggesting buried debris or other potential adverse environmental conditions. If any abnormal soils are discovered during development activities, such as stained soils, hydrocarbon odors, or any other unusual odors, all construction activities near the discovery shall be stopped immediately and the applicant for the relevant individual development proposal shall contact a qualified hazardous material consulting firm for further assessment and implementation of any appropriate actions as may be required under applicable laws and regulations before construction of the relevant individual proposal can begin again. **MM HAZ-1e**: **Consultation with Chevron and DigAlert (Suvik Farms parcel only)** Prior to any ground disturbance and construction along the northern side of West Grant Line Road, adjacent to the southern boundary of the Tracy Alliance and Suvik Farms parcels, the relevant applicant(s) for the development of the Tracy Alliance and/or Suvik Farms parcels shall consult with Chevron (www.chevron-pipeline.com; 800.762.3404) and DigAlert 811 to determine the location of the existing underground petroleum pipeline to facilitate avoidance during ground disturbance and construction activities.	
Impact HAZ-2: The proposed project would not create a significant hazard to the public	Less Than Significant	No mitigation is necessary.	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.			
Impact HAZ-3: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact HAZ-4: The proposed project is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.	Potentially Significant	MM HAZ-1a and MM HAZ-1b	Less Than Significant
Impact HAZ-5: The proposed project would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area.	No impact	No mitigation is necessary.	No impact
Impact HAZ-6: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact HAZ-7: The proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.	Less Than Significant	No mitigation is necessary.	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Cumulative Impacts	Less Than Significant	No mitigation is necessary	Less Than Significant
Section 3.10—Hydrology and Water Quality			
Impact HYD-1: The proposed project could violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Potentially Significant	**MM HYD-1a**: **Prepare Stormwater Pollution Prevention Plan** Prior to the issuance of a grading permit, the relevant applicant for each individual development proposal within the project site shall submit a draft of the Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) in connection with its individual development proposal pursuant to the then-applicable Multi-Agency Post-Construction Stormwater Standards Manual at the time the relevant grading permit is submitted. After City approval of the relevant grading permit, the relevant NOI and SWPPP shall be sent to the California State Water Resources Control Board (State Water Board) for approval. Approval by the State Water Board is a prerequisite for issuance of the relevant grading permit by the City. The SWPPP shall address stormwater management during each phase of construction of the relevant individual development proposal. Best Management Practices (BMPs) shall be integrated into the relevant SWPPP as identified by the City of Tracy, which will result in the reduction or elimination of pollutants in stormwater discharges and the stabilization of BMPs to reduce or eliminate pollutants after construction of the relevant individual development proposal is completed. The	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		relevant SWPPP shall be consistent with the applicable Regional Water Quality Control Board (RWQCB) standards and National Pollutant Discharge Elimination System (NPDES) permit requirements to protect water quality over the period of construction of the relevant individual development proposal. **MM HYD-1b**: **Prepare Stormwater Management Plan** Prior to the issuance of a grading permit, the relevant applicant for each individual development proposal within the project site shall prepare a Stormwater Management Plan in connection with its individual development proposal for review and approval by the City of Tracy. The relevant Storm Water Management Plan (SWMP) shall include two fundamental components: (1) treatment for pollutants collected in stormwater using Low Impact Development (LID) measures, and (2) no net increase in the erosion potential of the receiving stream over the pre-project (existing) condition. All LID treatment measures would be required to be designed in accordance with applicable engineering criteria in the then-applicable Multi-Agency Post-Construction Stormwater Standards Manual. Implementation of the relevant SWMP would require the preparation of a clearly defined Operations and Maintenance (O&M) Plan by the relevant applicant in connection with its	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		development proposal to ensure that installed stormwater treatment measure(s) and hydromodification management control(s) are inspected and properly operated and maintained for the life of the relevant individual development proposal.	
Impact HYD-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact HYD-3: The proposed project could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i.) result in substantial erosion or siltation on- or off-site; ii.) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; iii.) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv.) impede or redirect flood flows?	Potentially Significant	Implement MM HYD-1a MM HYD-1b and **MM HYD-3: Prepare Final Drainage Plan Prior to Grading** Each applicant for an individual development proposal within the project site shall, in connection with the relevant individual development proposal: • Comply with all applicable rules, regulations, and procedures of the National Pollutant Discharge Elimination System (NPDES) for municipal, construction and industrial activities as promulgated by the California State Water Resources Control Board (State Water Board), or any of its Regional Water Quality Control Boards (RWQCBs). • Submit a Final Stormwater Control Plan and a Stormwater Control Operation and Maintenance Plan (O&M Plan) to the City of Tracy Public Works and	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Community Development Department, which shall be reviewed for compliance with the County's National Pollutant Discharge Elimination System (NPDES) Permit and shall be determined consistent with the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.34 of the Municipal Code, Ordinance 1072) prior to issuance of a grading permit for the relevant individual development proposal. Improvement Plans shall be reviewed to verify consistency with the relevant Final Stormwater Control Plan and compliance with Provision C.3 of the City's NPDES Permit and the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.34 of the Municipal Code, Ordinance 1072). • Prior to issuance of grading permits for each relevant individual development proposal, the relevant applicant shall submit a Final Drainage Plan in connection with the relevant individual development proposal that incorporates the measures included in the Flood Protection Technical Memorandum. The City of Tracy Public Works and Community Development Department shall review the relevant Final Drainage Plan to ensure it is in compliance with all applicable requirements and standards, including the recommendations provided in the Flood Protection Technical	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Memorandum and in the Citywide Storm Drainage Master Plan in effect at the time building permits are issued, to reduce risk related to flooding within a designated floodplain. The relevant Final Drainage Plan shall be reviewed by City of Tracy Public Works and Community Development Department staff to ensure that all building minimum floor elevations for the relevant development proposal are at 26 feet or 1 foot above the maximum flood elevation and will accommodate the 200-year storm event as detailed in the Flood Protection Technical Memorandum. In addition, the on-site stormwater detention basin shall be designed in accordance with the recommendations provided in the Flood Protection Technical Memorandum and in accordance with the Citywide Storm Drainage Master Plan in effect at the time building permits are issued. Additionally, the relevant Final Drainage Plan shall determine if discharge of pre-project runoff rates and/or volumes into the Tom Paine Slough drainage area can continue after project construction pursuant to applicable standards and requirements. Should the relevant Final Drainage Plan determine it is feasible to discharge some runoff (possibly up to the pre-project runoff volume) into the existing downstream system, this design shall be submitted to the City of	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Tracy as part of the relevant Final Drainage Plan for review and approval.	
Impact HYD-4: The proposed project would be located in a flood hazard zone, tsunami, or seiche zone, or risk release of pollutants due to project inundation.	Potentially Significant	Implement MM HYD-3	Less Than Significant
Impact HYD-5: The proposed project could conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Potentially Significant	Implement MM HYD-1a	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation is necessary.	Less Than Significant
Section 3.11—Land Use and Planning			
Impact LAND-1: The proposed project would not physically divide an established community.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact LAND-2: The proposed project would not cause a significant environmental impact due to conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation is necessary.	Less Than Significant
Section 3.12—Noise			
Impact NOI-1: The proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact NOI-2: The proposed project could generate a substantial temporary or	Potentially Significant	**IMM NOI-2:** To reduce potential construction noise impacts, the following	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.		multi-part Improvement Mitigation Measure (IMM) shall be implemented for the project: • Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Locate stationary operational noise-generating equipment as far as feasible from sensitive receptors when sensitive receptors adjoin or are near a construction area. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site to the extent feasible. • Utilize "quiet" air compressors and other stationary operational noise sources where such technology exists and is commercially practicable. • The construction contractor shall prohibit unnecessary idling (i.e., idling in excess of 5 minutes) of internal combustion engines. • The construction contractor shall, to the maximum extent practicable, locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. • The construction contractor shall ensure that all construction activities	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		that would occur within 550 feet of a residential land use property line shall be limited to daylight hours or to the hours of 7:00 a.m. and 7:00 p.m.	
Impact NOI-3: The proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact NOI-4: The proposed project would not expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation is necessary.	Less Than Significant
Section 3.13—Public Services			
Impact PUB-1: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact PUB-2: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered	Less Than Significant	No mitigation is necessary	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.			
Impact PUB-3: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact PUB-4: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for parks.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact PUB-5: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause	Less Than Significant	No mitigation is necessary.	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for libraries or other public facilities.			
Cumulative Impacts	Less Than Significant	No mitigation is necessary.	Less Than Significant
Section 3.14—Transportation			
Impact TRANS-1: The proposed project would result in a substantial increase in vehicle miles traveled.	Potentially Significant	**MM TRANS-1: Transportation Demand Management Measures** **MM TRANS-1(a)**: Transportation Demand Management Measures Prior to issuance of the first building permit for the relevant individual development proposal, the relevant applicant for the individual development proposal at issue shall submit to the City of Tracy Planning Department a transportation demand management (TDM) program that incorporates all of the following six measures (as explained further in Table 3.14-6 of the Draft EIR): 1. Communication and Information Strategies–4 percent reduction; 2. Telecommuting for administrative staff (5 percent of staff population)–1 percent reduction; 3. Designated parking spaces for carpool vehicles–1 percent reduction; 4. Provide a transit stop along the project frontage on Grant Line Road, if agreed to by the City–2 percent reduction; 5. Provide bike lanes and sidewalks along the project frontage–1 percent reduction; and	Significant and Unavoidable

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		6. Provide on-site bike racks and showers–1 percent reduction. Provided, however, that if the relevant applicant determines that one of more of the foregoing six TDM measures is not feasible in connection with the individual development proposal at issue, then the relevant applicant may obtain approval from the City of Tracy Planning Department of acceptable substitute TDM measure(s) pursuant to Table 3.14-6 of the Draft EIR. The relevant applicant's TDM program, as described above, shall reflect a 10 percent reduction in VMT for the relevant individual development proposal. **MM TRANS-1(b): Payment of Applicable Banking Fee.** In addition to the TDM program required in MM TRANS-1(a), each applicant for an individual development proposal shall pay the applicable fee as set forth in the adopted VMT Mitigation Banking Fee in place and effective at the time the relevant applicant seeks to obtain building permits for its individual development proposal. Provided, however, that if the City Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, then payment of	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		$633.11 (cost per VMT reduction for the relevant individual development proposal) shall constitute compliance with this MM TRANS-1(b).	
Impact TRANS-2: The proposed project could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Potentially Significant	**MM TRANS-2:** Prepare and Implement Construction Traffic Control Plan Prior to the start of construction for ant individual development proposal, the relevant applicant shall prepare and submit a Construction Traffic Control Plan for the individual development proposal at issue. Each plan shall include the following items. Each approved plan shall be implemented during construction of the individual development proposal at issue. • Project staging plan to maximize on-site storage of materials and equipment • Permitted construction hours • Location of construction staging • Provisions for street sweeping to remove construction related debris on public streets • A set of comprehensive traffic control measures including preparation of traffic control plans, as needed; scheduling of major truck trips and deliveries to avoid peak-hours; lane closure proceedings; signs, cones, and other warning devices for drivers; and designation of construction haul routes. • Survey of the pavement condition on roadways within the relevant individual	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		development to be used as part of haul route prior to the commencement of any work on-site. The survey shall include a video tape of the roadways. Each relevant applicant shall complete any remedial work prior to initiation of use and provide a bond assuring completion of the remediation work triggered by the individual development proposal, the amount which shall be deemed sufficient by the Public Works Department. • The relevant applicant shall provide a pavement analysis for those roads along the proposed haul routes or any alternate route(s) that are proposed to be utilized by hauling operation for the individual development proposal at issue. This study shall analyze the existing pavement conditions and determine what impact the hauling operation will have over the construction period of the relevant individual development. The study shall provide recommendations to mitigate identified impacts, which shall be implemented by the relevant applicant for the individual development proposal at issue.	
Impact TRANS-3: The proposed project could result in inadequate emergency access.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact TRANS-4: The proposed project would not conflict with policies, plans, or programs regarding public transit, bicycle,	Less Than Significant	No mitigation is necessary.	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.			
Cumulative Impacts	Potentially Significant	Implement MM TRANS-1(a) and MM TRANS-(b)	Significant and Unavoidable
Section 3.15—Tribal Cultural Resources			
Impact TCR-1: The proposed project could cause a substantial adverse change in the significance of a Tribal Cultural Resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).	Potentially Significant	Implement MM CUL-1 and MM CUL-3	Less Than Significant
Impact TCR-2: The proposed project could cause a substantial adverse change in the significance of a Tribal Cultural Resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.	Potentially Significant	Implement MM CUL-1 and MM CUL-3	Less Than Significant
Cumulative Impacts	Potentially Significant	Implement MM CUL-1 and MM CUL-3	Less Than Significant
Section 3.16—Utilities and Service Systems			
Impact UTIL-1: The proposed project would require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	Potentially Significant	Implement MM UTIL-3 and **MM UTIL-1a: Adherence to Applicable Performance Standards and Payment of Infrastructure Fees** Prior to the issuance of building permits for an individual development proposal, the relevant applicant shall demonstrate compliance of the individual	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		development proposal at issue with applicable performance standards pursuant to the then-current Urban Water Management Plan, Citywide Water System Master Plan, Wastewater Master Plan, and Citywide Storm Drainage Master Plan. In addition, each applicant for an individual development proposal shall pay its respective proportionate share of required funding, subject to applicable laws governing nexus requirements, to the City for completion of relevant planned City Capital Improvement Plan improvements. **MM UTIL-1b: Submittal of Final Engineering Plans for Tracy Alliance Parcels** Prior to the issuance of the building permit for the first building on the Tracy Alliance parcels, the applicants for the development of the Tracy Alliance parcels shall submit engineering plans to the City of Tracy for review and approval to confirm compliance with this MM UTIL-1b. These plans shall include additional 12-inch diameter pipelines on-site as shown on Exhibit 3.16-6 of this Draft EIR and the fire service laterals shall be upsized to 14-inch diameter. **MM UTIL-1c: Submittal of Final Engineering Plans for Suvik Farms and Zuriakat Parcels** Prior to the issuance of the building permit for the first building on the subject	

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		parcel, each relevant applicant for the individual development proposal of the Suvik Farms or Zuriakat Parcels, respectively, shall each submit final engineering plans to the City of Tracy for review and approval to confirm compliance with the relevant performance standards, including, but not limited to, those pursuant to the current Urban Water Management Plan, Citywide Water System Master Plan, Wastewater Master Plan, and Citywide Storm Drainage Master Plan in effect at the time building permits are requested.	
Impact UTIL-2: The proposed project would have sufficient water supplies available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years.	Potentially Significant	Implement MM UTIL-1a	Less Than Significant
Impact UTIL-3: The proposed project would result in a determination by the wastewater treatment provider, which serves or may serve the proposed project, that it has adequate capacity to serve the proposed project's projected demand in addition to the provider's existing commitments.	Potentially Significant	**MM UTIL-3: Payment of Wastewater Infrastructure Fees/Construction of Wastewater Facilities** Prior to the issuance of the first building permit for the subject individual development proposal, the relevant applicant shall participate in the implementation of the Wastewater Master Plan (WWMP) in effect at the time the relevant building permit is requested through the payment of the applicable impact fees as included in the City's Capital Improvement Plan.	Less Than Significant

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact UTIL-4: The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Impact UTIL-5: The proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.	Less Than Significant	No mitigation is necessary.	Less Than Significant
Cumulative Impacts	Less Than Significant	No mitigation is necessary.	Less Than Significant
Section 3.17—Wildfire			
Impact WILD-1: The proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	No Impact	No mitigation is necessary.	No Impact
Impact WILD-2: Due to slope, prevailing winds, and other factors, the project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	No Impact	No mitigation is necessary.	No Impact
Impact WILD-3: The project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	No Impact	No mitigation is necessary.	No Impact

Impacts	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact WILD-4: The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	No Impact	No mitigation is necessary.	No Impact
Cumulative Impacts	No Impact	No mitigation is necessary.	No Impact

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CHAPTER 1: INTRODUCTION

This Draft Environmental Impact Report (Draft EIR) for the Tracy Alliance Project (proposed project) has been prepared in accordance with applicable criteria, standards, and procedures of the California Environmental Quality Act (CEQA), as amended (California Public Resources Code [PRC], § 21000, *et seq*.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000, *et seq*.). In accordance with Sections 21067, 15367, and 15050–15053 of the CEQA Guidelines, the City of Tracy (City) is the lead agency under whose authority this document has been prepared. As an informational document, this Draft EIR is intended for use by the City and other public agency decision makers, interested organizations and members of the public in evaluating the potential environmental impacts of the proposed project.

1.1 - Project Overview

The proposed project consists of the development of up to 3,352,320 square feet of warehouse and distribution and related uses on a total of approximately 191.18 acres. The site consists of six parcels under ownership by three separate parties: the Tracy Alliance Group owns two parcels (totaling approx. 122.44 acres), Suvik Farms, LLC owns three parcels (totaling approximately 46.61 acres), and Zuriakat owns one parcel (approximately 22.17 acres).

The project site is within unincorporated San Joaquin County adjacent to the City of Tracy's northeastern city limits and adjacent to the City of Tracy Northeast Industrial (NEI) Specific Plan area (Exhibit 2-1 and Exhibit 2-2 in the Project Description). The proposed project would require approval of annexation into the City of Tracy, pre-zoning, an amendment to the NEI Specific Plan, and a Tentative Parcel Map or Lot Line Adjustment(s) to create the final lot configurations (Exhibit 2-3 in the Project Description depicts the proposed parcel reconfiguration, which depicts the ultimate parcels).

The proposed project also includes demolition of existing residential and agricultural buildings, removal of existing trees and crops, construction of on- and off-site roadway improvements, and grading of approximately 500,000 cubic yards, which would be balanced on-site. Of the 500,000 cubic yards of material graded, approximately 300,000 cubic yards would occur on the Tracy Alliance parcels, approximately 150,000 cubic yards would occur in development of the Suvik Farms parcels, and approximately 50,000 cubic yards would occur in development of the Zuriakat parcel.

Development on the two Tracy Alliance parcels would consist of approximately 1,849,500 square feet of warehouse and distribution space located in three buildings, as well as a stormwater detention basin with pump station that would be City-owned and managed. Approximately 12.51 acres of the Tracy Alliance land would be reserved to accommodate a portion of a planned interchange at Paradise Road and Interstate 205 (I-205). However, the potential impacts of constructing this future interchange would undergo a separate environmental review process pursuant to the CEQA and National Environmental Policy Act (NEPA), once funding is programmed and available and once the ultimate design of the interchange is finalized; accordingly, the construction of the interchange is not considered part of the proposed project. In addition to the

proposed development on the Tracy Alliance parcels, this Draft EIR evaluates the maximum development potential that could occur on the remaining parcels (Suvik Farms and Zuriakat), which is estimated to consist of up to 1,502,820 square feet of warehouse and distribution development, consistent with the maximum allowable density per acre identified in the NEI Specific Plan.

Chapter 2, Project Description, provides a complete description of the proposed project.

1.2 - Environmental Review Process

An EIR is an informational document used by a lead agency (in this case, the City) when considering approval of a proposed project. The purpose of an EIR is to provide public agencies, other interested organizations, and members of the public with detailed information regarding the environmental effects associated with implementing a project. An EIR should analyze the environmental consequences of a project, and should also identify ways to feasibly reduce or avoid the proposed project's potential environmental effects through design refinements, mitigation, or the identification of project alternatives that could avoid or reduce impacts while still achieving most of the project objectives. Pursuant to CEQA, State and local government agencies must consider the environmental consequences of projects over which they have discretionary authority. This Draft EIR provides information to be used in the planning and decision-making process. It is not the purpose of an EIR to recommend approval or denial of a proposed project.

Before approval of the proposed project, the City, as lead agency and the land use decision-making entity, is required to certify that this EIR has been completed in compliance with CEQA, that the information in the EIR has been considered, and that the EIR reflects the independent judgment of the City. Pursuant to CEQA, if there are significant and unavoidable impacts identified in an EIR, then decision makers must balance the benefits of a project against its unavoidable environmental consequences. If environmental impacts are identified as significant and unavoidable, the City may still approve the proposed project if it finds that social, economic, legal, technological, or other benefits outweigh the unavoidable impacts, the reasoning for which the City would state in writing, based on information in the EIR and other information sources in the administrative record. This written document that sets forth this reasoning is called a "statement of overriding considerations" (PRC § 21081; CEQA Guidelines § 15093).

In addition, the City as lead agency must adopt a Mitigation Monitoring and Reporting Program (MMRP) describing the identified mitigation measures that are to be made enforceable conditions of project approval to feasibly avoid or mitigate significant effects on the environment (PRC § 21081.6; CEQA Guidelines § 15097). The MMRP is adopted at the time of project approval and is designed to ensure compliance with the Project Description and EIR mitigation measures during and after project implementation. If the City decides to approve the proposed project, it would be responsible for verifying that the MMRP for this proposed project is implemented. In addition, the EIR will be used by the City and responsible and trustee agencies, as relevant, during approval of future discretionary actions and permits that are necessary to implement the proposed project.

This Draft EIR provides a project level analysis for the proposed project. For the purposes of analysis in this Draft EIR, because the applicant for the Tracy Alliance parcels has submitted an individual

development proposal for these parcels, this Draft EIR evaluates, as required under CEQA, the specific aspects of that proposal. With respect to the remaining portions of the project site, individual development proposals have not yet been submitted. Accordingly, this Draft EIR evaluates at a project level full buildout of the project site as contemplated under the proposed project, based on information that is reasonably available and reflects reasonable assumptions of maximum development potential that could occur on the remaining parcels (Suvik Farms and Zuriakat). This is estimated to consist of up to 1,502,820 square feet of warehouse and distribution development, consistent with the maximum allowable density per acre identified in the NEI Specific Plan (see Table 2-2 in the Project Description for a summary of the proposed development). The level of analysis for Suvik Farms and Zuriakat parcels reflects the level of detail available at the time of preparation of this Draft EIR. The environmental impacts of the proposed project are analyzed in the Draft EIR to the degree of specificity appropriate, in accordance with CEQA Guidelines Section 15146. This document addresses the potentially significant adverse environmental impacts that may be associated with the construction and operation of the proposed project. It also identifies appropriate and feasible mitigation measures and a reasonable range of potentially feasible alternatives as required under CEQA.

CEQA requires that an EIR contain, at a minimum, certain specific components. These components are contained in this Draft EIR and include:

- Table of Contents
- Introduction
- Executive Summary
- Project Description
- Environmental Setting
- Significant Environmental Impacts
- Mitigation Measures
- Cumulative Impacts
- Significant Unavoidable Adverse Impacts
- Alternatives to the Proposed Project
- Growth-Inducing Impacts
- Effects Found not to be Significant
- Areas of Known Controversy

The City is designated as the lead agency for the proposed project. CEQA Guidelines Section 15367 defines the lead agency as ". . . the public agency, which has the principal responsibility for carrying out or approving a project." Other public agencies may use this Draft EIR in the decision-making or permit process and consider the information in this Draft EIR along with other information that may be presented during the CEQA process.

This Draft EIR was prepared by FirstCarbon Solutions (FCS), an environmental consultant, under contract to the City. Prior to public review, it was extensively reviewed and evaluated by the City. This Draft EIR reflects the independent judgment and analysis of the City as required by CEQA. Lists of organizations and persons consulted and the report preparation personnel is provided in Chapter 7 of this Draft EIR.

1.3 - Purpose and Legal Authority

1.3.1 - Notice of Preparation and Public Scoping Process

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the City, as lead agency, sent a Notice of Preparation (NOP) to responsible and trustee agencies, other public agencies and organizations, and members of the public on August 28, 2020, thus beginning the formal CEQA scoping process. The purpose of the scoping process is to allow the public, government agencies, and other interested organizations to provide input on the scope of the EIR. The scoping period began on August 28, 2020, and ended on September 30, 2020, representing the statutory 30-day public review period. Seven comment letters were received in response to the NOP. The NOP and comment letters are provided in Appendix A. Comments are summarized in Table 1-1, with cross-references to applicable Draft EIR sections, as appropriate, where analysis is included to address the comments received.

Pursuant to Section 15083 of the CEQA Guidelines, the NOP provided notice that the City would hold a public scoping meeting on September 9, 2020, starting at 7:00 p.m. Pacific Standard Time (PST) via a videoconference platform. At this meeting, attendees were given an opportunity to provide comments and express concerns about the potential effects of the proposed project; however, no public comments were received during the scoping meeting.

Table 1-1: Summary of EIR Scoping Comments

Agency/Organization	Author	Date	Comment Summary	Coverage in the Draft EIR
Public Agencies				
Native American Heritage Commission	Nancy Gonzalez-Lopez, Cultural Resources Analyst	8.31.2020	Compliance with Assembly Bill (AB) 52 and Senate Bill (SB) 18 regarding the requirements of tribal consultation as a result of an EIR and NOP. Author provides examples of appropriate mitigation measures if applicable. The author provides recommendations for cultural resource assessments and the necessary steps to follow in order to fully determine the existence and significant of tribal cultural resources on or near the project site.	Section 3.5: Cultural and Section 3.15: Tribal Cultural Resources
California Department of Toxic Substances Control	Gavin McCreary, Project Manager	9.8.2020	Hazards and Hazardous Materials, potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on the project site. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight. Because of the potential for Aerially Deposited Lead-contaminated soil, the California	Section 3.9: Hazards and Hazardous Materials

Agency/Organization	Author	Date	Comment Summary	Coverage in the Draft EIR
			Department of Toxic Substances Control (DTSC) recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR. If applicable, proper investigation for mine waste should be discussed in the EIR. Surveys should be conducted on buildings that would be demolished for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. If applicable, proper sampling should be conducted to ensure that the imported soil is free of contamination. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. The DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 Interim Guidance for Sampling Agricultural Properties.	
California Department of Conservation	Monique Wilber, Conservation Program Support Supervisor	9.24.2020	The commenter requests that the EIR specify the type, amount, and location of farmland conversion resulting directly and indirectly from implementation of the proposed project. The commenter asks that impacts on any current and future agricultural operations in the vicinity; e.g., land use conflicts, increases in land values and taxes, loss of agricultural support infrastructure such as processing facilities, etc. should be discussed in the EIR. The commenter requests that the EIR describe the incremental impacts leading to cumulative impacts on agricultural land. This would include impacts from the proposed project, as well as impacts from past, current, and likely future projects. The commenter asks that any proposed mitigation measures for all impacted agricultural lands within the proposed project area be described. The commenter asks that the EIR evaluate the project's compatibility with, or potential contract resolutions for land in	Section 3.2: Agriculture and Forestry Resources

Agency/Organization	Author	Date	Comment Summary	Coverage in the Draft EIR
			an agricultural preserve and/or enrolled in a Williamson Act contract.	
San Joaquin Valley Air Pollution Control District	Arnaud Marjollet, Director of Permit Services	9.30.2020	The commenter provides comments related to criteria air pollutant emissions, construction emissions, operational emissions, recommended using the California Emissions Estimator Model (CalEEMod), Truck Routing, cleanest available trucks, reduce idling of heavy duty trucks, use of on-site electric road equipment, voluntary emission reduction agreement, health risk assessment, a health impact discussion, ambient air quality analysis, and cumulative air impacts.	Section 3.3: Air Quality and Section 3.8: Greenhouse Gas Emissions
Central Valley Regional Water Quality Control Board (RWQCB)	Nicholas White, Water Resource Control Engineer	9.30.2020	The commenter explains the various RWQCB regulations and policies that would need to be discussed in the EIR and properly mitigated for. In addition, the commenter explains the types of permits required for this project to comply with regulations meant to protect water quality.	Section 3.10: Hydrology and Water Quality
Delta Stewardship Council	Jeff Henderson, AICP Deputy Executive Office	9.30.2020	The commenter states that the City should consult with SJCOG to determine whether the proposed project is consistent with the Sustainable Communities Strategy (SCS) and should identify this in the Land Use and Planning section of the Draft EIR. Projects that are consistent with the SCS are not considered to be a covered action under the Delta Plan. The comment lists Delta Plan regulatory policies that may apply to the proposed project if the proposed project is later determined to be a covered action. In particular, Delta Plan Mitigation Measure (MM) 7-1 is of particular relevance to the proposed project, which would be located on prime agricultural land, including three parcels under a Williamson Act contract. The additional truck traffic associated with the proposed project could have significant cumulative health effects on the residents of Banta, in combination with other recent and planned projects in the Northeast Industrial Specific Plan area and baseline noise, traffic, and air	Section 3.2: Agriculture and Forestry Resources, Section 3.3: Air Quality, Section 3.8: Greenhouse Gas Emissions, Section 3.11: Land Use and Planning, Section 3.12: Noise, and Section 3.14: Transportation

Agency/Organization	Author	Date	Comment Summary	Coverage in the Draft EIR
			quality levels. The Air Quality section of the EIR should include an analysis of the cumulative health impacts on sensitive receptors in Banta.	
San Joaquin Council of Governments (SJCOG)	Laurel Boyd	10.12.2020	The commenter states that the City of Tracy is a signatory to San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) and that the project site would fall in the planning area. The commenter explains that participation in the SJMSCP satisfies requirements of both the state and federal endangered species acts, and ensures that the impacts are mitigated below a level of significance in compliance with CEQA. The commenter recommends that the co-applicants Schedule a SJMSCP Biologist to perform a pre-construction survey prior to any ground disturbance. The commenter also explains that the project would need to implement SJMSCP Incidental take Minimization Measures and mitigation requirements.	Section 3.4: Biological Resources
Source: FCS 2020.				

1.3.2 - Public Review

Upon completion of the public Draft EIR, the City filed a Notice of Completion (NOC) with the State Office of Planning and Research (OPR) to begin the public review period (PRC § 21161, CEQA Guidelines §§ 15085(a) and 15372). Concurrent with the NOC, the City also provided the related Notice of Availability (NOA) (CEQA Guidelines § 15087(a)), and the Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, San Joaquin County, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b).

An electronic copy of the Draft EIR, including the technical appendices, can be viewed on the City's website at https://www.cityoftracy.org/our-city/departments/planning/specific-plans-environmental-impact-reports-and-initial-studies. A hard copy of the Draft EIR, including the technical appendices, can be viewed at the following locations (please check with the facility for hours of operation).:

City of Tracy
Development and Engineering Services
333 Civic Center Plaza
Tracy, CA 95376

Tracy Branch Library
20 East Eaton Avenue
Tracy, CA 95376

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on the Draft EIR should be addressed to:

Victoria Lombardo, Senior Planner
City of Tracy
Development Services
333 Civic Center Plaza
Tracy, CA 95376
Phone: 209.831.6428
Email: victoria.lombardo@cityoftracy.org

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the 45-day public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies, organizations and public at least 10 days prior to the public hearing before the Tracy City Council on the proposed project, at which the certification of the Final EIR will be considered prior to the Council taking action on the proposed project. Comments received and the responses to comments will be included as part of the record for consideration by decision makers for the proposed project.

1.3.3 - Environmental Issues Determined not to be Significant

The NOP identified topical areas that were determined not to be significant. An explanation of why each area is determined not to be significant is provided in Chapter 4, Effects Found not to be Significant. These topical areas are as follows:

- Mineral Resources
- Population and Housing
- Parks and Recreation

1.3.4 - Potentially Significant Environmental Issues

The NOP found that the following topical areas may contain potentially significant environmental issues that will require further analysis in the Draft EIR. These sections are as follows:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

1.4 - Draft EIR Document Organization

This Draft EIR is organized into the following main sections:

- **Chapter ES: Executive Summary.** This Chapter includes a summary of the proposed project and alternatives to be addressed in the Draft EIR. A brief description of any areas of controversy and issues to be resolved and an overview of the MMRP—in addition to a table that summarizes impacts, mitigation measures, and level of significance after mitigation—are also included in this Chapter.
- **Chapter 1: Introduction.** This Chapter provides an introduction and overview describing the purpose of this Draft EIR, its scope and components, and its review and certification process.
- **Chapter 2: Project Description.** This Chapter includes a detailed description of the proposed project, including location, site, and project characteristics. A discussion of project objectives intended uses of the Draft EIR, responsible and trustee agencies, and discretionary approvals that are needed for the proposed project are also provided.
- **Chapter 3: Environmental Impact Analysis.** This Chapter analyzes environmental impacts of the proposed project. Impacts are organized into major topical areas. Each topical area includes a description of the environmental setting, regulatory framework, significance criteria, methodology used in the analysis, specific thresholds of significance, impact analyses, mitigation measures (when applicable), and significance conclusions, as well as cumulative impacts associated with the project, including impacts of past, present, and reasonably foreseeable probable future projects. The specific environmental topical sections that are addressed within Chapter 3 are as follows:
  - **Section 3.1—Aesthetics:** Addresses potential visual impacts related to intensification and overall increase in illumination that would be produced by the proposed project.
  - **Section 3.2—Agriculture and Forestry Resources:** Addresses potential for conversion of Important Farmland to nonagricultural use and forest land to non-forest use.
  - **Section 3.3—Air Quality:** Addresses potential air quality impacts associated with project implementation and emissions of criteria pollutants. The section also evaluates project emissions of toxic air contaminants.
  - **Section 3.4—Biological Resources:** Addresses potential impacts on special-status habitat, vegetation, and wildlife; potential degradation or elimination of important habitat for special-status species; and impacts on listed, proposed, and candidate threatened and endangered species.
  - **Section 3.5—Cultural Resources:** Addresses potential impacts related to historical and archaeological resources, and burial sites.
  - **Section 3.6—Energy:** Addresses potential project impacts related to energy usage.
  - **Section 3.7—Geology and Soils:** Addresses potential impacts related to soils and assesses effects of project-related development in relation to geologic and seismic conditions. Also addresses potential impacts related to paleontological or unique geologic resources.
  - **Section 3.8—Greenhouse Gas Emissions:** Addresses potential project emissions of greenhouse gases.
  - **Section 3.9—Hazards and Hazardous Materials:** Addresses potential for presence of hazardous materials or conditions on the project site and vicinity that may have potential to create a significant hazard to the public or the environment.

- **Section 3.10—Hydrology and Water Quality:** Addresses potential impacts related to local hydrological conditions, including drainage areas and changes in flow rates, as well as the proposed project's potential impacts to water quality, erosion, and groundwater supplies.
- **Section 3.11—Land Use and Planning:** Addresses potential land use impacts associated with division of an established community and consistency with relevant land use plans, policies and regulations adopted for the purpose of avoiding or mitigating an environmental impact.
- **Section 3.12—Noise:** Addresses potential noise impacts during construction and at project buildout from mobile and stationary sources on sensitive receptors. The section also addresses potential impact related to groundborne vibration and groundborne noise.
- **Section 3.13—Public Services:** Addresses potential impacts of the proposed project upon public services, including fire protection, law enforcement, schools, parks, recreational facilities, and library facilities in terms of the need to provide new or physical alter facilities in order to maintain acceptable service ratios, response times, or other performance objectives.
- **Section 3.14—Transportation:** Addresses potential impacts related to the local and regional roadway system with respect to Vehicle Miles Traveled (VMT) and public transportation, bicycle, and pedestrian access. Also includes a non-CEQA operational analysis for informational purposes.
- **Section 3.15—Tribal Cultural Resources:** Addresses potential project impacts related to tribal cultural resources.
- **Section 3.16—Utilities and Services Systems:** Addresses potential impacts related to service providers, including water supply, stormwater, wastewater, solid waste, and energy (electric and natural gas) providers and telecommunications, with respect to the proposed project's potential to require or result in the construction of new or expanded infrastructure.
- **Section 3.17—Wildfire:** Addresses potential impacts related to wildfire including lands within State responsibility areas and lands classified as very high fire hazard severity zones.

- **Chapter 4: Effects Found not to be Significant.** This Chapter contains analysis of topical sections not addressed in Chapter 3.
- **Chapter 5: Other CEQA Considerations.** This Chapter provides a summary of significant environmental impacts, including unavoidable and growth-inducing impacts, as well as significant irreversible environmental changes.
- **Chapter 6: Alternatives to the Proposed Project.** This Chapter compares impacts of the project with four land use project alternatives: the No Project Alternative, Outside Storage Allowable Use Alternative, and the Agricultural Protection Alternative**.** An environmentally superior alternative is identified. In addition, alternatives initially considered but rejected from further consideration are discussed.
- **Chapter 7: Persons and Organizations Consulted/List of Preparers.** This Chapter contains a list of persons and organizations that were consulted during preparation of the Draft EIR. This Chapter also contains a list of authors who assisted in preparation of the Draft EIR by name and affiliation.

- **Appendices.** The Draft EIR appendices include notices and other procedural documents pertinent to the Draft EIR, as well as supporting technical materials. The following supporting materials and technical studies and analyses were prepared for the proposed project in support of preparation of this Draft EIR**:**
  - Air Quality/Greenhouse Gas Emissions/Energy Analysis
  - Biological Resources Assessment
  - Phase I Cultural Resources Assessment
  - Paleontological Records Research and Review
  - Noise Analysis
  - Traffic Impact Study and VMT Analysis Memorandum
  - Review of Applicant-prepared Studies
    - Phase I Environmental Site Assessments
    - Limited Site Investigation
    - Flood Protection Technical Memorandum
    - Geotechnical Engineering Report
    - Water Supply Assessment

1.5 - Documents Incorporated by Reference

As permitted by CEQA Guidelines Section 15150, this Draft EIR has referenced, among other things, several technical studies, analyses, and previously certified environmental documentation. Information from relevant documents, which have been incorporated by reference, has been briefly summarized in the appropriate section(s), where possible or briefly described if the data or information cannot be summarized. Where all or part of another document is incorporated by reference, the incorporated language shall be considered to be set forth in full as part of the text of this Draft EIR. The documents and other sources that have been used in the preparation of this Draft EIR include but are not limited to:

- City of Tracy General Plan
- City of Tracy General Plan EIR (State Clearinghouse [SCH] No. 992122069)
- City of Tracy Supplemental General Plan EIR (SCH No. 2008092006)
- City of Tracy Zoning Code
- City of Tracy 2015-2023 Housing Element
- Northeast Industrial Area Specific Plan and EIR (SCH No. 95102050)
- Northeast Industrial Area Specific Plan
- Citywide Water System Master Plan
- Wastewater Master Plan
- Citywide Storm Drainage Master Plan
- Urban Water Management Plan for the City of Tracy
- San Joaquin County General Plan
- San Joaquin County General Plan EIR (SCH No. 2013102017)
- San Joaquin County Code of Ordinances

The City of Tracy General Plan, City of Tracy General Plan EIR, City of Tracy Zoning Code, and the referenced documents and other sources used in preparation of the EIR can be viewed here: https://www.cityoftracy.org/our-city/departments/planning/specific-plans-environmental-impact-reports-and-initial-studies. The above-referenced documents and other sources used in the preparation of the Draft EIR will also be available to the public for inspection at the addresses shown in Section 1.3.2 in accordance with CEQA Guidelines Section 15150(b).

CHAPTER 2: PROJECT DESCRIPTION

2.1 - Overview

The Tracy Alliance Group, Suvik Farms, LLC, and Zuriakat (co-applicants) are proposing the Tracy Alliance Project (proposed project), which consists of the development of up to 3,352,320 square feet of warehouse and distribution and related development on a total of approximately 191.18 acres comprising six parcels. The six parcels consist of two Tracy Alliance parcels (totaling approximately 122.44 acres), three Suvik Farms, LLC parcels (totaling approximately 46.61 acres), and one Zuriakat parcel (approximately 22.17 acres).

The project site is within unincorporated San Joaquin County adjacent to the City of Tracy's northeastern city limits and adjacent to the City of Tracy Northeast Industrial (NEI) Specific Plan area. The proposed project would require approval of annexation into the City of Tracy, pre-zoning, an amendment to the NEI Specific Plan, and a Tentative Parcel Maps or Lot Line Adjustment(s) to create final development lots.

Development on the two Tracy Alliance parcels, as proposed by co-applicant Tracy Alliance Group, would consist of approximately 1,849,500 square feet of warehouse and distribution space located in three buildings, as well as an approximately 12.44-acre stormwater detention basin with pump station (that would be City owned and managed). Approximately 12.51 acres of the Tracy Alliance land would be reserved to accommodate a portion of a planned interchange at Paradise Road and Interstate 205 (I-205). However, the potential impacts of constructing this future interchange would undergo a separate environmental review process pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) once funding is programmed and available and once the ultimate design of the interchange is finalized; accordingly, the construction is not considered part of the proposed project (although the interchange is assumed to be in place as part of the cumulative conditions within the Transportation Impact Analysis prepared by Kimley Horn).

Development plans for the Suvik Farms, LLC parcels (identified as Suvik Farms parcels) and the Zuriakat parcel are not specified at this time. For the purposes of analysis in this Draft Environmental Impact Report (Draft EIR), buildout of these parcels is estimated to consist of a total of approximately 1,502,820 square feet of warehouse and distribution development, consistent with the maximum allowable density per acre identified in the NEI Specific Plan.

The proposed project also includes demolition of existing residential and agricultural buildings, removal of existing trees and crops, on- and off-site road improvements, and grading of approximately 500,000 cubic yards, which would be balanced on-site. Of the 500,000 cubic yards of material graded, approximately 300,000 cubic yards would occur on the Tracy Alliance parcels, approximately 150,000 cubic yards would occur in development of the Suvik Farms parcels, and approximately 50,000 cubic yards would occur in development of the Zuriakat parcel.

The purpose of this Draft EIR is to identify potential environmental impacts of the proposed project. This chapter provides a detailed overview of the project site location and setting, project objectives,

details, characteristics, and construction phasing. It also describes intended uses of the Draft EIR by agencies with discretionary permitting and approval authority over the proposed project, as well as the required discretionary permits and approvals to implement the proposed project.

2.2 - Project Location and Setting

2.2.1 - Location

Regional Location

The City of Tracy (City) is in the northern San Joaquin Valley of California. The City is bordered on all sides by unincorporated San Joaquin County. To the north, the City is roughly bordered by I-205 and agricultural lands, including dairy operations; to the east by the unincorporated community of Banta and other residential and industrial uses; to the south by open space; and to the west by open space and agricultural lands (Exhibit 2-1). The City covers 26 square miles and has historically been a semi-rural residential community with many light industrial uses such as warehouse, logistics, and distribution facilities. Major roadway networks including I-580, I-205, and I-5 provide regional access to the City and surrounding areas.

Local Setting

The project site is located at the northeast corner of Grant Line Road and Paradise Road (see Exhibit 2-2.). The site is within unincorporated County land adjacent to the northeastern city limits and within the City's Sphere of Influence (SOI) (10-year planning horizon). The project site is directly east of the City's NEI Specific Plan boundary. The project site lies at United States Geological Survey (USGS) Union Island 7.5-minute Quadrangle Section 22, 23, and 24 (and El Pescadero Land Grant) Township 2 South, Ranch 5 East (Latitude 37°45'33" North; Longitude 121°23'07" West). The site is bound by I-205 to the north, California Avenue to the northeast, Grant Line Road to the south, and Paradise Road to the west (see Exhibit 2-2). The site is currently accessed from Grant Line Road and Paradise Road. Paradise Road runs north/south and crosses I-205. No on- or off-ramps exist at the intersection of I-205 and Paradise Road.

2.2.2 - Existing Project Site Characteristics

The project site consists of six parcels, as shown in Exhibit 2-3 and listed in Table 2-1. In this Draft EIR, parcels may be referenced by Assessor's Parcel Number (APN) or the name of the current owner (e.g., APN 213-170-14 is also referenced as the Zuriakat parcel).

Table 2-1: Existing Parcels

Assessor's Parcel Number	Parcel Naming Convention	Address	Ownership/Applicant	Acreage (approx.)
213-170-14	Zuriakat Parcel	6050 California Avenue	Zuriakat/Not Applicable	22.17
213-170-24 213-170-25 213-170-26	Suvik Farms Parcels	6103 Grant Line Road 6281 Grant Line Road 6301 Grant Line Road	Suvik Farms/Souza Realty and Development	31.67 11.70 3.24

Assessor's Parcel Number	Parcel Naming Convention	Address	Ownership/Applicant	Acreage (approx.)
213-170-27 213-170-48	Tracy Alliance Parcels	6599 Grant Line Road Grant Line Road (no street number)	Tracy Alliance/Tracy Alliance Group Pacific T&T Company/Tracy Alliance Group	122.39 0.05
			Total	**191.22**[1]

Notes:
1. Numbers do not sum to 191.18, total acreage included throughout the Draft EIR, due to rounding.
Source: San Joaquin County. no date. Assessor's Map. Book 213. Page 17.

The project site is relatively flat and low in elevation (approximately 15-30 feet above mean sea level) with a gentle topographic slope in the north-northeast direction.[1,2] The Suvik and Zuriakat parcels do not contain any structures, only row crops.

The Tracy Alliance parcels are currently occupied by two existing approximately 1,000-square-foot residences (one occupied and one vacant), associated landscaping, and nine agricultural outbuildings used for equipment storage and maintenance, all located in the southwest corner of the property. The agricultural buildings began to appear in the 1930s, and an active dairy was present on-site from the 1950s to the 1970s.

Approximately 118 acres of the Tracy Alliance parcels are currently used for row crop production, including alfalfa, winter wheat, and almonds, with a small cattail marsh in an irrigation/drainage channel along the southern side of California Avenue. Several private dirt roads provide access within the project site; an irrigation/drainage channel runs along several of these roads. There is also a paved irrigation/drainage channel between the Tracy Alliance parcels and the Zuriakat parcel. In addition, there are streetlights and power and telecommunication lines in various locations surrounding the project site.

The project site provides suitable foraging habitat with potential to support birds of prey, including Swainson's hawk. Northern portions of the site are within a 100-year floodplain as designated by the Federal Emergency Management Agency (FEMA).[3] There are approximately 188 acres of the project site that are considered Prime Farmland as mapped by the California Department of Conservation Farmland Mapping and Monitoring Program. Prime Farmland has the best combination of features able to sustain long-term agricultural production with sustained high yields.[4] The Suvik Farms parcels are encumbered by a Williamson Act contract, which is set to expire in 2026.[5] Existing site conditions are shown in Exhibit 2-4 through 2-4e.

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1 Terracon Consultants, Inc. 2018. Phase I Environmental Site Assessment: Tracy Ridge. December 21.
2 Environmental Assessment Specialists, Inc. 2020. Phase I Environmental Site Assessment: Suvik and Zuriakat Properties, page 5.
3 Federal Emergency Management Agency (FEMA). 2020. National Flood Hazard Layer FIRMette. April 6. Website: https://msc.fema.gov/portal/search?AddressQuery=6281%20Grant%20Line%20Road%20Tracy%2C%20CA#searchresultsanchor. Accessed April 6, 2020
4 California Department of Conservation, Division of Land Resource Protection. 2018. San Joaquin County Important Farmland 2016. May.
5 The Williamson Act enables local governments to enter contracts with private landowners to restrict specific parcels to agricultural or related open space use. In return, landowners receive lower property tax assessments.

2.2.3 - Existing Land Use Designation and Zoning

Land Use Designations

The San Joaquin County General Plan (County General Plan) designates the site as Agriculture-Urban Reserve (A/UR) (Exhibit 2-5), which allows for agricultural uses, farm-related residential use, and open space and parks.[6]

The A/UR designation also reserves areas for urban development if the area is designated for urban development in a city's general plan, and the County determines the area is a reasonable future expansion for the city.

The City of Tracy General Plan (General Plan) designates the project site as Industrial (I) (Exhibit 2-6). Primary land uses allowed under this designation consist of flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs (e.g., restaurants, parks, consumers services, etc.). The maximum allowed floor area ratio (FAR) is 0.5.[7]

Zoning

The site is zoned General Agriculture, with a minimum parcel size of 40 acres (AG-40) on the County's Zoning Map (Exhibit 2-5). AG zoning preserves agricultural lands for continuation of commercial agricultural enterprises.[8]

The project site is not currently within city limits; accordingly, the City of Tracy does not currently provide a zoning designation for the project site. The co-applicants are requesting approval of a boundary reorganization (to annex the project site into the City of Tracy and detach the project site from the Tracy Rural Fire District), pre-zoning of the project site to a designation of NEI Specific Plan, and an amendment to the boundaries of the NEI Specific Plan to incorporate the project site (as well as any conforming amendments to the NEI Specific Plan to ensure consistency).

2.2.4 - Surrounding Land Uses

The area surrounding the project site has both an agricultural and industrial character. Land uses north of California Avenue consist of single-family homes; there is a cell tower just east of the terminus of California Avenue. A vehicle dealership and agricultural lands are also to the north (north of I-205). East of the project site is agricultural land with associated single-family homes and agricultural structures and outbuildings. Neighboring properties south and west of the project site consist of agricultural lands and industrial warehouses, which are part of the NEI Specific Plan area, with vacant lots interspersed among the agricultural and industrial lands to the west.

[6] Mintier Harnish Planning Consultants (prepared for San Joaquin County). 2016. San Joaquin County General Plan: Policy Document. December.
[7] Design, Community & Environment (prepared for the City of Tracy). 2011. City of Tracy General Plan. February 1.
[8] San Joaquin County. 2001. Ordinance Code of San Joaquin County. Section 9-600.1.

2.3 - Project Objectives

In general, the overall purpose of the proposed project is to provide high-quality industrial warehousing and distribution uses to attract businesses to the City of Tracy and to provide local employment opportunities.

The quantifiable objectives of the Tracy Alliance Project include the following:

- Development of approximately 167 acres of industrial uses (building and parking areas and related improvements);
- Development of approximately 12.44 acres of public facilities (storm basin);
- Reserve approximately 12.51 acres for future planned interchange at Paradise Road and I-205; and
- Build a maximum of 3,352,320 square feet of employment-generating industrial uses.

Additional qualitative objectives for the proposed project are as follows:

- **Employment Opportunities:** Provide for local and regional employment opportunities that take advantage of the project site's high level of accessibility, allow for the expansion of the City's economic base, help improve the jobs/housing balance, and reduce the commute for regional residents.
- **Transportation:** Provide an efficient circulation system, including reserving land for a future planned interchange at Paradise Road and I-205 (construction of the interchange would not be completed as part of the proposed project).
- **Public Facilities and Services:** Provide infrastructure and services to serve the proposed project that meet applicable City standards and integrate with existing and planned facilities.
- **Phasing:** Establish a logical phasing plan designed to ensure that each phase of development would include necessary public improvements required to meet applicable City standards.

2.4 - Project Components

2.4.1 - Land Uses

The proposed project includes demolition of 11 existing residential and agricultural structures on approximately four acres located at the southwestern corner of the Tracy Alliance parcels, removal of all crops and some existing trees, and construction of the following primary components:

- Multiple warehouse buildings totaling up to 3,352,320 square feet that support industrial uses and associated offices;
- An approximately 12.44-acre City owned and managed stormwater detention basin with pump station;

- Ample landscaping consistent with all applicable City requirements; for example, in connection with the individual development proposal for the Tracy Alliance parcels, the relevant site plan reflects approximately 110,000 square feet of landscaped areas; and
- Sufficient on-site parking for both vehicles and trailer spaces consistent with all applicable City requirements; for example, in connection with the individual development proposal for the Tracy Alliance parcels, the relevant site plan reflects approximately 1,134 automobile parking spaces and approximately 572 trailer parking spaces.

Currently, there are no individual development proposals that have been formally submitted for either the Suvik or Zuriakat parcels. Therefore, for purposes of a conservative analysis, this Draft EIR has assumed warehouse and distribution uses on these parcels would be developed to the maximum intensity allowed under the NEI Specific Plan. In addition, as noted above, these parcels would be required to adhere to all applicable development standards and design guidelines, including those related to landscaping and parking.

Exhibit 2-7a depicts a conceptual site plan for the project site as a whole; Exhibit 2-7b depicts a detailed site plan for the Tracy Alliance parcels only. Table 2-2 summarizes locations and square footage for each project component.

Table 2-2: Proposed Development Summary

Tracy Alliance Parcels (APN 213-170-27, -48)				
Land Use (NEI Specific Plan)		Total Building Area (gross square feet) (approx.)	Total Building Area (gross square feet) (approx.)	Total (acres) (approx.)
Light Industrial (LI)				
Building A	Warehouse	948,500	**978,500**	**22.46**
	Office	30,000		
Building B	Warehouse	62,000	**64,000**	**1.47**
	Office	2,000		
Building C	Warehouse	782,000	**807,000**	**18.52**
	Office	25,000		
	Total	**1,849,500**	**–**	
Basin Area		**–**	**–**	**12.44**
			Total	**54.90**
Suvik Farms Parcels (APNs 213-170-24, -25, -26)				
Land Use (NEI Specific Plan)		Maximum Building (gross square feet)[1] (approx.)		
Light Industrial (LI)		1,023,660		

Zuriakat Parcel (APN 213-170-14)	
Land Use (NEI Specific Plan)	**Maximum Building (gross square feet)[2] (approx.)**
Light Industrial (LI)	479,160
Total Maximum Building Gross Square Footage = approx. 3,352,320	

Notes:
APN = Assessor's Parcel Number
FAR = floor area ratio
NEI = Northeast Industrial
[1] The maximum building square footage is calculated from the maximum allowable FAR (50 percent) as set forth in the NEI Specific Plan. The total land area is approximately 2,047,320 square feet (47 acres).
[2] The maximum building square footage is calculated from the maximum allowable FAR (50 percent) as set forth in the NEI Specific Plan. The total land area is approximately 958,320 square feet (22 acres).
Source: Tracy Alliance Group 2020.

Light Industrial

The buildings would support warehouse, distribution and related office uses. Based on the proposed uses described below, it is expected that approximately 1,871 employees would work on-site at full buildout.[9]

Warehouse and Distribution

Multiple warehouse and distribution buildings are proposed, totaling up to 3,352,320 square feet. Three warehouse buildings are proposed on the Tracy Alliance parcels, totaling approximately 1,849,500 square feet. As noted above, because no individual development proposals have been formally submitted as of this writing, the number of buildings and other site planning details of the uses to be constructed on the Suvik Farms parcels and Zuriakat parcel are not currently known. For purposes of analysis in this Draft EIR, it is assumed that buildout on the Suvik Farms parcels and Zuriakat parcel would be to the maximum allowable FAR of 0.5, which provides the most conservative estimate of potential development. Although future occupants/tenants are unknown at this time, the buildings would be utilized for light industrial uses as defined by the NEI Specific Plan, which is most commonly warehouse and distribution operations with low employee densities. Using the maximum FAR allowed, and accounting for applicable setbacks, parking, access, circulation, and landscaping requirements, the Suvik Farms parcels could support up to 1,023,660 square feet of development, while the Zuriakat parcel could support up to 479,160 square feet of development.

Office

Office use is permitted within the Light Industrial (LI) designation under the NEI Specific Plan. Each warehouse/distribution building developed under the proposed project is assumed to include ancillary office space for the purpose of facilitating and administering operations of each building and their respective occupants/tenants.

[9] Conversation between Victoria Lombardo, Senior Planner, and Barbara Harb, Economic Development Analyst, City of Tracy in May 2020. Employment data collected by conversations with business owners for various industrial businesses, including warehousing, manufacturing, and distribution centers, and existing building square footage data, averaged.

Parking

Parking would be provided pursuant to applicable parking requirements of Tracy Municipal Code Chapter 10.08 Article 26. For warehouses, storage buildings, and wholesale industrial, parking spaces must be provided at minimum as follows:

- One space per 1,000 square feet of the first 20,000 square feet of gross floor area; plus
- One space per 2,000 square feet of the second 20,000 square feet of gross floor area; and
- An additional one space per 4,000 square feet of the remaining square feet of gross floor area.

Projects are required to provide bicycle parking based on the required automobile parking. For projects with over 40 required spaces, bicycle parking is required at 5 percent of the automobile spaces. The required automobile and bicycle parking per parcel are shown in Table 2-3.

Table 2-3: Required Parking

Tracy Alliance Parcels (APN 213-170-27 and APN 213-170-48)				
Site Area	**Building A**	**Building B**	**Building C**	**TOTAL**
Minimum Auto Parking Required	377	44	316	**737**
Auto Parking Provided	657	57	420	**1,134**
Trailer Parking Provided	319	0	253	**572**
Minimum Bicycle Parking Required	19[1]	3[1]	16[1]	**38**
Suvik Farms Parcels (APNs 213-170-24, -25, and -26)				
Minimum Auto Parking Required	276			
Minimum Bicycle Parking Required	14[1]			
Zuriakat Parcel (APN 213-170-14)				
Minimum Auto Parking Required	140			
Minimum Bicycle Parking Required	7[1]			
Total Auto Parking Required = approx. 1,153	**Total Auto Parking Provided = approx. 1,550**		**Total Bicycle Parking Required = approx. 591**	

Notes:
[1] Number of spaces is rounded up.
Source: Tracy Alliance Group 2020.

There would be trailer parking provided on the Suvik Farms and Zuriakat parcels, but the count and location of these spaces is not known at this time.

2.4.2 - Proposed Land Use Designation and Zoning

Land Use Designation

General Plan

As described above and shown on Exhibit 2-6, the City of Tracy General Plan designates the project site Industrial. The project site would be annexed into the City of Tracy upon the Local Agency Formation Commission (LAFCo) approval (as shown in Exhibit 2-8a) and detached from the Tracy Rural Fire District; at such time as the reorganization is complete, the current San Joaquin County General Plan designation (A/UR) would no longer apply to the site. Because the project site is already designated Industrial by the City of Tracy General Plan, no land use re-designation (General Plan Amendment) would be required (as shown in Exhibit 2-8a). Primary land uses allowed under this designation consist of flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs (e.g., restaurants, parks, consumers services, etc.). The maximum FAR is 0.5.[10] The proposed project would be consistent with this Industrial land use designation.

Northeast Industrial Specific Plan

The project site would be incorporated into the NEI Specific Plan area with approval of the proposed amendment to the NEI Specific Plan, and the NEI Specific Plan would be amended to designate the site LI (and any other conforming amendments therein to ensure consistency). Primary land uses allowed within this designation include warehouse and distribution operations with low employee densities. The LI designation also allows for general commercial uses such as automotive supply or plumbing stores.[11] The proposed NEI Specific Plan land use designation is shown in Exhibit 2-8b.

Zoning

The project site is currently zoned General Agriculture with a minimum parcel size of 40 acres (AG-40) by the Ordinance Code of San Joaquin County. Pursuant to applicable State law, the San Joaquin County LAFCo will require the City to pre-zone the project site in conjunction with the proposed annexation. Therefore, the project site would be pre-zoned NEI Specific Plan, which would take effect upon annexation into the City. Allowable uses within this zoning district are governed by the NEI Specific Plan and light industrial uses, as described in the NEI Specific Plan.[12] The proposed zoning is shown in Exhibit 2-8c.

2.4.3 - Circulation and Access

Vehicle

Primary vehicle access to the project site would be provided from four access points on Grant Line Road and four access points on Paradise Road; the northerly access point along Paradise Road would be for Emergency Vehicle Access (EVA) only. Once the future planned I-205 Interchange at Paradise Road is complete (as part of a separate process to be pursued by the relevant public agencies once funding, design and necessary environmental review is completed), the two northmost access points along Paradise Road (including the EVA) would be slightly modified to accommodate the

[10] Design, Community & Environment (prepared for the City of Tracy). 2011. City of Tracy General Plan. February 1.
[11] City of Tracy. 2012. Northeast Industrial Specific Plan. Pages 10-11. July 17.
[12] City of Tracy. 2016. Tracy Municipal Code Section 10.08.3022 – Northeast Industrial Specific Plan. October 18.

interchange. A second EVA may be added along California Avenue to provide emergency access to the Zuriakat parcel; this site planning decision would occur at such time as an individual development proposal is submitted for this parcel.

A new signalized intersection on Grant Line Road would provide access to a New Private Drive that would facilitate on-site circulation for the warehouse and distribution facilities on the Tracy Alliance parcels as well as access to the Suvik Farms and Zuriakat parcels as shown in Exhibit 2-7a. The New Private Drive, located along the Tracy Alliance parcels' eastern boundary, would also provide access to the proposed stormwater detention basin area. Since no individual development proposals (and thus no detailed site plans) are currently being processed on either the Suvik Farms or Zuriakat parcels, the exact location(s) of access points from the New Private Drive to the Suvik and Zuriakat parcels have not been identified at this time.

Future Interchange

The City of Tracy Transportation Master Plan includes improvements to Chrisman Road, which are planned as part of improvements to the City's expressway system, as well as a future I-205/Paradise Road/Chrisman Road interchange as shown in Exhibit 2-7c. The schedule for implementation of the improvements is not known as this time. Though the proposed project would not trigger the need for these improvements, including the interchange, to facilitate and implement the City of Tracy Transportation Master Plan, the proposed project would set aside approximately 12.51 acres in the northwest corner of the project site, which would be sufficient to accommodate the future planned interchange. The proposed project includes annexation of this land into the City, but does not include any design, analysis, or construction of the future planned interchange. Rather, the potential impacts of constructing this future interchange would undergo a separate environmental review process pursuant to the CEQA and NEPA, once funding is programmed and available and once the ultimate design of the interchange is finalized; accordingly, the construction of the interchange is not considered part of the proposed project. Therefore, pursuant to applicable requirements under CEQA, this Draft EIR includes an evaluation of potential impacts of annexing the future interchange area into the City but does not include evaluation of potential impacts from construction and operation of this future interchange.

Off-site Roadway Improvements

The proposed project would include a westbound right-turn lane at the intersection of Grant Line Road and North MacArthur Drive with a right-turn overlap of the signal phase. The proposed project would also include an additional second westbound left turn lane at the intersection of Chrisman Road and Eleventh Street and the signal timing be modified to allow a lagging phase for the eastbound left turn and northbound left turn.

Transit

Bus

The City provides fixed-route bus service (TRACER) within city limits.

San Joaquin Regional Transit District (RTD) provides regional fixed-route bus service within the Stockton Metropolitan Area and greater County.

The closest bus stop to the project site is approximately 0.5 mile west at the intersection of Grant Line Road and North Chrisman Road. The stop is served by San Joaquin RTD County Hopper bus Route 797, connecting to Lathrop, Stockton, and Manteca on weekends.[13] The next nearest bus stop is 1.59 miles to the west at the Shops at Northgate Village. The stop is served by TRACER Route E, connecting to the Tracy Transit Station, and San Joaquin RTD County Hopper bus Routes 90 and 97, connecting to Lathrop and Stockton.[14,15,16]

In addition, Americans with Disability Act (ADA) Paratransit Service by TRACER is a door-to-door service available to City residents that complete a certification for the service and visitors with ADA documentation. The service is designed to serve ADA/Medicare passengers and those 65 and older. The TRACER Paratransit Service area boundary is adjacent to the southern and western project site boundaries.[17]

Rail

The San Joaquin Regional Rail Commission (SJRRC) provides the Altamont Corridor Express commuter rail transit service between Stockton and San José. The Tracy Station is the closest Altamont Corridor Express (ACE) station to the project site, which is located at 4800 South Tracy Boulevard, approximately 4.70 miles southwest of the project site and would provide ACE service to the project site. A westbound train runs in the morning, arriving in Tracy between 4:51 a.m. and 7:36 a.m., Monday to Friday, and between 6:36 a.m. and 9:46 a.m. on Saturdays. An eastbound train runs in the evening, leaving Tracy between 5:11 p.m. and 8:14 p.m. Monday to Friday, and at 5:34 p.m. and 8:54 p.m. on Saturdays.[18] TRACER makes connections with most departures and arrivals, providing transit to the Tracy Transit Station and other stops. However, because of the COVID-19 Pandemic, the 7:11 a.m. and 7:36 a.m. and the 6:11 p.m. and 8:14 p.m. trains have been suspended. In addition, all weekend service has been suspended.

Bicycle

In the project site and vicinity, there is a Class I paved multiuse bicycle path, which is separated from North MacArthur Drive from the I-205 business loop to I-205, spanning approximately 1.8 miles and extending eastward along the northern side of East Pescadero Avenue for less than 0.5 mile.[19] A Class II bicycle lane runs the same length on North MacArthur Drive and ends at the North MacArthur Drive/East Pescadero Avenue intersection. The Class II bicycle lane extends westward on East Pescadero Avenue for approximately 950 feet. There is also a Class II bicycle lane along Grant

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[13] San Joaquin Regional Transit District (RTD). 2018. Route 797 Schedule. March 11. Website: http://sanjoaquinrtd.com/route-797/. Accessed April 20, 2020.

[14] City of Tracy. 2019. TRACER Route Map. October. Website: https://www.ci.tracy.ca.us/documents/Route_Map_October_2019.pdf. Accessed: April 6, 2020.

[15] San Joaquin Regional Transit District (RTD). 2014. Route 90 Map. August 10. Website: http://www.sanjoaquinrtd.com/maps_and_schedules/GIF/90.gif. Accessed: April 6, 2020.

[16] San Joaquin Regional Transit District (RTD). 2013. Route 97 Map. August 11. Website: http://www.sanjoaquinrtd.com/maps_and_schedules/GIF/97.gif. Accessed: April 6, 2020.

[17] City of Tracy. 2017. TRACER Paratransit System Map. November 1.

[18] San Joaquin Regional Rail Commission (SJRRC). 2020. Schedules & Fares. Website: https://acerail.com/schedules/. Accessed April 8, 2020.

[19] A Class I bikeway is a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow of motorized traffic minimized. (Source: California Department of Transportation. 2018. Highway Design Manual, 6th Edition.)

Line Road from the Joe Pombo Parkway/Grant Line Road intersection that spans approximately 3.80 miles to the east and terminates at the Chabot Court/Grant Line Road intersection.[20,21]

As part of the proposed project's frontage improvements, it is anticipated that the proposed project would construct a Class I path (that would accommodate both pedestrians and bicycles) per the Transportation Master Plan (TMP) for both Grant Line Road and Paradise Road. Pursuant to the applicable parking requirements of Tracy Municipal Code Chapter 10.08 Article 26, the proposed project would provide approximately 59 bicycle parking spaces as described above. Bicycle racks (single-sided or double sided racks, or equivalent) would be located near the office entrances of each building in order to provide for the secured parking of bicycles. The required spaces for bicycle parking would be evenly distributed among the office locations within each building.

Pedestrian

There are existing sidewalks on the southern side of Grant Line Road, extending eastward from the Grant Line Road/East Paradise Road intersection for approximately 0.25 mile. There is also an existing sidewalk on the west side of Paradise Road, running northward from the existing distribution center entrance at 2795 Paradise Road to the Paradise Road/West Pescadero Avenue intersection; existing sidewalks are also located on both sides of East Paradise Road for approximately 0.7 mile from the Grant Line Road/East Paradise Road intersection to just west of the East Paradise Road/North Chrisman Road intersection. Existing sidewalks along both sides of the entirety of Chabot Court provide a pedestrian connection from East Paradise Road to Grant Line Road. There are no sidewalks along California Avenue. As part of the proposed project's frontage improvements, it is anticipated that the proposed project would construct a Class I path (that would accommodate both pedestrians and bicycles) per the TMP for both Grant Line Road and Paradise Road.

2.4.4 - Design, Landscaping, and Lighting

The NEI Specific Plan includes design guidelines and development standards that regulate site planning and architecture within the NEI Specific Plan area. Specific design details are not known at this time, but the proposed project would be required to conform to the applicable design guidelines and development standards set forth in the NEI Specific Plan, subject to review and approval by the City's Development Services Director. Specific regulations set forth in the NEI Specific Plan are provided in Section 3.11, Land Use and Planning.

Building Design and Height

The NEI Specific Plan requires that attention be given to parts of any buildings visible from adjacent roadways or public parking. Large buildings should have facades that include variations in massing, form, and texture. Continuous surface treatments of a single material should be minimized. Architecture should be used to highlight building entries. Any accessory buildings and enclosures, whether attached or detached from the main building, shall be of similar compatible design and

[20] A Class II bike lane is a striped and signed lane for one-way bicycle travel on a street or highway. (Source: Caltrans. 2018. Highway Design Manual 6th Edition.)

[21] City of Tracy Parks and Community Services Department. 2005. City of Tracy Bikeways Master Plan. April.

materials.[22] The proposed buildings would be designed to adhere to these building design standards and guidelines.

The maximum height for LI uses under the NEI Specific Plan is 60 feet. The proposed buildings would not exceed this height.

Landscaping

Within parking areas on-site, landscaping would be required to conform to the applicable requirements for Off-Street Parking established by Municipal Code Chapter 10.08, Article 26, except where modified by the NEI Specific Plan. Landscaping requirements as set forth in the NEI Specific Plan are summarized in Table 2-4. Table 2-4 assumes parking lot landscaping would be decreased by 50 percent, and that a corresponding increase in perimeter landscaping of 50 percent would be provided to compensate, as allowed in the Municipal Code.[23] These requirements include designing landscapes as extensions of adjacent public right-of-way landscaping as applicable and completing on-site landscaping simultaneous to completion of buildings and other improvements. Additionally, landscaping shall not obstruct sight lines at street or driveway intersections, and parking areas and project frontages shall be screened from public rights-of-way.[24] Additional landscaping guidelines are available in the NEI Specific Plan. The proposed project would be designed to adhere to these landscaping development standards and design guidelines.

Table 2-4: Summary of Applicable Landscaping Requirements

Landscaping Requirement	Industrial Use
Landscaped frontage setback	10 feet
Minimum number of trees in parking area	one tree per five spaces
Percentage of landscaping in parking areas for over: 0-15 cars 16-30 cars 31-60 cars Over 60 cars	 5 percent 5 percent 7.5 percent 10 percent
Source: City of Tracy. 2012. Northeast Industrial Specific Plan.	

Lighting and Signage

Light fixtures would be required to meet all applicable safety standards pursuant to the latest adopted edition of the California Building Code and would be installed throughout the length of the New Private Drive and other portions of the project site pursuant to applicable provisions in the Municipal Code. The NEI Specific Plan recommends that one lighting fixture style be used on all streets. Where possible, light standards would be located in roadway medians.[25]

[22] City of Tracy. 2012. Northeast Industrial Specific Plan. Page 32. July 17.
[23] City of Tracy. 2019. Tracy Municipal Code Section 10.08.3560(g).
[24] City of Tracy. 2012. Northeast Industrial Specific Plan. Pages 33 and 34. July 17.
[25] City of Tracy. 2012. Northeast Industrial Specific Plan. Page 24. July 17.

Signage would be required to conform to the applicable requirements of Municipal Code Chapter 10.08, Article 35, except as modified by the NEI Specific Plan. A site sign program would be prepared and integrated into the total design concept for the proposed project, and all signs would be required to be approved prior to installation. Project signage may be illuminated provided that no flashing, traveling, animated, or intermittent illumination would be used. Such illumination would be confined to the area of the sign except when such illumination is back lighting for an otherwise non-illuminated sign. No sign illumination would cast a glare which is visible from any street.

The proposed project would be designed to adhere to these lighting and signage development standards and design guidelines.

2.4.5 - Infrastructure Improvements

Domestic Water

The City, through its Public Works Department, would supply potable water to the proposed project. In the current adopted City Water System Master Plan, 12-inch water lines have been proposed for continuation north on Paradise Road until West Arbor Avenue, and within the project site along the perimeter of the Suvik Farms parcels.[26] The 12-inch water line in Paradise Road has been extended as planned; planned water lines that would traverse through the project site have not yet been installed**.**

The proposed project would install 10-inch lines to accommodate the level of development proposed on the Tracy Alliance parcels. These lines would connect to the buildings on the Tracy Alliance parcels at several locations (as shown in Exhibit 2-9). Several fire hydrants would be installed surrounding the buildings on the Tracy Alliance parcels and would connect to the 10-inch water lines. At such time as individual development proposal(s) for either the Suvik Farms or Zuriakat parcels are formally submitted to the City, then the location and sizing of water lines would be identified and reviewed by the City as part of subsequent engineering plans, which would be required to meet all applicable requirements and standards including those set forth in the then-current adopted City Water System Master Plan .

Stormwater Drainage

The project site drains generally toward the northeast toward I-205 and into Pescadero Irrigation District facilities; this stormwater does not currently enter into a City-maintained facility. There are no existing stormwater drainage facilities on the project site.[27]

The proposed project includes construction of a stormwater detention basin on-site as identified in the current adopted City of Tracy Citywide Storm Drainage Master Plan.[28] The proposed approximately 12.44-acre stormwater detention basin with a pump station would be located along the northeast site boundary. Following its construction, the basin would be dedicated to and managed by the City.

[26] West Yost Associates. 2012. City of Tracy Citywide Water System Master Plan, Figure 8-2 on Page 8-25. December.
[27] Stantec. 2012. City of Tracy Citywide Storm Drainage Master Plan. November.
[28] Stantec. 2012. City of Tracy Citywide Storm Drainage Master Plan. Figure 5-1a. November.

The proposed stormwater detention basin would be in the northern portion of the project site, along the terminus of California Avenue, and would connect to the City's proposed NEI detention basin west of the project site (see Exhibit 3.10-1). It is anticipated that the NEI detention basin would be completed prior to operation of any buildings on the project site and would therefore accept stormwater from the proposed project.

Following Phase 1 (Tracy Alliance parcels), each subsequent applicant for its respective individual development proposal within the project site would be required to confirm that the proposed project's on-site stormwater detention basin and bioretention treatment areas could accommodate project flows to the satisfaction of the City and that post-development stormwater flow rates would not substantially exceed predevelopment rates pursuant to the applicable C.3 requirements. The proposed project's on-site stormwater detention basin would be required to comply with applicable provisions of the Multi-Agency Post-Construction Stormwater Standards Manual which identifies BMPs to control the potential pollutant load of stormwater runoff. Additionally, Chapter 11.32 of the Municipal Code requires each applicant for its respective individual development proposal within the project site to pay applicable stormwater impact fees in connection with their respective development proposals, which would ensure the operation, maintenance, and replacement of existing and future stormwater facilities. Each applicant for its respective individual development proposal within the project site would be required to prepare a clearly defined Operations & Maintenance (O&M) Plan in connection with its respective individual development proposal to ensure that installed stormwater treatment measures and hydromodification management controls are inspected and properly operated and maintained for the life of the relevant individual development proposal.

The proposed project would construct a 12-inch forced main storm drain line along the corner of I-205 east and Paradise Road (see Exhibit 2-9, Exhibit 2-10a and 2-10b) to connect the proposed on-site detention basin to the City's NEI detention basin (Exhibit 3.10-1) adjacent to the western boundary of the project site. Project discharge into the on-site detention basin would be held until the NEI detention basin is drained enough to accept inflow; all stormwater would eventually discharge into the Eastside Channel.

Bioretention treatment areas would intermittently surround the buildings on the Tracy Alliance parcels and be interspersed throughout the parking lots (Exhibit 2-10b); similar features are anticipated for the remaining portions of the project site, although the design of these improvements would be finalized when individual development proposals for the remainder of the project site are submitted to the City. On-site storm drain lines within the Tracy Alliance parcels would be 12 inches and would connect bioretention treatment areas to the proposed on-site detention basin; similar features are anticipated for the remaining portions of the project site, although the design of these improvements would be finalized when individual development proposals for the remainder of the project site are submitted to the City.

Sanitary Sewer

The proposed project would include connections to the existing City sanitary sewer system operated by the Public Works Department via the existing wastewater line beneath Paradise Road (see Exhibit

2-9).[29] An existing 15-inch sanitary sewer line is located within the Paradise Road right-of-way and an existing 10-inch sanitary sewer line is located within Grant Line Road and have sufficient capacity to accommodate the development as proposed. Based on the relevant site plan submitted in connection with the individual development proposal for the Tracy Alliance parcels, these lands would be served as follows:

- **Building A:** would be served via two proposed 8-inch sanitary sewer lines that would each connect to the existing 15-inch sanitary sewer line in Paradise Road.
- **Building B:** would be served by a proposed 6-inch sanitary sewer line that would traverse the northern side of Building A, connecting to the existing 15-inch sanitary sewer line in Paradise Road.
- **Building C:** would be served by two sanitary sewer lines: (1) a proposed 6-inch sanitary sewer line that would connect to an existing 10-inch sanitary sewer line in Grant Line Road, and (2) a proposed 8-inch sanitary sewer line that would connect to the existing 15-inch sanitary sewer line in Paradise Road.

Since no individual development proposals (and thus no site plans) have been submitted to the City for the Suvik Farms and Zuriakat parcels as of this writing, the exact location and sizing of an on-site sanitary sewer system for the development to occur on these lands are not currently known. However, this information would be identified and reviewed by the City of Tracy as part of subsequent engineering plans when applications for their respective individual development proposals are submitted for these parcels, which would be required to meet all applicable requirements and standards.

Solid Waste and Recycling Collection

The City, through its Public Works Department, provides solid waste and recycling services for areas within city limits and certain surrounding County areas. The Public Works Department has a partnership with Tracy Disposal Service Company to provide residential and commercial solid waste collection and disposal, including recycling and organics services.[30,31] Garbage is collected once a week, and recycling and yard waste are collected on alternating weeks.[32]

Solid waste generated by the proposed project would be accommodated at the Tracy Material Recovery Facility & Solid Waste Transfer (MRF), and then hauled to the Foothill Sanitary Landfill on North Waverly Road east of Tracy. On a designated day, Tracy Disposal Service Company collects and transports solid waste to the MRF.

[29] De Novo Planning Group. 2019. Tracy Municipal Services Review. July.
[30] City of Tracy. 2020. Recycling & Solid Waste. Website: https://www.ci.tracy.ca.us/?navId=688. Accessed April 9, 2020.
[31] Tracy Delta Solid Waste Management, Inc. Website: https://www.tdswm.com/. Accessed April 9, 2020.
[32] City of Tracy. 2020. Garbage & Recycling Schedule. Website: https://www.ci.tracy.ca.us/?navId=700. Accessed April 16, 2020.

Power and Telecommunications

Electricity and natural gas services for the proposed project would be provided by Pacific Gas and Electric Company (PG&E). There is a natural gas pipeline under Grant Line Road, as well as an aboveground electric transmission line.[33,34]

Phone and internet services could be provided by various private companies, including AT&T, Xfinity Comcast, and Verizon.

2.4.6 - Phasing and Construction

The proposed project would include construction of multiple buildings in approximately three phases over a period of approximately 36 months (three years) starting in April 2022 and ending in April 2025. The phasing would happen per parcel as shown in Table 2-5:

Table 2-5: Phasing and Construction

Activity	Start Date	End Date
Phase 1 (Tracy Alliance parcels)		
Site Improvements	4/2022	12/2022
Building(s) Constructed	9/2022	3/2023
Operations	4/2023	N/A
Phase 2 (Suvik Farms parcels)		
Site Improvements	4/2023	12/2023
Building(s) Constructed	9/2023	3/2024
Operations	4/2024	N/A
Phase 3 (Zuriakat parcel)		
Site Improvements	4/2024	12/2024
Building(s) Constructed	9/2024	3/2025
Operations	5/2025	N/A

Notes:
The timing for commencement of construction was based on available information at the time that environmental review commenced. To the extent construction commences later than assumed, this Draft EIR reflects a conservative analysis given that technological advances and more stringent regulations governing air quality and greenhouse gas (GHG) emission impacts would be anticipated to further decrease emissions.
Source: Tracy Alliance Group 2020.

[33] Pacific Gas and Electric Company (PG&E). 2020. Gas Transmission Pipelines. Website: https://www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/gas-transmission-pipeline/gas-transmission-pipelines.page. Accessed April 9, 2020.

[34] California Energy Commission. California Electric Infrastructure App. Website: https://cecgis-caenergy.opendata.arcgis.com/app/ad8323410d9b47c1b1a9f751d62fe495. Accessed April 9, 2020.

However, for purposes of a conservative analysis, this Draft EIR considers both sequential and concurrent phasing options for the proposed project, as detailed more fully in Section 3.3, Air Quality, and Section 3.8, Greenhouse Gas Emissions.

Approximately 500,000 cubic yards of material would be cut and rebalanced across the entire site as part of the three phases of development. As specific construction schedules and detailed information for the development of the Suvik and Zuriakat parcels is not known at this time, conservative default assumptions were used for the purpose of analyzing and modeling potential construction durations and equipment for the proposed project.

2.5 - Required Actions and Approvals

The following discretionary approvals and permits are required by the City for implementation of the proposed project**:**

- EIR Certification
- Pre-zoning to Northeast Industrial Specific Plan
- Northeast Industrial Specific Plan Amendment
- Development review permit(s)
- Tentative Parcel Map or Lot Line Adjustment(s) as needed to create final development lots
- Resolution of City Initiation of Reorganization Proceedings
- Cancellation of the Williamson Act Contract on the Suvik Farms parcels (if required)

In addition, the ministerial actions by the City for implementation of the proposed project may include, but are not limited, to the following:

- Demolition permits
- Grading permits
- Building permits
- Certificates of occupancy

In addition to the City, several other agencies will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. This Draft EIR provides environmental information that may be required to grant approvals or to support coordination with other agencies as part of project implementation. These agencies may include, but are not limited to, the following:

- United States Army Corps of Engineers
- United States Fish and Wildlife Service
- California Department of Fish and Wildlife
- California Department of Transportation
- California Public Utilities Commission
- Central Valley Regional Water Quality Control Board
- County of San Joaquin
- San Joaquin Local Agency Formation Commission

Discretionary and ministerial actions by other agencies that are necessary to implement the proposed project may include the following:

- Approval of proposed reorganization to accomplish the annexation of the project site into the City of Tracy (San Joaquin LAFCo) and detachment of the project site from Tracy Rural Fire District (San Joaquin LAFCo)
- Coverage under General Construction Stormwater Permit (California State Water Resources Control Board/Central Valley Regional Water Quality Control Board)
- Approval of Indirect Source Review (San Joaquin Valley Air Pollution Control District)
- Issuance of Encroachment Permits for roadway or utility improvements within facilities under the jurisdiction of the California Department of Transportation (Caltrans) or the County of San Joaquin may also be necessary.

2.6 - Intended Uses of This Draft EIR

This Draft EIR has been prepared by the City to assess the potential environmental impacts that may arise in connection with actions necessary to implement the proposed project. Accordingly, consistent with the CEQA mandate that prefers finality and seeks to avoid additional unnecessary environmental review, once this EIR is certified by the City Council, it is anticipated that it will be utilized to provide CEQA coverage for future discretionary actions, entitlements and permits considered by the City as well as other public agencies that have discretionary authority over certain aspect(s) of the proposed project to the maximum extent permitted under all applicable laws and regulations including, without limitation, CEQA Guidelines Section 15162, 15164 and/or 15183.

This document will also serve as a basis for soliciting comments and input from members of the public, other interested organizations, and public agencies regarding the proposed project. The Draft EIR will be circulated for 45 days, during which period comments concerning analysis contained in the Draft EIR should be sent to:

Victoria Lombardo, Senior Planner
City of Tracy
Development Services
333 Civic Center Plaza
Tracy, CA 95376
Tel: 209.831.6428
Email: victoria.lombardo@cityoftracy.org

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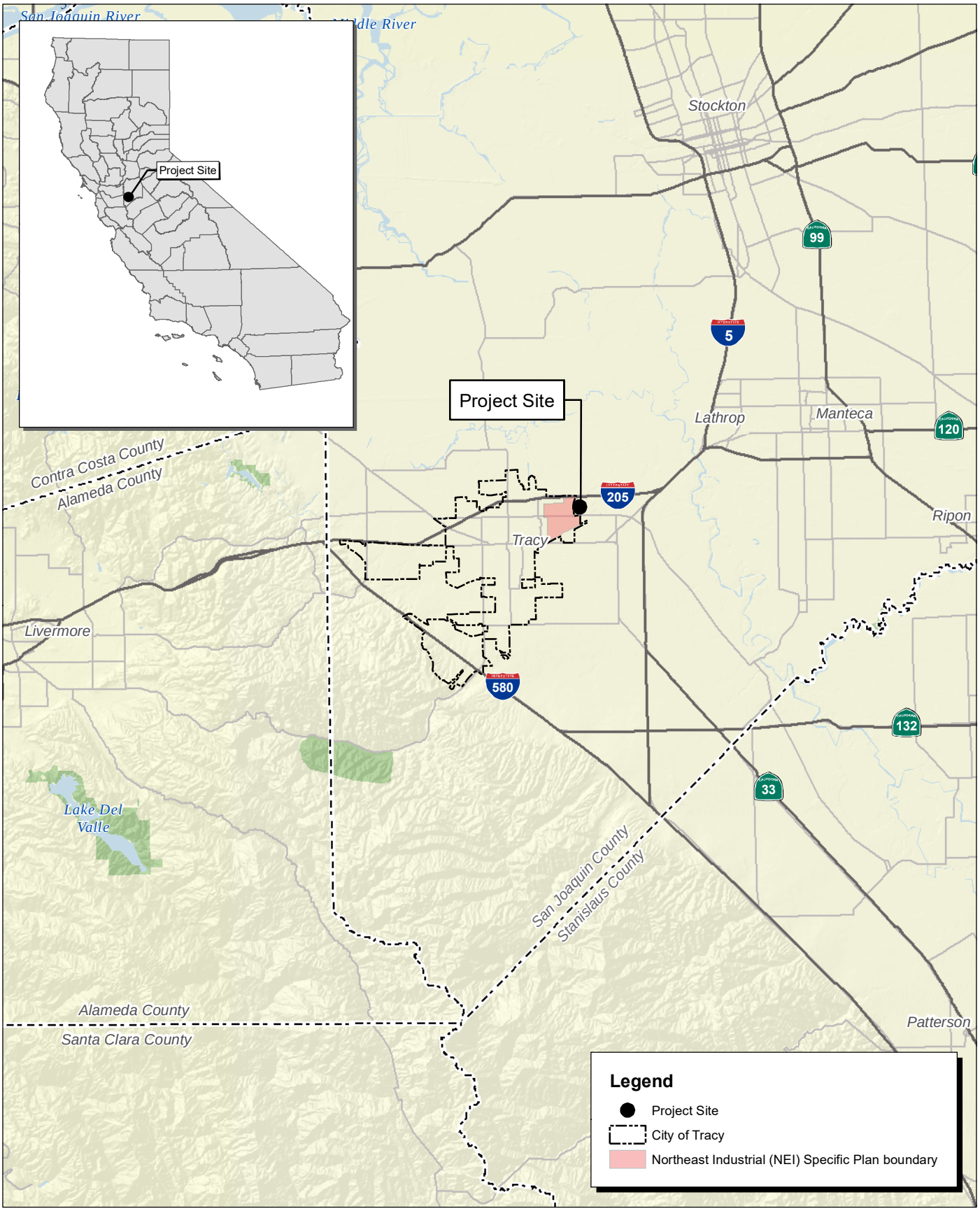

Source: Census 2000 Data, The CaSIL.

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5 2.5 0 5 Miles

Exhibit 2-1
Regional Location Map

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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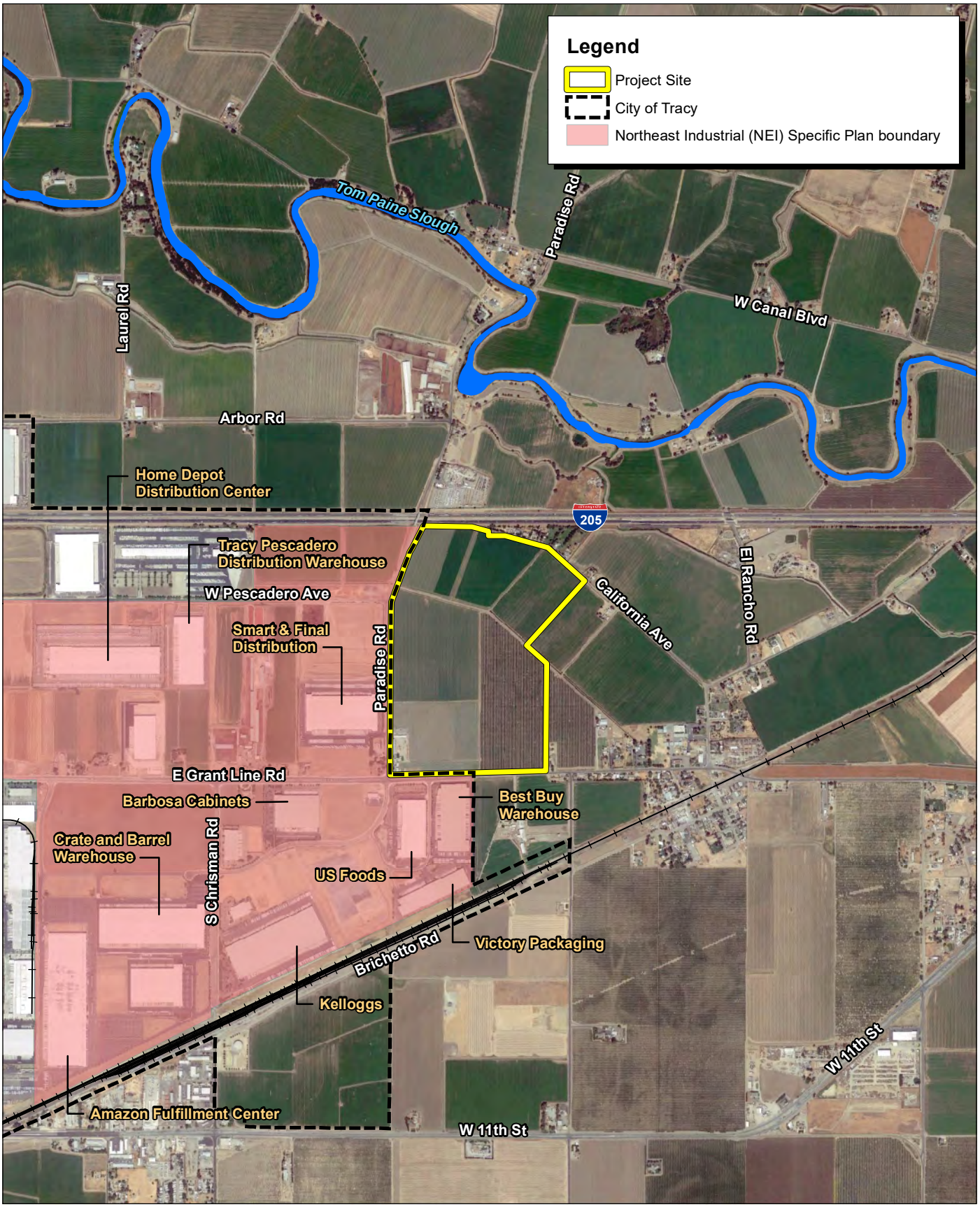

Source: Google Earth Aerial Imagery, August 2018.

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2,000 1,000 0 2,000 Feet

Exhibit 2-2
Local Vicinity Map

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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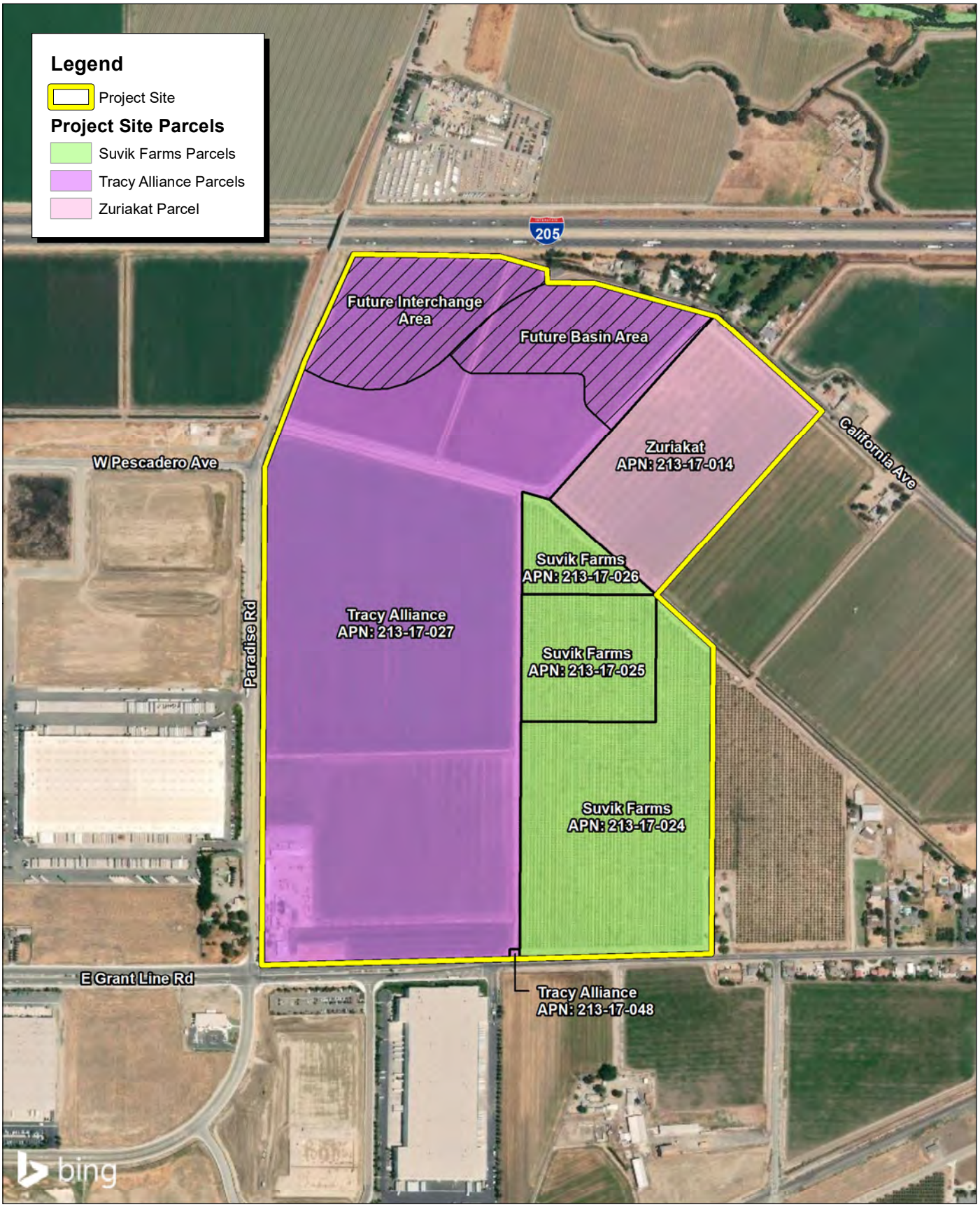

Source: Bing Aerial Imagery. County of San Joaquin.

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700 350 0 700 Feet

Exhibit 2-3
Project Parcel Map

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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Photograph 1: View of the project site from California Avenue; facing south.

Photograph 2: View of the project site from the northwest corner of future interchange area; facing southeast.

Photograph 3: View of drainage ditch running along the western side of the future interchange area; facing south.

Photograph 4: View of dirt road entering the project site at the intersection of Paradise Road and West Pescadero Avenue; facing east.

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Exhibit 2-4a
Existing Site Conditions

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Photograph 5: View of the project site from the western Tracy Alliance Parcel boundary; facing east.

Photograph 6: Overview of farm complex located in the southwest corner of the project area; facing southeast.

Photograph 7: View from the southwest corner of the project site; facing northeast.

Photograph 8: View of dirt road separating the Tracy Alliance and Suvik Farms Parcels from the southern project boundary, facing north.

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Exhibit 2-4b
Existing Site Conditions

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Photograph 9: View from the southwest corner of the project site; facing northwest.

Photograph 10: View of irrigation ditch and dirt road running along the northern boundary of the Suvik Farms Parcels; facing northwest.

Photograph 11: View along the southeastern edge of the Zuriakat Parcel; facing northeast.

Photograph 12: View from the northeast corner of the project site; facing southwest.

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Exhibit 2-4c
Existing Site Conditions

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Photograph 13: View of northern boundary of project site along California Ave; facing northwest.

Photograph 14: View from the northwest corner of the Zuriakat Parcel boundary; facing southwest.

Photograph 15: View from the center of the project site; facing north.

Photograph 16: View from the center of the project site; facing southeast.

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Exhibit 2-4d
Existing Site Conditions

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Photograph 17: View from the center of the project site; facing south.

Photograph 18: View from the center of the project site; facing west.

Photograph 19: View of the residences at the southwest corner of the project site; facing west.

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Exhibit 2-4e
Existing Site Conditions

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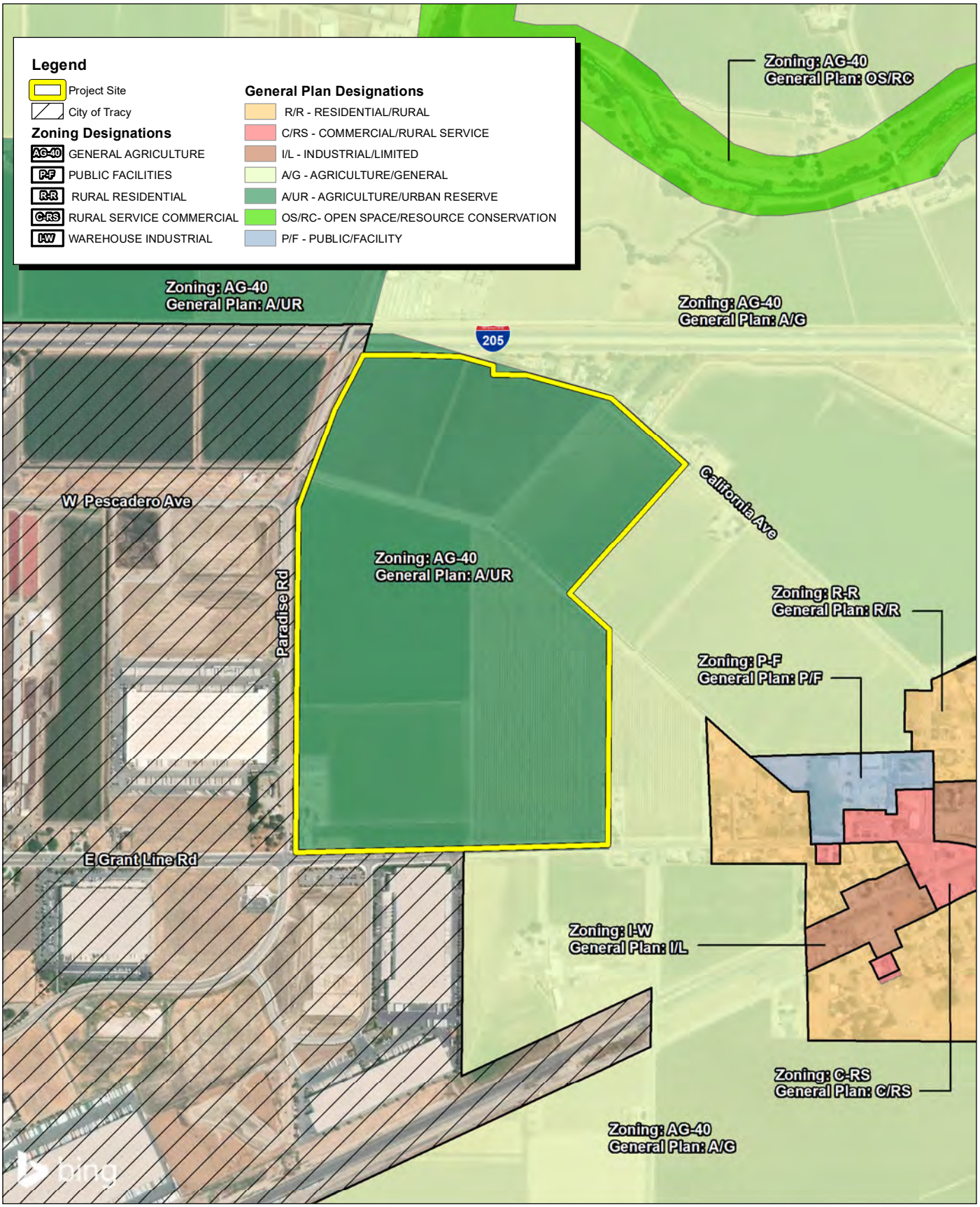

Source: Bing Aerial Imagery. San Joaquin County GIS Data, 2020.

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1,000 500 0 1,000 Feet

Exhibit 2-5
San Joaquin County General Plan
Land Use and Zoning Designations

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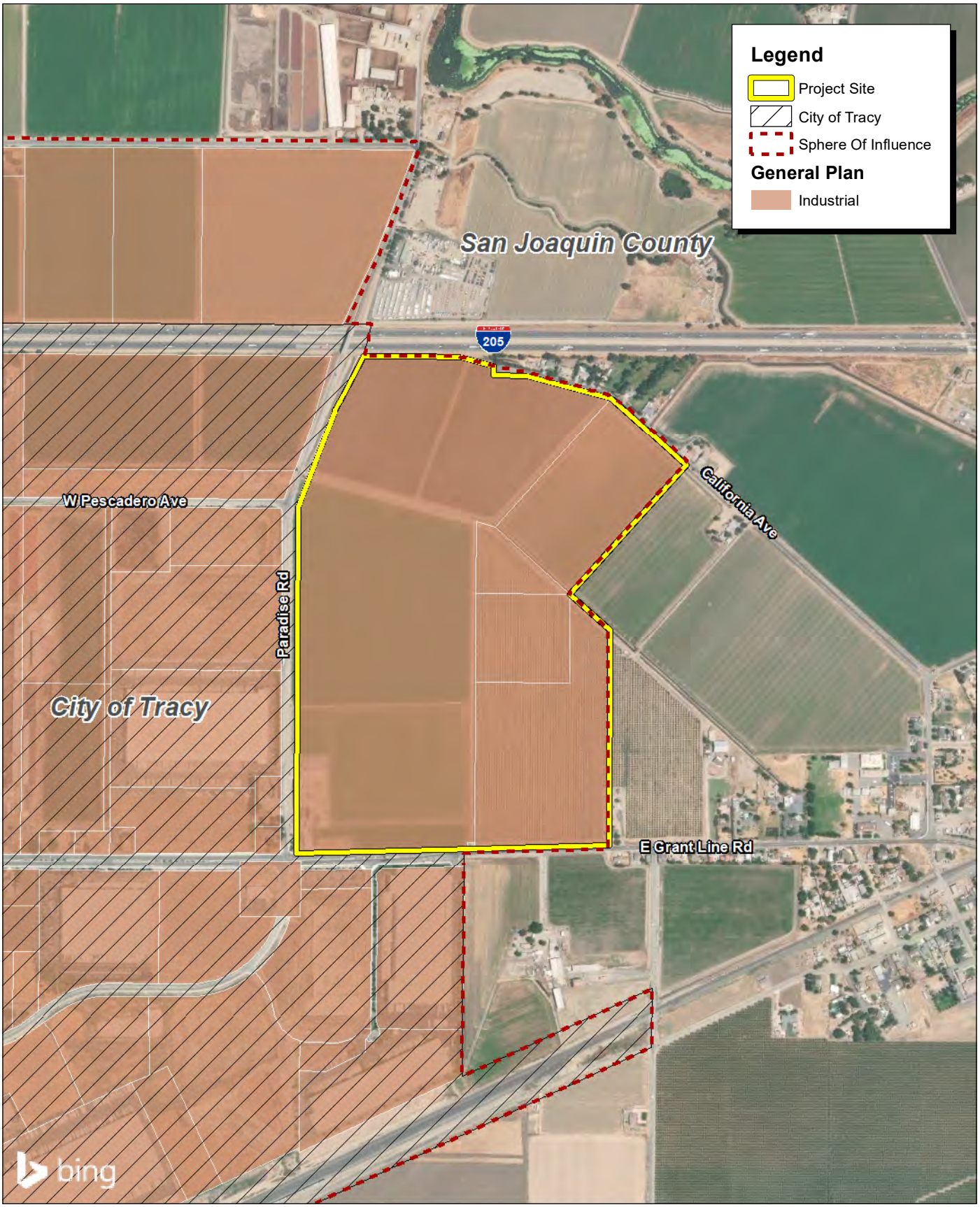

Source: Bing Aerial Imagery. City of Tracy. County of San Joaquin.

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1,000 500 0 1,000 Feet

Exhibit 2-6
City of Tracy
General Plan Designation

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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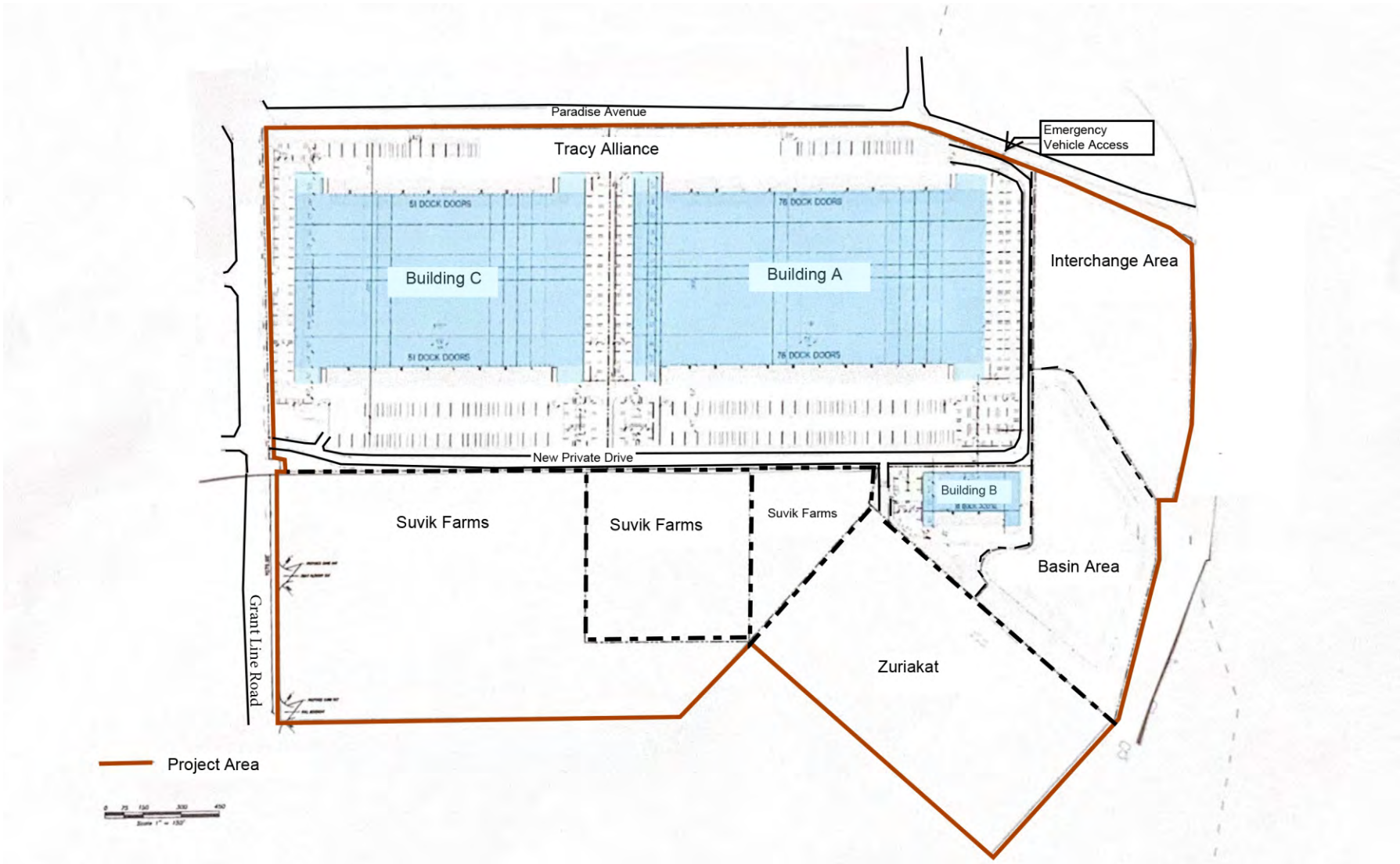

Source: Kier & Wright Civil Engineers & Surveyors Inc., December 2020.

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Exhibit 2-7a
Comprehensive Site Plan

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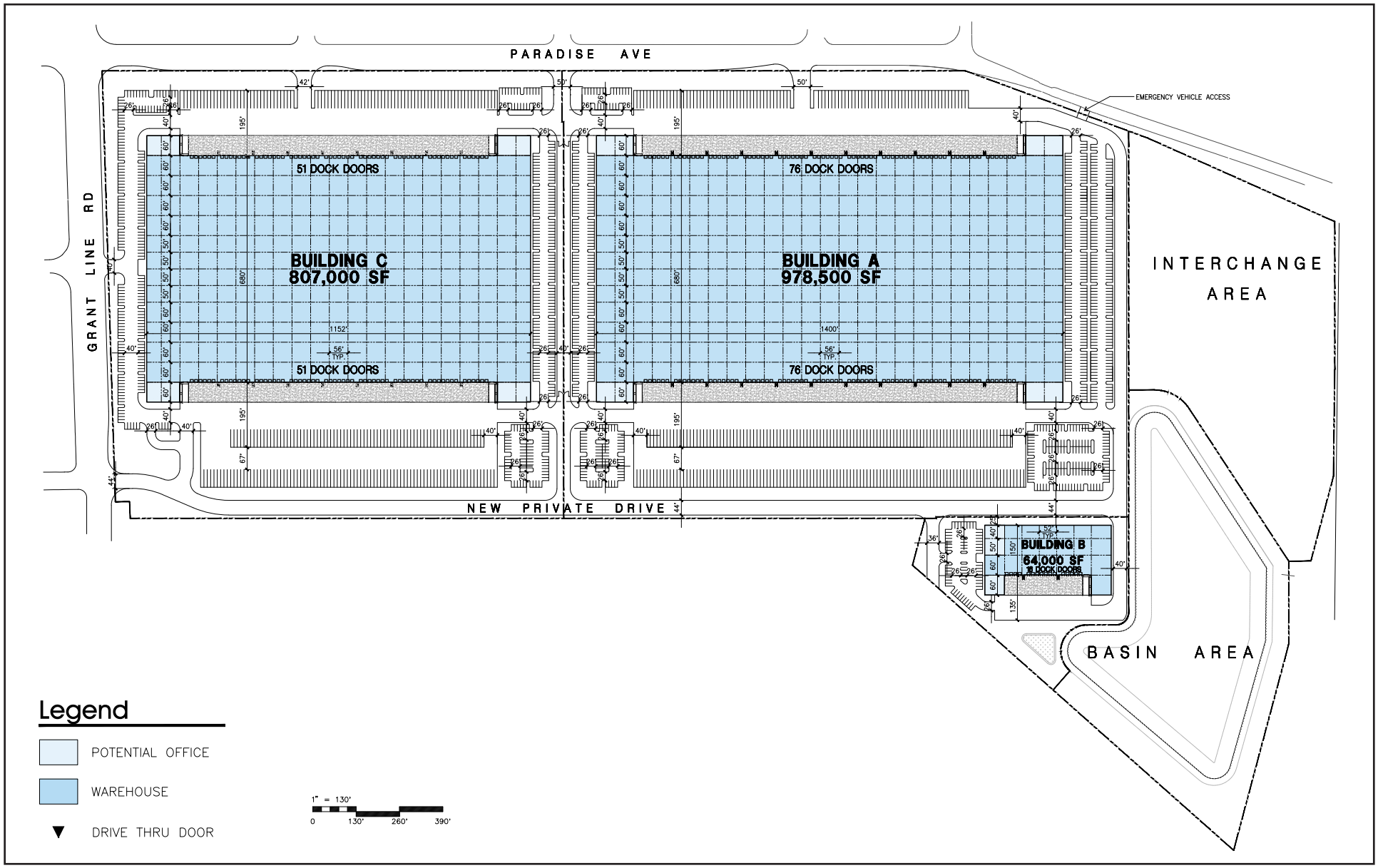

Source: HRA Architecture, December 30, 2020.

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Exhibit 2-7b
Tracy Alliance Parcels Site Plan

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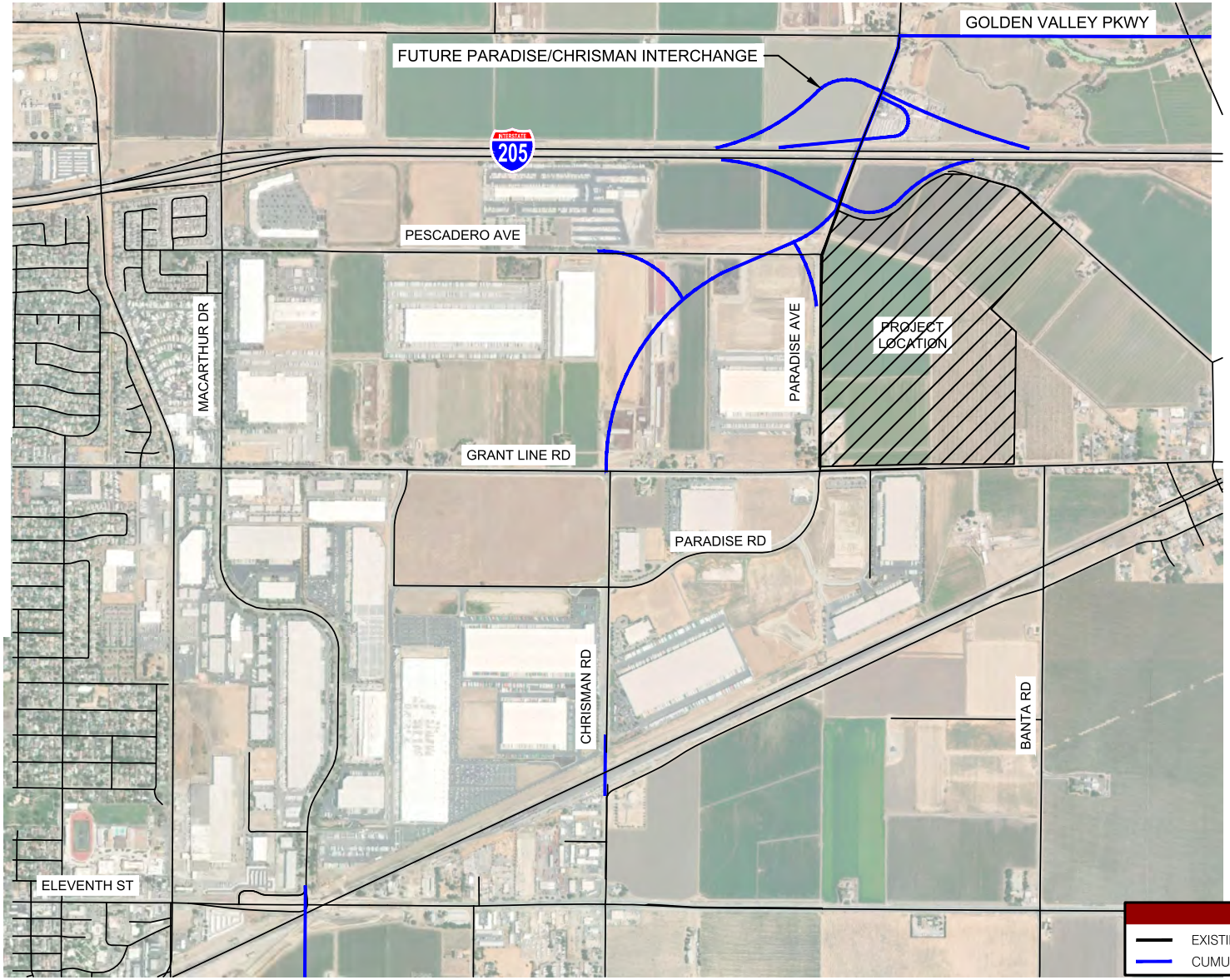

Source: Kimley-Horn, August 2020.

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Exhibit 2-7c
Conceptual Plan for Future I-205/ Paradise Road/Chrisman Road Interchange

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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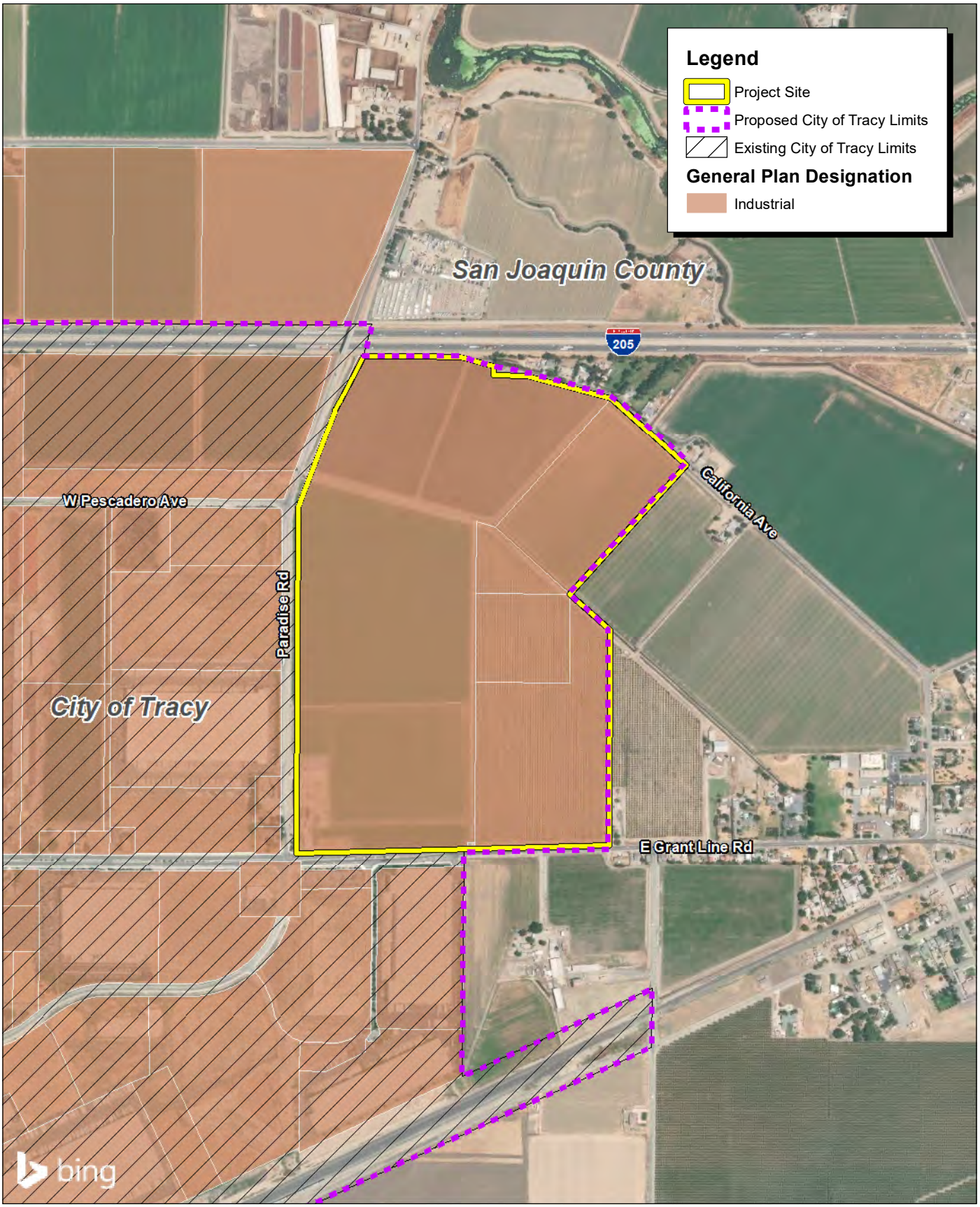

Source: Bing Aerial Imagery. City of Tracy. County of San Joaquin.

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Exhibit 2-8a
Proposed Annexation

17260011 • 08/2020 | 2-8a_proposed_annexation.mxd

CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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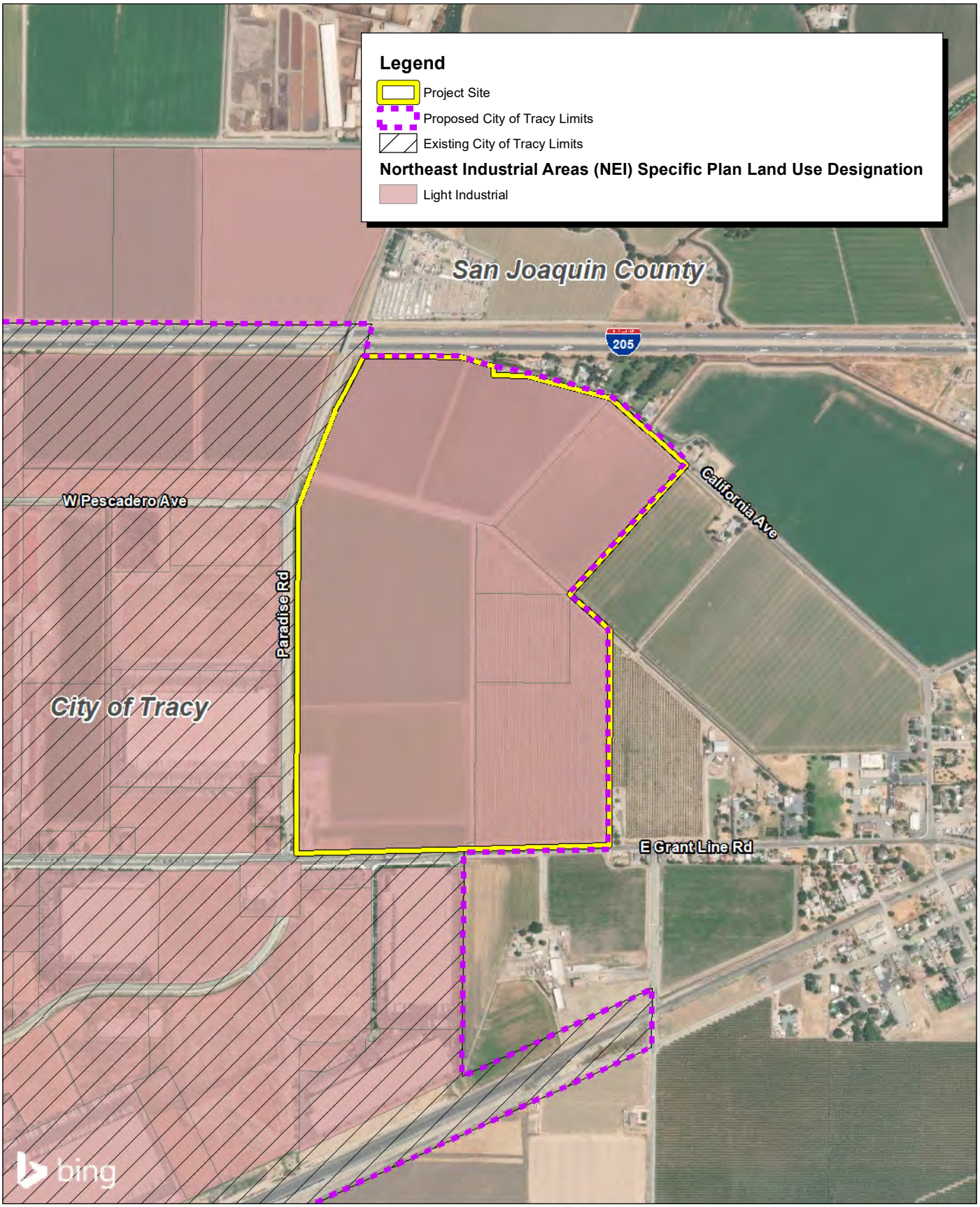

Source: Bing Aerial Imagery. City of Tracy. County of San Joaquin.

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Exhibit 2-8b
Proposed NEI Specific Plan Land Use Designation

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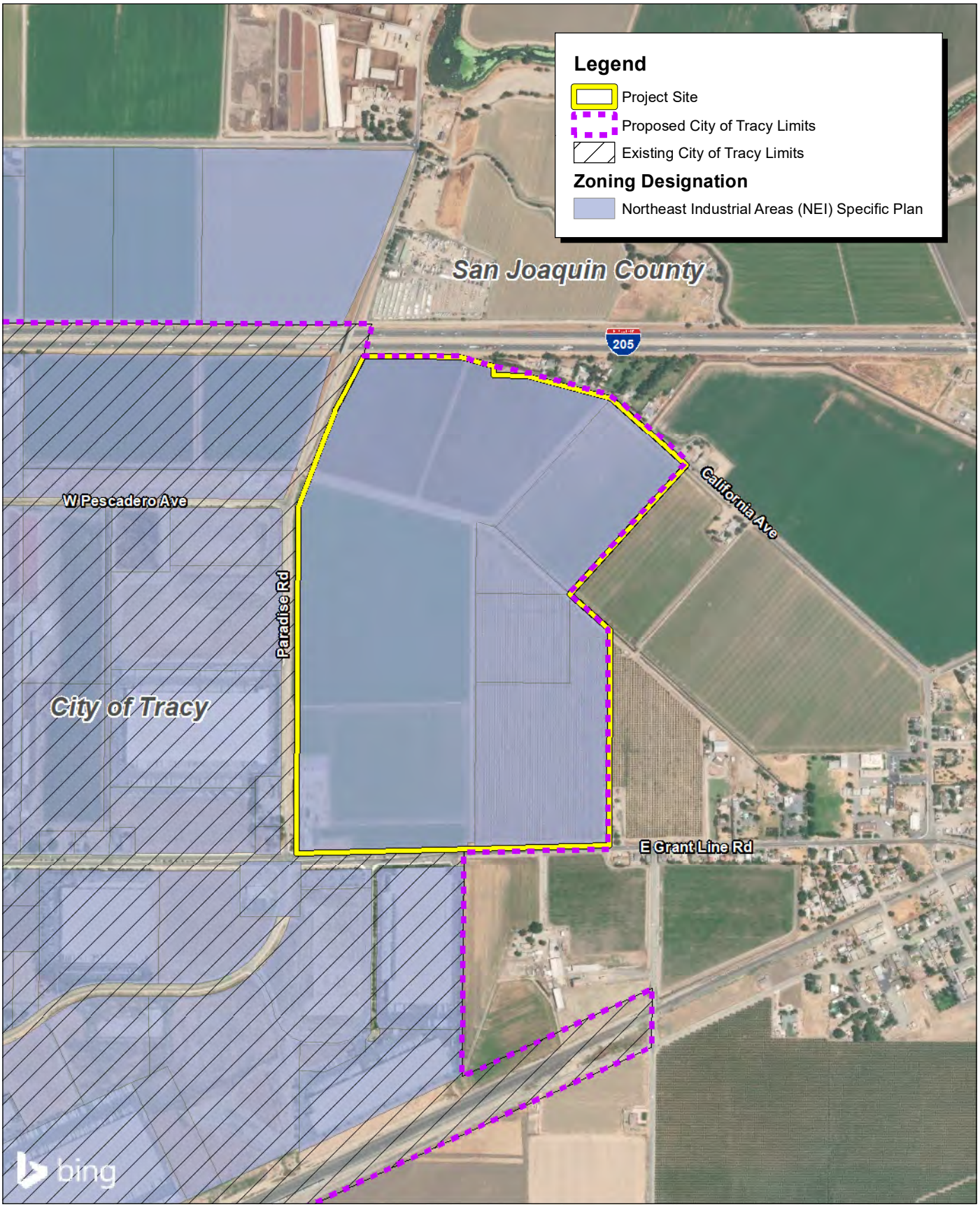

Source: Bing Aerial Imagery. City of Tracy. County of San Joaquin.

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Exhibit 2-8c
Proposed City of Tracy Zoning Designation

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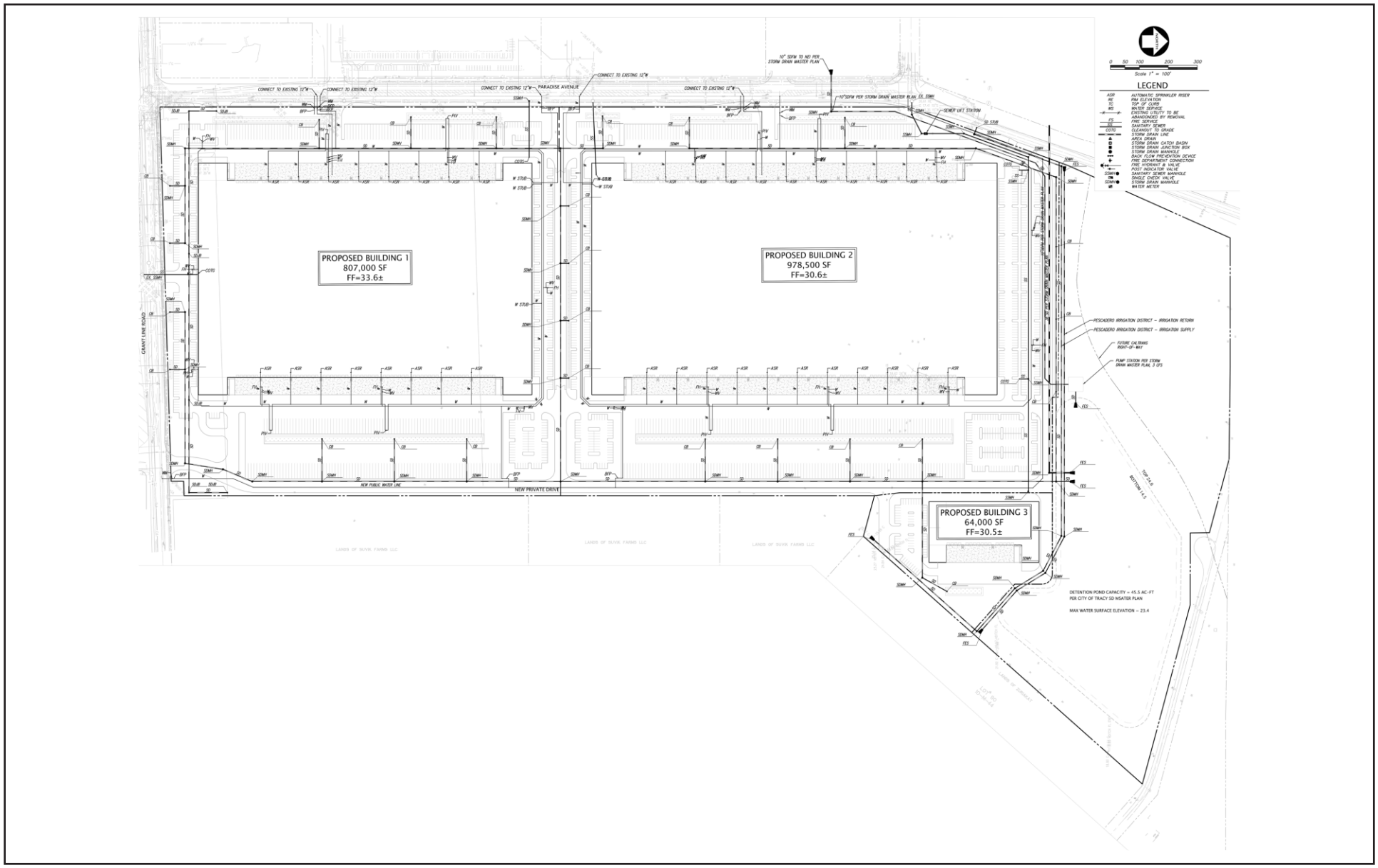

Source: Kier & Wright Civil Engineers & Surveyors Inc., February 2021.

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Exhibit 2-9
Tracy Alliance Parcels - Preliminary Utility Plan

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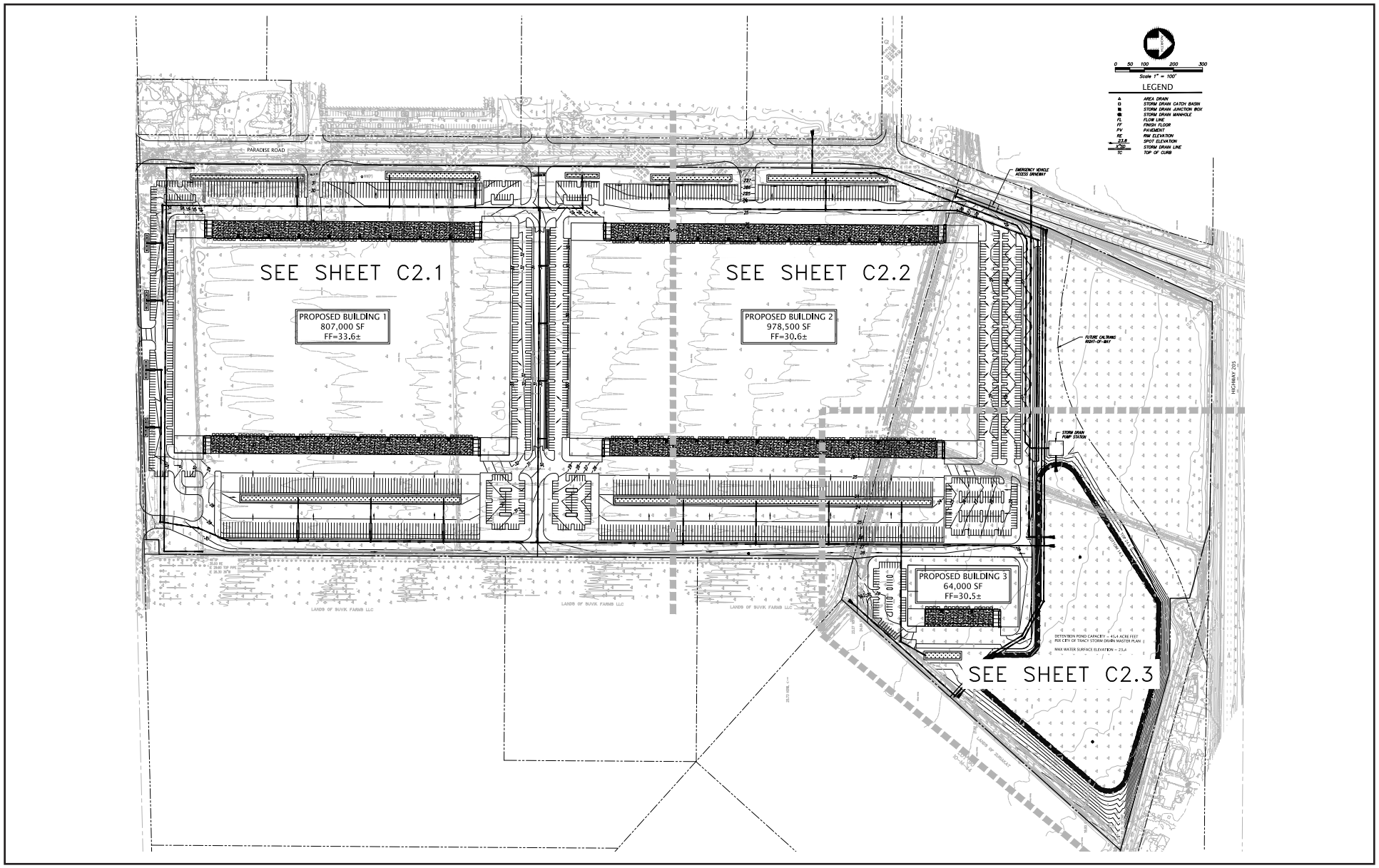

Source: Kier + Wright, February 2021.

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Exhibit 2-10a (Part 1 of 4)
Tracy Alliance Parcels - Preliminary Grading and Drainage Plan

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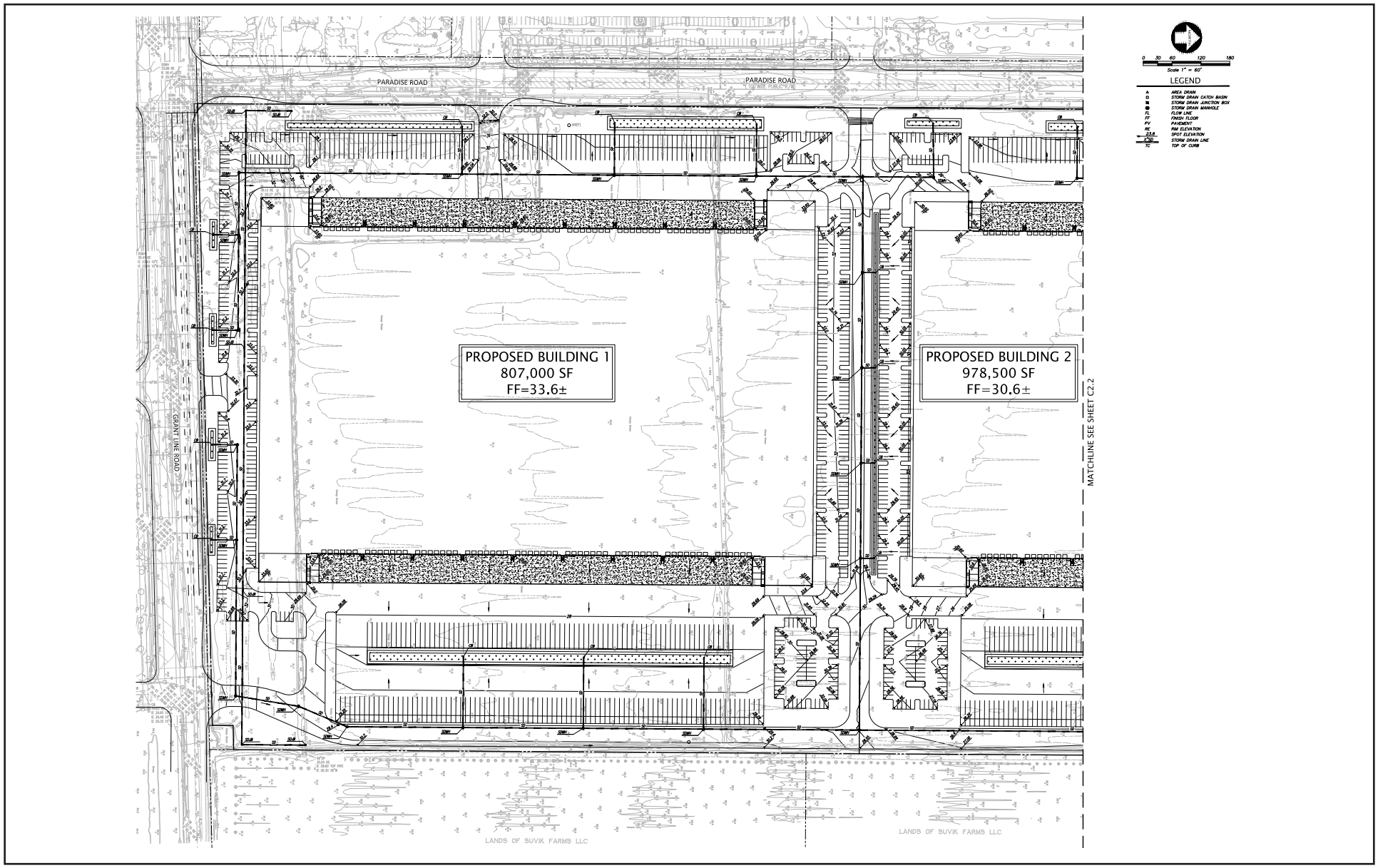

Source: Kier + Wright, February 2021.

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Exhibit 2-10a (Part 2 of 4)
Tracy Alliance Parcels - Preliminary Grading and Drainage Plan

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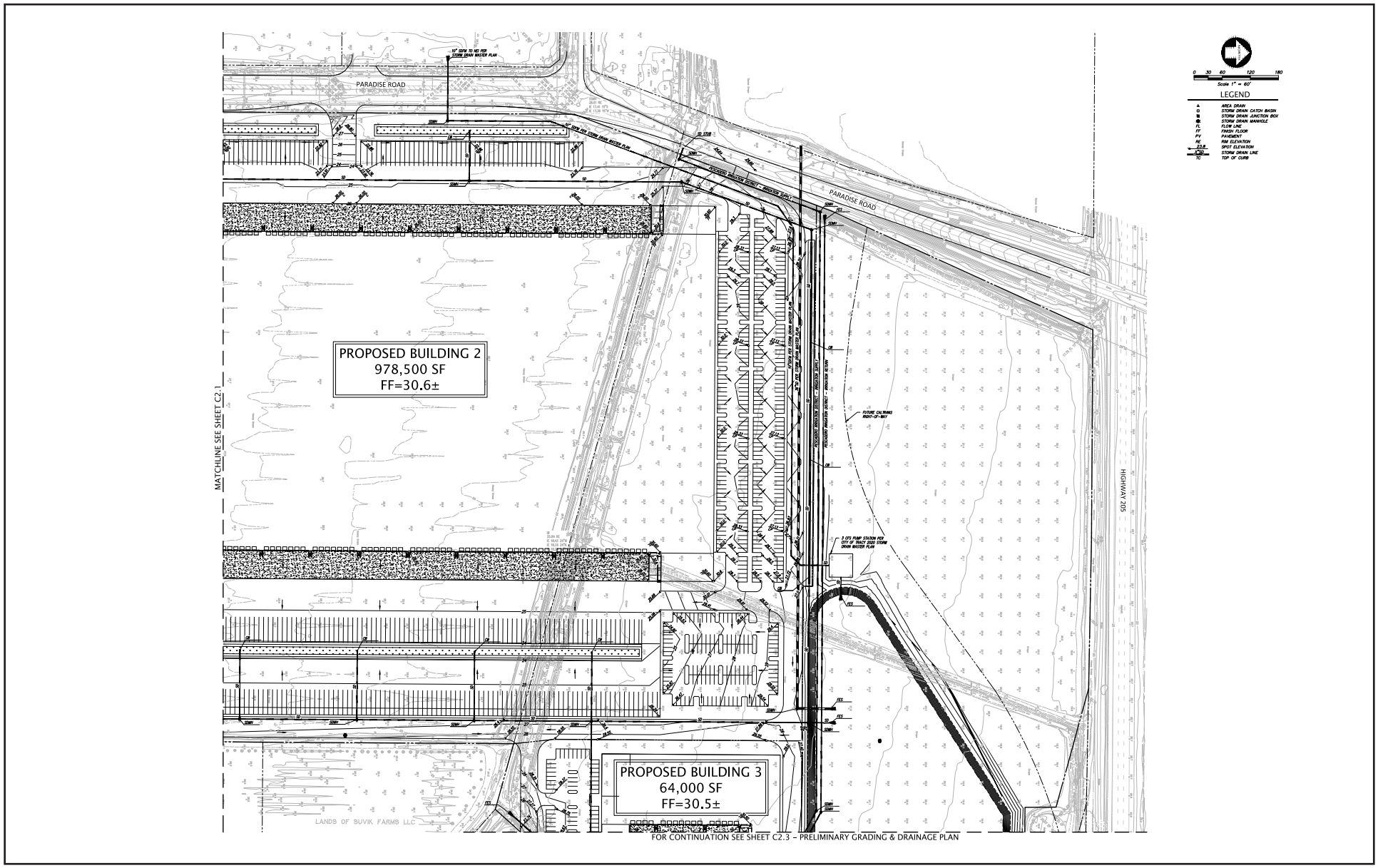

Source: Kier + Wright, February 2021.

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Exhibit 2-10a (Part 3 of 4)
Tracy Alliance Parcels - Preliminary Grading and Drainage Plan

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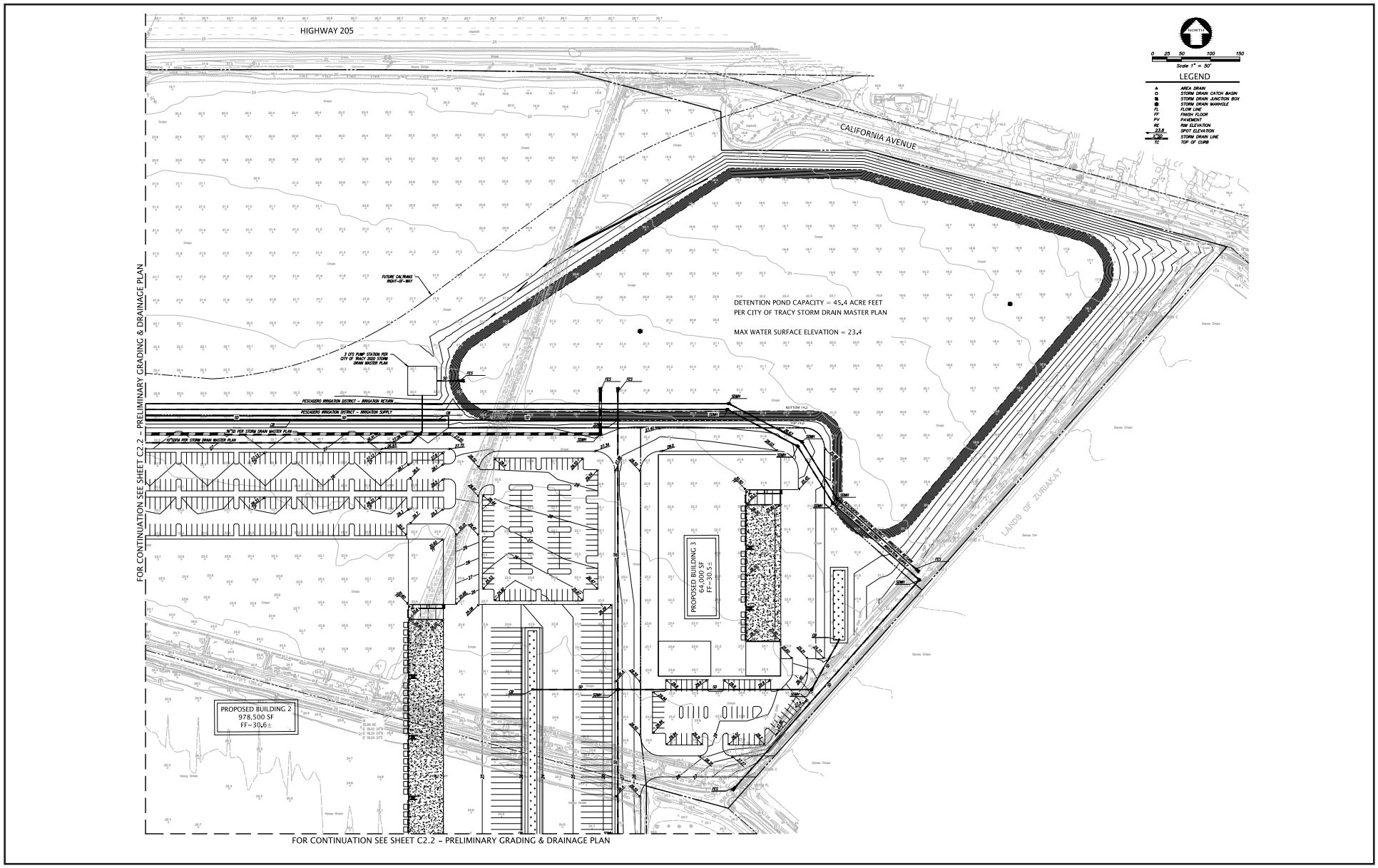

Source: Kier + Wright, February 2021.

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Exhibit 2-10a (Part 4 of 4)
Tracy Alliance Parcels - Preliminary Grading and Drainage Plan

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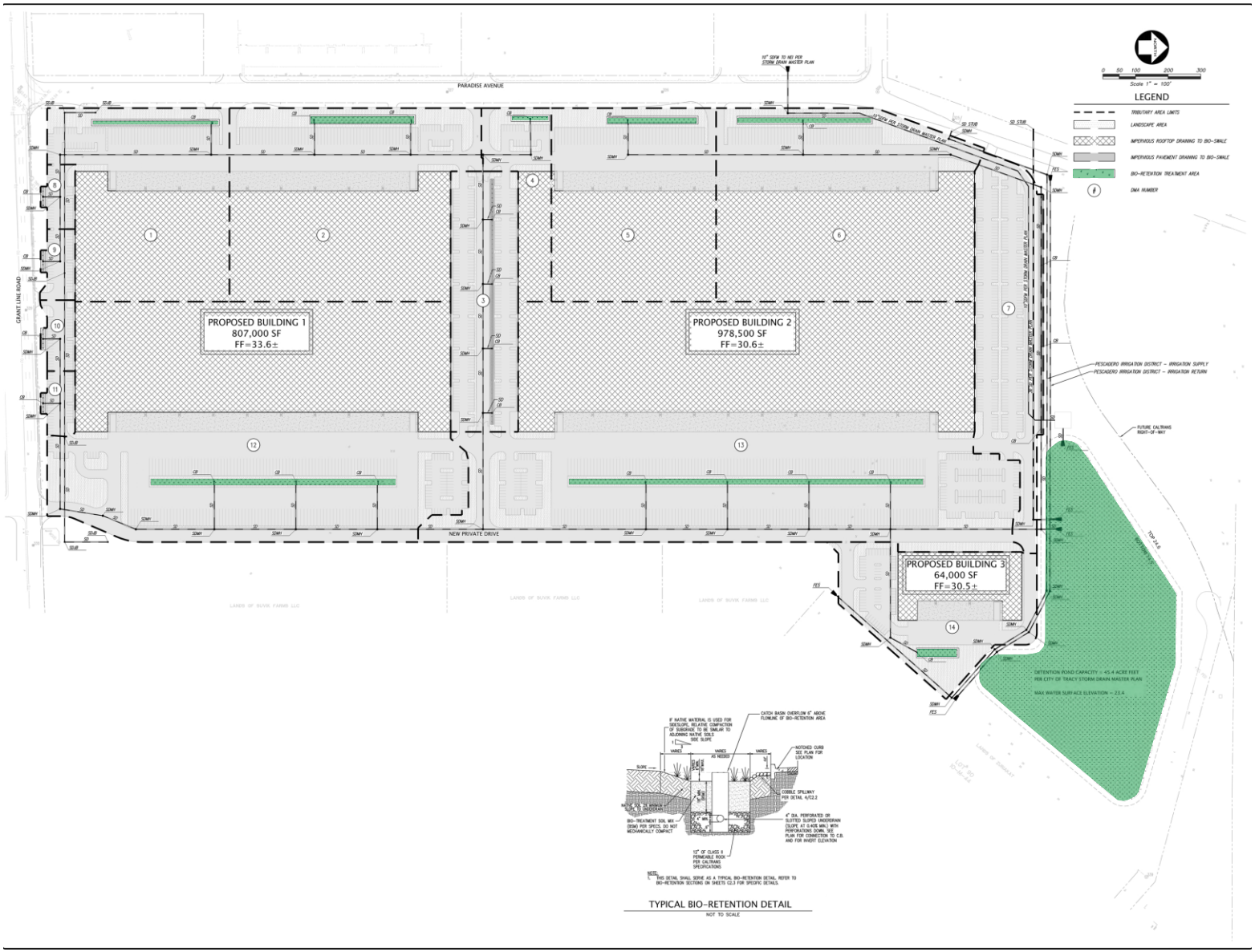

Source: Kier + Wright, February 2021.

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Exhibit 2-10b
Tracy Alliance Parcels - Preliminary Storm Water Control Plan

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CHAPTER 3: ENVIRONMENTAL IMPACT ANALYSIS

This Chapter sets forth the physical and regulatory environmental setting and addresses the organization of the discussion of the environmental impacts of the Tracy Alliance Project (proposed project) with respect to 17 environmental resource areas. The discussions of the environmental setting describe present physical conditions, or baseline conditions, on the project site and in the vicinity. For purposes of this analysis, the baseline used for the evaluation of environmental impacts under the California Environmental Quality Act (CEQA) reflects the conditions present at the time the Notice of Preparation (NOP) for this Draft Environmental Impact Report (Draft EIR) was published. To determine the proposed project's individual impacts, potential impacts of the proposed project are compared against the existing baseline conditions for each environmental resource. For purposes of the cumulative analysis, the impacts of the proposed project in combination with other past, present, and reasonably foreseeable future projects are analyzed to determine whether overall long-term impacts of all such projects would be cumulatively significant, and to determine whether the proposed project itself would cause a "cumulatively considerable" incremental contribution to any such cumulatively significant impacts.

Environmental Topics Addressed in this Draft EIR

The project is analyzed in this EIR from the perspective of the following 17 environmental resource areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Format of the Environmental Analysis

Each resource area analyzed in this Draft EIR includes the subsections summarized below.

Introduction

This subsection summarizes what is discussed in the respective environmental topic section, states what informational documents are used as the basis for the section, and indicates what related comments, if any, were received during the Draft EIR public scoping period.

Environmental Setting

This subsection describes existing, baseline physical conditions of the project site and the surroundings (e.g., existing land uses, transportation conditions, noise environment) with respect to each resource topic at the time the NOP was issued. Conditions are described in sufficient detail and breadth to allow a general understanding of environmental impacts of the proposed project based on reasonably available information.

Regulatory Framework

This subsection describes relevant federal, State, regional (if applicable), and local regulatory requirements that are directly applicable to the environmental topic being analyzed.

Impacts and Mitigation Measures

This subsection evaluates potential for the proposed project to result in direct and indirect adverse impacts on the existing physical environment, with consideration of both short-term and long-term impacts. The analysis covers construction and operation of the proposed project. The City is utilizing Appendix G of the State CEQA Guidelines as thresholds of significance for this project. The significance thresholds for environmental impacts are defined at the beginning of this subsection, and the discussion of the approach to the analysis explains how significance thresholds have been applied to evaluate impacts of the proposed project.

Indirect impacts are discussed only for those resources for which they have potential to occur (e.g., cultural resources, air quality, and biological resources). Both individual-level and cumulative impacts are analyzed. Individual-level impacts could result from actions related to implementation of the proposed project as compared to the existing, baseline conditions. Cumulative impacts could result from implementation of the proposed project in combination with other cumulative projects in the relevant study area. As discussed in “Cumulative Impacts,” below, the projects listed in Table 3-1, in conjunction with the proposed project, are considered the cumulative scenario for analysis of cumulative impacts.

Impacts are analyzed and the respective assessment and findings are included in this Draft EIR, applying the following levels of significance:

- **No Impact.** A conclusion of No Impact is reached if no potential exists for impacts or if the environmental resource does not occur in the project site or the relevant study area of potential impacts.
- **Less than significant impact.** This determination applies if the impact does not exceed the defined significance criteria or would be eliminated or reduced to a less than significant level through compliance with existing local, State, and federal laws and regulations. No mitigation is required for impacts determined to be less than significant.
- **Less than significant impact with mitigation.** This determination applies if the proposed project would result in a significant impact, exceeding the established significance criteria, but feasible mitigation is available that would reduce the impact to a less than significant level.

- **Significant and unavoidable impact.** This determination applies if the proposed project would result in an adverse impact that exceeds the established significance criteria, and no feasible mitigation is available to reduce the impact to a less than significant level. Therefore, the residual impact would be significant and unavoidable.

Impacts are defined in terms of their context and intensity. Context is related to the uniqueness of a resource; intensity refers to severity of the impact. Where applicable, Best Management Practices (BMPs), project improvement measures (otherwise referred to as project design features), or both, are incorporated into the proposed project to limit potential for a significant impact. Where necessary, feasible mitigation measures are identified for significant impacts to limit the degree or lower the magnitude of the impact; rectify the impact by repairing, rehabilitating, or restoring the affected environment; or compensate for the impact by replacing or providing substitute resources or environments. These impacts conclude with a finding of *Less than significant impact with mitigation*. Where no mitigation measures are necessary, relevant impacts are concluded to be *Less than significant* or to have **No impact.**

As part of the impact analysis, mitigation measures are identified, where feasible, for impacts considered significant or potentially significant consistent with CEQA Guidelines Section 15126.4, which states that an EIR "shall describe feasible measures which could minimize significant adverse impacts." CEQA requires that mitigation measures have an essential nexus and be roughly proportional to the significant impact identified in the EIR. The project sponsor may be required to implement all identified mitigation measures identified in this Draft EIR, as reflected in an adopted Mitigation Monitoring and Reporting Program (MMRP) and the lead agency (in this case, the City of Tracy) is responsible for overseeing the project sponsor's implementation of mitigation measures, which occurs through the imposition of the MMRP as enforceable conditions of approval. Pursuant to CEQA Guidelines Section 15126.4, mitigation measures are not required for environmental impacts that are found not to be significant.

Impacts are numbered and shown in bold type. The corresponding mitigation measures, where identified, are numbered, indented, and follow the impact statements. Impacts and mitigation measures are numbered consecutively within each topic and include an abbreviated reference to the impact section (e.g., "LAND" for Land Use and Planning). The following abbreviations are used for individual topics:

- Aesthetics (AES)
- Agriculture and Forestry Resources (AG)
- Air Quality (AIR)
- Biological Resources (BIO)
- Cultural Resources (CUL)
- Energy (ENER)
- Geology and Soils (GEO)
- Greenhouse Gas Emissions (GHG)
- Hazards and Hazardous Materials (HAZ)
- Hydrology and Water Quality (HYD)

- Land Use and Planning (LAND)
- Noise (NOI)
- Public Services (PUB)
- Transportation (TRANS)
- Utilities and Service Systems (UTIL)
- Tribal Cultural Resources (TCR)
- Wildfire (WILD)

Cumulative Impacts

The discussion of cumulative impacts in this subsection analyzes cumulative impacts of the proposed project, taken together with other past, present, and reasonably foreseeable future projects producing related impacts. The goal of this analysis is to determine whether overall long-term impacts of all such projects would be cumulatively significant, and to determine whether the proposed project itself would cause a "cumulatively considerable" incremental contribution to any such cumulatively significant impacts. To determine whether the overall long-term impacts of all such projects would be cumulatively significant, the analysis generally considers the following:

- The area in which impacts of the proposed project would be experienced;
- The impacts of the proposed project that are expected in the area;
- Other past, proposed, and reasonably foreseeable projects that have had or are expected to have impacts in the same area;
- The impacts or expected impacts of these other projects; and
- The overall impact that can be expected if the individual impacts from each project are allowed to accumulate.

"Cumulative impacts" refers to two or more individual impacts that, when considered together, are considerable, or that compound or increase other environmental impacts (CEQA Guidelines § 15355). Cumulative impacts can result from individually minor but collectively significant impacts taking place over time (40 Code of Federal Regulations [CFR] § 1508.7). This analysis will determine whether the potential exists for the proposed project, taken together with other past, present, and reasonably foreseeable future projects, would result in a significant or adverse cumulative impact. This analysis would then determine whether the proposed project's incremental contribution to any significant cumulative impact is itself significant (i.e., "cumulatively considerable"). Both conditions must apply for the project's cumulative effects to rise to the level of significance.

The cumulative impact analysis for each individual resource topic is presented in each resource section of this Chapter immediately after the description of direct project impacts and identified mitigation measures.

In addition to relevant past and present cumulative projects, Table 3-1 lists relevant cumulative projects considered for the environmental analysis and Exhibit 3-1, Cumulative Projects Map, shows

the locations of the cumulative projects. The cumulative projects list includes past, present, and future projects. Future projects include pipeline projects that are considered reasonably foreseeable.

Table 3-1: Cumulative Projects

No.	Project	Characteristics	Project Development			
			Units	Square Footage	Location	Status
City of Tracy						
1	Home2 Suites Hotel	Highway Commercial Hotel	94	67,230	2025 West Grant Line Road	Operational
2	Shamrock Business Center	Light Industrial	–	67,058	3508 Shamrock Way	Approved and Under Construction
3	Byron Apartments	Medium Density Residential	60	217,800	2660 Byron Road	Approved and Under Construction
4	Berg Road Project	Medium Density Cluster Residential	71	435,600	2774, 2850, 12920 West Byron Road	Approved and Under Construction
5	Brookview	Single-family Dwellings	80	436,036	Brookview Drive and Perennial Place	Approved and Under Construction
6	Brookview West	Low Density Residential	23	243,936	4005 South Tracy Boulevard	Approved and Under Construction
7	Primrose/ Kagehiro Phase III	Single-family Dwellings	252	2,047,000	Southeast corner of Corral Hollow Road and Kagehiro Drive	Approved and Under Construction
8	Tracy Harvest	Residential Subdivision	304	871,200	Henley Parkway	Approved and Under Construction
9	Katerra Apartments	High Density Residential	264	506,167	501 East Valpico Road	Approved and Under Construction
10	Home Depot Distribution Truck Parking Lot	Northeast Industrial–Light Industrial	–	804,118	Pescadero Avenue east of MacArthur Drive	Approved
11	Majestic Tracy Distribution Center	Northeast Industrial–Light Industrial	–	1,172,142	1500 East Grant Line Road	Approved
12	Central Plastics Industrial Building	Northeast Industrial–Light Industrial	–	60,456	1480 Pescadero Avenue	Approved
13	NEI Building 4	Northeast Industrial–Light Industrial	–	606,343	1269 East Grant Line Road	Approved
14	Desalination Plant	Light Industrial	–	10,320,000	9251 West Arbor Avenue	Approved

No.	Project	Characteristics	Project Development			
			Units	Square Footage	Location	Status
15	Schack and Company Warehouse with Office	Northeast Industrial–Light Industrial	–	90,000	1850 North Chrisman Road	Approved
16	Starbucks, Burger King, Gasoline Station and Store, Car Wash	General Highway Commercial	–	5,584	630 East 11th Street	Approved
17	Tracy Assisted Living and Memory Care	Dependent Living Facility	100	87,107	South of Grant Line Road, west of Corral Hollow Road	Approved
18	Marriott Hotel	Commercial Hotel	107	58,800	3550 North MacArthur Drive	Approved
19	NEI Building 17/ Katerra Phase II	Northeast Industrial–Light Industrial	–	175,200	2302 East Paradise Road	Approved
20	GH Logistics Phase II	Light Industrial	–	6,000	1428 Mariani Court	Approved
21	California Highway Patrol (CHP) Facility	CHP Headquarters	–	28,162	1175 East Pescadero Avenue	Approved
22	Southgate High Density Development	High Density Residential	42	149,411	2483 West Schulte Road	Approved
23	Tracy Village and Annexation	High Density Residential	581	5,663,000	Southeast corner of Valpico Road and Corral Hollow Road	Approved
24	Project Big Bird	Industrial	–	823,500	South of Grant Line Road, east of Skylark Way, and west of Chrisman Road	Approved
25	MacArthur Drive Extension	Traffic Congestion Relief	–	–	From Mount Diablo Avenue to Eleventh Street	Planned
26	Schulte Road Extension	Traffic Congestion Relief	–	–	From Corral Hollow Road to Lammers Road	Planned
27	Chrisman Road Extension	Traffic Congestion Relief	–	–	From Grant Line Road to Interstate 205	Planned

No.	Project	Characteristics	Project Development			
			Units	Square Footage	Location	Status
28	Chrisman Road/Union Pacific Railroad Crossing	Railroad Crossing Safety	–	–	Between North and South Chrisman Road across Union Pacific Railroad	Planned
County of San Joaquin						
29	Linne Road Widening	Traffic Congestion Relief	–	–	From Tracy Boulevard to Chrisman Road (south of Tracy city limit)	Planned
30	County Expressway from Tracy to River Islands/ Lathrop	Traffic Congestion Relief	–	–	From Arbor Avenue north of Tracy city limit to River Islands/ Lathrop	Planned
California Department of Transportation						
31	I-205 Tracy HOV 8 Lane Widening	Traffic Congestion Relief	–	–	From Alameda County Line to Interstate 5 (through northern City of Tracy and surrounding San Joaquin County lands)	Planned
32	I-205/Lammers Road/Eleventh Street Interchange Project	Traffic Congestion Relief	–	–	Junction of Interstate 205 and Lammers Road (within City adjacent to western city limit)	Planned
33	I-205/MacArthur Drive Interchange Improvements	Traffic Congestion Relief	–	–	Existing Interstate 205/MacArthur Drive Interchange (within City)	Planned
34	I-5 Widening	Traffic Congestion Relief	–	–	From State Route 120 to Interstate 205 (within City of Lathrop)	Planned
35	I-205/Chrisman Road Interchange	Traffic Congestion Relief	–	–	Junction of Interstate 205 and Paradise Road (on project site)	Planned
Sources:						

No.	Project	Characteristics	Project Development			
			Units	Square Footage	Location	Status

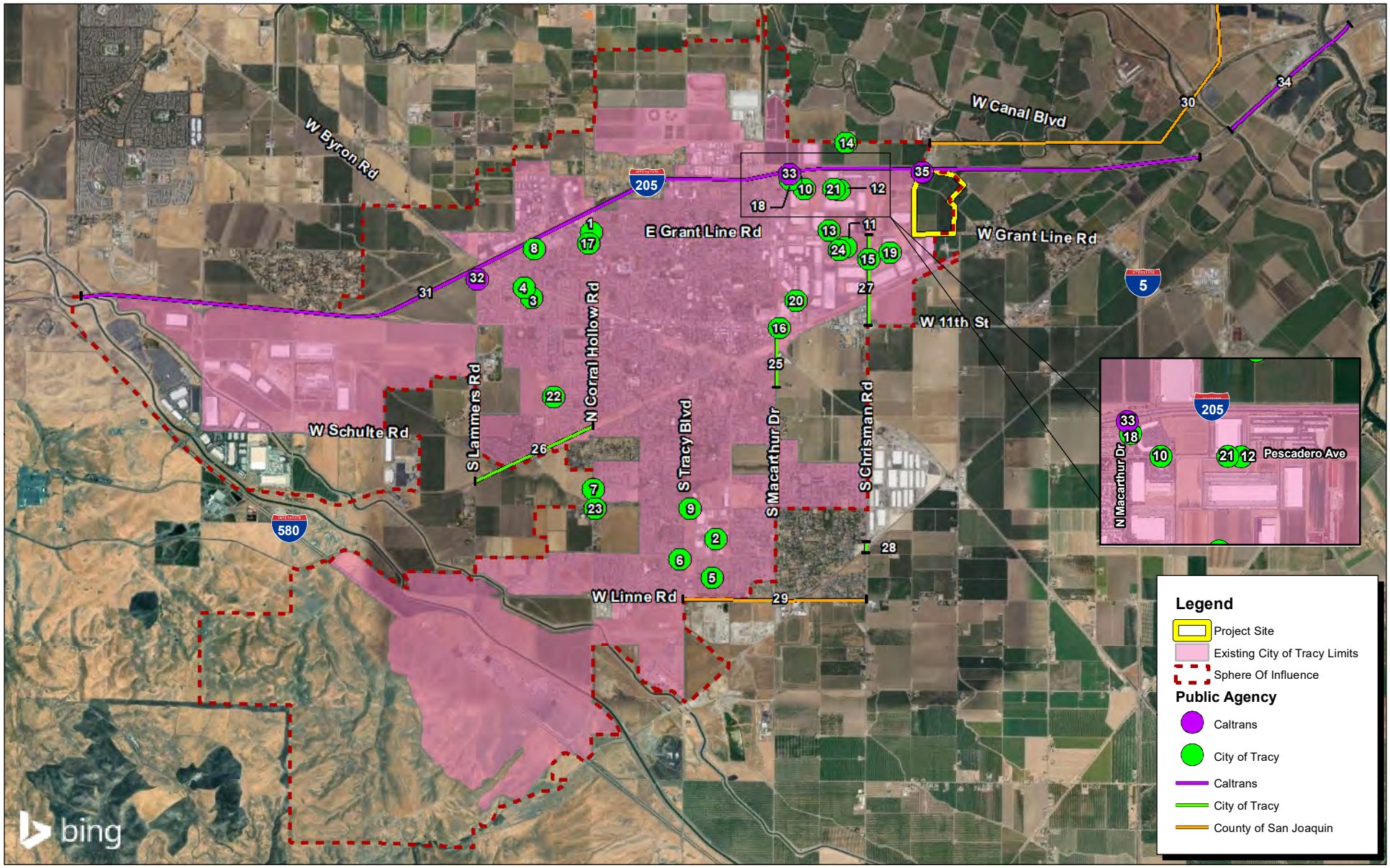
City of Tracy. 2020. City of Tracy New Construction: Industrial & Commercial Development Pipeline Report. May.

City of Tracy. 2020. City of Tracy Residential Development Pipeline Report. May.

RBF Consulting. 2012. Citywide Roadway & Transportation Master Plan. November.

San Joaquin Council of Governments. Interactive Project Map. Website: https://www.sjcog.org/396/Interactive-Map. Accessed May 5, 2020.

California Department of Transportation (Caltrans). 2020. District 10 Current Projects. Website: https://dot.ca.gov/caltrans-near-me/district-10/district-10-current-projects. Accessed May 5, 2020.



Source: Bing Aerial Imagery.

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Exhibit 3-1
Cumulative Projects Map

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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3.1 - Aesthetics

3.1.1 - Introduction

This section describes the existing aesthetics, light, and glare setting and potential environmental effects from project implementation on visual resources on the site and its surroundings. Descriptions and analyses in this section are based, in part, on on-site reconnaissance and a photo inventory by FirstCarbon Solutions (FCS) personnel and review of the City of Tracy General Plan (General Plan), City of Tracy Municipal Code (Tracy Municipal Code), and the City of Tracy Northeast Industrial (NEI) Specific Plan.

3.1.2 - Environmental Setting

Visual Character

Visual character in the California Environmental Quality Act (CEQA) context is an impartial description of defining physical features, landscape patterns, and distinctive physical qualities within a landscape. Visual character is informed by the composition of land, vegetation, water, and structures and their relationship (or dominance) to one another, and by prominent elements of form, line, color, and texture that combine to define the composition of views. Visual character-defining resources and features within a landscape may derive from notable landforms, vegetation, land uses, building design and façade treatments, transportation facilities, overhead utility structures and lighting, historic structures or districts, or panoramic open space.

City of Tracy

The City of Tracy (City) is located in San Joaquin County, east of the Coastal Range that separates California's Central Valley from the San Francisco Bay Area. The City lies east of the Mount Diablo Meridian and covers approximately 22 square miles. It is surrounded generally by agricultural, industrial, and rural and suburban residential uses.

The City is in the San Joaquin Valley, between the Sierra Nevada Mountains to the east and the Diablo Range to the west. Substantial portions of the valley floor are developed with residential, agricultural, and industrial facilities. Its visual urban form consists of several distinct segments, including Tracy's downtown, traditional residential neighborhoods, contemporary residential subdivisions, retail and commercial areas, industrial areas, parks and landscaping, and agricultural lands.

Project Site

The project site is generally flat and is currently comprised of cultivated fields, with associated irrigation/drainage channels. A portion of the project site is currently occupied by several existing residences and agricultural structures, all of which are located in the southwest corner of the site. Ruderal vegetation and ornamental trees associated with the existing structures are present. Several private dirt roads bisect the site providing access to the crop fields. Irrigation/drainage channels run along all of the private dirt roads within the project site (see Exhibit 3.1-1 in Section 3, Biological Resources).

Scenic Resources

Scenic resources typically involve prominent, unique, and identifiable natural features in the environment (e.g., trees, rock outcroppings, islands, ridgelines, channels of water, and aesthetically appealing open space), and/or cultural features or resources, such as regional or architecturally distinctive buildings or structures that serve as a focal point of interest.

City of Tracy

The City of Tracy General Plan identifies the following scenic resources within the Tracy Planning Area:

- **Views of the Diablo Range**. Rising from the southwest portion of the Tracy Planning Area, this range extends from near sea level to 1,652 feet and provides a visual barrier between the Central Valley and the San Francisco Bay Area. Generally, the eastern slopes visible from Tracy have not been developed and contain sporadic tree groupings.
- **Natural landscapes surrounding the Paradise Cut, Old River, and Tom Paine Sloughs**. Located on the north side of the Tracy Planning Area, these landscapes contain streamside vegetation that provide visual contrasts as they run through the relatively flat agricultural lands.
- **Expansive Agricultural Lands**. The surrounding Sphere of Influence (SOI) and Planning Area contain agricultural lands that are used for row crops and grazing.
- **Hillside Areas**. Hillside areas, located on the southwestern side of the City to the west of Interstate 580 (I-580), including in the Tracy Hills Specific Plan area, are a visual amenity for residents of the City and travelers on I-580.

There are two officially designated California Scenic Highway segments in the Tracy Planning Area, covering approximately 16 miles. The first segment is the portion of I-580 between I-205 and I-5, which offers views of the Coast Range to the west and the Central Valley's urban and agricultural lands to the east. The second segment is the portion of I-5 that starts at I-205 and continues south to Stanislaus County, which allows for views of surrounding agricultural lands, the Delta-Mendota Canal, and the California Aqueduct.[1] These segments are shown in Exhibit 3.1-1.

A visual landmark or entryway, as defined by the General Plan, is an element by which people orient themselves and can help create a unique identity for an area. Examples of visual landmarks include statues, major works of public art, historic buildings, water towers, significant landscaping or landforms, and other easily identifiable features.

The City of Tracy provides entrances to the City from major roadways called "entry corridors" or "gateways." These scenic corridors are important for providing both visitors and residents with initial impressions of Tracy and also providing a transition from a rural to urban environment. The City's existing gateways include exits from I-205 at MacArthur Drive, Tracy Boulevard, Grant Line Road and Eleventh Street, and also include exits from I-580 at Lammers Road and Corral Hollow Road. The entry corridors are shown on Exhibit 3.1-1.

[1] California Department of Transportation (Caltrans). 2019. California State Scenic Highway. List of Eligible and Officially Designated State Scenic Highways. August.

Project Site

The project site is adjacent to the current boundaries of the NEI Specific Plan area, which is primarily characterized by light industrial uses such as warehouse and logistic facilities, as well as agricultural uses. Hillside areas and views of Diablo Range are visible from the project site and the project site contains expansive agricultural lands. There are no City entry corridors or gateways, or State Scenic Highways on, or adjacent to, the project site; however, views of the project site are visible from one of the entry corridors identified in the General Plan, the eastbound exit from I-205 off MacArthur Drive. The nearest designated California Scenic Highway is the portion of I-580 between I-205 and I-5, which is approximately 7.2 miles east of the project site.

Views

Views may be generally described as panoramic views of a large geographic area for which the field of view can be wide and extend into the distance. Associated vantage points provide an orientation from publicly accessible locations. Examples of distinctive views include urban skylines, valleys, mountain ranges, or large bodies of water.

City of Tracy

The Diablo Range, rising to an elevation of nearly 1,652 feet, is the most prominent topographical feature in the area.

Project Site

In April 2020, FCS conducted a field visit to observe and document existing visual quality and character of the project site and vicinity. As shown in Exhibits 2-4a through 2-4e in Chapter 2, Project Description, the area surrounding the project site has both an agricultural and industrial character, with neighboring properties south and west of the project site consisting of agricultural lands and industrial warehouses. Land uses north of California Avenue consist of single-family homes and a cell tower located immediately east of the terminus of California Avenue. In addition, urban development such as a vehicle dealership is located to the north, across I-205. East of the project site is agricultural land with associated single-family homes and agricultural structures and outbuildings. To the west are vacant lots interspersed among the agricultural and industrial lands. Views from the project site north are of single-family homes and I-205; views to the west are of industrial buildings and undeveloped land; views to the south are of industrial buildings, single-family homes, and open space; and view to the east are single-family homes and undeveloped land.

Light and Glare

In the context of CEQA, light is nighttime illumination that stimulates sight and makes things visible; glare may be defined as difficulty seeing in the presence of bright light, such as direct or reflected sunlight.

Project Vicinity

The primary sources of nighttime light in the surrounding area are from vehicle headlights traveling along I-205 and Grant Line Road, as well as other surrounding roadways. There are also streetlights and buildings with outdoor security lighting in the project vicinity. There are some large reflective surfaces associated with buildings in the project vicinity that contribute daytime glare.

Project Site

The few residences and agricultural structures on-site may include exterior nighttime lighting; however, such lighting is minimal. There are streetlights surrounding the project site on Grant Line Road and Paradise Road. There are also lights on I-205. There are some outdoor lighting fixtures on adjacent industrial buildings. No other features on the project site produce light or glare.

3.1.3 - Regulatory Framework

State

California Scenic Highway Program

The California Scenic Highway Program is intended to preserve and protect scenic highway corridors from change that would diminish aesthetic value of highway lands. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, scenic quality of the landscape, and the extent to which development intrudes upon travelers' enjoyment of the view. A scenic corridor is land generally adjacent to and visible from the highway and is identified using a motorist's line of vision. The corridor protection program seeks to encourage quality development that does not degrade scenic value of corridors. Minimum requirements for scenic corridor protection include:

- Regulation of land use and density of development
- Detailed land and site planning
- Control of outdoor advertising (including a ban on billboards)
- Careful attention to and control of earthmoving and landscaping
- Careful attention to design and appearance of structures and equipment

Title 24 of the California Code of Regulations Building Energy Efficiency Standards

California Building Code (California Code of Regulations [CCR], Title 24)—including Title 24, Part 6—includes Section 132 of the Building Energy Efficiency Standards, which regulates lighting characteristics, such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off. Different lighting standards are set by classifying areas by lighting zone. The classification is based on population figures of the 2000 Census. Areas can be designated as LZ1 (dark), LZ2 (rural), or LZ3 (urban). Lighting requirements for dark and rural areas are stricter, to protect the areas from the introduction of new sources of light pollution and light trespass.

Local

City of Tracy General Plan

The Tracy General Plan establishes the following goals and policies related to aesthetics, light, and glare that are relevant to this analysis:

Land Use Element

Goal LU-1. A balanced and orderly pattern of growth in the City.

Objective LU-1.1. Establish a clearly defined urban form and city structure.

Policies

Policy P1 New development and redevelopment in existing areas shall be organized as a series of residential neighborhoods, Employment Areas, Corridors, Village Centers, the Downtown and the I-205 Regional Commercial Area. Each is defined as follows:

- Neighborhoods are residential areas of the city that are approximately ½ mile in diameter and centered on a focal point such as a park, school, or public open space.
- Employment areas are the job-centers of the city and include office districts, retail centers and industrial areas.
- The Downtown provides a focal point of community life in the City and contains a mix of uses including commercial, residential, public facilities and community services.
- Village Centers are retail areas that may contain a mix of uses, such as housing and office uses. These areas serve several neighborhoods and are designed to be walkable, main streets.
- Corridors refer to several arterial streets, each with a mix of uses.
- The I-205 Regional Commercial Area is a special district north of I-205 that contains big-box retail, automobile sales establishments and a large, regional shopping mall.

Community Character Element

Goal CC-1. Superior design quality through Tracy.

Objective CC-1.1. Preserve and enhance Tracy's unique character and "hometown feel" through high-quality urban design.

Policies

CC-1.1 P1 Preserving and enhancing hometown feel shall be the overriding design principle for the City of Tracy.

CC-1.1 P3 All new development and redevelopment shall adhere to the basic principles of high-quality urban design, architecture and landscape architecture including, but not limited to, human-scale design, pedestrian-orientation, interconnectivity of street layout, siting buildings to hold corners, entryways, focal points, and landmarks.

CC-1.1 P4 To the extent possible, site layout and building design should take into account Tracy's warm, dry climate, such as through the inclusion of trees and landscaping or other architectural elements to provide shade.

CC-1.1 P5 Lighting on private and public property should be designed to provide safe and adequate lighting, while minimizing light spillage to adjacent properties.

Objective CC-1.2: Balance the need for growth with the preservation of Tracy's "hometown feel."

Policies

CC-1.2 P1 New development projects shall be approved only if they meet the design principles set forth in the Community Character Element and in detailed design guidelines approved by the City Council.

Objective CC-1.4. Minimize the use of sound walls in Tracy.

Policies

CC-1.4 P3 Sound walls or solid fences along streets other than arterials and expressways should be used only if no other design solutions exist for reduction the impact of roadway noise on residential areas.

CC-1.4 P4 Where sound walls are used, they shall be set back from the street, include design features that enhance visual interest and be landscaped in order to mitigate their impact on urban character and the pedestrian environment.

Objective CC-1.5. Provide underground utilities throughout Tracy.

Policies

CC-1.5 P1 New development shall allocate and construct utilities underground.

Goal CC-4. An enhanced identity through preservation of open space at the City's periphery and appropriate transitions between urban development and non-urban areas.

Objective CC-4.1: Create appropriate edges to the urbanized area.

Policies

CC-4 P1 Strongly oppose the urbanization within the City of Tracy's Planning Area as defined by this General Plan or the San Joaquin County General Plan, whichever is more restrictive, particularly between the City of Tracy and the adjacent communities of Mountain House and Lathrop.

CC-4 P2 To the extent feasible, the City shall use land designations and open space preservation techniques to create appropriate transitions. A variety of techniques can be used to create the soft or hard edges to the City including the following:

- **Buffer Zone.** Soft edges can be created with buffer zones such as natural open space, large setbacks, and landscaped areas, as a means to separate urban from rural uses. Buffer areas shall be planted and maintained by the property owner, tenants or homeowner's association and may include passive and active recreation areas such as picnic areas, bridle, and walking trails. Golf course development may also be an option in areas where a soft edge is desired.
- **Cluster Development.** Clustered development is a method of site planning in which structures are clustered on a given site in the interest of preserving open space or creating a buffer. Areas with clustered development typically have low gross

residential densities and high minimum open space requirements to encourage the clustering of structures.

- **Feathering of Density:** A gradual reduction in residential density can be used to establish a smooth transition between urban and rural uses.

CC-4 P3 The City shall encourage the location of new parks around the edge of the SOI to help create and support a soft edge to the city.

Goal CC-11. Well-designed Employment Areas that are integrated with other parts of Tracy.

Objective CC-11.1: Ensure that Employment Areas are developed with a recognizable identity and structure.

Policies

CC-11.1 P1 Employment Areas should contain one or more focal points such as a retail use, park, or plaza.

CC-11.1 P2 Focal Points in Employment Areas may be located on private or public property and are encouraged to be publicly accessible.

CC-11.1 P3 Development within an Employment Area should occur such that a majority of business parks or office parks are within a reasonable walking or biking distance, generally ½ mile, of one or more focal points.

Objective CC-11.2. Encourage attractive design in Employment Areas.

Policies

CC-11.2 P1 Development in Employment Areas should adhere to high-quality design standards.

CC-11.2 P4 Building setbacks for office buildings or office portions of industrial buildings should be minimized to ensure that buildings define the edges of the street.

CC-11.2 P5 Building facades in Employment Areas should provide visual interest.

CC-11.2 P6 Loading facilities in Employment Areas should be screened from view from public streets to the extent possible.

CC-11.2 P7 Individual projects in Employment Areas shall provide adequate buffers to adjacent residential areas.

CC-11.2 P8 Fencing on industrial and commercial sites at the front property line shall be discouraged, except when necessary for security or noise attenuation.

CC-11.2 P9 Fencing visible from the public right-of-way shall be visually appealing when used in industrial and commercial developments.

Objective CC-11.3. Minimize the impact of parking on the pedestrian environment in the Employment Areas.

Policies

CC-11.3 P1 The impact of parking in Employment Areas on the pedestrian environment should be minimized with attractive landscaping.

CC-11.3 P2 Parking lots should be set back from the street with a landscaped buffer wherever possible.

CC-11.3 P3 Parking for alternative modes of transportation, such as preferential parking for carpool/vanpool, motorcycles or alternative fuel vehicles and bicycles, should be incorporated into parking plans for development projects in Employment Areas.

Northeast Industrial Specific Plan

The NEI Specific Plan establishes design guidelines and development standards for projects within its boundaries. For Light Industrial (LI) uses, this includes a maximum floor area ratio (FAR) of 0.5 and a maximum building height of 60 feet. Other applicable design guidelines are included below.

Streetscapes

- The design of the streetscape should integrate, in a consistent and creative manner, plant materials, paths, berming, lighting, and signage to produce an attractive and functional environment.
- All landscaping should employ a mix of trees, shrubs, groundcovers and turf, where appropriate. The plant palette should be relatively limited and applied in groupings of similar species rather than a few plants of many different species planted together. The use of water conserving plantings, such as California natives and drought tolerant trees, shrubs, and turf is encouraged, and compliance with the state's water efficient landscape guidelines is required.
- The use of lawn substitutes is encouraged in all medians and for parkways. The use of turf should be minimized and reserved for areas of high use or visibility and temporary median planting in anticipation of future street widths.
- Automatic irrigation is required for all landscape areas. Plants should be watered and maintained on a regular basis. Irrigation systems should be designed so as not to overspray walks, buildings, and parking areas, etc. The use of water conserving systems, such as drip irrigation for shrub and tree planting, is encouraged.
- Tree plantings should reflect street hierarchy with larger trees along arterial streets and smaller trees on industrial streets. Tree plantings shall be symmetrical and of the same species in the parkways on both sides of the streets. One tree species or mixture of species shall be planted consistently at regular intervals along the entire length of a street. Spacing interval shall be no greater than 40 feet on center. Where trees are planted in medians, the plantings shall be continuous and at regular intervals. Spacing of median trees shall be no greater than 30 feet on center. Different tree species shall be planted at intersections to highlight these areas.
- Adequate sight lines shall be maintained at all times.

Street Lighting

- Illumination standards for arterial and industrial streets should reflect the different right-of-way widths and functions.
- Light fixtures and standards shall meet all safety standards and shall be employed throughout the length of the street. It is recommended that one lighting fixture style be employed for use on all streets. Where possible, light standards shall be located in medians.

Building Setbacks

- Building setback from any property line adjacent to a street or Caltrans right-of-way shall be 25 feet minimum. Rear and side yard building setbacks from property lines not adjacent to a street or Caltrans right-of-way shall be 15 feet minimum.
- A 5-foot-wide landscape setback is required along property lines not adjacent to a right-of-way. On the property lines perpendicular to the street frontage on industrial streets, the landscaped setback is only required to a point 150 feet onto the parcel from the street right-of-way or 50 feet back of building face, whichever is greater.
- Parking setback from any property line along a public street of the Caltrans right-of-way for commercial land uses shall be 10 feet and for industrial land uses shall be 15 feet.
- Parking shall not be permitted within 10 feet of the building entry face of any commercial structure. In the event the building has an arcade or other shade structure along this frontage, the structure can be located within this required setback. Parking shall not be permitted within 15 feet of the office face or portion of a building. On industrial buildings, a 15 foot setback to the parking area shall be provided at building entries.

Loading and Unloading Spaces

- Sufficient off-street loading and unloading spaces shall be provided on each site, and adequate provisions and space shall be made for maneuvering freight vehicles and handling all freight. All loading activity, including turnaround and maneuvering, shall be made on-site.
- In industrial areas, truck loading areas and docks shall not be permitted between building(s) and the street unless the building(s) are set back from the curb a minimum of 125 feet and doors are screened by landscaping, berms, and/or fences.
- Buildings, structures, and loading facilities shall be designed and placed upon the site so that vehicles, whether rear or side loading, may be loaded or unloaded at any loading dock, door, or area without extending beyond the property line.

Driveway Standards

Driveways should be carefully located so as not to impede the primary function of the streets, which is to carry through traffic. It should be noted that these spacing guidelines are minimum values. The goal should be to exceed them where possible.

- Individual industrial parcels on major arterial streets may have driveways, but they should be carefully located so as not to impede the traffic efficiency. In general, parcels with frontage on the

major arterials should have their entryway on side streets if possible. If a parcel's only frontage is on the major arterial, every effort should be made to consolidate access at a single driveway. Spacing standards for driveways on major arterials shall be as follows:

a) Full access driveways, 500 ft. minimum
b) Partial access driveways (right in/out, left turn in), 500 ft. minimum
c) Right turn in and out, 350 ft. minimum upstream from an intersection
d) Right turn in and out, 200 ft. minimum downstream from an intersection

- On industrial streets, spacing for full access driveways is 450 feet, minimum. "T" intersections are encouraged over four-way intersections. Every effort should be made to consolidate driveways.
- No driveway shall be located closer than 200 feet to the radius return point at intersections.
- Driveways shall be a minimum of 25 feet wide. Subsequent development shall demonstrate driveway width and placement can accommodate truck turning movement and clearing without blocking roadways.
- Driveway width modifications may be approved with shared (ganged) driveways. Ganged driveways which serve two adjacent sites will be required to install landscaped islands along parking adjacent to the gang driveway and a landscape zone at the end of the common drive will act as a terminus to the view line down the ganged driveway.
- Full curb returns (as opposed to a standard driveway) shall be utilized for entries to all sites of over 10 acres in size or for common driveways that serve two adjacent sites that together total more than 10 acres.
- Access driveways shall provide adequate length to accommodate off-street vehicle stacking needs during times of peak use.
- Parcel entry should be clear, attractive, and inviting; circulation should direct employee and visitor traffic clearly through the site to main building entries and drop-off points and service trucks to loading.

Freeway Interface

The control of views of Tracy from I-205 is critical for the establishment of a quality image for the community.

- Locate services and storage areas to minimize visibility from I-205.
- All freeway setback zones shall be planted with a combination of trees, shrubs, and groundcover. Automatic irrigation is required of all planted area. Use large scale trees, from a 24-inch box minimum, grouped in single species clusters. Mass trees to avoid blocking views of commercial signage while providing at least one tree per 1,500 square feet of setback area. Plant shrubs in an informal hedge near the property line with gaps between hedges of 50 feet maximum. Install from 5-gallon cans, minimum, in single species clusters at least 100 feet long. Hydroseed or otherwise install permanent groundcover in all places not planted with shrubs.

Building Architecture

- Use of creative building design and construction techniques is encouraged. Special attention should be given to that portion of the building visible from adjacent roadways or public parking areas.

- Large buildings should have facades that include variations in massing, form, and texture. Continuous surface treatments of a single material should be minimized. Architecture should be used to highlight building entries.
- Any accessory buildings and enclosures, whether attached or detached from the main building, shall be of similar compatible design and materials.

Signs

- Signs must conform to the requirements of Signs, Title 10, Article 35 of the Tracy Municipal Code as modified herein.
- A site sign program should be integrated into a total design concept for a site and its buildings. The primary goal of the project sign system is to provide information and identification. When more than one sign is permitted, all signs shall be of similar style, shape, and materials.
- All signs must be approved prior to installation, and should be designed in a manner that coordinates the sign designs and locations with the site plan and building architecture for each project. The sign plans should include:

  a) **Detached Business Identification Signs:** One such monument sign (as defined by the Tracy Municipal Code) shall be allowed for each street frontage of the site. These signs may only contain the symbol and/or name of the business and its street address. The sign shall be free standing, may be double-sided, and shall be set back a minimum of 5 feet from the public right-of-way. Sign area shall not exceed 32 square feet per frontage and sign shall not exceed 6 feet in height from finished grade. Signs should generally be oriented perpendicular to approaching traffic.

  b) **Wall signs:** On large single tenant buildings, signs should be located immediately above or adjacent to the primary building entrance. No sign shall extend above dominant roof lines. The area of any single sign shall not exceed 100 square feet. Total area shall not exceed one-half square foot of sign per lineal foot of business being served.

     On smaller multi-tenant buildings, signs should be located at the frontage of each individual lessee. The area of any single sign shall not exceed 100 square feet nor more than 75 percent of the tenant frontage. Capital letters shall be no more than 2.5 feet in height and lower-case letters no more than 1.5 feet in height. When individually lettered wall signs comprise over 50 percent of the sign area of all sign types, total sign area shall not exceed 1.2 square feet per lineal foot of business being served. When comprising less than 50 percent of the total sign area, the maximum sign area shall be one-half square foot per lineal foot of business being served.

c) **Directional Signs:** Signs required or desired to assist patrons in accessing the facility shall be located in the site parking areas. The design of such signs shall be simple and easily legible. There is no limit to the number of signs provided on a site; however, no single sign shall exceed 6 square feet in area, except that vehicular "stop" signs shall be mounted per State standards.

- A sign may be illuminated provided that no flashing, traveling, animated, or intermittent illumination shall be used. Such illumination shall be confined to the area of the sign except when such illumination is back lighting for an otherwise non-illuminated sign. No sign illumination shall cast a glare which is visible from any street.
- Signs should be constructed with quality materials and in a craftsman-like manner to ensure both an attractive appearance and durability.

Landscaping

Minimum on-site landscaping requirements shall be established by Off-Street Parking Requirements (Title 10, Article 26 of the Tracy Municipal Code), except as modified below.

Summary of Requirements	*Industrial*
Landscaped frontage setback	15 feet
Minimum number of trees in parking area	1 tree per 10 spaces
Percentage of landscaping in parking areas with over	10 percent

- While commercial uses benefit from a well-landscaped parking area and visibility from the street, views of industrial uses benefit from a more generously landscaped streetscape. Thus, parking lot landscaping requirements for industrial uses may be reduced as specified in the Off-Street Parking Requirements in order to create a large landscape setback along the street. These provisions allow the reduction of 50 percent of the required landscaping based on the provision of a 15-foot landscape setback along the street frontage. The 15-foot strip may be included in the calculation of the total parking lot landscaping requirement. The remainder of the landscaping requirement must be distributed over the lot(s) to provide shade and landscape building frontage. Canopy trees shall be evenly distributed throughout the parking area to provide shade.
- On-site landscaping along rights-of-way between property lines and buildings, parking lots, or vehicular circulation improvements shall be installed by the property owner. This landscaping shall be designed as an extension of the adjacent public right-of-way landscaping. Completion of landscaping on the site shall be simultaneous with completion of the building and other improvements on the site.
- Landscaping shall not obstruct sight lines at street or driveway intersections.
- In place of the wheel stops at parking lots, landscape areas and pedestrian walkways may be extended not more than 2 feet into required parking spaces, to include a 6" concrete curb. In such cases, no credit toward parking lot landscape requirements shall be given for the resulting additional landscaping.

- Screening of the parking area from public rights-of-way in industrial areas shall be provided with a 2½ to 3-foot-high element, measuring from the top of the parking area pavement. Screening may consist of one or a combination of the following:
  a) Berms landscaped with ground cover, trees, and shrubs;
  b) Solid, low profile, decorative masonry walls;
  c) Evergreen shrubbery which, when solely used as screening, shall be continuously maintained to provide solid screening.
- Generous landscaping screening is required adjacent on all street frontages for industrial areas. These areas should be landscaped with a combination of trees, shrubs, and ground cover to soften views of parking areas.
- Tree planting and selection and massing should be compatible with streetscape plantings. Provide minimum one tree per 400 square feet of landscape setback. The plant palette should be relatively limited and applied in groupings of similar species rather than a few plants of many different species planted together.
- The use of water conserving plantings, such as California natives and drought tolerant trees, shrubs, and turf is encouraged. The use of turf in the narrow planting islands is discouraged.
- Live plant materials shall be used in all landscaped areas. The use of gravel, colored rock, bark, and other similar materials are not acceptable as a sole groundcover material.
- All trees shall be of 24-inch box size minimum at planting with a minimum branching height 5 years after installation of 10 feet above road or parking surfaces and 6 feet at pedestrian areas. Shrubs shall be of 5-gallon size minimum with a maximum on center spacing of 24 inches. Likewise, groundcover may be planted at 1 gallon size minimum with a maximum spacing of 12 inches on center.
- Automatic irrigation is required for all landscaped areas. Irrigation systems shall be designed so as not to overspray walks, buildings, and parking areas.

Screening and Storage

- All exterior trash areas, storage structures, and service areas shall be screened from public view with a wall or fence of a minimum height of 8 feet above the street curb level. Storage areas shall be set back a minimum of 50 feet from streets, unless fully enclosed in an architecturally compatible enclosure.
- No storage areas are allowed within the landscape easements, front setbacks, or side or rear yard landscaped buffers.
- Roof-mounted equipment shall be screened from street view. Pad-mounted transformers, utility connections, and meter boxes shall be screened and integrated into the site plan.
- The design of masonry walls, fencing, trash enclosures, and similar accessory site elements should be compatible with the architecture of the building and should use similar materials. Where masonry walls are along property frontage, they should enhance the entrance to the property and

should not impair traffic safety by obscuring views. Long expanses of wall surfaces should be architecturally designed to prevent monotony.

- The use of chain link fences shall be discouraged, and no chain link fences shall be visible from any public right-of-way.

Tracy Municipal Code

Chapter 7.08–Trees and Shrubbery

This chapter regulates removal, alteration, planting, and maintenance of public trees (mainly street trees) and shrubbery and requires a permit for removal or alteration of a street tree, including tree stumps. Street trees are defined as "any tree that has the center of its trunk at ground level located within the right-of-way or planting easement. Shrubs with multiple, or single, trunk(s) are included in this definition of 'street tree.' The [Parks and Community Services or Public Works] Director shall determine whether any specific woody plant shall be considered a 'street tree.'"[2] No replacement ratio for removed or altered trees is identified in the ordinance.

3.1.4 - Impacts and Mitigation Measures

Significance Criteria

The City, in its discretion, is using Appendix G of the State CEQA Guidelines as thresholds of significance for this project. According to CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts related to aesthetics are significant environmental effects, the following questions are analyzed and evaluated. Would the proposed project:

a) Have a substantial adverse effect on a scenic vista?

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?

c) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Approach to Analysis

This analysis provides a discussion of the visual impacts to aesthetic resources associated with the proposed project and its potential upon the project site and the vicinity. Several variables affect the degree of visibility, visual contrast, and ultimately the determination as to project impacts: (1) scale and size of facilities, (2) viewer types and activities, (3) distance and viewing angle, and (4) influences of adjacent scenery or land uses. Viewer response and sensitivity vary depending on viewer attitudes and expectations. Viewer sensitivity is distinguished among project viewers in identified scenic corridors and from publicly accessible recreational and plaza areas. Recreational areas and scenic corridors are

[2] City of Tracy. 2002. Tracy Municipal Code Section 7.07.010 – Definitions.

considered to have relatively high sensitivity. Drivers along I-205 and I-5 are considered to have relatively low sensitivity because of the speed of travel along these highways.

FCS evaluated potential project impacts on aesthetics, light, and glare through site reconnaissance and review of applicable plans and policies. FCS personnel visited the project site in April 2020, and documented site conditions through photographs, notes, aerial photographs, topographical and street maps, and project plans and elevations to identify surrounding land uses and to evaluate potential impacts from project development. The General Plan, the Municipal Code and NEI Specific Plan were reviewed to determine applicable policies, development standards, and design guidelines for the proposed project, and project plans were reviewed to determine compliance with the applicable requirements of the General Plan, Municipal Code and the NEI Specific Plan.

Light and Glare

The analysis of light and glare impacts in this section focuses on the nature and magnitude of changes in light and glare conditions of the project site and surrounding area. If light and glare conditions of the proposed project and the existing environment are similar, then the visual compatibility would be high and any resulting impacts would be less than significant. If light and glare conditions of the proposed project would strongly contrast with existing light and glare or applicable General Plan or NEI Specific Plan policies and guidelines and/or any applicable Municipal Code requirements, then light and glare compatibility would be low and significant impacts may result. Relevant urban design policies, requirements and guidelines are used to provide conclusions regarding significance of individual- and cumulative-level light and glare impacts.

Scenic Vistas

Impact AES-1: The proposed project would not have a substantial adverse effect on a scenic vista.

Construction

The General Plan identifies scenic resources rather than scenic vistas. Therefore, for the purposes of this analysis, a significant impact would occur if project construction would result in substantial adverse effects on the view of a scenic resource as defined by the General Plan. During construction, views of scenic resources could be impacted because of construction vehicles and dust generated from construction of the proposed project.

As described in the Environmental Setting, the General Plan and City of Tracy identify the following scenic resources: views of the Diablo Range, natural landscapes surrounding the Paradise Cut, Old River, and Tom Paine Sloughs, expansive agricultural areas, and hillside areas. In addition, entrances to the City from major roadways called “entry corridors” or “gateways” are important in providing a transition from a rural to urban environment and include views from the exits on I-205 off MacArthur Drive, Tracy Boulevard, Grant Line Road and Eleventh Street, and exits from I-580 at Lammers Road and Corral Hollow Road. The scenic resources visible from the project site and from adjacent, publicly accessible roadways (Grant Line Road, Paradise Road, and California Avenue) include views of the “entry corridors” from eastbound I-205 off MacArthur Drive, views of expansive agricultural lands, and views of the Diablo Range to the west.

Construction of the proposed project would not significantly interrupt views from the entry corridor off MacArthur Drive because of the distance to that corridor and intervening development and trees, all of which would remain. However, given the expected duration of construction (approximately 3 years) and the proximity of the project site to surrounding roadways (Grant Line Road, Paradise Road, and California Avenue), construction of the proposed project would obstruct, to a certain degree, views of expansive agricultural lands on and adjacent to the project site from these roadways. Though the project site is located far from the Diablo Range (approximately 9 miles to the east of the range), the Diablo Range is still visible from California Avenue. The initial construction of each phase of the proposed project would include demolition, site preparation, and grading, and, while construction vehicles would be on-site, those vehicles would not be tall enough to obstruct the views of expansive agricultural lands or views of the Diablo Range from California Avenue, and these views would only be partially obstructed while the structures of the buildings are being erected. Dust caused by construction would be kicked up intermittently throughout the day but would not obstruct these views for long period of time. In addition, as described in Section 3.3, Air Quality, the proposed project would be required to incorporate dust control measures as stipulated by District Rule 8021. Because the project site is located to the north and east of Grant Line Road and Paradise Road, respectively, views of the Diablo Range from those roadways would not be significantly affected by the proposed project's construction. In summary, construction of the proposed project would not result in a substantial impact to publicly accessible views from certain roadways of certain scenic resources (expansive agricultural lands and certain views of the Diablo Range) as defined in the General Plan. Impacts would be less than significant.

Operation

As noted above, the General Plan identifies scenic resources, rather than scenic vistas. Therefore, a significant impact would occur if project operation would result in substantial adverse effects on the view of a scenic resource, as defined by the General Plan (scenic resources are detailed in the Environmental Setting section and above).

As anticipated in the General Plan, the area surrounding the project site is a transition zone between rural and agricultural lands to an urban environment, and the General Plan seeks to enhance the City's identity by creating a soft transition between urban and non-urban uses around the edge of the City. Techniques used to achieve this goal are addressed in Goal CC-4, which recommends the use of buffer zones and landscaping to create appropriate transitions. The proposed project would be required to adhere to this goal and associated policies, including the use of a buffer zone and landscaping, which could be provided by the proposed stormwater detention basin.

The scenic resources visible from the project site and adjacent, publicly accessible roadways (Grant Line Road, Paradise Road, and California Avenue) are views of the "entry corridors," which include the eastbound exit from I-205 off MacArthur Drive, views of expansive agricultural lands, and views of the Diablo Range to the west. During operation, the buildings would not significantly interrupt views from the entry corridor off MacArthur Drive because of the distance to those corridors as well as intervening development and trees, all of which would remain and drivers along I-205 are considered to have a relatively low sensitivity because of the speed of travel along the highway.

The stormwater detention basin and land set aside for the future interchange area would provide a sizable setback between the homes on California Avenue and the proposed buildings on the Tracy Alliance parcels and the required landscaped frontage (per the NEI Specific Plan) would provide a setback (at least 10 feet) on the Zuriakat parcel. The proposed buildings would be similar in height to the existing industrial development located between the publicly accessible roadways and the Diablo Range. In addition, pursuant to the NEI Specific Plan, the maximum permitted height for the proposed buildings would be 60 feet, and the proposed buildings, as designed, would be required to comply with this requirement. Even with the setback and adherence to applicable development standards and design guidelines, given the change in the project site from expansive agriculture land to a large industrial site and the proximity of the project site to Grant Line Road, Paradise Road, and California Avenue, operation of the proposed project would impact views of expansive agricultural lands on and adjacent to the project site from publicly accessible roadways. However, this type of change was envisioned by the City in the General Plan and is in keeping with the General Plan goals, objectives policies described above as well as other surrounding urbanized uses in the general vicinity.

Because the project site is to the north and east of Grant Line Road and Paradise Road, respectively, views of the Diablo Range available to drivers traveling on these roadways would not be significantly affected. Drivers along these roadways would have a low sensitivity because of the typical speed of travel (40 miles per hour) along this roadway. Views of the Diablo Range from California Avenue are already partially obstructed by the intervening industrial developments, and the proposed buildings would result in further view obstruction. Though the proposed project would result in further obstruction of views of the Diablo Range from drivers along California Avenue, this roadway is considered to have a low sensitivity because of the typical speed of travel. In addition, this type of industrial development would be a continuation of the type of development that was envisioned by the General Plan and the already increasingly urbanized nature of the general vicinity. Therefore, the proposed project would not substantially impact publicly accessible views of scenic resources as defined by the General Plan during operation, and impacts would be significant less than significant.

Level of Significance

Less than significant impact.

Scenic Highways

Impact AES-2:	**The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway.**

Construction

A significant impact would occur if proposed construction would substantially damage scenic resources as seen from a designated scenic highway. As shown in Exhibit 3.1-1, I-580 is officially designated as a State Scenic Highway between I-205 and I-5 and is the nearest State Scenic Highway from the project site.[3] The project site is located approximately 7.2 miles northeast of I-580 and is not visible from that highway. Intervening trees and development, all of which would remain, would obscure the project site from being viewed from this portion of the highway. Therefore, the proposed project would not further obstruct views

[3] California Department of Transportation (Caltrans). 2019. List of Eligible and Officially Designated State Scenic Highways. August.

from this highway. Thus, demolition, grading, and tree removal during construction would not result in substantial adverse impacts to scenic resources within a State Scenic Highway, and no significant impact would occur.

Operation

A significant impact would occur if project operation would substantially damage scenic resources as seen from a designated scenic highway. Given the absence of scenic highways proximate to the project site, and the presence of intervening trees and development between the project site and the nearest scenic highway, the proposed project would not significantly and adversely affect views from a State Scenic Highway during operation, and no significant impact would occur.

Level of Significance

Less than significant impact.

Visual Character

Impact AES-3: The proposed project is in an urbanized area. The proposed project would not conflict with applicable zoning and other regulations governing scenic quality.

The proposed project is located in an increasingly urbanized area and therefore, impacts to scenic quality are analyzed in terms of compatibility with applicable zoning and other regulations governing scenic quality. The City's General Plan designates the project site as Industrial (I). Primary land uses allowed under this designation consist of flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs (e.g., restaurants, parks, consumers services, etc.). The maximum allowed FAR is 0.5.[4] The project site is not currently within City limits although it is within the City's current SOI; accordingly, the City of Tracy does not currently provide a zoning designation for the project site. The co-applicants are requesting pre-zoning to a designation of NEI Specific Plan and an amendment to the boundaries of the NEI Specific Plan to include the project site. No other proposed amendments to the NEI Specific Plan are being proposed by the co-applicants, and the proposed project would be required to be consistent with this proposed zoning.

Pursuant to the NEI Specific Plan, the maximum height for the proposed project is 60 feet (similar to other industrial buildings in the area) and the proposed buildings would not exceed this height. This height would also be consistent and thus compatible with adjacent existing industrial uses to the south and west. As described in the Environmental Setting and Regulatory Setting, the General Plan and NEI Specific Plan contain design guidelines and policies and development standards that include measures to help ensure quality design. These standards, policies and guidelines address placement and appearance of buildings, circulation, interfacing with I-205, parking and loading, landscape design, fencing and screening, signage, exterior lighting, and sustainable design practices. As anticipated in the General Plan, the area surrounding the project site is a transition zone between rural and agricultural lands to an urban environment. The General Plan seeks to enhance the City's identity by creating a soft transition between urban and non-urban uses around the edge of the City. Techniques used to achieve this goal are addressed in Goal CC-4, which recommends the use of buffer zones and landscaping to create

[4] Design, Community and Environment (prepared for the City of Tracy). 2011. City of Tracy General Plan. February 1.

appropriate transitions. The proposed project would be required to adhere to this goal and associated policies, including the use of a buffer zone and landscaping, which could be provided by the proposed stormwater detention basin. The proposed buildings would be setback (by at least 10 feet) from California Avenue, which would provide a transition between the homes and agricultural lands adjacent to the proposed project.

The proposed project would be required to comply with all applicable design guidelines and policies and development standards provided by the City to ensure consistency and visual compatibility with surrounding existing and planned uses. Therefore, impacts related to consistency with applicable scenic quality regulations and visual quality and character would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Light and Glare

Impact AES-4:	**The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

Construction

Construction-related impacts would include a certain amount of light and glare from construction equipment and machinery and nighttime security lighting. Light and glare during the construction phase would be temporary and limited to the duration of construction. Pursuant to Section 4.12.820 of the Municipal Code, construction activities would be limited to the 7:00 a.m. and 10:00 p.m. on weekdays or between the hours of 7:00 a.m. and 10:00 p.m. on weekends and federal holidays, which would limit the amount of nighttime construction lighting. Though there would be some nighttime lighting, it would not occur during the most sensitive time period (after 10:00 p.m.) when people are sleeping. Therefore, construction-related impacts associated with light and glare would be less than significant.

Operation

Light and Glare

The proposed project would have a significant impact if substantial light or glare would adversely affect nighttime or daytime views, respectively, in the area. Sources of daytime glare include direct beam sunlight and reflections from windows, architectural coatings, glass, and other reflective surfaces. Nighttime illumination and associated glare are generally divided into two sources: stationary and mobile. Stationary sources include structure lighting and decorative landscaping, lighted signs, solar panels, and streetlights. Mobile sources are primarily headlights from motor vehicles.

As described in the Environmental Setting, the project site contains minimal existing light or glare due to the small amount of existing development on-site. Exterior lighting would be located around and within the project site for security and safety reasons. As a result, the proposed project would increase the amount of light and glare on the project site. The light fixtures used for the proposed project would meet all applicable safety standards pursuant to the latest adopted edition of the California Building Code and would be installed throughout the length of the New Private Drive pursuant to the Municipal Code. The proposed project would be required to adhere to all applicable development standards and design guidelines provided in the NEI Specific Plan intended to reduce daytime glare and nighttime

lighting; the City would confirm consistency with these requirements as part of the development review process. The NEI Specific Plan provides that one lighting fixture style be used on all streets. Where possible, light standards would be in roadway medians.[5] Project signage would be required to conform to the applicable requirements of Municipal Code Chapter 10.08, Article 35, except as modified by the NEI Specific Plan. A site-specific sign program would be prepared and integrated into the total design concept for each individual development proposal within the proposed project, and all signs would be approved prior to installation. Sign illumination would be confined to the area of the sign except when such illumination is back lighting for an otherwise non-illuminated sign. No sign illumination would cast a glare which is visible from any street. Furthermore, project landscaping would be included along all project boundaries and throughout the site consistent with applicable requirements of the Municipal Code and the NEI Specific Plan. Landscaping would further reduce light spillage off-site and help to block glare from significantly impacting nearby uses to the extent feasible.

Given the nature of the proposed uses, it is anticipated that there would be minimal windows, but the windows could result in glare. This glare would be partially obscured by landscaping, depending on the time of day and the location of the reflecting light source. Glare may also occur from on-site vehicles; however, such glare would be transient, depending upon the time of day and location of the vehicle. Because of the proposed project's location adjacent to other existing urban development, the proposed project would not be adding significant nighttime lighting or glare in an area with no existing lighting impacts. Therefore, impacts to light and glare would be less than significant.

Level of Significance

Less than significant impact.

3.1.5 - Cumulative Impacts

Visual Character and Views

For purposes of evaluating the proposed project's cumulative impacts on visual character and views, the relevant geographic scope of review is within the immediate vicinity surrounding the project site. This is the area within view of the proposed project and therefore, the area most likely to experience changes in visual character or impacts to views. The cumulative setting includes relevant past, present and reasonably foreseeable future development, including existing agricultural and industrial uses located in the above-referenced geographic scope. A portion of the southwest corner of the project site is currently occupied by several residences and agricultural structures. Existing industrial development is located between the publicly accessible roadways and the Diablo Range. Additionally, three probable future cumulative projects listed in Table 3-1, Cumulative Project 15, Cumulative Project 19, and Cumulative Project 24, are within approximately 1 mile of the project site, the same visible area as the proposed project. Cumulative Project 15 is approximately 0.6 mile to the southwest, Cumulative Project 19 is adjacent to the southwest corner of the project site (just south of the intersection of Grant Line Road and East Paradise Road), and Cumulative Project 24 is 0.5 mile west of the project site. The cumulative projects are subject to applicable City Code provisions, development standards and design policies and guidelines related to building heights, setbacks, undergrounding of utilities, landscaping, signage, and permitted land uses as described above, which would serve to reduce visual impacts to a certain extent. Because the past, present and reasonably foreseeable cumulative projects would be consistent with the

[5] City of Tracy. 2012. Northeast Industrial Specific Plan. Page 24. July 17.

types of projects envisioned in the General Plan and reflect the increasingly urbanized nature of this area, and would adhere to all applicable regulations and policies, the cumulative impact of these cumulative projects is less than significant.

As described above, the proposed project would not result in significant impacts with respect to visual character and views. Therefore, the proposed project would not have a cumulatively considerable contribution to the already less than significant cumulative impact with respect to visual character and views.

Light and Glare

For purposes of evaluating the cumulative impacts on light and glare, the relevant geographic scope of review is within the immediate vicinity surrounding the project site. This is the area within view of the proposed project and therefore, the area most likely to experience changes in light and glare. The cumulative setting includes both existing agricultural land and outbuildings as well as industrial warehouses. Additionally, three reasonably foreseeable future cumulative projects listed in Table 3-1, Cumulative Project 15, Cumulative Project 19, and Cumulative Project 24, are within approximately 1 mile of the project site, the same visible area as the proposed project. Existing and new buildings associated with these existing and foreseeable cumulative projects could result in an increase in light and glare impacts on surrounding uses. Because these cumulative projects would be adjacent to other existing urban development, they would add significant nighttime lighting or glare in an area with no existing lighting impacts. The cumulative projects are required to adhere to all applicable development standards and design guidelines provided in the NEI Specific Plan intended to reduce daytime glare and nighttime lighting; the City would confirm consistency with these requirements as part of the development review process. Therefore, there is a less than significant cumulative impact to light and glare. As discussed above, the proposed project has a less than significant impact with respect to light and glare and its contribution to the already less than significant cumulative impact would not be considerable.

The proposed project combined with the relevant cumulative projects would include sources of daytime glare such as direct beam sunlight and reflections from windows, architectural coatings, glass, and other reflective surfaces. Nighttime illumination would include stationary sources such as structure lighting and decorative landscaping, lighted signs, solar panels, and streetlights. Mobile nighttime sources would primarily be from headlights from motor vehicles. As described above, the proposed project would not be adding significant lighting or glare in an area with no existing lighting impacts and would adhere to all applicable development standards provided in the NEI Specific Plan indented to reduce daytime glare and nighttime lighting and would not result in significant impacts with respect to light and glare to this already less than significant cumulative impact. As such, the proposed project, in conjunction with other cumulative projects, would not result in a cumulatively considerable contribution to the less than significant cumulative impact with respect to light and glare.

Level of Cumulative Significance

Less than significant impact.

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Source: Bing Aerial Imagery.

FIRSTCARBON SOLUTIONS™

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Exhibit 3.1-1
Designated California Scenic Highways and Entry Corridors

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3.2 - Agriculture and Forestry Resources

3.2.1 - Introduction

This section describes existing agricultural resources and potential environmental effects thereon from project implementation on the project site and its surrounding area. Descriptions and analyses in this section are based, in part, on information contained in the City of Tracy General Plan, and California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) maps. The following comments were received during the EIR scoping period related to Agriculture and Forestry Resources:

- The commenter requests that the EIR specify the type, amount, and location of farmland conversion resulting directly and indirectly from implementation of the project. The commenter asks that impacts on any current and future agricultural operations in the vicinity of the project site (e.g., land use conflicts, increases in land values and taxes, loss of agricultural support infrastructure such as processing facilities, etc.) be discussed in the EIR.
- The commenter requests that the EIR describe the incremental impacts leading to cumulative impacts on agricultural land. This would include impacts from the project, as well as impacts from other past, current, and likely future projects.
- The commenter asks that any proposed mitigation measures for all impacted agricultural lands within the proposed project area be described.
- The commenter asks that the EIR evaluate the project's compatibility with, or potential contract resolutions for land in an agricultural preserve and/or enrolled in a Williamson Act contract.

3.2.2 - Environmental Setting

Farmland Classifications

The California Department of Conservation FMMP classifies cultivated agricultural land into four categories, listed below:

- **Prime Farmland:** Land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields.
- **Unique Farmland:** Land of lesser-quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards, as found in some climactic zones in California.
- **Farmland of Statewide Importance:** Land similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to hold and store moisture.
- **Farmland of Local Importance:** Land of importance in the local agricultural economy, as determined by each County's Board of Supervisors and a local advisory committee.

Williamson Act Contract

Williamson Act contracts are formed between a County or City and a landowner to restrict specific parcels of land to agricultural or related open space use in exchange for reduced property tax assessments. Private land within locally designated agricultural preserve areas are also eligible for enrollment under a contract. The minimum term for contracts is 10 years; however, since the contract term automatically renews annually, the actual term is essentially indefinite. Williamson Act contracts are described in more detailed in Section 3.2.4, Regulatory Framework.

3.2.3 - Existing Conditions

Agricultural Economy

According to the Economic Development Element of the City General Plan, between 1990 and 2000 Tracy's employment base nearly doubled as it shifted from a strong agricultural and transportation-driven economy to a services and retail economy. Agriculture remains a major activity within undeveloped portions of the Tracy Planning Area; based on available information included in the General Plan, a total of approximately 7,458 acres of agricultural uses were located within the Sphere of Influence (SOI): 1,618 within the city limits and 5,839 outside the city limits.[1]

Surrounding Agricultural Uses

Most areas north and east of the project site, in addition to a few parcels directly south and west, are currently used for agriculture. The County of San Joaquin zones areas north, east, and south of the project site (outside city limits) as AG-40, General Agriculture (40 acres) and designates these lands under the County General Plan as General Agriculture (A/G).[2]

Timber Land and Forest Land

Pursuant to California Public Resources Code Section 4526, timberland is defined as " . . . land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees…" Timberland zoned as Timberland Production, as defined by California Government Code Section 51104(g) is an area " . . . devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses . . . " As mapped by the United States Department of Agriculture Forest Service, there are no National Forest lands within the City Planning Area.[3]

City of Tracy

Farmland Classifications

Within the City, there are limited areas of Prime Farmland and Farmland of Local Importance. Land within the City limits contained approximately 1,415 acres of Prime Farmland, 198 acres of Unique

[1] Design, Community and Environment. 2011. City of Tracy General Plan (prepared for the City of Tracy). February 1.
[2] Mintier Harnish. 2016. San Joaquin County General Plan (prepared for San Joaquin County). December.
[3] United States Department of Agriculture (USDA). Forest Service, National Forest Type Groups. No date. Website: https://data.fs.usda.gov/geodata/rastergateway/forest_type/index.php. Accessed August 17, 2021.

Farmland, and 4,137 acres of Farmland of Local Importance.[4] Within the SOI, the City contained approximately 4,763 acres of Prime Farmland, 475 acres of Unique Farmland, and 4,958 acres of Farmland of Local Importance.

Soils

Capay clay and Stomar clay loam are the two most prominent soil types in the City and SOI.[5] Underlying soil types are relevant because certain types of soil are more suitable to agricultural uses than other soil types, and soil types assist the Natural Resources Conservation Service in its determination of farmland classifications.

Williamson Act Contract

In 2005, land within the city limits contained 1,360 lands under a Williamson Act Contract. Within its SOI, the City contained 4,073 acres of land under a Williamson Act Contract.[6]

Project Site

Farmland Classifications

Exhibit 3.2-1 depicts the Prime Farmland areas for the project site. The project site contains approximately 188 acres of Prime Farmland and approximately 4 acres of Semi-Agricultural and Rural Commercial Land, as classified by the FMMP.

Soils

Capay clay underlies the entire project site as shown in Exhibit 3.2-2.

Williamson Act Contract

The three Suvik Farms parcels are currently under Williamson Act contracts, totaling 46.61 acres (Exhibit 3.2-3). None of the other portions of the project site is currently under a Williamson Act contract.

Timberland and Forest Land

Most of the project site is occupied by row crops. A portion of the Tracy Alliance parcels are currently occupied by two existing approximately 1,000-square-foot residences (one occupied and one vacant), associated landscaping, and nine agricultural outbuildings used for equipment storage and maintenance, all located in the southwest corner of the property. The project site does not contain any forest land or timberland, as defined by Public Resource Code Section 4526, nor does it contain any timberland zoned Timberland Production, as defined by Government Code Section 51104(g).

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[4] State of California. 2018. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed March 20, 2022.

[5] United States Department of Agriculture (USDA). Natural Resources Conservation Service. 2019. Web Soil Survey 3.3.2. September 16.

[6] City of Tracy. 2011. Design, Community and Environment. City of Tracy General Plan Draft Environmental Impact Report (prepared for the City of Tracy). February 1.

3.2.4 - Regulatory Framework

State

California Department of Conservation Classification

The California Department of Conservation, Division of Land Resource Protection developed the FMMP in 1984 to analyze impacts to California's agricultural resources. In the FMMP, land ratings are based on a land capability classification system, and land use.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965 (Williamson Act) enables local governments to enter contracts with private landowners to restrict specific parcels of land to maintain agricultural or related open space use. As an incentive, landowners receive lower property tax assessments based on agricultural or open space land uses, as opposed to real estate value of the land.

California Public Resources Code

California Public Resource Code Section 4562 defines Forest Land and Timber Land as follows:

Forest Land

Land that can support 10 -percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

Timber Land

Land, other than land owned by the federal government and land designated by the Board of Forestry and Fire Protection (Board) as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the Board on a District basis after consultation with the District committees and others.

Local

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) was adopted in 2000 to provide a strategy for balancing the need to conserve open space and the need to convert open space to non-open space uses while protecting the region's agricultural economy; preserving landowner property rights; providing for the long-term management of plant, fish and wildlife species, especially those that are currently listed, or may be listed in the future, under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA); providing and maintaining multiple-use open spaces that contribute to the quality of life of the residents of San Joaquin County; and accommodating a growing population while minimizing costs to project applicants and society at large. The SJMSCP is administered by the San Joaquin Council of Governments.

The project site is located within the Central Zone; Category C, Agriculture Habitat Open Spaces; Pay Zone B (Agricultural) of the SJMSCP. Adoption and implementation of the SJMSCP is intended to

provide full compensation and mitigation for potential environmental impacts to covered plants, fish and wildlife and demonstrate compliance pursuant to State and federal laws such as the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), State Planning and Zoning Law, the State Subdivision Map Act, the Porter-Cologne Act, and the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2001 (LAFCO Law) with respect to species covered under the SJMSCP.

Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (LAFCo Law)

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires that LAFCo review and update the SOI for each district within the county. In determining the SOI for an agency, LAFCo must consider and prepare written determinations with respect to five factors [Government Code §56425(e)].[7] These factors relate to the present and planned land uses including agricultural and open-space lands, the present and probable need for public facilities and services, the present capacity of public facilities and adequacy of public services, the existence of any social or economic communities of interest in the area, and the present and probable need for public facilities and services of any disadvantaged unincorporated communities within the existing sphere.

Section 56377 says "in reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open-space lands to uses other than open-space uses, the commission shall consider all of the following policies and priorities:

a) Development or use of land for other than open-space uses shall be guided away from existing prime agricultural lands in open-space use toward areas containing nonprime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.

b) Development of existing vacant or nonprime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the sphere of influence of a local agency should be encouraged before any proposal is approved which would allow for or lead to the development of existing open-space lands for non-open-space uses which are outside of the existing jurisdiction of the local agency or outside of the existing sphere of influence of the local agency."

Under LAFCo law, "prime agricultural land" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:

a) Land that qualifies, if irrigated, for rating as class I or class II in the United States Department of Agriculture (USDA) Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.

[7] Assembly Local Government Committee. 2021. Guide to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. December. Website: https://calafco.org/sites/default/files/documents/CKH%20Guide%20Update%202021.pdf. Accessed March 29, 2022.

b) Land that qualifies for rating 80 through 100 Storie Index Rating.[8]

c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.

d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre.

e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years.

City of Tracy

Feathering

The City's General Plan contains policies and actions intended to preserve and enhance open spaces, including agricultural land. One policy and action identify locations for soft and hard edges for the City. Soft edges are defined as a feathering of density between urban and rural uses. Whereas hard edges are an abrupt separation from urban and rural uses, such as a fence or highway. The City's General Plan establishes the following objectives and policies related to agricultural resources that are relevant to this analysis:

Policy

OSC-2.1 Policy 2 The City shall support San Joaquin County policies and zoning actions that maintain agricultural lands in viable farming units for those areas not currently designated for urban uses.

Objective OSC-2.2 Minimize conflicts between agricultural and urban uses.

Policies

OSC-2.2 Policy 1 Development projects shall have buffer zones, such as roads, setbacks and other physical boundaries, between agricultural uses and urban development. These buffer zones shall be of sufficient size to protect the agriculture operations from the impacts of incompatible development and shall be established based on the proposed land use, site conditions and anticipated agricultural practices. Buffers shall be located on the land where the use is being changed, and shall not become the maintenance responsibility of the City.

[8] The Storie index is a method of soil rating based on soil characteristics that govern the land's potential utilization and productivity capacity.

OSC-2.2 Policy 2 Land uses allowed near agricultural operations should be limited to those not negatively impacted by dust, noise, and odors.

City of Tracy Right to Farm Ordinance

Chapter 10.24 of the Tracy Municipal Code is a "Right to Farm" Ordinance intended to protect agricultural productivity in the City. The ordinance states:

a) No agricultural operation, or appurtenances thereof, conducted or maintained for commercial purposes, and in a manner consistent with the proper and accepted customs and standards as established and followed by similar agricultural operations in the same locality, shall be or become a nuisance, private or public, due to any changed condition in or about the locality. The above shall be the case provided that the agricultural operation has been in operation for more than three (3) years.

b) Subsection (a) of this section shall not apply whenever a nuisance results from the negligent or improper handling of any such agricultural operation by person(s) or entities responsible for such operations, and if the agricultural operation obstructs free passage or use in the customary manner of any navigable lake, river, bay, stream, canal, basin, or any public park, square, street or highway. Nothing in this chapter shall prevent anyone from complaining to any appropriate agency, or taking any other available remedy, concerning any unlawful or improper agricultural practice.

City of Tracy Agriculture Mitigation Fee Program

On June 7, 2005, the City Council adopted Chapter 13.28 (Agricultural Mitigation Fee) to its Municipal Code. In addition, the City Council adopted a resolution approving the Central Valley Farmland Trust Inc., as a qualifying agency to receive funds.[9] These actions were in response to the conclusions set forth in the General Plan EIR, which analyzed the potential impacts from long-term development in the City as reflected in the land use vision of the General Plan and identified the Agricultural Mitigation Fee Ordinance as a supportive policy that the City can use to reduce the impacts associated with conversion of Important Farmland. However, no feasible mitigation measures were identified to reduce this impact to below a level of significance, and the City Council adopted a Statement of Overriding Considerations with respect to the anticipated loss of Important Farmland that would result because of the City's adoption of the General Plan and implementation of the land use vision reflected therein.

The purpose of the fee is to mitigate the loss of productive agricultural lands converted for urban uses within the City by permanently protecting other agricultural lands planned for agricultural use and by working with farmers who voluntarily wish to sell or restrict their land in exchange for fair compensation. The relationship between the fee and the purpose is detailed in the Tracy Municipal Code Chapter 13.28 and in the South San Joaquin County Farmland Conversion Fee Nexus Study, dated July 18, 2005. This program requires the owner of farmland that is to be developed for private urban uses (such as residential, commercial, industrial, or other urban uses) to pay an Agricultural Mitigation Fee for each acre of farmland developed. The City collects fees at the time building

[9] Tracy City Council. 2008. Resolution No. 2008-204. October 7.

permits are issued, and fees are used to purchase agricultural conservation easements on agricultural lands.

3.2.5 - Impacts and Mitigation Measures

Significance Criteria

The City, in its discretion, is utilizing CEQA Guidelines Appendix G, to determine whether impacts to agriculture and forestry resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code [PRC] § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Approach to Analysis

FirstCarbon Solutions (FCS) evaluated potential impacts on agricultural resources through review of FMMP and Williamson Act maps, site plans, and applicable plans and policies.

Impacts Evaluation

Conversion of Important Farmland to Non-Agricultural Use

Impact AG-1:	**The project would convert Farmland pursuant to the FMMP, to non-agricultural use.**

The project site contains approximately 188 acres of Prime Farmland, pursuant to the current FMMP mapping (Exhibit 3.2-1) available at the time environmental review commenced for the proposed project.[10] The proposed project is consistent with the land use designation and densities established by the General Plan and conversion of the project site to industrial use was envisioned as part of buildout under the General Plan and evaluated and disclosed under the General Plan EIR. Nevertheless, for purposes of a conservative analysis, this Draft EIR acknowledges that the proposed project would result in the loss of Prime Farmland as a result of its conversion of Prime Farmland to urban uses. On June 7, 2005, the City Council adopted Chapter 13.28 Agricultural Mitigation Fee to its Municipal Code. In addition, the City Council adopted a resolution approving the Central Valley

[10] California Department of Conservation, Division of Land Resource Protection. 2018. Farmland Mapping and Monitoring Program.

Farmland Trust as a qualifying agency to receive funds.[11] This program serves as mitigation to the extent feasible for the conversion of Prime Farmland. In accordance with Chapter 13.28 of the Municipal Code, Agricultural Mitigation Fee, the developers of the Suvik Farms, Zuriakat, and Tracy Alliance parcels would each be required to pay applicable Agricultural Mitigation fees in connection with individual development proposals as implemented by MM AG-1. In addition, the SJMSCP works at a regional level to promote the permanent preservation of agricultural lands in San Joaquin County. The SJMSCP calls for the preservation of about 100,000 acres, including 57,000 agricultural acres, over a 50-year period for the protection of a variety of biological species. Most agricultural conservation easements in the County are the product of the SJMSCP. The proposed project would be required to comply with applicable provisions of the SJMSCP (see Section 3.4, Biological Resources, for more information), which may include payment of development fees for conversion of lands. Even with the payment of City mitigation fees and adherence to the SJMSCP, the proposed project would result in significant and unavoidable impacts related to the conversion of Farmland as identified by FMMP mapping to non-agricultural use since the foregoing would not fully avoid the impacts of this conversion**.**

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM AG-1 Payment of Agricultural Mitigation Fees

At the time of issuance of building permits for each individual development proposal, the relevant applicant(s) for the subject development proposal shall pay the applicable Agriculture Mitigation Fee in accordance with Chapter 13.28 of the Municipal Code.

Level of Significance After Mitigation

Significant and unavoidable.

Conflict with Existing Zoning or Williamson Act Contract

Impact AG-2: The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

Agricultural Zoning

The existing zoning for the project site is AG-40 under the County's General Plan. However, the co-applicants are requesting pre-zoning to "Northeast Industrial (NEI) Specific Plan," which would take effect upon annexation into the City. This zoning district would be consistent with the existing Industrial General Plan designation under the City's General Plan, and project development would be governed by the NEI Specific Plan (as amended), which allows Light Industrial uses.[12] Because the pre-zoning allows for industrial use, the change in zoning from AG-40 under the County's General

[11] Tracy City Council. 2008. Resolution No. 2008-204. October 7.
[12] City of Tracy. 2016. Tracy Municipal Code Section 10.08.3022–Northeast Industrial Specific Plan. October 18.

Plan to NEI Specific Plan zoning would ensure there is no conflict with existing zoning. Impacts would be less than significant.

Williamson Act Contracts

The Suvik Farms parcels are covered by an active Williamson Act contract; none of the other lands within the project site is covered by an active Williamson Act contract. Pursuant to the applicable provisions of the California Government Code, the Suvik Farms landowners initiated a Notice of Nonrenewal in 2017 for the contract, beginning a nine-year process to formally expire the contract. Based on the date of the Notice of Nonrenewal, the contract will expire on August 21, 2026. Additionally, State law provides a detailed procedure to terminate a Williamson Act contract. Accordingly, should development of the Suvik Farms parcels be pursued prior to the Williamson Act contract expiration date, then pursuant to the provision of the Williamson Act, the applicant for the development of the Suvik Farms parcels would be required to petition the City Council for cancellation, or agree to the imposition of a condition of approval such that no permit for development on the Suvik Farms parcels would be issued prior to the August 21, 2026 expiration date. Accordingly, because the Suvik Farms parcels applicant would be required to follow applicable provisions of State law, the proposed project would not result in any conflicts with a Williamson Act Contract and impacts would be less than significant.

Level of Significance

Less than significant impact.

Conflict with Existing Forest Land Zoning

Impact AG-3:	**The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.**

The project site does not contain any forest land or timberland, as defined by Public Resource Code Section 4526, nor does it contain any timberland zoned Timberland Production, as defined by Government Code Section 51104(g). This condition precludes the possibility of the proposed project conflicting with forest zoning of forest land or timberland. No impact would occur.

Level of Significance

No impact.

Conversion of Forest Land to Non-Forest Use

Impact AG-4:	**The project would not result in the loss of forest land or conversion of forest land to non-forest use.**

As explained more fully above, the project site is adjacent to urbanized, industrial land uses (with these surrounding uses also not containing any forest land), and does not contain any forest land. This condition precludes the possibility of the proposed project converting forest land to non-forest use. Therefore, no impacts would occur.

Level of Significance

No impact.

Other Changes to Convert Farmland to Non-Agricultural Use or Forest Land to Non-Forest Use

Impact AG-5:	**The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.**

Impact Analysis

As discussed above, the County of San Joaquin zones areas north, east, and south of the project site (outside City limits) as AG-40, General Agriculture (40 acres), and designates these lands under the County General Plan as General Agriculture (A/G).[13] Similar to the proposed project, the land directly northwest of the project site (north of I-205) is within the City's SOI and is designated Industrial by the General Plan. For this land to be converted to non-agricultural uses, it would need to be annexed into the City of Tracy and would require the completion of CEQA analysis prior to the discretionary approval of any development. However, the proposed project does not include the annexation of these lands and, therefore, would not result in a change in the existing environment that could result in conversion of Farmland to non-agricultural use. Though there is a possibility this land would be converted to non-agricultural uses in the future, the proposed project would not be the cause of that conversion. Moreover, the proposed project would be required to adhere to applicable Right-to-Farm provisions described above, which would help to avoid any potential land use incompatibility issues that could otherwise facilitate the eventual conversion of other agricultural lands.

As explained more fully above, the project site is adjacent to urbanized, industrial land uses; these adjacent lands does not contain any forest land. This condition precludes the possibility of the proposed project converting forest land to non-forest use.

Impacts under this criterion would be less than significant.

Level of Significance

Less than significant impact.

3.2.6 - Cumulative Impacts

Agriculture

The geographic scope of this cumulative analysis includes past, present and reasonably foreseeable future projects on lands within the NEI Specific Plan area. The relevant Cumulative Projects 11, 12, 13, 14, 15, 19, are all planned for industrial uses; the relevant Cumulative Projects 27 and 35 are transportation projects. Much of the NEI Specific Plan area consists of Prime Farmland that would be converted to non-agricultural uses with implementation of the relevant cumulative projects, as already envisioned by the Industrial general plan and specific plan designations. Like the proposed project, any of the cumulative projects that would convert Farmland to non-agricultural uses would pay the applicable Agricultural Mitigation Fee. In addition, the SJMSCP works at a regional level to promote the permanent preservation of agricultural lands in San Joaquin County. The SJMSCP calls for the preservation of about 100,000 acres, including 57,000 agricultural acres, over a 50-year period for the protection of a variety of biological species. Most agricultural conservation easements

[13] Mintier Harnish. 2016. San Joaquin County General Plan (prepared for San Joaquin County). December.

in the County are the product of the SJMSCP. All of the cumulative projects are within San Joaquin County and would be required to adhere to the SJMSCP, which may include payment of development fees for conversion of lands. Even with payment of this fee and adherence to the SJMSCP, the development of the cumulative projects would result in a significant and unavoidable impact, which the General Plan EIR previously disclosed and the City Council previously adopted a Statement of Overriding Considerations in connection with the Council's adoption of the General Plan. As discussed above, the proposed development of the project would result in the loss of approximately 188 acres of Prime Farmland, which would result in a project-level significant and unavoidable impact. Therefore, given the existence of a cumulative impact with respect to agricultural resources, the proposed project's contribution to this significant cumulative effect to agricultural resources would be considered cumulatively considerable.

Forestry Resources

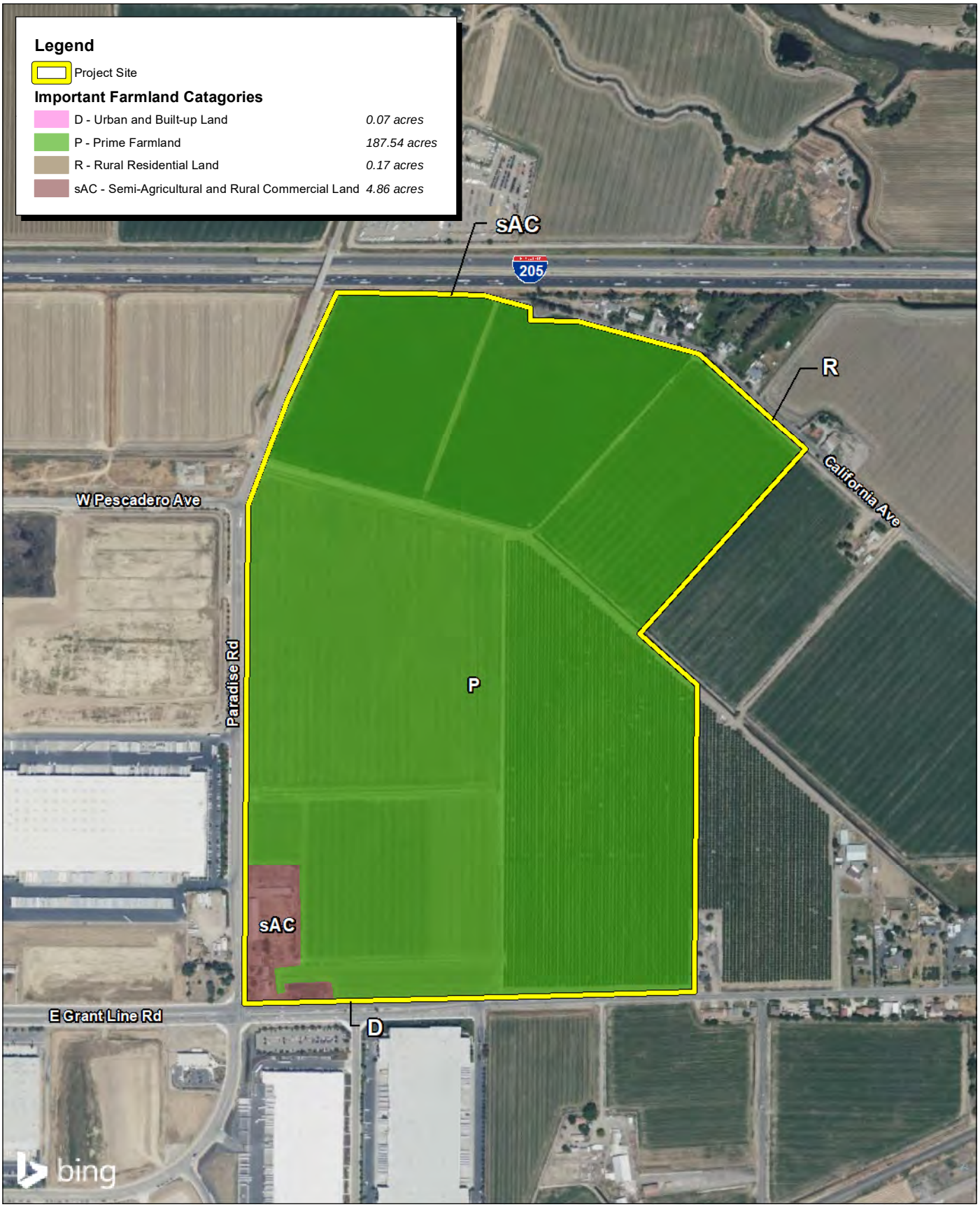
Similar to the relevant geographic scope for agricultural resources described above, the geographic scope of this cumulative analysis with respect to forestry resources is lands within the NEI Specific Plan area. As mapped by the United States Department of Agriculture Forest Service, there are no National Forest lands within the City or the City's SOI, which includes the NEI Specific Plan area.[14] The project site and the cumulative project sites do not contain forest land or timberland, as defined by Public Resource Code Section 4526, nor do they contain any timberland zoned Timberland Production, as defined by Government Code Section 51104(g). Therefore, the cumulative projects would not conflict with forest zoning or converting forest land to non-forest use, and thus there would be no significant cumulative impact in this regard. Furthermore, this condition precludes the possibility of the proposed project, in conjunction with the cumulative projects, to conflict with forest zoning or converting forest land to non-forest use. Therefore, the proposed project would not have a cumulatively considerable contribution to the already less than significant cumulative impact with respect to forestry resources.

Level of Cumulative Significance

Significant and unavoidable (with respect to Agricultural Resources).

Less than significant impact (with respect to Forestry Resources).

[14] U.S. Department of Agriculture, Forest Service, National Forest Type Groups. No date. Website: https://data.fs.usda.gov/geodata/rastergateway/forest_type/index.php. Accessed July 14, 2021.



Source: Bing Aerial Imagery. County of San Joaquin FMMP GIS Data, 2016.

FIRSTCARBON SOLUTIONS™

700 350 0 700 Feet

Exhibit 3.2-1
Important Farmland Map

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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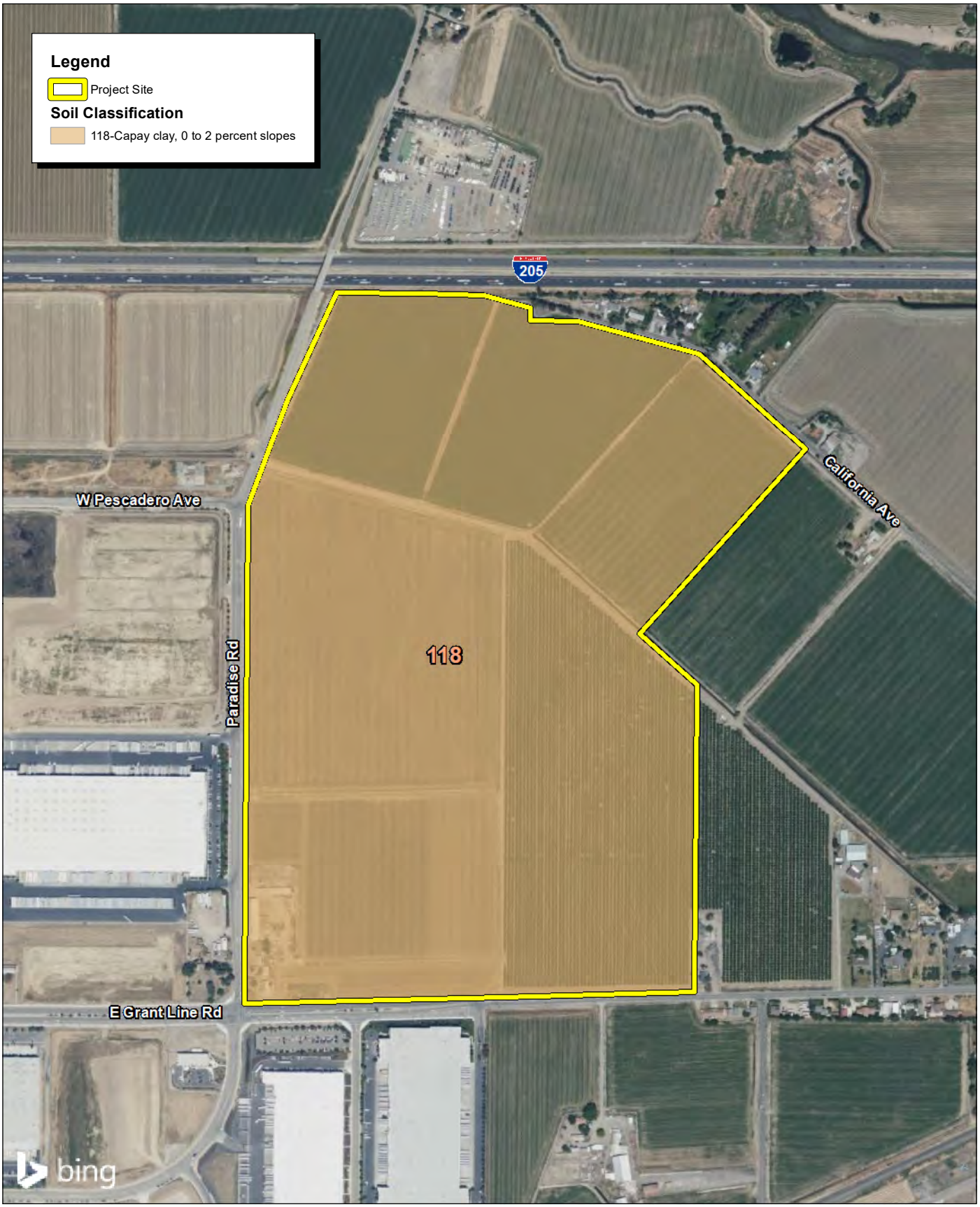

Source: Bing Aerial Imagery. USDA Soils Data Mart, San Joaquin.

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Exhibit 3.2-2
Soils Map

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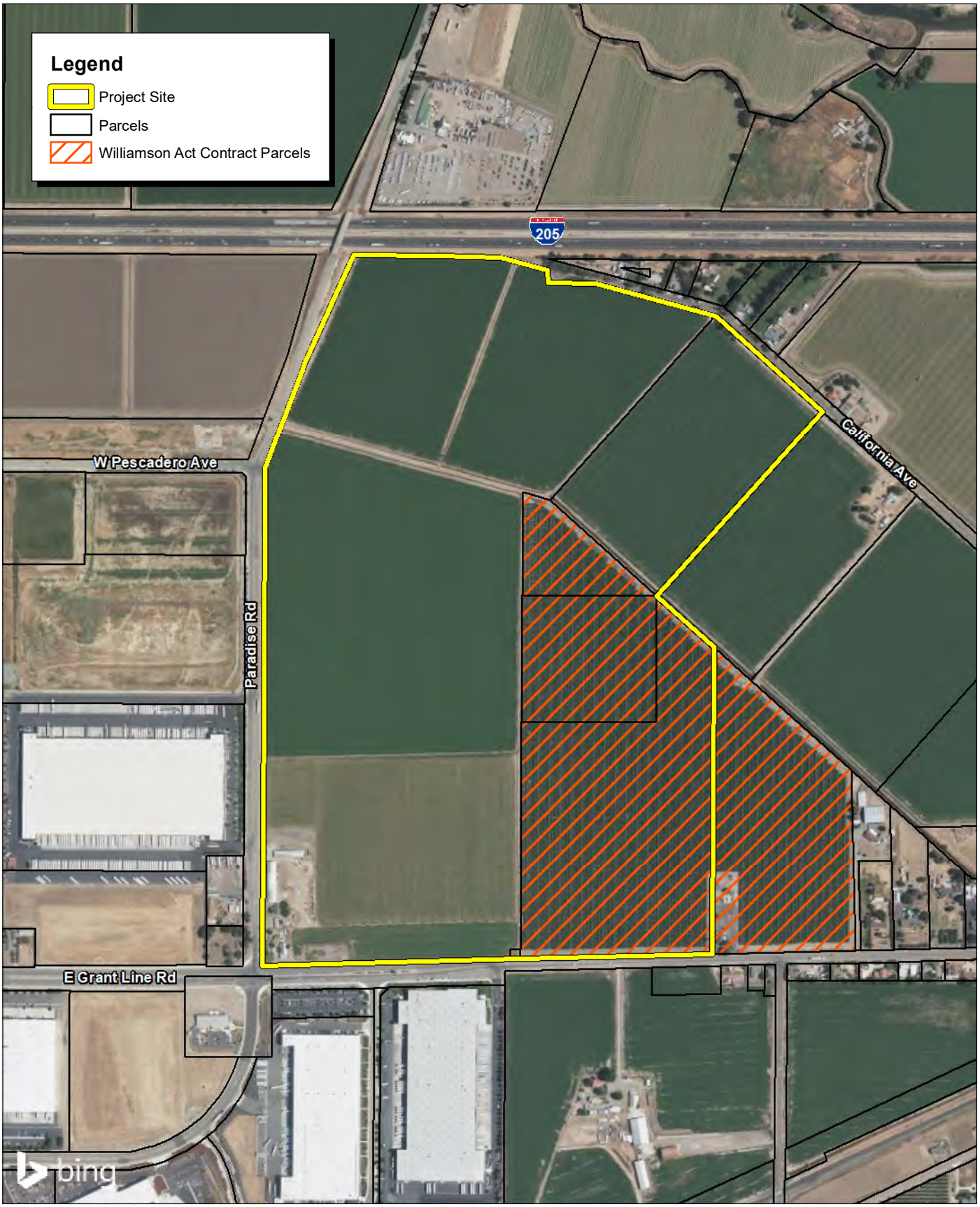

Source: Bing Aerial Imagery. County of San Joaquin.

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Exhibit 3.2-3
County Williamson Act Contracts

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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3.3 - Air Quality

3.3.1 - Introduction

This section describes existing air quality conditions regionally and locally as well as the relevant regulatory framework. This section also evaluates the potential impacts related to air quality that could result from implementation of the proposed project. Information included in this section is based, in part, on project-specific air quality modeling results included in Appendix B.

3.3.2 - Environmental Setting

The proposed project is located in unincorporated San Joaquin County adjacent to the City of Tracy's municipal boundaries, within the San Joaquin Valley Air Basin (Air Basin). Regional and local air quality is impacted by topography, dominant airflows, atmospheric inversions, location, and season. The following section describes these conditions as they pertain to the Air Basin.

San Joaquin Valley Air Basin

The information in this section is primarily from the San Joaquin Valley Air Pollution Control District (Valley Air District) Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) and the accompanying Technical Document.[1,2]

Topography

The topography of a region is important for air quality because mountains can block airflow that would help disperse pollutants and can channel air from upwind areas that transports pollutants to downwind areas. The Valley Air District covers the entirety of the Air Basin. The Air Basin is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada lies along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation).

Climate

The climate is important for air quality because of differences in the atmosphere's ability to trap pollutants close to the ground, creating adverse air quality or rapidly dispersing pollutants over a wide area, thus preventing high concentrations from accumulating under different climatic conditions. The Air Basin has an "inland Mediterranean" climate and is characterized by long, hot, dry summers and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone); the Air Basin averages over 260 sunny days per year.

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the Air Basin form natural horizontal barriers to the dispersion of air contaminants. The wind generally flows south-southeast through the Valley, through the Tehachapi

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1 San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigating Air Quality Impact. Website: http://www.valleyair.org/transportation/GAMAQI_12-26-19.pdf Accessed January 28, 2021.

2 San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. 2015 Plan for the 1997 PM 2.5 Standard. Website: http://www.valleyair.org/Air_Quality_Plans/docs/PM25-2015/2015-PM2.5-Plan_Bookmarked.pdf Accessed January 28, 2021.

Pass and into the Southeast Desert Air Basin portion of Kern County. As the wind moves through the Air Basin, it mixes with the air pollution generated locally, generally transporting air pollutants from the north to the south in the summer and in a reverse flow in the winter.

Existing Air Quality Conditions

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project site and vicinity. Table 3.3-1 summarizes 2017 through 2019 published monitoring data, which is the most recent 3-year period available as of the date of commencement of environmental review for the proposed project. The table displays data from the Tracy-Airport monitoring station (located approximately 5.2 miles southwest of the project site) for ozone, nitrogen dioxide, and particulate matter, including dust, 10 micrometers or less in diameter (PM_{10}) concentrations. As particulate matter, including dust, 2.5 micrometers or less in diameter ($PM_{2.5}$) concentrations were not available at the Tracy-Airport monitoring station. Therefore, the next closest station with $PM_{2.5}$ was used to provide $PM_{2.5}$ concentrations representative of the project site and vicinity. Table 3.3-1 provides $PM_{2.5}$ concentrations from the Manteca-530 Fishback Road monitoring station, located approximately 7.5 miles northeast of the project site. No carbon monoxide (CO) or sulfur dioxide (SO_2) concentrations were available at any nearby monitoring station. The data shows that during the above-referenced 3 years, the project site and vicinity have exceeded the national ozone and $PM_{2.5}$ standards and the State ozone and PM_{10} standards. The data in the table reflects the concentration of the pollutants in the air, measured using air monitoring equipment. This differs from emissions, which are calculations of a pollutant being emitted over a certain period.

Table 3.3-1: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2017	2018	2019
Ozone[1]	1 Hour	Max 1 Hour (ppm)	**0.093**	**0.099**	**0.095**
		Days > State Standard (0.09 ppm)	0	**1**	**1**
	8 Hours	Max 8 Hours (ppm)	**0.082**	**0.081**	**0.079**
		Days > State Standard (0.07 ppm)	**7**	**8**	**3**
		Days > National Standard (0.075 ppm)	**5**	**8**	**3**
Carbon monoxide[3]	8 Hours	Max 8 Hours (ppm)	ND	ND	ND
		Days > State Standard (9.0 ppm)	ND	ND	ND
		Days > National Standard (9 ppm)	ND	ND	ND
Nitrogen dioxide[1]	Annual	Annual Average (ppm)	0.004	0.005	0.004
	1 Hour	Max 1 Hour (ppm)	0.041	0.049	0.037
		Days > State Standard (0.18 ppm)	0	0	0
Sulfur dioxide[3]	Annual	Annual Average (ppm)	ND	ND	ND
	24 Hours	Max 24 Hours (ppm)	ND	ND	ND
		Days > State Standard (0.04 ppm)	ND	ND	ND

Air Pollutant	Averaging Time	Item	2017	2018	2019
Inhalable coarse particles (PM_{10})[1]	Annual	Annual Average (µg/m^3)	22.6	24.7	19.4
	24 hours	24 Hours (µg/m^3)	**152.0**	**250.2**	**241.4**
		Days > State Standard (50 µg/m^3)	ID	ID	ID
		Days > National Standard (150 µg/m^3)	0	**2**	**1**
Fine particulate matter ($PM_{2.5}$) [2]	Annual	Annual Average (µg/m^3)	11.1	13.4	ID
	24 Hours	24 Hours (µg/m^3)	**50.0**	**180.0**	**42.4**
		Days > National Standard (35 µg/m^3)	**9**	**15**	**2**

Notes:
> = exceed
µg/m^3 = micrograms per cubic meter
max = maximum
ND = no data
ppm = parts per million
Bold = exceedance
State Standard = California Ambient Air Quality Standard
National Standard = National Ambient Air Quality Standard
[1] Ozone, PM_{10}, and NO_2 concentrations and exceedances were drawn from the Tracy-Airport monitoring station.
[2] $PM_{2.5}$ concentrations and exceedances were drawn from the Tracy-Airport monitoring station.
[3] No concentrations of SO_2 and CO were unavailable for monitoring sites in the project area.

The health impacts of the various air pollutants of concern can be presented in a number of ways. The clearest in comparison is to the State and federal ozone standards. If concentrations are below the applicable ozone standard, industry standards generally indicate that there would not be a health impact. When concentrations exceed the applicable ozone standard, impacts will vary based on the amount the standard is exceeded. The United States Environmental Protection Agency (EPA) developed the Air Quality Index (AQI) as an easy-to-understand measure of health impacts compared with concentrations in the air. Table 3.3-2 provides a description of the health impacts ozone at different concentrations.

Table 3.3-2: Air Quality Index and Health Effects

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI—0–50 (Good)/ Concentration 54 parts per billion (ppb)	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
	Health Effects Statements: None.
	Cautionary Statements: None.
AQI—51–100 (Moderate)/ Concentration 70 ppb	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Unusually sensitive individuals may experience respiratory symptoms.

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
	Cautionary Statements: Unusually sensitive people should consider limiting prolonged outdoor exertion.
AQI—101–150 (Unhealthy for Sensitive Groups)/Concentration 85 ppb	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults and people with respiratory disease, such as asthma.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
AQI—151–200—(Unhealthy)/Concentration 105 ppb	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
AQI—201-300—(Very Unhealthy)/Concentration 200 ppb	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
Source: AirNow.gov. U.S. Air Quality Index Calculator. Website: https://www.airnow.gov/aqi/aqi-calculator/. Accessed February 16, 2021.	

Based on the AQI scale for the 8-hour ozone standard, Tracy experienced 18 days in the above-referenced 3 years that would be categorized as unhealthful for sensitive groups (AQI 150), as measured at the Tracy-Airport monitoring station.

Attainment Status

The EPA and the California Air Resources Board (ARB) designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” National nonattainment areas are further

designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

Each standard has a different definition, or "form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring measurement exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the 3-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

The current attainment designations for the San Joaquin Valley Air Basin are shown in Table 3.3-3. The Air Basin is designated as nonattainment for ozone, PM_{10}, and $PM_{2.5}$.

Table 3.3-3: San Joaquin Valley Air Basin Attainment Status

Pollutant	State Status	National Status
Ozone–1 Hour	Nonattainment/Severe	No Standard
Ozone–8 Hours	Nonattainment	Nonattainment/Extreme
Carbon monoxide	Attainment/Unclassified	Merced, Madera, and Kings Counties are unclassified; others are in Attainment
Nitrogen dioxide	Attainment	Attainment/Unclassified
Sulfur dioxide	Attainment	Attainment/Unclassified
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Lead	Attainment	No Designation/Classification
Source: California Air Resources Board (ARB). 2021. Maps of State and Federal Area Designations. Website: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed February 16, 2021.		

3.3.3 - Regulatory Framework

Air pollutants are regulated primarily to protect human health and for secondary effects such as visibility and property damage from pollutant deposition. The Clean Air Act (CAA) of 1970 tasks the EPA with setting air quality standards. The State of California also sets air quality standards that are in some cases more stringent than federal standards and address additional pollutants. The following section describes these federal and State standards and the health effects of the regulated pollutants.

Clean Air Act

Congress established much of the basic structure of the CAA in 1970 and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are addressed in the CAA. These are particulate matter, ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. The EPA calls these pollutants criteria air pollutants because it regulates them by developing human health-based and/or environmentally based criteria (science-based guidelines)

for setting permissible levels. The set of limits based on human health are called primary standards. Another set of limits intended to prevent environmental and property damage are called secondary standards.[3] The federal standards are called National Ambient Air Quality Standards (NAAQS). The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The criteria pollutants are:

- Ozone
- Nitrogen dioxide (NO_2)
- Lead
- Particulate matter (PM_{10} and $PM_{2.5}$)
- Carbon monoxide (CO)
- Sulfur dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health.

California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation and required additional actions beyond the federal mandates. The ARB administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 State air pollutants are the six federal standards listed above as well as visibility reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA. Generally, the planning requirements of the federal CAA are less stringent than the CCAA; therefore, consistency with the CCAA will also demonstrate consistency with the federal CAA.

Air Pollutant Description and Health Effects

The federal and State ambient air quality standards, the most relevant effects, the properties, and sources of the pollutants are summarized in Table 3.3-4.

[3] United States Environmental Protection Agency (EPA). 2021. NAAQS Table. Website: https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed February 16, 2021.

Table 3.3-4: Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour	0.09 ppm	—	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between reactive organic gases (ROG), nitrous oxides (NO_x), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (ROG and NO_x) are mobile sources (on-road and off-road vehicle exhaust).
	8 Hours	0.070 ppm	0.070 ppm			
Carbon monoxide (CO)	1 Hour	20 ppm	35 ppm	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential woodburning, and natural sources.
	8 Hours	9.0 ppm	9 ppm			
Nitrogen dioxide[b] (NO_2)	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO_x (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, and N_2O_5). NO_x is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NO_x can react with compounds to form nitric acid and related small particles and result in particulate matter (PM) related health effects.	NO_x is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO_x emissions. NO_2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfur dioxide[c] (SO_2)	1 Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO_x) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below State and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM_{10}.	Human caused sources include fossil fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethylsulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.
	3 Hours	—	0.5 ppm			
	24 Hours	0.04 ppm	0.14 (for certain areas)			
	Annual	—	0.030 ppm (for certain areas)			
Particulate matter (PM_{10})	24 hours	50 µg/m^3	150 µg/m^3	- Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. - Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.
	Mean	20 µg/m^3	—			
Particulate matter ($PM_{2.5}$)	24 Hours	—	35 µg/m^3			
	Annual	12 µg/m^3	12.0 µg/m^3			
Visibility reducing particles	8 Hours	See note below[d]				

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfates	24 Hours	25 µg/m^3	—	(a) Decrease in ventilatory function; (b) aggravation of asthmatic symptoms; (c) aggravation of cardio-pulmonary disease; (d) vegetation damage; (e) degradation of visibility; (f) property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO_4^{2-}. Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead[e]	30-days	1.5 µg/m^3	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal standards at any monitoring station since 1982.	Lead ore crushing, lead ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 µg/m^3			
	Rolling 3-month average	—	0.15 µg/m^3			
Vinyl chloride[e]	24 Hours	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, ARB identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.
Hydrogen sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H_2S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Volatile organic compounds (VOC)		There are no State or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.	ROGs, or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility.
Benzene		There are no ambient air quality standards for benzene.		Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, loss of consciousness can occur. Long-term (chronic) occupational exposure of high doses has caused blood disorders, leukemia, and lymphatic cancer.	Benzene is VOC. It is a clear or colorless light-yellow, volatile, highly flammable liquid with a gasoline-like odor. The EPA has classified benzene as a "Group A" carcinogen.	Benzene is emitted into the air from fuel evaporation, motor vehicle exhaust, tobacco smoke, and from burning oil and coal. Benzene is used as a solvent for paints, inks, oils, waxes, plastic, and rubber. Benzene occurs naturally in gasoline at one to 2 percent by volume. The primary route of human exposure is through inhalation.
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, lightheadedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk	Diesel PM is a source of $PM_{2.5}$—diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
				cannot be clearly attributed to diesel exhaust exposure.	derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	various pieces of stationary construction equipment.

Notes:
µg/m^3 = micrograms per cubic meter
30-day = 30-day average
Annual = Annual Arithmetic Mean
ppm = parts per million (concentration)
Quarter = Calendar quarter

[a] Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3-Hour SO_2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[b] To attain the 1-hour nitrogen dioxide national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (0.100 ppm).

[c] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[d] Visibility reducing particles: In 1989, ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the statewide and Lake Tahoe Air Basin standards, respectively.

[e] ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source of effects, properties, and sources: South Coast Air Quality Management District (South Coast AQMD) 2007; California Environmental Protection Agency (Cal/EPA) 2002; California Air Resources Board (ARB) 2009; United States Environmental Protection Agency (EPA) 2003, 2009, 2010, 2011, and 2012; National Toxicology Program 2011 and 2011. Source of standards: California Air Resources Board (ARB) 2013.

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Several pollutants listed in Table 3.3-4 are not addressed in this analysis. Visibility reducing particles are not explicitly addressed in this analysis because particulate matter is addressed as PM_{10} and $PM_{2.5}$ and thus evaluated accordingly (see below). In addition, given the nature of the proposed uses, no components of the project would result in vinyl chloride or hydrogen sulfide emissions in any substantial quantity and thus are not addressed further.

Toxic Air Contaminants Health Effects

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data. The 10 TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk.[4] In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance, but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the ARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of DPM.

Limited data on levels and health risks attributable to the top 10 TACs listed above is available from the ARB as part of its California Almanac of Emissions and Air Quality—2013 Edition.[5] Risks associated with DPM emissions are only provided for the year 2000 and have not been updated in the Almanac. Although recent editions of the Almanac do not provide estimated risk, they do provide emission

[4] California Air Resources Board (ARB). 1998. Initial Statement of Reasons for Rulemaking, Staff Report, Proposed Identification of Diesel Exhaust As A Toxic Air Contaminant. Website: https://ww2.arb.ca.gov/sites/default/files/classic//toxics/dieseltac/staffrpt.pdf. Accessed February 16, 2021.

[5] California Air Resources Board (ARB). 2013. California Almanac of Emissions and Air Quality – 2013 Edition. Website: https://ww2.arb.ca.gov/our-work/programs/resource-center/technical-assistance/air-quality-and-emissions-data/almanac. Accessed February 16, 2021.

inventories for DPM for later years. The 2013 Almanac provides emission inventory trends for DPM from 2000 through 2035. The 2013 Almanac reports that DPM emissions were reduced in the Air Basin from 16 tons per day in 2000 to 11 tons per day in 2010, a 31 percent decrease. DPM emissions in the San Joaquin Valley are projected to decrease to 6 tons per day by 2015, which would represent a 62 percent reduction from year 2000 levels. The ARB predicts a reduction to 3 tons per day by 2035, which would represent an 81 percent reduction from year 2000 levels. Continued implementation of the ARB's Diesel Risk Reduction Plan is expected to provide continued reductions in DPM through 2020 and beyond through regulations on this source.[6]

Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present.

Lead

Lead is a naturally occurring element found in small amounts in the earth's crust. While it has some beneficial uses, it can be toxic to human and animals, causing health effects.[7] Lead is known to cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death. Exposure to building materials containing lead, such as lead-based paint, during land use development activities can occur during demolition of older buildings. Children exposed to lead can suffer from a variety of symptoms, including lowered IQ, damage to the brain and nervous system, learning and behavioral difficulties, slowed growth, hearing problems, and headaches. Adults exposed to lead can suffer from reproductive complications, high blood pressure and hypertension, nerve disorders, memory and concentration challenges, and muscle and joint pain.[8]Federal

Air pollutants are regulated at the national, state, and air basin or county level; each agency has a different level of regulatory responsibility. The EPA regulates at the national level. The ARB regulates at the State level. The Valley Air District regulates at the air basin level.

[6] California Air Resources Board (ARB). 2013. California Almanac of Emissions and Air Quality – 2013 Edition. Website: https://ww2.arb.ca.gov/our-work/programs/resource-center/technical-assistance/air-quality-and-emissions-data/almanac. Accessed February 16, 2021.

[7] United States Environmental Protection Agency (EPA). 2021. Learn About Lead. Website: https://www.epa.gov/lead/learn-about-lead. Accessed July 20, 2021.

[8] United States Environmental Protection Agency (EPA). 2021. What are some of the health effects of lead? Website: https://www.epa.gov/lead/what-are-some-health-effects-lead. Accessed July 20, 2021.

The EPA is responsible for national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards, also known as the federal standards, or NAAQS, described earlier.

A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The State Implementation Plan for the State of California is administered by the ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's State Implementation Plan incorporates individual federal attainment plans for regional air districts—an air district prepares their federal attainment plan, which is sent to ARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. The most recent attainment plans for the Valley Air District are the 2007 8-hour Ozone Attainment Plan and the 2012 $PM_{2.5}$ Plan for the 2006 $PM_{2.5}$ standard. The Air Basin is designated as an extreme ozone nonattainment area for the EPA's 2008 8-hour ozone standard of 75 ppb. The EPA Administrator signed the Final Rule revising the 8-hour ozone standard to 70 ppm on October 1, 2015. Adoption of a new standard requires an implementation process that includes making attainment designations and the development of new plans to attain the standard based on each area's designation. The District's Governing Board approved the 2016 Plan for the 2008 8-Hour Ozone Standard on June 16, 2016. The comprehensive strategy in this plan will reduce oxides of nitrogen (NO_x) emissions by over 60 percent between 2012 and 2031 and will bring the San Joaquin Valley into attainment of EPA's 2008 8-hour ozone standard as expeditiously as practicable, no later than December 31, 2031.

Areas designated nonattainment must develop Air Quality Plans (AQPs) and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional State and local regulation is required to achieve the standards. Regulations adopted by California are described below.

State

Low Emission Vehicle Program

The ARB first adopted Low Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan. In 2012, the ARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and greenhouse gas (GHG) emissions for new passenger vehicles.

On September 23, 2020, Governor Gavin Newsom issued Executive Order N-79-20 establishing a goal that 100 percent of new passenger cars and trucks sold in California shall be zero-emission by 2035. The Executive Order also sets a goal that, where feasible, all operations include zero-emission medium- and heavy-duty trucks by 2045, and drayage trucks by 2035. Off-road vehicles have a goal to transition to 100 percent zero-emission vehicles by 2035, where feasible.

On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. The ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.

California Air Resources Board Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the ARB adopted a regulation to reduce DPM and NO_x emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The ARB is enforcing that part of the rule with fines up to $10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NO_x emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014, for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter (PM) filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.[9]

[9] California Air Resources Board (ARB). 2021. Truck and Bus Regulation. Website: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed February 16, 2021.

California Air Resources Board Airborne Toxic Control Measure for Asbestos

In July 2001, the ARB approved an Airborne Toxic Control Measure (ATCM) for construction, grading, quarrying and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of Best Management Practices (BMPs) to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than one acre in size. These projects require the submittal of a "Dust Mitigation Plan" and approval by the air district prior to the start of a project.

Construction sometimes requires the demolition of existing buildings where construction occurs. Buildings often include materials containing asbestos; demolition is associated with this project and therefore asbestos exposure could occur as a result of this demolition work. In addition, asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

The ARB has an ATCM for construction, grading, quarrying, and surface mining operations, requiring the implementation of mitigation measures to minimize emissions of asbestos-laden dust. The measure applies to road construction and maintenance, construction and grading operations, and quarries and surface mines when the activity occurs in an area where naturally occurring asbestos is likely to be found. Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the Department of Conservation maps indicates that no ultramafic rock has been found near the City of Tracy.

Diesel Risk Reduction Plan

The ARB's Diesel Risk Reduction Plan has led to the adoption of new State regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020.[10]

[10] California Air Resources Board (ARB). 2021. Diesel Risk Reduction Plan. Website: https://ww2.arb.ca.gov/our-work/programs/diesel-risk-reduction-plan. Accessed February 16, 2021.

Regional (San Joaquin Valley Air Pollution Control District)

Ozone Plans

The Air Basin is designated nonattainment of State and federal health-based air quality standards for ozone. To meet CAA requirements for the one-hour ozone standard, the Valley Air District adopted an Extreme Ozone Attainment Demonstration Plan in 2004, with an attainment date of 2010. Although the EPA revoked the federal 1-hour ozone standard effective June 15, 2005, and replaced it with an 8-hour standard, the requirement to submit a plan for that standard remained in effect for the San Joaquin Valley.

The planning requirements for the 1-hour plan remain in effect until replaced by a federal 8-hour ozone attainment plan. The EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan, including revisions to the plan, on March 8, 2010, effective April 7, 2010. However, the Air Basin failed to attain the standard in 2010 and was subject to a $29 million CAA penalty. The penalty is being collected through an additional $12 motor vehicle registration surcharge for each passenger vehicle registered in the Air Basin that will be applied to pollution reduction programs in the region. The District also instituted a more robust ozone episodic program to reduce emissions on days with the potential to exceed the ozone standards. On July 18, 2016, the EPA published in the Federal Register a final action determining that the San Joaquin Valley has attained the 1-hour ozone national ambient air quality standard. This determination is based on the most recent 3-year period (2012–2014) of sufficient, quality-assured, and certified data that was available as of the date that environmental review for the proposed project commenced.[11]

The EPA originally classified the Air Basin as serious nonattainment for the 1997 federal 8-hour ozone standard with an attainment date of 2013. On April 30, 2007, the Valley Air District's Governing Board adopted the 2007 Ozone Plan, which contained analysis showing a 2013 attainment target to be infeasible. The 2007 Ozone Plan details the plan for achieving attainment on schedule with an "extreme nonattainment" deadline of 2024. At its adoption of the 2007 Ozone Plan, the Valley Air District also requested a reclassification to extreme nonattainment. The ARB approved the plan in June 2007, and the EPA approved the request for reclassification to extreme nonattainment on April 15, 2010.

The 2007 Ozone Plan contains measures to reduce ozone and particulate matter precursor emissions to bring the Air Basin into attainment with the federal 8-hour ozone standard. The 2007 Ozone Plan calls for a 75 percent reduction of NO_x and a 25 percent reduction of reactive organic gases (ROG).

Figure 1 displays the anticipated NO_x reductions attributed in the 2007 Ozone Plan.[12] The plan, with innovative measures and a "dual path" strategy, assures expeditious attainment of the federal 8-hour ozone standard for all Air Basin residents. The Valley Air District Governing Board adopted the 2007 Ozone Plan on April 30, 2007. The ARB approved the plan on June 14, 2007. The 2007 Ozone Plan

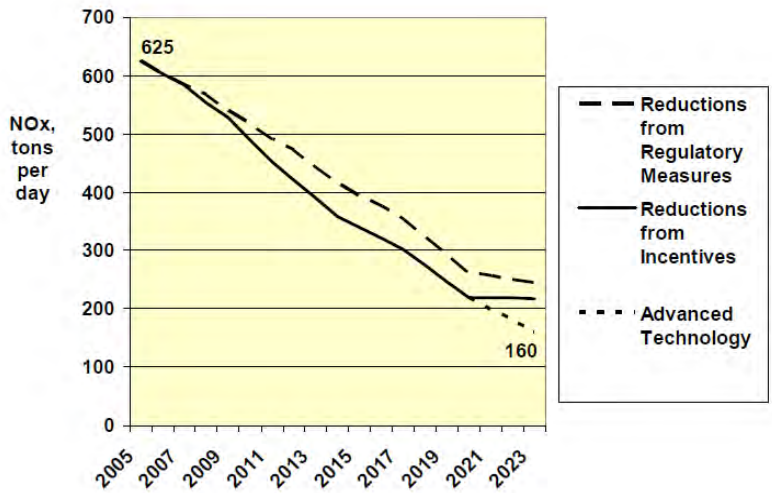
[11] California Air Resources Board (ARB). 2016. Fact Sheet, Final Rule for San Joaquin Valley Determination of Attainment of the 1-Hour Ozone National Ambient Air Quality Standards. June 30. Website: https://www3.epa.gov/region9/air/actions/pdf/ca/sjv/epa-r09-oar-2016-0164-sjv-1hr-o2-determin-attain-factsheet-2016-06-30.pdf. Accessed February 16, 2021.

[12] San Joaquin Valley Air Pollution Control District (Valley Air District). 2007. 2007 8-Hour Ozone Plan. Website: http://www.valleyair.org/air_quality_plans/docs/AQ_Ozone_2007_Adopted/2007_8HourOzone_CompletePlan.pdf. Accessed February 16, 2021.

requires yet to be determined "Advanced Technology" to achieve additional reductions after 2021, in order to attain the standard at all monitoring stations in the Air Basin by 2024 as allowed for areas designated extreme nonattainment by the CAA.

The Air Basin is designated as an extreme ozone nonattainment area for the EPA's 2008 8-hour ozone standard of 75 ppb. The plan to address this standard was developed for the region to attain EPA's 2008 8-hour ozone standard by December 31, 2031.

State ozone standards do not have an attainment deadline but require implementation of all feasible measures to achieve attainment at the earliest date possible. This is achieved through compliance with the federal deadlines and control measure requirements.



Source: San Joaquin Valley Air Pollution Control District (Valley Air District). 2007. 2007 8-Hour Ozone Plan. Website: http://www.valleyair.org/air_quality_plans/docs/AQ_Ozone_2007_Adopted/2007_8HourOzone_CompletePlan.pdf. Accessed February 16, 2021.

Figure 1: San Joaquin Valley NO_x Emissions Forecast

Particulate Matter Plans

The Air Basin was designated nonattainment of State and federal health-based air quality standards for PM_{10}. The Air Basin is also designated nonattainment of State and federal standards for $PM_{2.5}$.

To meet CAA requirements for the PM_{10} standard, the District adopted a PM_{10} Attainment Demonstration Plan (Amended 2003 PM_{10} Plan and 2006 PM_{10} Plan), which had an attainment date of 2010. The Valley Air District adopted the 2007 PM_{10} Maintenance Plan in September 2007 to assure the San Joaquin Valley's continued attainment of the EPA's PM_{10} standard. The EPA designated the San Joaquin Valley as an attainment/maintenance area for PM_{10} on September 25, 2008. Although the San Joaquin Valley has exceeded the standard since then, those days were considered exceptional events that are not considered a violation of the standard for attainment purposes.

The 2008 $PM_{2.5}$ Plan builds upon the comprehensive strategy adopted in the 2007 Ozone Plan to bring the Air Basin into attainment of the 1997 national standards for $PM_{2.5}$. The EPA has identified

NO_x and sulfur dioxide as precursors that must be addressed in AQPs for the 1997 $PM_{2.5}$ standards. The 2008 $PM_{2.5}$ Plan is a continuation of the District's strategy to improve the air quality in the Air Basin. The EPA issued final approval of the 2008 $PM_{2.5}$ Plan on November 9, 2011, which became effective on January 9, 2012. The EPA approved the emissions inventory, the reasonably available control measures/reasonably available control technology demonstration, reasonable further progress demonstration, attainment demonstration and associated air quality modeling, and the transportation conformity motor vehicle emissions budgets. The EPA also granted California's request to extend the attainment deadline for the San Joaquin Valley to April 5, 2015, and approved commitments to measures and reductions by the Valley Air District and the ARB. Finally, it disapproved the State Implementation Plan's contingency provisions and issued a protective finding for transportation conformity determinations.

In December 2012, the Valley Air District adopted the 2012 $PM_{2.5}$ Plan to bring the San Joaquin Valley into attainment of the EPA's 2006 24-hour $PM_{2.5}$ standard of 35 $\mu g/m^3$. The ARB approved the District's 2012 $PM_{2.5}$ Plan for the 2006 standard at a public hearing on January 24, 2013.[13] This plan seeks to bring the San Joaquin Valley into attainment with the standard by 2019, with the expectation that most areas will achieve attainment before that time.

The 2015 Plan for the 1997 $PM_{2.5}$ Standard, approved by the District Governing Board on April 16, 2015, will bring the San Joaquin Valley into attainment of EPA's 1997 $PM_{2.5}$ standard as expeditiously as practicable, but no later than December 31, 2020. However, this did not occur. Therefore, the plan was required to request reclassification to serious nonattainment and to extend the attainment date from 2018 to 2020.[14]

San Joaquin Valley Air Pollution Control District Rules and Regulations

The following Valley Air District rules and regulations are relevant to this analysis:

Rule 4102—Nuisance. The purpose of this rule is to protect the health and safety of the public and applies to any source operation that emits or may emit air contaminants or other materials.

Rule 4601—Architectural Coatings. The purpose of this rule is to limit volatile organic compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling.

Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641.

Regulation VIII—Fugitive PM_{10} Prohibitions. Rules 8011-8081 are designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout

[13] San Joaquin Valley Air Pollution Control District (Valley Air District). 2012. 2012 $PM_{2.5}$ Plan. Website: https://www.valleyair.org/Air_Quality_Plans/PM25Plan2012/CompletedPlanbookmarked.pdf. Accessed February 16, 2021.

[14] San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. 2015 Plan for the 1997 $PM_{2.5}$ Standard. Website: http://www.valleyair.org/air_quality_plans/docs/pm25-2015/2015-pm2.5-plan_bookmarked.pdf. Accessed February 16, 2021.

and trackout, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

Rule 9510—Indirect Source Review. This rule reduces the impact of NO_x and PM_{10} emissions from growth within the Air Basin. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through on-site mitigation, off-site Valley Air District-administered projects, or a combination of the two. The proposed project must comply with Rule 9510 because it would develop more than 25,000 square feet of light industrial uses.

California Environmental Quality Act

The Valley Air District provides guidance and thresholds for California Environmental Quality Act (CEQA) air quality and GHG analyses. The result of this guidance, as well as State regulations to control air pollution, is an overall improvement in the Air Basin. In particular, the Valley Air District's 2015 GAMAQI states the following:

1. The District's Air Quality Attainment Plans include measures to promote air quality elements in county and city general plans as one of the primary indirect source programs. The general plan is the primary long range planning document used by cities and counties to direct development. Since air districts have no authority over land use decisions, it is up to cities and counties to ensure that their general plans help achieve air quality goals. Section 65302.1 of the California Government Code requires cities and counties in the San Joaquin Valley to amend appropriate elements of their general plans to include data, analysis, comprehensive goals, policies, and feasible implementation strategies to improve air quality in their next housing element revisions.
2. The Air Quality Guidelines for General Plans (AQGGP), adopted by the Valley Air District in 1994 and amended in 2005, is a guidance document containing goals and policy examples that cities and counties may want to incorporate into their General Plans to satisfy Section 65302.1. When adopted in a general plan and implemented, the suggestions in the AQGGP can reduce vehicle trips and miles traveled and improve air quality. The specific suggestions in the AQGGP are voluntary. The Valley Air District strongly encourages cities and counties to use their land use and transportation planning authority to help achieve air quality goals by adopting the suggested policies and programs.

City of Tracy

The City's air quality goals and policies from the Air Quality Element and Circulation Element that are relevant to this analysis are listed below.[15]

[15] City of Tracy. 2011. City of Tracy General Plan. February 1. Website: https://www.ci.tracy.ca.us/documents/2011_General_Plan.pdf. Accessed February 16, 2021.

City of Tracy Air Quality Goals and Policies

Air Quality Element

Goal AQ-1–Improved air quality and reduced greenhouse gas emissions

Objective AQ-1.1 Improve air quality and reduce greenhouse gas emissions through land use planning decisions.

Policies

Policy P1 The City shall promote land use patterns that reduce the number and length of motor vehicle trips.

Objective AQ-1.2 Promote development that minimizes air pollutant and greenhouse gas emissions and their impact on sensitive receptors as a result of indirect and stationary sources.

Policies

Policy P3 Developers shall implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects.

Policy P4 New development projects should incorporate energy efficient design features for HVAC, lighting systems and insulation that exceed Title 24.

Policy P5 Use of solar water and pool heaters is encouraged.

Policy P6 Installation of solar voltaic panels on new homes and businesses shall be encouraged.

Policy P7 Trees should be planted on the south- and west-facing sides of new buildings or building undergoing substantial renovation in order to reduce energy usage.

Policy P9 New developments shall follow the current requirements of the SJVAPCD [Valley Air District] with respect to woodburning fireplaces and heaters.

Circulation Element

Goal CIR-1: A roadway system that provides access and mobility for all of Tracy's residents and businesses while maintaining the quality of life in the community.

Objective CIR-1.1: Implement a hierarchical street system in which each street serves a specific, primary function and is sensitive to the context of the land uses served.

Policies

Policy P3 The City shall continue to apply traffic mitigation fee programs to fund transportation infrastructure, based on a fair share of facility use.

Policy P6 The Roadway Master Plan update shall identify necessary improvements to various intersections on I-205 and I-580 based on land use designations and with particular attention to Terminal Access Routes in accordance with Surface Transportation Assistance Act of 1982 (STAA).

Objective CIR-1.2: Provide a high level of street connectivity.

Policies

Policy P3 New development shall be designed to provide vehicular, bicycle and pedestrian connections with adjacent developments.

Policy P5 New development shall be designed with a grid or modified grid pattern to facilitate traffic flows and to provide multiple connections to arterial streets.

Goal CIR-3: Safe and convenient bicycle and pedestrian travel as alternative modes of transportation in and around the City.

Objective CIR-3.1: Achieve a comprehensive system of citywide bikeways and pedestrian facilities.

Policies

Policy P6 New development shall include pedestrian and bicycle facilities internal to the development and that connect to citywide facilities, such as parks, schools and recreational corridors, as well as adjacent development and other services.

Policy P7 New development sites for commercial, employment, educational, recreational and park-and-ride land uses shall provide bicycle parking and/or storage facilities.

Economic Development Element

Goal ED-1: A diversified and sustainable local economy.

Objective ED-1.2: Support and encourage a sustainable local economy.

Policies

Policy P1 The City shall encourage businesses that use green practices.

Policy P2 The City shall conduct public education and outreach to support employment opportunities that minimize the need for automobile trips, such as live/work, telecommuting, satellite work centers, and home occupations, in addition to mixed-use development strategies.

Objective ED-6.2: Support infill development of commercial and industrial properties within the city limits.

Policies

Policy P1 The City shall promote the development and redevelopment of City infill areas.

Policy P2 A balanced mix of retail, restaurant, and other services should be encouraged throughout the City.

Northeast Industrial Specific Plan

The City of Tracy adopted the Northeast Industrial Specific Plan on July 17, 2012. The City's air quality objectives, goals, and policies from the Northeast Industrial Specific Plan that are relevant to this analysis are listed below.[16]

Parking and On-site Vehicular Circulation

- Parking, on-site circulation, and loading area standards shall be as required by the provisions of Title 10, Article 26, Off-Street Parking Requirements of the Tracy Municipal Code unless modified below or as part of the Development Review approval.
- Parking lots containing 10-20 spaces may include a maximum of 20 percent of the total number of spaces for compact cars. These spaces shall be designed and marked in accordance with City standards and distributed throughout the lot. Parking areas containing 20 or more spaces may include a maximum of 30 percent of the total number of spaces for compact cars.
- Warehouse/Storage off-street parking standards:
  - One space per 1,000 square feet of the first 20,000 square feet of gross floor area, plus one space per 2,000 square feet of the second 20,000 square feet of gross floor area, plus one space per 4,000 square feet of the remaining square feet of gross floor area.

Environmental Performance Standards

- No use shall be permitted to exist or operate on any lot which:
  - Emits dust, sweepings, dirt, cinders, fumes, odors, radiation, gases and vapors, or discharges liquid or solid wastes or other harmful matter into the atmosphere or any body of water which may, according to the appropriate agency, adversely affect the health and safety persons within the area or the health and safety of persons in adjacent areas or the use of adjacent properties.
  - Produces intense glare or heat, unless such use is performed only within an enclosed or screened area, and then only in such manner that glare, or heat emitted will not be discernible from any exterior lot line.
  - Allows the visible emissions of smoke (outside any building) other than the exhausts emitted by motor vehicles or other transportation facilities or any emissions in violation of any regulation of any public body having jurisdiction. This requirement shall also be applicable to the disposal of trash and waste materials.
- Hazardous Wastes and Water Pollutants
  - Industries regularly using significant quantities of hazardous chemicals as defined by State Law in the course of their operations shall be required to obtain a Conditional Use Permit.

[16] City of Tracy. 2012. City of Tracy Northeast Industrial Specific Plan. July 17. Website: https://www.ci.tracy.ca.us/documents/Northeast_Industrial_Specific_Plan.pdf. Accessed February 16, 2021.

3.3.4 - Project Impacts and Mitigation Measures

Significance Criteria

For purposes of this proposed project, the City, in its discretion, is utilizing CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to air quality are significant environmental effects.

As discussed below, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?

c) Expose sensitive receptors to substantial pollutant concentrations?

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Approach to Analysis

While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, the Valley Air District recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the Lead Agency finds that the project would exceed these air pollution thresholds, the project should be considered to have significant air quality impacts. The applicable Valley Air District thresholds and methodologies are contained under each impact statement below, as the City, in its discretion, has determined to utilize these thresholds and methodologies, which are based on scientific and factual data.

This analysis was performed consistent with the guidance and methodologies provided by the Valley Air District's GAMAQI.[17] Based on Valley Air District New Source Review (NSR) offset requirements for stationary sources, the Valley Air District has established thresholds of significance for criteria pollutant emissions, shown in Table 3.3-5. These thresholds apply to the project because these air pollutants would be generated during project construction and operation and constitute criteria pollutants or precursor emissions for criteria pollutants, which are regulated by the federal and State Clean Air Acts.

[17] San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigating Air Quality Impact. Website: http://www.valleyair.org/transportation/GAMAQI_12-26-19.pdf Accessed January 28, 2021.

Table 3.3-5: San Joaquin Valley Air Pollution Control District Significance Thresholds

Pollutant	Construction Thresholds (TPY)	Operational Thresholds (TPY)	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
ROG	10	10	10
NO_X	10	10	10
CO	100	100	100
SO_X	27	27	27
PM_{10}	15	15	15
$PM_{2.5}$	15	15	15

Notes:
CO = carbon monoxide
NO_X = oxides of nitrogen
PM_{10} = particulate matter with aerodynamic diameter less than 2.5 microns
$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 10 microns
ROG = reactive organic gases
SO_X = oxides of sulfur
TPY = tons per year
Source:
San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigating Air Quality Impact. Website: http://www.valleyair.org/transportation/GAMAQI_12-26-19.pdf Accessed January 28, 2021.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following significance determinations. As noted above, the City, in its discretion, has decided to rely upon the foregoing significance criteria for purposes of this analysis.

Impact Evaluation

Air Quality Management Plan Consistency

Impact AIR-1: The proposed project could conflict with or obstruct implementation of the applicable air quality plan.

The CEQA Guidelines indicate that a significant impact would occur if the proposed project would conflict with or obstruct implementation of the applicable AQP. The GAMAQI does not provide specific guidance on analyzing conformity with the AQP. Therefore, for the reasons stated below, this Draft EIR proposes the following criteria for determining project consistency with the current AQPs:

- **Criterion 1:** Does the project support the primary goals of the AQP?
- **Criterion 2:** Does the project include applicable control measures from the AQP?
- **Criterion 3:** Does the project disrupt or hinder implementation of any AQP control measures?

The use of the criteria listed above is a standard approach for CEQA analysis of projects in the Valley Air District's jurisdiction, as well as within other air districts, for the following reasons:

- Significant contribution to existing or new exceedances of the air quality standards would be inconsistent with the goal of attaining the air quality standards.
- AQP emissions inventories and attainment modeling are based on growth assumptions for the area within the air district's jurisdiction.
- AQPs rely on a set of air district-initiated control measures as well as implementation of federal and State measures to reduce emissions within their jurisdictions, with the goal of attaining the air quality standards.

AQPs are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine whether the Air Basin can reach attainment for the ambient air quality standards. To show attainment of the standards, the Valley Air District analyzes the growth projections in the valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The Valley Air District then formulates a control strategy to reach attainment that includes both State and Valley Air District regulations and other local programs and measures.

Criterion 1

The first criterion for determining whether the proposed project supports the primary goals of the AQP is if the proposed project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs. The development of the AQP is based in part on the land use general plan projections of the various cities and counties that constitute the Air Basin. The City of Tracy General Plan Land Use Element designates the project site as Industrial, which is intended to accommodate flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs. Therefore, the proposed project, which involves the development of light industrial, warehouse and distribution and related uses is considered consistent with the site's General Plan land use designation and its traffic would be included in volumes projected for analysis of the General Plan.

Nonetheless, as further discussed under Impact AIR-2 and Impact AIR-3, the proposed project could create a localized violation of State or federal air quality standards, significantly contribute to cumulative nonattainment pollutant violations, and expose sensitive receptors to substantial pollutant concentrations. The proposed project would be required to implement the mitigation measures identified under Impact AIR-2; however, because full implementation of the mitigation cannot be guaranteed due to potential technical or financial feasibility, the proposed project's potentially significant impact is conservatively identified as significant and unavoidable. The proposed project is, therefore, considered inconsistent with Criterion 1 after the incorporation of mitigation.

Criterion 2

The AQP contains a number of control measures, which are enforceable requirements through the adoption of rules and regulations. A detailed description of rules and regulations that may apply to this project is provided in Section 3.2.3, Regulatory Framework. The proposed project would be

required to comply with all applicable Valley Air District rules and regulations. Therefore, the proposed project would comply with this criterion through compliance with existing regulations.

Criterion 3

A measure of determining whether the proposed project is consistent with the AQPs is if the proposed project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs. Because of the region's nonattainment status for ozone, $PM_{2.5}$, and PM_{10}, if project-generated emissions of either of the ozone precursor pollutants (ROG and NO_x), PM_{10}, or $PM_{2.5}$ would exceed the Valley Air District's significance thresholds, then the proposed project would be considered to conflict with the attainment plans.

As discussed in Impact AIR-2 below, annual emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$ associated with the construction of the proposed project (whether phases are constructed sequentially or concurrently) would not exceed the Valley Air District's significance thresholds after incorporation of mitigation. However, emissions of ROG would exceed the Valley Air District's localized significance thresholds if all three project phases were constructed concurrently, even after implementation of identified mitigation. Operation of the proposed project would also have the potential to exceed regional significance thresholds for ROG and NO_X and would have the potential to result in a violation of localized standards after incorporation of mitigation. As shown in Impact AIR-2, the proposed project could also result in CO hotspots that would violate applicable CO standards. Therefore, as the proposed project has the potential to exceed Valley Air District significance thresholds during construction and operation, even after incorporation of the identified mitigation, this impact would remain significant and unavoidable.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

MM AIR-1a **NO_X Reduction Measures**

Prior to the issuance of grading or building permits for each individual development proposal within the project site, the relevant applicant for each development proposal shall provide documentation to the City of Tracy demonstrating the following NO_X reduction measures would be adhered to during construction activities for the relevant development proposal:

- For all construction equipment and vehicles used during project construction that are equal to or greater than 250 horsepower, the contractor shall use construction equipment and vehicles that meet the United States Environmental Protection Agency (EPA) Tier 4 Final engine standards;
- For all construction equipment and vehicles used during project construction that are less than 250 horsepower, the contractor shall use electric construction equipment and vehicles to the extent feasible, with the exception of handheld generator sets; and

- All generator sets utilized during project construction shall be limited to 5 horsepower and shall only be used to power handheld power tools.

The construction contractor shall maintain reasonable records concerning its efforts to comply with this requirement, including equipment lists. Documentation that each relevant applicant provides to the City shall include, but is not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

MM AIR-1b "Super-Compliant" Architectural Coatings

Prior to the issuance of grading or building permits for each individual development proposal within the project site, the relevant applicant for each development shall provide the City with documentation demonstrating the use of "Super-Compliant" architectural coatings, as defined by the South Coast Air Quality Management District (South Coast AQMD), during construction of the proposed project. "Super-Compliant" architectural coatings, as defined by the South Coast AQMD, are paints which do not exceed 10 grams of reactive organic gas (ROG) per liter of paint.

MM AIR-1c "Zero-VOC" Consumer Products

The consumer products purchased by the building occupant(s) or by the cleaning business contracted by the building occupant(s) for each on-site use shall consist of water-based or "zero volatile organic compound [VOC]" consumer products, to the maximum extent feasible. "Consumer products," as referred to in this mitigation measure, shall include detergents, cleaning compounds, polishes, and floor finishes. "Consumer products," as referred to in this mitigation measure, shall not include parking lot degreasers, architectural coatings, pesticides, or fertilizers.

MM AIR-1d Clean Truck Fleet

Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating the use of a clean truck fleet that meets the California Air Resources Board's adopted 2013 Optional Low-NO_X Standard of 0.02 gram of nitrogen oxide (NO_X) per brake horsepower-hour for all heavy-duty trucks during operation of the proposed project, to the maximum extent feasible. If the relevant applicant does not own the truck fleet that will be used during operation of the subject individual development, the relevant applicant shall provide the City with reasonable documentation from the truck fleet owner demonstrating that trucks utilized for operation of the subject individual development will meet the California 2013 Optional Low-NO_X Standard, to the maximum extent feasible. If any change occurs where a new truck fleet is utilized during operation of the subject individual development, the relevant applicant shall provide the City with reasonable

documentation demonstrating that the new truck fleet meets the California 2013 Optional Low-NO_X Standard of 0.02 gram per brake horsepower-hour, to the maximum extent feasible.

Level of Significance After Mitigation

Significant and Unavoidable Impact

Cumulative Criteria Pollutant Emissions

Impact AIR-2:	**The proposed project could result in a cumulatively considerable net increase of any criteria pollutant for which the region is in nonattainment under an applicable federal or State ambient air quality standard.**

If an area is in nonattainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a project exceeds the regional threshold for that nonattainment pollutant, then it would result in a cumulatively considerable net increase of that pollutant and result in a significant cumulative impact.

The Air Basin is in nonattainment for PM_{10}, $PM_{2.5}$, and ozone. Therefore, if the proposed project exceeds the regional thresholds for PM_{10}, or $PM_{2.5}$, then it would contribute to a cumulatively considerable impact for those pollutants. If the proposed project exceeds the regional threshold for NO_x or ROG (which are precursors to ozone), then it follows that the project would result in a cumulatively considerable contribution and thus result in a significant cumulative impact for ozone.

Regional emissions include those generated from all on-site and off-site activities. Regional significance thresholds have been established by the Valley Air District because emissions from projects in the Air Basin can potentially contribute to the existing emission burden and possibly affect the attainment and maintenance of ambient air quality standards. Projects within the Air Basin with regional emissions that exceed any of the thresholds presented previously are considered to have a significant regional air quality impact.

Construction Emissions

As discussed in Chapter 2, Project Description, the proposed project involves three different applicants, each of which would have individual development proposals for their respective properties within the project site; based on currently available information, it is assumed the proposed project would involve three separate construction phases. For purposes of this analysis, it is assumed that each construction phase would occur over a 12-month period from April through March. Phase 1 would occur from April 2022 through March 2023, Phase 2 would occur from April 2023 through March 2024, and Phase 3 would occur from April 2024 through March 2025. The default construction equipment utilized in the California Emissions Estimator Model (CalEEMod) were adjusted to match the assumed construction schedule presented in Table 3.3-6 and to preserve CalEEMod's default horsepower-hours during construction activities. For more detailed information on assumptions and calculations utilized in the emissions modeling, please see Appendix B. It should be noted, however, that while the construction schedule anticipated for the proposed project assumes that none of the three project phases would overlap, the potential remains for project

phases to be constructed concurrently. Accordingly, for purposes of a conservative analysis, this evaluation also discloses the potential impacts that would occur if phasing overlapped.

Table 3.3-6: Anticipated Construction Schedule

Construction Activity	Start Date	End Date	Days per Week	Total Workdays
Project Phase 1				
Demolition	04/01/2022	04/28/2022	5	20
Site Preparation	04/29/2022	07/07/2022	5	50
Grading	07/08/2022	12/29/2022	5	125
Building Construction	09/01/2022	02/01/2023	5	110
Paving	02/02/2023	03/01/2023	5	20
Architectural Coating	03/02/2023	03/29/2023	5	20
Project Phase 2				
Site Preparation	04/03/2023	06/09/2023	5	50
Grading	06/10/2023	12/29/2023	5	145
Building Construction	09/01/2023	02/01/2024	5	110
Paving	02/02/2024	02/29/2024	5	20
Architectural Coating	03/01/2024	03/28/2024	5	20
Project Phase 3				
Site Preparation	04/01/2024	06/07/2024	5	50
Grading	06/08/2024	12/27/2024	5	145
Building Construction	12/28/2024	01/31/2025	5	110
Paving	02/03/2025	02/28/2025	5	20
Architectural Coating	03/03/2025	03/28/2025	5	20

Notes:
Anticipated construction schedule reflects the schedule as presented by the co-applicants based on information provided by the project applicants. Detailed methodology and calculations related to adjustments to construction equipment lists and other information to reflect the anticipated construction schedule are contained in Appendix B.

As shown in Table 3.3-7, criteria pollutant emissions would exceed Valley Air District thresholds of significance during unmitigated construction for ROG and NO_X during construction of the proposed project. It should be noted that unmitigated construction emissions incorporate the basic dust control measures required under District Rule 8021, which requires that vehicle speeds on unpaved roads and surfaces be reduced to no more than 15 miles per hour and exposed construction areas are watered during earthmoving activities. Because the proposed project would exceed significance thresholds for ROG and NO_X during construction activities, MMs AIR-1a and AIR-1b would be required during construction of the proposed project to reduce ROG and NO_X emissions to below Valley Air District significance thresholds.

As detailed more fully above, Mitigation Measure (MM) AIR-1a would require the use of Tier 4 Final engines for construction equipment equal to or greater than 250 horsepower and electric alternatives for all construction equipment less than 250 horsepower. MM AIR-1a would not preclude the use of generators; however, generators would be limited to no greater than 5 horsepower under MM AIR-1a to ensure that only handheld power tools are powered by generators and no electric alternative for any specific construction equipment which exceeds 250 horsepower is powered by diesel-fueled generators during construction. As detailed more fully above, MM AIR-1b would require the use of "Super-Compliant" architectural coatings during construction of the proposed project. "Super-Compliant" architectural coatings refer to paints which do not exceed 10 grams of ROG per liter of paint. As shown in Table 3.3-8, construction of the proposed project would not exceed the Valley Air District's annual significance threshold with MMs AIR-1a and AIR-1b incorporated.

It should be noted, however, that while the construction schedule assumed for the proposed project illustrates that none of the three project phases would overlap, the potential remains for project phases to be constructed concurrently. Therefore, Table 3.3-7 and Table 3.3-8 each contain a secondary analysis to illustrate the potential emissions generated during the concurrent construction of all three project phases, representing a reasonable worst-case scenario for purposes of a conservative analysis. As demonstrated therein, construction emissions would be mitigated to below the Valley Air District's annual significance thresholds for ROG and NO_X after implementation of identified mitigation, even if all three project phases were constructed concurrently.

Table 3.3-7: Unmitigated Annual Construction Emissions (Sequential and Concurrent Phasing)

Project Phase/Year/Construction Activity	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Unmitigated Project Phase 1–Construction Year 2022						
Demolition	0.28	0.27	0.21	<0.01	0.02	0.01
Site Preparation	0.13	1.32	0.80	<0.01	0.40	0.24
Grading	0.34	3.53	2.72	0.01	0.53	0.29
Building Construction	1.47	12.85	13.38	0.03	1.27	0.73
2022 Construction Subtotal	*1.97*	*17.98*	*17.11*	*0.04*	*2.22*	*1.27*
Unmitigated Project Phase 1–Construction Year 2023						
Building Construction	0.36	3.06	3.46	0.01	0.32	0.17
Paving	0.10	0.71	1.05	<0.01	0.05	0.04
Architectural Coating	13.04	0.10	0.20	<0.01	0.03	0.01
Phase 1 Construction Total	***15.46***	***21.86***	***21.82***	***0.05***	***2.62***	***1.49***
Unmitigated Project Phase 2–Construction Year 2023						
Site Preparation	0.03	0.28	0.20	<0.01	0.10	0.06

Project Phase/Year/Construction Activity	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Grading	0.12	1.22	1.04	<0.01	0.21	0.11
Building Construction	0.56	4.84	5.47	0.01	0.51	0.27
2023 Construction Subtotal	*14.22*	*10.21*	*11.41*	*0.02*	*0.81*	*0.44*
Unmitigated Project Phase 2–Construction Year 2024						
Building Construction	0.15	1.27	1.51	<0.01	0.13	0.07
Paving	0.02	0.19	0.30	<0.01	0.01	0.01
Architectural Coating	7.15	0.03	0.06	<0.01	0.01	<0.01
Phase 2 Construction Total	***8.03***	***7.83***	***8.57***	***0.02***	***0.97***	***0.52***
Unmitigated Project Phase 3–Construction Year 2024						
Site Preparation	0.01	0.14	0.09	<0.01	0.05	0.03
Grading	0.06	0.57	0.51	<0.01	0.10	0.05
Building Construction	0.01	0.05	0.06	<0.01	<0.01	<0.01
2024 Construction Subtotal	*7.40*	*2.25*	*2.53*	*0.01*	*0.15*	*0.08*
Unmitigated Project Phase 3–Construction Year 2025						
Building Construction	0.06	0.56	0.68	<0.01	0.48	0.03
Paving	0.01	0.09	0.15	<0.01	0.01	<0.01
Architectural Coating	3.35	0.01	0.03	<0.01	<0.01	<0.01
Phase 3 Construction Total	***3.50***	***1.42***	***1.52***	***<0.01***	***0.21***	***0.11***
2025 Construction Subtotal	*3.42*	*0.66*	*0.86*	*<0.01*	*0.06*	*0.03*
Maximum 12-Month Period (Total for Sequential Phases)	**15.46**	**21.86**	**21.82**	**0.05**	**2.62**	**1.49**
Valley Air District Annual Thresholds	10	10	100	27	15	15
Do Construction Emissions Exceed Thresholds?	**Yes**	**Yes**	**No**	**No**	**No**	**No**
Unmitigated Project Construction (All Phases Concurrent)						
Concurrent Construction 12-Month Period (All Three Project Phases Combined)	**27.01**	**31.11**	**31.91**	**0.07**	**3.80**	**2.12**
Valley Air District Annual Thresholds	10	10	100	27	15	15
Do Construction Emissions Exceed Thresholds?	**Yes**	**Yes**	**No**	**No**	**No**	**No**

Project Phase/Year/Construction Activity	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$

Notes:
CO = carbon monoxide
NO_X = oxides of nitrogen
PM_{10} = particulate matter with aerodynamic diameter less than 2.5 microns
$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 10 microns
ROG = reactive organic gases
SO_X = oxides of sulfur
Each construction year subtotal includes emissions from all activities occurring within that calendar irrespective of which project phase that activity occurs. Totals may not add up due to rounding. CalEEMod Output files are contained in Appendix B.

Table 3.3-8: Mitigated Annual Construction Emissions (Sequential and Concurrent Phasing)

Project Phase/Year/Construction Activity	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Mitigated Project Phase 1–Construction Year 2022						
Demolition	<0.01	0.02	0.01	<0.01	0.01	<0.01
Site Preparation	<0.01	<0.01	0.02	<0.01	0.33	0.18
Grading	0.05	0.15	1.32	0.01	0.39	0.16
Building Construction	0.47	3.01	3.17	0.02	0.75	0.24
2022 Construction Subtotal	*0.52*	*3.18*	*4.51*	*0.03*	*1.48*	*0.58*
Mitigated Project Phase 1–Construction Year 2023						
Building Construction	0.11	0.68	0.78	0.01	0.20	0.06
Paving	0.03	<0.01	0.03	<0.01	0.01	<0.01
Architectural Coating	0.88	0.01	0.07	<0.01	0.03	0.01
Phase 1 Construction Total	***1.54***	***3.87***	***5.39***	***0.04***	***1.72***	***0.65***
Mitigated Project Phase 2–Construction Year 2023						
Site Preparation	<0.01	<0.01	0.01	<0.01	0.09	0.05
Grading	0.02	0.06	0.53	<0.01	0.16	0.06
Building Construction	0.13	0.75	1.42	0.01	0.31	0.09
2023 Construction Subtotal	*1.16*	*1.50*	*2.84*	*0.02*	*0.79*	*0.26*
Mitigated Project Phase 2–Construction Year 2024						
Building Construction	0.03	0.21	0.38	<0.01	0.09	0.02
Paving	<0.01	<0.01	0.01	<0.01	<0.01	<0.01
Architectural Coating	0.48	<0.01	0.03	<0.01	0.01	<0.01
Phase 2 Construction Total	***0.66***	***1.02***	***2.38***	***0.02***	***0.65***	***0.22***

Project Phase/Year/Construction Activity	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Mitigated Project Phase 3–Construction Year 2024						
Site Preparation	<0.01	<0.01	<0.01	<0.01	0.04	0.02
Grading	0.01	0.03	0.26	<0.01	0.08	0.03
Building Construction	<0.01	0.01	0.01	<0.01	<0.01	<0.01
2024 Construction Subtotal	*0.52*	*0.25*	*2.53*	*0.01*	*0.22*	*0.07*
Mitigated Project Phase 3–Construction Year 2025						
Building Construction	0.01	0.09	0.15	<0.01	0.03	0.01
Paving	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Architectural Coating	0.22	<0.01	0.01	<0.01	<0.01	<0.01
Phase 3 Construction Total	***0.25***	***0.13***	***0.44***	***<0.01***	***0.15***	***0.06***
2025 Construction Subtotal	*0.24*	*0.09*	*0.16*	*<0.01*	*0.03*	*0.01*
Maximum 12-Month Period (Total for Sequential Phases)	**1.54**	**3.87**	**5.39**	**0.04**	**1.72**	**0.65**
Valley Air District Annual Thresholds	10	10	100	27	15	15
Do Mitigated Construction Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
Mitigated Project Construction (All Phases)						
Concurrent Construction 12-Month Period (All Three Project Phases Combined)	**2.45**	**5.02**	**10.04**	**0.06**	**2.52**	**0.93**
Valley Air District Annual Thresholds	10	10	100	27	15	15
Do Construction Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_X = oxides of nitrogen
PM_{10} = particulate matter with aerodynamic diameter less than 2.5 microns
$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 10 microns
ROG = reactive organic gases
SO_X = oxides of sulfur
Each construction year subtotal includes emissions from all activities occurring within that calendar irrespective of which project phase that activity occurs. Totals may not add up due to rounding. CalEEMod Output files are contained in Appendix B.

Construction Ambient Air Quality Analysis

Valley Air District Rule 2201 requires that an Ambient Air Quality Analysis (AAQA) be conducted for a project when that project's maximum daily emissions exceed 100 pounds for any single criteria or precursor pollutant after incorporation of all mitigation.

Mitigated project construction emissions are presented in Table 3.3-9. It should be noted that if project construction moves to later years, resulting emissions are anticipated to reduce because equipment efficiency and fuel content standards generally improve with each year and construction fleet operators periodically replace old equipment with new, more efficent equipment.

It should also be noted, however, that while the construction schedule anticipated for the proposed project assumes that none of the three project phases would overlap, the potential remains for project phases to be constructed concurrently. Therefore, for purposes of a conservative analysis, Table 3.3-9 contains a secondary analysis to illustrate the potential emissions generated during the concurrent construction of all three project phases, representing a reasonable worst-case scenario.

As shown in Table 3.3-9, after the incorporation of MMs AIR-1a and AIR-1b, construction of the proposed project would not exceed the Valley Air District's daily emission screening levels for an AAQA, pursuant to District Rule 2201, assuming that none of the project phases were to be constructed concurrently.

However, as demonstrated in Table 3.3-9, emissions of ROG and CO would exceed the Valley Air District's significance thresholds after implementation of identified mitigation if all three project phases were constructed concurrently. As such, this impact would remain significant and unavoidable after implementation of identified mitigation.

Table 3.3-9: Mitigated Daily Construction Emissions (Sequential and Concurrent Phasing)

Year	Emissions (Pounds)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Mitigated Project Phase 1						
Construction Year 2022	12.25	71.81	99.34	0.67	24.06	8.22
Construction Year 2023	87.87	59.11	72.80	0.56	17.60	5.45
Maximum Phase 1 Daily Construction Emissions	**87.87**	**71.81**	**99.34**	**0.67**	**24.06**	**8.22**
Valley Air District Daily Thresholds	100	100	100	100	100	100
Do Construction Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
Mitigated Project Phase 2						
Construction Year 2023	3.43	18.41	42.60	0.27	9.51	2.92
Construction Year 2024	48.04	17.27	33.76	0.24	7.32	2.04
Maximum Phase 1 Daily Construction Emissions	**48.04**	**18.41**	**42.60**	**0.27**	**9.51**	**2.92**
Valley Air District Daily Thresholds	100	100	100	100	100	100
Do Construction Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Year	Emissions (Pounds)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Mitigated Project Phase 3						
Construction Year 2024	1.13	8.20	13.98	0.11	2.49	0.90
Construction Year 2025	22.43	8.09	13.53	0.11	2.49	0.71
Maximum Daily Construction Emissions (Total for Sequenced Phases)	**22.43**	**8.20**	**13.98**	**0.11**	**2.49**	**0.90**
Valley Air District Daily Thresholds	100	100	100	100	100	100
Do Construction Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
Mitigated Project Construction (All Phases)						
Concurrent Construction (Maximum for All Phases Combined)	**158.34**	**98.42**	**155.92**	**1.05**	**36.06**	**12.04**
Valley Air District Daily Thresholds	100	100	100	100	100	100
Do Construction Emissions Exceed Thresholds?	**Yes**	**No**	**Yes**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_X = oxides of nitrogen
PM_{10} = particulate matter with aerodynamic diameter less than 2.5 microns
$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 10 microns
ROG = reactive organic gases
SO_X = oxides of sulfur
Daily maximum emissions are drawn from the maximum values between the Winter and Summer construction model results. Totals may not add up due to rounding. CalEEMod Output files are contained in Appendix B.

Operational Emissions

Operation of the proposed project at full buildout would involve the operation of light industrial, warehouse and distribution and relates uses on the project site. As shown in Chapter 2, Project Description, Table 2-2, Proposed Development Summary, the applicant for the Tracy Alliance parcels (Phase I) would develop approximately 1,849,500 square feet of warehouse uses and ancillary office space and related improvements. The applicant for the Suvik Farms parcels (Phase 2) would develop an estimated 1,023,660 square feet of light industrial uses and related improvements. The applicant for the Zuriakat parcel (Phase 3) would develop an estimated 479,160 square feet of light industrial uses and related improvements. Specific development plans for Phase 2 (Suvik Farms parcels) and Phase 3 (Zuriakat parcel) are not specified at this time. For the purposes of this analysis, buildout of these parcels was estimated at the maximum allowable density per acre identified in the Northeast Industrial Specific Plan.

Kimley-Horn and Associates produced a Transportation Impact Analysis (TIA) for the proposed project that analyzes the trip generation rates for the proposed project. As contained therein and shown in Table 3.3-10, Phase I (Tracy Alliance parcels) would generate an estimated 1,775 daily passenger vehicle trips and 836 daily truck trips; Phase 2 (Suvik Farms parcels) would generate an

estimated 974 daily passenger vehicle trips and 459 daily truck trips; and Phase 3 (Zuriakat parcel) would generate an estimated 456 daily passenger vehicle trips and 215 daily truck trips.

Table 3.3-10: Operational Vehicle Trips

Source	Daily Vehicle Trips
Project Phase 1	
Passenger Vehicles	1,775
Heavy-Duty Trucks	836
Total Phase 1 Vehicle Trips	**2,611**
Project Phase 2	
Passenger Vehicles	974
Heavy-Duty Trucks	459
Total Phase 2 Vehicle Trips	**1,433**
Project Phase 3	
Passenger Vehicles	456
Heavy-Duty Trucks	215
Total Phase 3 Vehicle Trips	**671**
Notes: Fleet mix adjustment calculations can be found in Appendix B. Source: Kimley-Horn and Associates, Inc. 2021. Tracy Alliance and Northeast Area Annexation Transportation Impact Analysis – Draft. February.	

As discussed in Chapter 2, Project Description, the proposed project would involve the removal of existing structures, including two residences and nine agricultural outbuildings for equipment storage and maintenance. In order to demonstrate the net increase in emissions generated by the proposed project during operation beyond what is currently generated by existing land uses, the existing land uses were modeled. Table 3.3-11 displays the annual operational emissions that the existing land uses are anticipated to generate.

Table 3.3-11: Existing Annual Operational Emissions

Emission Source	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Existing Operations						
Area	0.14	<0.01	0.02	<0.01	<0.01	<0.01
Energy	<0.01	0.01	0.01	<0.01	<0.01	<0.01
Mobile	0.02	0.11	0.20	<0.01	0.07	0.02
Existing Operations Total	***0.15***	***0.12***	***0.22***	***<0.01***	***0.07***	***0.02***

Emission Source	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$

Notes:
CO = carbon monoxide
NO_X = oxides of nitrogen
PM_{10} = particulate matter with aerodynamic diameter less than 2.5 microns
$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 10 microns
ROG = reactive organic gases
SO_X = oxides of sulfur
Source:
CalEEMod Output files and detailed modeling methodology are contained in Appendix B.

As shown in Table 3.3-12, unmitigated operational emissions would exceed Valley Air District thresholds of significance for ROG and NO_X. Therefore, MMs AIR-1c and AIR-1d would be required to mitigate operational emissions to below Valley Air District thresholds.

Table 3.3-12: Unmitigated Annual Operational Emissions

Emission Source	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Existing Operations						
Existing Operations Total	*0.15*	*0.12*	*0.22*	*<0.01*	*0.07*	*0.02*
Project Phase 1–Operational Year 2023						
Area	8.58	<0.01	0.03	<0.01	<0.01	<0.01
Energy	0.06	0.58	0.49	<0.01	0.04	0.04
Mobile–Trucks	0.49	18.92	3.36	0.07	1.50	0.43
Mobile–Autos	0.38	0.64	6.40	0.02	2.72	0.73
Phase 1 Operations Total	*9.52*	*20.14*	*10.28*	*0.10*	*4.27*	*1.21*
Phase 1 Operations Net Total (Subtracting Existing Emissions)	**9.36**	**20.02**	**10.06**	**0.10**	**4.20**	**1.19**
Project Phase 2–Operational Year 2024						
Area	4.72	0.00	0.01	0.00	0.00	0.00
Energy	0.03	0.31	0.26	0.00	0.02	0.02
Mobile–Trucks	0.27	10.21	1.82	0.04	0.82	0.23
Mobile–Autos	0.19	0.31	3.24	0.01	1.49	0.40
Phase 2 Operations Total	**5.21**	**10.83**	**5.32**	**0.05**	**2.34**	**0.66**
Project Phase 3–Operational Year 2025						
Area	2.21	0.00	0.01	0.00	0.00	0.00
Energy	0.02	0.14	0.12	0.00	0.01	0.01
Mobile–Trucks	0.12	4.70	0.84	0.02	0.39	0.11

Emission Source	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile–Autos	0.08	0.13	1.41	0.01	0.70	0.19
Phase 1 Operations Total	**2.43**	**4.98**	**2.38**	**0.02**	**1.10**	**0.31**
Full Project–Operational Year 2025						
Full Project Buildout (All Phases)	***17.01***	***35.83***	***17.77***	***0.18***	***7.63***	***2.16***
Valley Air District Annual Thresholds	10	10	100	27	15	15
Do Operational Emissions Exceed Thresholds?	**Yes**	**Yes**	**No**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_X = oxides of nitrogen
PM_{10} = particulate matter with aerodynamic diameter less than 2.5 microns
$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 10 microns
ROG = reactive organic gases
SO_X = oxides of sulfur
Totals may not add up due to rounding.
Source:
CalEEMod Output files are contained in Appendix B.

Table 3.3-13: Project Phase Share of Unmitigated Operational Emissions

Project Phase	Emissions (Percent of Total)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Phase 1	55%	56%	57%	56%	55%	55%
Project Phase 2	31%	30%	30%	30%	31%	31%
Project Phase 3	14%	14%	13%	14%	14%	14%

Notes:
CO = carbon monoxide
NO_X = oxides of nitrogen
PM_{10} = particulate matter with aerodynamic diameter less than 2.5 microns
$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 10 microns
ROG = reactive organic gases
SO_X = oxides of sulfur

Incorporation of MM AIR-1d in operation of the proposed project would reduce annual NO_X emissions. As detailed more fully above, MM AIR-1d would require all phases of the proposed project to use a “clean truck fleet” that meets a performance standard of 0.02 gram of NO_X per brake horsepower-hour for all heavy-heavy-duty (HHD) trucks during project operation. In addition, as detailed more fully above, MM AIR-1c would require the use of consumer products that contain zero VOCs during operation of the proposed project. “Consumer products,” as referred to in this mitigation measure, would include detergents, cleaning compounds, polishes, and floor finishes. “Consumer products,” as referred to in this mitigation measure, would not include parking lot

degreasers, architectural coatings, and fertilizers. MM AIR-1d would require all phases of the proposed project to use a "clean truck fleet" that meets or exceeds a performance standard of 0.02 gram of NO_X per brake horsepower-hour for all HHD trucks during project operation.

It should be noted that, as detailed more fully above, MM AIR-1d, which would require the use of a HHD truck fleet that meets the 2013 Optional Low-NO_X Standard of 0.02 gram of NO_X per brake horsepower-hour, would represent an approximately 90 percent reduction in NO_X emissions from the current heavy-duty truck NO_X standard of 0.2 gram of NO_X per brake horsepower-hour.[18]

Nonetheless, the full implementation of MM AIR-1c and MM AIR-1d cannot be guaranteed during project operation; therefore, the emission estimates provided in Table 3.3-14 demonstrate a reasonable worst-case scenario for project operation after incorporation of identified mitigation. Because the operational emissions shown therein would exceed the Valley Air District's significnace thresholds for ROG and NO_X and this impact would remain significant and unavoidable.

Operational Ambient Air Quality Analysis

Valley Air District Rule 2201 requires that an AAQA be conducted for a project when that project's maximum daily emissions exceed 100 pounds for any single criteria or precursor pollutant after incorporation of all mitigation. As shown in Table 3.3-14, due to the uncertainty of full implementation of MM AIR-1c and MM AIR-1d, the potential emission reductions resulting from MM AIR-1c and MM AIR-1d are not considered in the proposed project's mitigated operational emissions. As such, maximum daily operational emissions generated by all phases of the proposed project would exceed the Valley Air District's screening threshold for an AAQA for NO_X emissions. As a result, this impact would remain significant and unavoidable after mitigation is incorporated.

Table 3.3-14: Mitigated Daily Operational Emissions

Metric	Emissions					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Total Tons Per Year	17.01	35.83	17.77	0.18	7.63	2.16
Total Pounds Per Year	34,020	71,660	35,533	357	15,261	4,312
Pounds Per Day	**93.21**	**196.33**	**97.35**	**0.98**	**41.81**	**11.81**
Valley Air District Daily Thresholds	100	100	100	100	100	100
Do Daily Emissions Exceed Thresholds?	**No**	**Yes**	**No**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_X = oxides of nitrogen
PM_{10} = particulate matter with aerodynamic diameter less than 2.5 microns
$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 10 microns
ROG = reactive organic gases
SO_X = oxides of sulfur
Totals may not add up due to rounding. CalEEMod Output files are contained in Appendix B.

[18] California Air Resources Board (ARB). 2021. Heavy-Duty Low NOx. Website: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-low-nox/about. Accessed February 19, 2021.

Impact Summary

Regional emissions generated by the proposed project would exceed applicable thresholds after compliance with all rules, regulations, and mitigation measures during operation. Localized operational emissions would also present a potentially significant impact after incorporation of identified mitigation. This impact would be significant and unavoidable.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MMs AIR-1a to AIR-1d

Level of Significance After Mitigation

Significant and unavoidable impact.

Sensitive Receptors Exposure to Toxic Air Contaminant Concentrations

Impact AIR-3:	**The proposed project could expose sensitive receptors to substantial pollutant concentrations.**

Sensitive Receptors

Those who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. The Valley Air District considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools.

The closest sensitive receptors to the project site are single-family residences and Banta Elementary School. The closest sensitive receptors to the project site are located at the following distances:

- Residences as close as 145 feet west of the project site across Paradise Road;
- Residences immediately adjacent to the project site to the east along Grant Line Road;
- Residences as close as 120 feet south of the project site across Grant Line Road;
- Residences as close as 60 feet north of the project site across California Avenue; and
- Banta Elementary School approximately 1,500 feet to the east at its closest outside area.

It should be noted that while the above receptors represent the closest sensitive receptors to the proposed project, the Maximally Impacted Sensitive Receptor (MIR), as will be discussed under the "Construction: Toxic Air Contaminant" discussion below, during each construction phase of the proposed project may be different. The MIR during pollutant-generating activity is influenced by the distance of that receptor to the pollutant source(s), the amount and type of pollutants generated by each source, the topography and direction of the MIR as it relates to the pollutant source(s), and the prevailing meteorological conditions. Therefore, the closest sensitive receptor and the MIR may not be the same.

Construction

Construction: Reactive Organic Gas

ROG generated during construction activities are primarily emitted during the application of architectural coatings (painting). The amount emitted is dependent on the amount of ROG (or VOC) in the paint. ROG emissions are typically an indoor air quality health hazard concern rather than an outdoor air quality health hazard concern. In addition, construction of the proposed project would incorporate MM AIR-1b, which would require the use of "super-compliance" architectural coatings, reducing potential health impacts from ROG exposure. Therefore, exposure to ROGs during architectural coatings would be a less than significant health impact.

ROG generated during construction activities are also emitted during the pouring and curing of asphalt. Three types of asphalt are typically used in paving: asphalt cements, cutback asphalts, and emulsified asphalts. However, District Rule 4641 prohibits the use of the following types of asphalt: rapid cure cutback asphalt; medium cure cutback asphalt; slow cure asphalt that contains more than 0.5 percent of organic compounds that evaporate at 500 degrees Fahrenheit (°F) or lower; and emulsified asphalt containing organic compounds, in excess of 3 percent by volume, which evaporate at 500°F or lower. An exception to this is medium cure asphalt when the National Weather Service official forecast of the high temperature for the 24-hour period following application is below 50°F.

The acute (short-term) health effects from worker direct exposure to asphalt fumes include irritation of the eyes, nose, and throat. Other effects include respiratory tract symptoms and pulmonary function changes. The studies were based on occupational exposure of fumes. Residents are not in the immediate vicinity of the fumes because asphalt laying would principally occur within the interior of the project site and subsequent fumes would dissipate as they are emitted; therefore, they would not be subjected to concentrations high enough to evoke a negative response. In addition, the restrictions that are placed on asphalt in the San Joaquin Valley would serve to further reduce ROG emissions from asphalt and exposure. The impact to nearby sensitive receptors from ROG generation during construction would be less than significant.

Construction: NO_x, PM_{10}, $PM_{2.5}$, and CO

As discussed in Impact AIR-2, after incorporation of identified mitigation, emissions of CO generated during project construction have the potential to exceed the Valley Air District maximum daily emission AAQA screening threshold if all three project phases were constructed concurrently. Therefore, emissions during construction could exceed the significance thresholds (in the case of all three phases being constructed concurrently) even after incorporation of mitigation and could result in concentrations that would exceed ambient standards, contribute substantially to an existing exceedance of an ambient air quality standard, or expose sensitive receptors to substantial pollutant concentrations.

Construction: Toxic Air Contaminants

Construction of the proposed project would involve the use of diesel-fueled vehicles and equipment that emit DPM, which has been identified by the ARB as a TAC. The Valley Air District's latest threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed

individual of 20 in one million persons. Major sources of DPM include off-road construction equipment and heavy-duty delivery truck and worker activities. For purposes of this analysis, DPM is represented as exhaust emissions of PM_{10}.

Construction DPM emissions (PM_{10} exhaust) were estimated using CalEEMod, Version 2016.3.2, as presented under Impact AIR-2. On-site and off-site PM_{10} exhaust emissions utilized in the air dispersion modeling for this analysis are provided in Table 3.3-15. As presented in Table 3.3-6, the proposed project's construction is anticipated to occur from April 2022 through March 2025. Construction emissions were reasonably assumed to be distributed over the project site with a working schedule of 8 hours per day, 7 days per week. If all construction phases were to occur concurrently, construction emissions would consist of the combined emissions disclosed here; however, the exposure duration would be shorter than what was analyzed. Table 3.3-15 summarizes the mitigated emission rates of DPM during the construction of the proposed project, incorporating dust control measures required by District Rule 8021 and implementation of MM AIR-1a and MM AIR-1b. As illustrated in Table 3.3-16, unmitigated project construction would cancer risks experienced by nearby residents which exceed the Valley Air District's significance threshold of 20 cancer cases per 1 million people. As such, mitigation would be necessary to reduce impacts to nearby residents to less than significant levels.

Table 3.3-15: Unmitigated and Mitigated Construction DPM Emissions by Phase

Construction Scenario	On-Site DPM (as PM_{10} Exhaust)	Off-Site DPM[1] (as PM_{10} Exhaust)
Phase 1 (Tracy Alliance Parcels)		
Unmitigated Construction[2]	3.882E-02	4.830E-05
Mitigated Construction[2]	4.030E-03	4.830E-05
Phase 2 (Suvik Farms Parcels)		
Unmitigated Construction[2]	1.321E-02	1.995E-05
Mitigated Construction[2]	1.954E-04	1.995E-05
Phase 3 (Zuriakat Parcel)		
Unmitigated Construction[2]	2.299E-03	2.139E-06
Mitigated Construction[2]	4.986E-05	2.139E-06

Notes:
DPM = diesel particulate matter
PM_{10} = particulate matter with aerodynamic diameter less than 2.5 microns
[1] The off-site emissions were estimated over construction vehicle travel routes within two kilometers of the project site, or approximately 6,562 feet; see Appendix B for calculations.
[2] In scientific notation, the letter E is used to mean "10 to the power of."
Source: Appendix B; CalEEMod Output Files.

To assess impacts to off-site sensitive receptors, receptor locations within the American Meteorological Society/EPA Regulatory Model (AERMOD) model were placed at locations of existing

residences and the nearby school, all of which are located within a 2-kilometer radius of the project site boundary.

The Valley Air District has developed a set of guidelines for estimating cancer risks utilizing the Hot Spots Analysis and Reporting Program (HARP2), Version 19044, risk assessment stand-alone tool. Table 3.3-16 provides the estimated health and hazard impacts from unmitigated construction emissions at the MIRs for each construction phase and sensitive receptor age group using HARP2. The MIRs for Phase 1 construction were a single-family residence located approximately 1,025 feet east of the project site and Banta Elementary School approximately 2,495 feet east of the project site. The MIRs for Phase 2 construction were a single-family residence located approximately 35 feet east of the project site and Banta Elementary School approximately 1,500 feet east of the project site. The MIRs for Phase 3 construction were a single-family residence located approximately 550 feet southeast of the project site and Banta Elementary School approximately 2,150 feet southeast of the project site. As shown in Table 3.3-16, unmitigated construction emissions with sequential phasing would exceed the Valley Air District's cancer risk health threshold.

Table 3.3-16: Estimated Health Risks and Hazards—Unmitigated Construction (Sequential Phasing)

Risk Scenario	Annual Average PM_{10} Exhaust Concentration ($\mu g/m^3$)	Cancer Risk (Risk Per One Million)	Chronic Non-Cancer Hazard Index[1]
Phase 1 (Tracy Alliance Parcels)			
Residential MIR	5.775E-02	10.27	0.01
School MIR	2.239E-02	0.87	< 0.01
Phase 2 (Suvik Farms Parcels)			
Residential MIR	1.811E-01	32.20	0.04
School MIR	1.637E-02	0.64	< 0.01
Phase 3 (Zuriakat Parcel)			
Residential MIR	1.303E-02	2.32	< 0.01
School MIR	4.110E-03	0.16	< 0.01
	Total Residential Risk	**44.79**	**0.05**
	Total School Risk	**1.67**	**< 0.01**
	Valley Air District Thresholds	**20**	**1**
	Project Construction Exceeds Thresholds?	**Yes**	**No**

Notes:
$\mu g/m^3$ = micrograms per cubic meter
MIR = Maximally Impacted Sensitive Receptor
[1] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM_{10} exhaust) by the reference exposure level of 5 $\mu g/m^3$.
Source: California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. February. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

The estimates shown in Table 3.3-17 include the application of measures required by District Rule 8021 and implementation of MMs AIR-1a and AIR-1b. As shown therein, the proposed project's construction DPM emissions would not exceed the Valley Air District's cancer risk or chronic non-cancer hazard index thresholds of significance at the maximum impacted receptor for any of the sensitive receptor age groups analyzed assuming that phases are constructed sequentially.

Nonetheless, the potential exists for all three project phases to be constructed concurrently, which would substantially increase the daily quantity of DPM emissions generated during project construction. As a result, the health risk impacts associated with project construction where phasing would be concurrent has the potential to generate DPM emissions resulting in cancer risks to nearby residents that exceed the Valley Air District's significance threshold of 20 cases per 1 million people even after incorporation of mitigation. As such, this impact would be significant and unavoidable after mitigation.

Table 3.3-17: Estimated Health Risks and Hazards—Mitigated Construction (Sequential Phasing)

Risk Scenario	Annual Average PM_{10} Exhaust Concentration ($\mu g/m^3$)	Cancer Risk (Risk Per One Million)	Chronic Non-Cancer Hazard Index[1]
Phase 1 (Tracy Alliance Parcels)			
Residential MIR	6.100E-03	1.08	<0.01
School MIR	2.460E-03	0.10	<0.01
Phase 2 (Suvik Farms Parcels)			
Residential MIR	2.700E-03	0.48	<0.01
School MIR	3.000E-04	0.01	<0.01
Phase 3 (Zuriakat Parcel)			
Residential MIR	2.900E-04	0.05	<0.01
School MIR	9.000E-05	<0.01	<0.01
	Total Residential Risk	**1.62**	**0.05**
	Total School Risk	**0.11**	**<0.01**
	Valley Air District Thresholds	**20**	**1**
	Project Construction Exceeds Thresholds?	**No**	**No**

Notes:
$\mu g/m^3$ = micrograms per cubic meter
MIR = Maximally Impacted Sensitive Receptor
[1] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM_{10} exhaust) by the reference exposure level of 5 $\mu g/m^3$.
Source: California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. February. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

Operation

Operation: Reactive Organic Gas

During operation, ROG would be emitted primarily from consumer products and motor vehicles. MM AIR-1c would require that the proposed project use zero-VOC consumer products during operation. While the full implementation of MM AIR-1c cannot be guaranteed, ROG emissions generated by the use of consumer products would be limited to the immediate area in which they are used on-site and would only occur during activities that use those products, such as facility cleaning activities. Therefore, nearby sensitive receptors would not be exposed to substantial ROG concentrations during project operations.

Direct exposure to ROG from motor vehicles would not result in health effects because the ROG emissions would be distributed across several miles of roadway and in the air. Therefore, the concentrations would not be great enough to result in direct health effects.

Operation: PM_{10}, $PM_{2.5}$, CO, and NO_X

As discussed in Impact AIR-2, after incorporation of identified mitigation, emissions of ROG and NO_X generated during project operation could exceed the Valley Air District annual thresholds of significance and maximum daily NO_X emissions could exceed the Valley Air District AAQA screening threshold. Therefore, emissions during operation of the proposed project could result in emission concentrations that exceed ambient standards, contribute substantially to an existing exceedance of an ambient air quality standard, or expose sensitive receptors to substantial pollutant concentrations.

Operation: Toxic Air Contaminants

Operation of the proposed project would involve the operation of heavy-duty, diesel-fueled vehicles that emit DPM, which has been identified by the ARB as a TAC. The Valley Air District's latest threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in one million persons. Major sources of DPM during project operation include heavy-duty truck activities and worker vehicle trips. For purposes of this analysis, DPM is represented as exhaust emissions of PM_{10}.

Operational DPM emissions (PM_{10} exhaust) were estimated using CalEEMod, Version 2016.3.2, as described under Impact AIR-2. Operational emissions were assumed to be distributed over the project site with a working schedule of 24 hours per day, 7 days per week. Table 3.3-18 summarizes the mitigated emission rates of DPM during operation of the proposed project, incorporating measures required by District Rule 8021 and implementation of MM AIR-1c and MM AIR-1d.

Table 3.3-18: Mitigated Operational DPM Emissions (Phase 1 Only)

Construction Emissions	PM_{10} Exhaust (tons/year)
Mitigated Project Phase 1	
On-site[1]	1.412E-03
Off-site[2]	1.437E-04

Construction Emissions	PM_{10} Exhaust (tons/year)

Notes:

[1] Because of the off-model reductions applied to Phase 1 Mitigated Operational Emissions to demonstrate compliance with Mitigation Measure AIR-1d, which would require that all heavy-duty trucks utilized during operation of Phase I of the project meet the 2013 Optional Low-NO_x Standard of 0.02 gram of NO_x per brake horsepower-hour. This would represent a 90 percent reduction in NOx emissions from the current heavy-duty truck NOx standard of 0.2 gram of NOx per brake horsepower-hour. Because of the lack of available information related to reductions in the other criteria pollutants resulting from the application of Mitigation Measure AIR-1d, the mitigated PM_{10} exhaust emission estimates for operation of Phase I of the project do not reflect actual reductions to NO_x that would result from Mitigation Measure AIR-1d.

[2] The off-site emissions are adjusted to include only off-site emissions occurring along the local roadway network within a 2-kilometer radius of the project site.

Source: CalEEMod Output and Construction Health Risk Assessment Calculations; see Appendix B.

To assess impacts to off-site sensitive receptors, receptor locations within the AERMOD model were placed at locations of existing residences and the nearby school, all of which are located within a 2-kilometer radius of the project boundary. The MIRs for Phase 1 operation were a single-family residence located approximately 75 feet north of the project site, Banta Elementary School approximately 2,495 feet east of the project site, and on-site workers.

The Valley Air District has developed a set of guidelines for estimating cancer risks utilizing the Hot Spots Analysis and Reporting Program (HARP2), Version 19044, risk assessment stand-alone tool. Table 3.3-19 provides the estimated health and hazard impacts from operational emissions at the MIRs using HARP2.

Table 3.3-19: Estimated Health Risks and Hazards—Phase 1 Operation

Risk Scenario	Annual Average PM_{10} Exhaust Concentration ($\mu g/m^3$)	Cancer Risk (Risk Per One Million)	Chronic Non-Cancer Hazard Index[1]
Phase 1 (Tracy Alliance Parcels)			
Residential MIR	1.251E-02	13.13	< 0.01
School MIR	4.390E-03	1.13	< 0.01
Worker MIR	2.949E-02	2.92	0.01
Valley Air District Thresholds		**20**	**1**
Project Construction Exceeds Thresholds?		**No**	**No**

Risk Scenario	Annual Average PM_{10} Exhaust Concentration ($\mu g/m^3$)	Cancer Risk (Risk Per One Million)	Chronic Non-Cancer Hazard Index[1]

Notes:
$\mu g/m^3$ = micrograms per cubic meter
MIR = Maximally Impacted Sensitive Receptor
[1] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM_{10} exhaust) by the reference exposure level of 5 $\mu g/m^3$.
[2] Concentrations are taken from the air dispersion modeling results (Appendix B) and risk summary values are taken from HARP2 cancer risk calculation results (Appendix B).
[3] MM AIR-1c applies only to the generation of ROG and would not affect the generation of PM_{10} exhaust emissions.
[4] Phase 1 Mitigated Operational Emissions would be required to comply with Mitigation Measure AIR-1d, which would require that all heavy-duty trucks utilized during operation of Phase I of the project meet the 2013 Optional Low-NO_x Standard of 0.02 gram of NO_x per brake horsepower-hour. This would represent a 90 percent reduction in NO_x emissions from the current heavy-duty truck NO_x standard of 0.2 gram of NO_x per brake horsepower-hour. Because of the lack of available information related to reductions in the other criteria pollutants resulting from the application of Mitigation Measure AIR-1d, the mitigated PM_{10} exhaust emission estimates for operation of Phase I of the project do not reflect actual emission reductions that would result from Mitigation Measure AIR-1d.
Source: California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. February. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

As shown above in Table 3.3-19, the proposed project's operational DPM emissions during Phase I would not exceed the Valley Air District's cancer risk or chronic non-cancer hazard index thresholds of significance at the maximum impacted receptor for any of the sensitive receptors analyzed. As displayed in Chapter 2, Project Description, Table 2-2, Proposed Development Summary, Phase I of the proposed project would involve the development of approximately 1,849,500 square feet out of a total approximately 3,352,320 square feet across all three project phases, representing approximately 46 percent of the total proposed building space. In addition, as displayed in Table 3.3-10, Phase 1 of the proposed project would generate an estimated 2,611 daily vehicle trips out of the total 4,715 daily trips across all three project phases, representing approximately 55 percent of the total proposed operational vehicle activity. Moreover, the potential emission reductions to DPM from the application of MM AIR-1d, which would require the operation of a clean truck fleet during operation of all phases of the proposed project, was not represented in the cancer risk values during Phase I operation in Table 3.3-19. Because of a lack in operational information for Phases 2 and 3 of the proposed project, such as freight product origin, local truck circulation, or other details necessary to preform a site-specific health risk assessment, Phase 1 of the proposed project was the only project phase modeled for health risk and chronic non-cancer hazard impacts. As Phase 1 represents approximately 55 percent of the potential operational trucking impact, although operation of Phase 1 (Tracy Alliance) would not result in a significant impact in this regard, operation at full buildout of the proposed project could have a potentially significant health impact on nearby sensitive receptors, particularly the residential MIRs.

The implementation of MM AIR-1d would contribute to the minimization of DPM emissions generated from trucking emissions; however, full implementation of MM AIR-1d cannot be guaranteed. As a result, this impact would be significant and unavoidable after the incorporation of mitigation.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

MM AIR-1d.

Level of Significance After Mitigation

Significant and Unavoidable Impact

Valley Fever

Valley Fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis (C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley Fever. By geographic region, hospitalizations for Valley Fever in the San Joaquin Valley increased from 230 (6.9 per 100,000 population) in 2000 to 701 (17.7 per 100,000 population) in 2007. Within the region, Kern County reported the highest hospitalization rates, increasing from 121 (18.2 per 100,000 population) in 2000 to 285 (34.9 per 100,000 population) in 2007, and peaking in 2005 at 353 hospitalizations (45.8 per 100,000 population). The Centers for Disease Control and Prevention indicates that 752 of the 8,657 persons (8.7 percent) hospitalized in California between 2000 and 2007 for Valley Fever died.[19]

The distribution of *C. immitis* within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when feasible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis*:[20]

1. Rodent burrows (often a favorable site for *C. immitis*, perhaps because temperatures are more moderate and humidity higher than on the ground surface).
2. Prehistoric Indian campsites near fire pits.
3. Areas with sparse vegetation and alkaline soils.
4. Areas with high salinity soils.
5. Areas adjacent to arroyos (where residual moisture may be available).

[19] The Centers for Disease Control and Prevent (CDC). 2009. Increase in Coccidioidomycosis – California, 2000-2007. February 13. Website: https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5805a1.htm#:~:text=In%20California%2C%20coccidioidomycosis%20cases%20requiring,in%202007%20(Figure%201). Accessed February 18, 2021.

[20] United States Geological Survey (USGS). 2000. Operational Guidelines (Version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever). Website: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.486.1526&rep=rep1&type=pdf. Accessed March 1, 2021.

6. Packrat middens.
7. Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils.
8. Sandy well aerated soil with relatively high-water holding capacities.

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

1. Cultivated fields
2. Heavily vegetated areas (e.g., grassy lawns)
3. Higher elevations (above 7,000 feet)
4. Areas where commercial fertilizers (e.g., ammonium sulfate) have been applied
5. Areas that are continually wet
6. Paved (asphalt or concrete) or oiled areas
7. Soils containing abundant microorganisms
8. Heavily urbanized areas where there is little undisturbed virgin soil

The project site is relatively undeveloped and is surround by undeveloped, agricultural, industrial, and residential land uses which are semi-rural to urban in character. Because the majority of the project site and the immediately surrounding vicinity consists of urbanized development or cultivated fields, the project site is an area that would lead to a low probability of having *C. immitis* growth sites and exposure from disturbed soil.

Construction activities would generate fugitive dust that could contain *C. immitis* spores. The proposed project would be required to minimize the generation of fugitive dust during construction activities by complying with District Rule 8021. Therefore, this regulation would ensure that Valley Fever impacts during construction are less than significant.

During operations, dust emissions are anticipated to be negligible, because the site for each project phase would be occupied by buildings, pavement, and landscaped areas after construction is complete for that project phase. Therefore, project operations would not occur on undeveloped sites and dust emissions typically associated with activity on unpaved surfaces would be negligible. This condition would preclude the possibility of the proposed project from generating significant fugitive dust that may contribute to Valley Fever exposure. Impacts would be less than significant.

Asbestos and Lead-Based Paint Exposure

According to a map of areas where naturally occurring asbestos in California are likely to occur, there are no such areas in the project area.[21] Therefore, development of the proposed project is not anticipated to expose receptors to naturally occurring asbestos. Moreover, the proposed project would include the demolition of two single-family homes and various agricultural buildings on-site. As a result, the demolition of the existing structures could potentially expose workers and nearby receptors to asbestos-containing material, such as insulation, or lead-based paint. Nonetheless, the proposed project would be subject to California Code of Regulations, Section 66261.24; Title 8,

[21] United States Geological Survey (USGS). 2011. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Website: https://pubs.usgs.gov/of/2011/1188/. Accessed February 18, 2021.

California Code of Regulations, Section 1532.1; and Title 40, Code of Federal Regulations, Part 745, which are intended to limit hazardous material emissions, including asbestos and lead, from demolition or renovation of structures and the associated disturbance of waste material generated or handled during these activities. The rule addresses the national emissions standards for asbestos and lead along with some additional requirements. Therefore, projects that comply with these regulations would ensure that hazardous demolition materials, such as asbestos or lead-based paint, would be removed and disposed of appropriately and safely. By complying with these existing regulations, thereby minimizing the potential release of airborne asbestos or lead emissions, proposed demolition activity would not result in a significant impact to air quality. This impact would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact

Mitigation Measures

None

Objectionable Odors Exposure

Impact AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. Impacts to new receptors is generally outside the scope of CEQA review but is included in this analysis for informational purposes only. The Valley Air District has determined the common land use types that are known to produce odors in the Air Basin and their associated screening distances when determining potentially significant odor impacts. These types and screening distances are shown in Table 3.3-20.

Table 3.3-20: Screening Levels for Potential Odor Sources

Odor Generator	Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile

Odor Generator	Distance
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Final Draft Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: http://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF/ Accessed February 16, 2021.	

According to the Valley Air District GAMAQI, analysis of potential odor impacts should be conducted for the following two situations:

- **Generators:** projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate, and
- **Receivers:** residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources.

Project Analysis

Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, feed lots, coffee roasters, asphalt batch plants, and rendering plants. The proposed project would not involve any of these or similar activities. Therefore, the proposed project would not be considered to have the potential to expose nearby persons to substantial sources of objectionable odors.

During construction, the various diesel-powered vehicles and equipment in use on-site would create localized odors. The proposed project would develop approximately 191 acres, which would require the operation of construction equipment and vehicles throughout the project site. However, as the proposed buildings would be located within the interior of the project site and set back from the project boundaries and surrounding land uses, the operation of construction equipment and vehicles would predominantly occur in the interior of the project site and not along the project boundaries. As such, these odors would be temporary and would not likely be noticeable for extended periods of time beyond the project's site boundaries. The potential for diesel odor impacts is therefore less than significant.

As an industrial development project, the proposed project would not constitute the development of residences, schools, hospitals, or other sensitive receptors and therefore does not have the potential to place sensitive receptors near existing odor sources. Therefore, the proposed project would neither constitute a land use which would generate odors affecting a substantial amount of people nor place new receptors that could be affected by existing odor sources.

Level of Significance

Less Than Significant Impact

3.3.5 - Cumulative Impacts

The geographic scope considered for cumulative impacts to air quality is the Air Basin. In developing mass emission thresholds of significance for criteria pollutants and ozone precursors, the Valley Air District considers the emission levels for which a project's individual emissions would be cumulatively considerable. Therefore, if a project would exceed the identified construction or operational significance thresholds, its emissions would be cumulatively considerable.

The Air Basin is in nonattainment for ozone, PM_{10}, and $PM_{2.5}$, which means that the background levels of those pollutants are at times higher than the ambient air quality standards and a cumulative air quality impact currently exists for the region. Therefore, if a project exceeds the Valley Air District significance thresholds for ozone precursor emissions or emissions of $PM_{2.5}$ or PM_{10}, that project would be considered to contribute to an existing cumulative air quality impact. As discussed in Impact AIR-2, MMs AIR-1a and AIR-1b would reduce the proposed project's potentially significant air quality impacts related to ozone precursor emissions during construction; however, as discussed in Impact AIR-2, project construction emissions for ozone precursors would remain potentially significant after implementation of identified mitigation should all three project phases be constructed concurrently.. In addition, because the full implementation of MMs AIR-1c and AIR-1d cannot be guaranteed during project operation, the proposed project could result in potentially significant impact related to regional emissions significance threshold for ROGs and NO_X, both ozone precursor pollutants, during project operation. Moreover, because full implementation of MMs AIR-1c and AIR-1d cannot be guaranteed, the proposed project could result in a potentially significant localized violation during operation.

As discussed in Impact AIR-2, District Rule 8021 would be required, which would further ensure that air quality impacts related to fugitive particulate matter during construction activities are less than significant. Nonetheless, after incorporation of identified mitigation and implementation of the required rules and regulations, the proposed project could result in construction and operational emissions which are greater than the respective Valley Air District significance thresholds and could therefore have a cumulatively considerable contribution to a cumulative impact. The proposed project would therefore result in significant and unavoidable cumulative air quality impacts.

With regard to impacts on sensitive receptors, the DPM emissions from construction of the proposed project could result in significant health impacts if all three project phases are constructed concurrently. Therefore, the proposed project's impact could be cumulatively considerable. In addition, the operational DPM emissions during Phase 1 of the proposed project would not result in significant health impacts. However, Phase 1 of the proposed project would constitute approximately 55 percent of anticipated trucking activity across the whole project. Therefore, the combined operation of the proposed project could result in exposing nearby sensitive receptors to substantial amounts of pollutants. Nonetheless, the cumulative impact associated with construction and operation of the proposed project would be cumulatively considerable.

Odor impacts that would be associated with the proposed project would principally be temporary in nature and limited to the combustion of diesel fuels during construction and operation. The impact would be less than significant during project construction and operation would be intermittent and spatially dispersed. As such, associated odors would dissipate quickly. In addition, no adverse cumulative condition related to odors to which the proposed project could contribute currently exists. Given the proximity of cumulative projects to the proposed project and the expected duration of sensitive receptor exposure to project-related diesel exhaust, the proposed project in combination with other cumulative projects would not cause a significant cumulative effect. Therefore, cumulative odor impacts would be less than significant.

The proposed project would result in a cumulatively considerable contribution to significant cumulative air quality and health impacts with respect to consistency with the applicable AQP (Impact AIR-1), cumulative criteria pollutant emissions during both construction and operation (Impact AIR-2), and impacts to sensitive receptors during both construction and operation (Impact AIR-3).

Level of Cumulative Significance Before Mitigation

Potentially significant impact with respect to consistency with the applicable AQP (Impact AIR-1), cumulative criteria pollutant emissions during both construction and operation (Impact AIR-2), and impacts to sensitive receptors during both construction and operation (Impact AIR-3).

Less than significant with respect to odor impacts (Impact AIR-4).

Mitigation Measures

Implement MMs AIR-1a to AIR-1d and MM AIR-3

Level of Cumulative Significance After Mitigation

Significant and unavoidable impact with respect to consistency with the applicable AQP (Impact AIR-1), cumulative criteria pollutant emissions during both construction and operation (Impact AIR-2), and impacts to sensitive receptors during both construction and operation (Impact AIR-3).

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3.4 - Biological Resources

3.4.1 - Introduction

This section describes the existing biological resources conditions in the project site and vicinity,[1] as well as the relevant regulatory framework. This section also evaluates the potential impacts related to biological resources that could result from implementation of the proposed project and appropriate and feasible mitigation measures to reduce potential impacts to a less than significant level. Information in this section is based, in part, on-site reconnaissance surveys of the project site that included a Biological Resources Assessment (BRA). The BRA can be found in Appendix C.

The following comments were received during the Draft Environmental Impact Report (Draft EIR) scoping period related to Biological Resources:

- **Central Valley Regional Water Quality Control Board:** The commenter describes the various Regional Water Quality Control Board (RWQCB) regulations and policies that would need to be discussed in the Draft EIR and properly mitigated for. In addition, the commenter provides background information regarding the types of permits required for this project to comply with regulations meant to protect water quality.
- **San Joaquin Council of Governments:** The commenter states that the City of Tracy (City) is a signatory to San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) and that the project site would fall in the Planning Area. The commenter explains that participation in the SJMSCP satisfies requirements of both the State and federal Endangered Species Acts and ensures that the impacts are mitigated below a level of significance in compliance with the California Environmental Quality Act (CEQA). The commenter recommends that the co-applicants schedule an SJMSCP Biologist to perform a pre-construction survey prior to any ground disturbance. The commenter also explains that the proposed project would need to implement SJMSCP Incidental Take Minimization Measures (ITMMs) and mitigation requirements.

3.4.2 - Methods

Records Searches and Pedestrian Survey to Identify Existing Biological Resources

Literature Review

The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the project site, as well as in the surrounding study area.

FirstCarbon Solutions (FCS) Biologists examined existing environmental documentation for the project site and immediate vicinity, an approximately 500-foot buffer where applicable. This documentation included the BRA noted above; relevant biological studies for the project site and its immediate vicinity; relevant literature pertaining to the habitat requirements of special-status species potentially occurring within of the project site; and federal and State register listings, protocols, and species data

[1] Off-site frontage improvements are limited in nature and are located within Rights of Way. Off-site traffic improvements have been contemplated as part of City's Traffic Management Plan and the associated environmental document.

provided by the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW).

Elevation and Drainage

FCS Biologists reviewed current United States Geological Survey (USGS) 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary step in the analysis of the existing conditions within the project site and immediate vicinity. Information obtained from the review of the topographic maps included elevation range, general watershed information, and potential drainage feature locations.[2] Aerial photographs provide a perspective of the most current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

Soil

FCS Biologists also reviewed United States Department of Agriculture (USDA) soil surveys to establish if soil conditions in the project site are suitable for any special-status plant species.[3] These soil profiles include soil series with similar thickness, arrangement, and other important characteristics. The soil series consist of separate soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to establish if soil conditions are suitable for any special-status plant species.

Special-status Wildlife and Plant Species

FCS Biologists compiled a list of threatened, endangered, and otherwise special-status species previously recorded on the project site and within the general project site vicinity. The list was based on a search of the CDFW California Natural Diversity Database (CNDDB),[4] a special-status species and plant community account database, and the California Native Plant Society (CNPS) Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California database[5] for the *Tracy, California* USGS 7.5-minute Topographic Quadrangle Map. The database search results can be found in Appendix C. The CNDDB Biogeographic Information and Observation System (BIOS) database[6] was used to determine the distance between known recorded occurrences of special-status species and the project site.

Trees

The City of Tracy Municipal Code, Chapter 7.08 pertains to the alteration or removal of street trees, which are not present on the project site. The City does not have an adopted Tree Protection Ordinance relating to alteration or removal of trees on private property.

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[2] United States Geological Survey (USGS). 2020 USGS Maps. Website: https://www.usgs.gov/products/maps/map-topics/overview. Accessed April 24, 2020.

[3] United States Department of Agriculture (USDA). No date. Web Soil Survey: 2020 Soil Survey. Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed April 22, 2020.

[4] California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Database (CNDDB). Website: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed April 22, 2020.

[5] California Native Plant Society (CNPS). 2020. Rare and Endangered Plant Inventory. Website: http://rareplants.cnps.org/. Accessed April 22, 2020.

[6] California Department of Fish and Wildlife (CDFW). 2020. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/.

Jurisdictional Waters and Wetlands

FCS Biologists reviewed USGS topographic maps and aerial photography to identify any potential natural drainage features and water bodies. In general, all surface drainage features identified as blue-line streams on USGS maps and linear patches of vegetation are expected to exhibit evidence of flows and considered potentially subject to State and federal regulatory authority as "waters of the United States and/or State." A preliminary assessment was conducted to determine the location of any existing drainages and limits of project-related grading activities, to aid in determining whether a formal delineation of waters of the United States or State is necessary.

Field Survey

The reconnaissance-level field survey was conducted by FCS Biologists, Bernhard Warzecha and Robert Carroll, on April 7, 2020, from 11:45 a.m. to 2:45 p.m. Weather conditions during the field survey were partly cloudy with a high temperature of 65°F (degrees Fahrenheit).

The objective of the survey was to ascertain existing site conditions and identify potentially suitable habitat areas for various special-status plant and wildlife species. Special-status or unusual biological resources identified during the literature review were ground-truthed during the reconnaissance-level survey. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

3.4.3 - Environmental Setting

Physical Habitat/Vegetation

Habitat is an area consisting of a combination of resources (e.g., food, cover, water) and environmental conditions (e.g., temperature, precipitation, and presence or absence of predators and competitors) that promotes occupancy by individuals of a species and enables those individuals to survive and reproduce. Thus, habitat arises from interaction among soils, hydrology, climate, vegetation, and others. Soils, hydrology, and climate are addressed in other sections of this Draft EIR; this habitat discussion includes information regarding vegetation.

City of Tracy

The City of Tracy General Plan Planning Area currently contains a range of vegetation and habitat types including urban, agricultural, riparian woodlands, seasonal wetlands, farmed wetlands, and non-native grasslands. These vegetation areas and habitats, which are described below, host a wide range of wildlife and plant species that reflect the diversity in San Joaquin County and the Central Valley. [7] The Planning Area is included within the General Plan as a signal to the County and other nearby local and regional authorities that the City recognizes that planning and development within this area has an impact on the future of the City. Under State law, the City is invited to comment on development within the Planning Area that is subject to review by the County as the Lead Agency. The Planning Area contains approximately 114 square miles and is 92 square miles larger than the city limits and 72 square miles larger than the proposed Sphere of Influence (SOI).[8] Figure 1-2 of the

[7] Design, Community, and Environment. 2011. City of Tracy General Plan (prepared for the City of Tracy). Website: https://www.ci.tracy.ca.us/documents/2011_General_Plan.pdf. Accessed: January 18, 2021.
[8] Ibid.

City's General Plan delineates the city limits, Planning Area, and SOI. The project site is located within the City's SOI, but not within the City municipal boundaries.

Agricultural

Much of the land outside of the Tracy city limits is used for agricultural production. This area includes land that is currently in agricultural use and lands that have been used for agricultural uses in the past and remain non-urbanized.

Urban

The Urban land use type applies to the built-up portions of Tracy. Much of the land in the city limits and portion of the lands in the City's SOI are considered Urban.

Non-native Grasslands

The majority of non-native grasslands within Tracy and its SOI in the General Plan Planning Area occur within the southern portion of the City.

Riparian Woodland

The Great Valley Riparian Woodland communities lie in the northern portion of the City and its SOI, along the Old River and Tom Paine Slough riparian zones, and in the southern portion of the City and its SOI, along the Corral Hollow system, which flows northeast.

Seasonal Wetlands

There are numerous seasonal wetlands throughout the City and its SOI.

Farmed Wetlands

Wetland areas that are currently in agricultural uses are defined as farmed wetlands. This type of area occurs in the northern portion of the City and its SOI.

Project Site

The project site is almost entirely comprised of active agricultural fields consisting of alfalfa, almond tree orchards, and hay; associated agricultural and a few rural residential structures and irrigation/drainage channels are interspersed throughout the project site. Additionally, a ruderal/disturbed area is located within the southwestern corner of the project site along Grant Road Line which shows evidence of previous development. A comprehensive list of plant species observed during the April 2020 site visit can be found in Appendix C.

Agricultural

Based on preliminary mapping, the project site potentially includes approximately 188 acres of active agricultural fields. Alfalfa fields are located in the northern portion of the site, pecan (*Carya illinoinensis)* tree orchard is located in the eastern portion, a hay field is located in the southwestern portion, and irrigation/drainage channels spread throughout the agricultural fields along private dirt roads. The fields are routinely managed–including the applications of pesticides, herbicides, irrigation, and seasonal harvests–and disced regularly. Plant species observed within areas not subject to active agriculture (e.g., narrow strips along field borders and access roads) are dominated by common ruderal species and non-native annual grasses, including field bindweed (*Convolvulus*

arvensis), shortpod mustard (*Hirschfeldia incana*) black mustard (*Brassica nigra)*, soft chess (Bromus hordeaceous), ripgut brome (*Bromus diandrus*), seaside barley (*Hordeum marinum* ssp. *gussaneonum)*, wall barley (*Hordeum murinum)*, and others.

Ruderal/Disturbed

This small area of the project site consists of approximately 0.63 acre along Grant Line Road. Species observed in this area include ryegrass (Festuca perennis), Bermuda grass (Cynodon dactylon), and other non-native and ruderal plants. Ruderal/Disturbed land is classified as areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association but continues to retain a soil substrate. Typically, vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance, or that shows signs of past or present animal usage that removes any capability of providing viable natural habitat for uses other than dispersal. Examples of Ruderal/Disturbed land include areas that have been graded, repeatedly cleared for fuel management purposes and/or experienced repeated use that prevents natural revegetation (i.e., dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and others.

Urban/Developed

This small area of the project site consists of approximately 4 acres at the intersection of Grant Line Road and Paradise Road. This area contains a combination of equipment storage sheds, active barns, parking, and a few rural residential structures. Urban/Developed land is classified as areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported and retains no soil substrate. Urban/Developed land is characterized by permanent or semi-permanent structures, pavement, or hardscape, and landscaped areas that often require irrigation. Areas where no natural land is evident because a large amount of debris or other materials have been placed upon it may also be considered Urban/Developed (e.g., car recycling plant, quarry).

Cattail Marsh

One occurrence of approximately 0.07 acre of cattail (*Typha* spp.) marsh was observed in the channel along California Ave, on the northern boundary of the project site, within the Zuriakat parcel. The majority of the cattails consist of broadleaf cattails (*Typha latifolia*). Most plants were senescent during the time of the survey; however, some live plants were also observed. This vegetation type is classified as a California Natural Community by the CDFW (Type 52.050.04–Typha [*latifolia, angustifolia])*.

Sensitive Biological Communities

Biological communities are assemblages of organisms that live within or use a variety of habitats for their range-of-life functions. Of the habitat communities discussed above, some are further identified as sensitive biological communities. For the purpose of this Draft EIR, sensitive biological communities are defined as habitats that fulfill special functions or have special values (e.g., greater biological diversity), such as wetlands, streams, and riparian habitat. Because wildlife is a major

aspect of a biological community, this discussion of sensitive biological communities describes wildlife present in such communities.

Sensitive Biological Communities on the Project Site

A small portion of the project site contains approximately 0.07 acre of cattail marsh in the channel along California Avenue, on the northern boundary of the project site, within the Zuriakat parcel. The majority of the cattails consisted of broadleaf cattails. This vegetation type is classified as a California Natural Community by the CDFW (Type 52.050.04–Typha [*latifolia, angustifolia]*). This natural community is discussed in further detail in Impact BIO-3 below.

Wetlands and Waters of the United States and the State

Wetlands and waters of the United States and waters of the State are protected as aquatic resources that provide habitat for common and special-status species. Types of aquatic resource features include open water, developed open water, tidal marsh, seasonal wetland, wetlands swale, streams, creeks, and other waters.

City of Tracy

Wetlands, waters of the United States, and waters of the State in the City primarily occur in northern portion of the City along the Old River and Tom Paine Slough riparian zones, and in the southern portion of the City along the Corral Hollow system, which flows northeast. Additionally, there are numerous seasonal wetlands scattered through the City.[9]

Project Site

There are several irrigation/drainage channels throughout the project site, which appear to have a potential hydrological connection to the San Joaquin River, a traditional navigable water of the United States. The man-made channels on the project site have all been excavated within upland habitat for the purpose of on-site agricultural irrigation and drainage.

A small portion of the project site contains an approximately 0.07-acre cattail marsh in the channel along California Avenue, on the northern boundary of the project site, within the Zuriakat parcel. These features are discussed in further detail in Impact BIO-3 below.

Common Species

The vegetation community and land cover types discussed above provide habitat for numerous local wildlife species. The agricultural fields, including the almond orchard is likely to provide cover and foraging opportunities for urban-adapted mammals such as raccoon (*Procyon lotor)* and Virginia opossum (*Didelphis virginiana)*. California ground squirrel (*Otospermophilus beecheyi)* was observed only at the area of the project residential site where rural residential uses are located. No California ground squirrel or ground squirrel burrows were observed on or near the agricultural fields, orchard, or channel. One jack rabbit (*Lepus californicus*) was observed on the project site. While not

[9] Design, Community, and Environment. 2011. City of Tracy General Plan (prepared for the City of Tracy), pages, 6-3-6-5. Website: https://www.ci.tracy.ca.us/socuments/2011_General_Plan.pdf.Accessed: January 18, 2021.

physically observed during the field survey, FCS Biologists found numerous raccoon and great egret (*Ardea alba)* tracks throughout the project site.

Because of a lack of suitable habitat, it is unlikely that most amphibians and reptiles would regularly occur on the project site. Potential species occurring on the project site include western fence lizard (*Sceloporus occidentalis*), terrestrial garter snake (*Thamnophis elegans*), gopher snake (*Pituophis melanoleucus*), and Northern Pacific tree frog (*Pseudacris regilla)*. Northern Pacific tree frog was the only amphibian observed on the project site; no other amphibians or reptiles were observed during the field survey.

Ornamental trees within the Urban/Developed portion of the project site and within the greater project site vicinity (approximately 500 feet) also provide suitable habitat for nesting avian species. A comprehensive list of wildlife species observed during the April 2020 site visit can be found in Appendix C.

Special-status Species

Special-status species, whether plants, wildlife, or fish, are considered sufficiently rare that they require special consideration and/or protection and have been or should be listed as rare, threatened, or endangered by the federal and/or State governments. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under the California Endangered Species Act (CESA) or the federal Endangered Species Act.
- Protected under other regulations (e.g., Migratory Bird Treaty Act [MBTA]).
- CDFW Species of Special Concern.
- Plant species ranked by the CNPS; or
- Otherwise entitled to receive consideration during environmental review under CEQA pursuant to applicable laws and regulations.

The following discussion focuses on potential for occurrence of special-status species in the project site.

Special-status Plant Species Evaluated

Special-status plants and plant communities are considered sensitive biological resources when federal, State, or local laws regulate their development, limited distributions, and habitat requirements of special-status plant or wildlife species that occur within them.

The Special-status Plant Species Table (Appendix C, Table 1) identifies six special-status plant species and CNPS sensitive species that have been recorded to occur within the *Tracy*, *California* USGS 7.5-minute Topographic Quadrangle Map as recorded by the CNDDB and CNPSEI.[10,11] The table also

[10] California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Database (CNDDB). Website: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed April 24, 2020.

[11] California Native Plant Society (CNPS). 2020. Rare and Endangered Plant Inventory. Website: http://rareplants.cnps.org/. Accessed April 24, 2020.

includes the species' status, required habitat, and potential to occur within the project site. All special-status plant species have been determined unlikely to occur on the project site, based on the absence of suitable habitat, lack of observations during FCS's field survey, and past and ongoing disturbance through agricultural activity.

Special-status Wildlife Species Evaluated

The Special-status Wildlife Species Table (Appendix C, Table 2) identifies seven federal and State listed threatened and/or endangered wildlife species, and 15 other special-status species that have been recorded in the CNDDB as occurring within the *Tracy*, *California* USGS 7.5-minute Topographic Quadrangle Map (Exhibit 3.4-2).[12] The table also includes species' status, required habitat, and potential to occur within the project site. Fourteen special-status wildlife species have been determined unlikely to occur on the project site, primarily based on the absence of suitable habitat and past and ongoing disturbance through agricultural activity.

Eight special-status wildlife species have at least some potential to occur on the project site and are therefore discussed in further detail below.

Mammals

San Joaquin Kit Fox

San Joaquin kit fox (*Vulpes macrotis mutica)* is listed under the Endangered Species Act as endangered and is listed under CESA as threatened. This species is also covered under the SJMSCP. This species is found in annual grasslands with scattered shrub vegetation and needs loose textured sandy soils for burrowing. The project site generally lacks suitable habitat for this species. San Joaquin kit fox has been sporadically reported from southern areas of Tracy, less than 4 miles from the project site.[13] While San Joaquin kit fox is unlikely to occur on the project site and no dens or other signs of San Joaquin kit fox were observed during the reconnaissance-level field survey, it cannot be ruled out that a stray or migrating San Joaquin kit fox may be found on the project site before or during construction.

Pallid Bat

Pallid bat (*Antrozous pallidus)* is a State Species of Special Concern. This species occurs commonly in low elevations throughout California and occupies a wide variety of habitats, including woodlands, grasslands, shrublands, and forests from sea level up to mixed conifer forests.[14] This species is most common in open, dry habitats with rocky areas, but may also be found in caves, crevices, hollow trees, and buildings for roosting. The project site generally lacks suitable habitat for this species and all recorded occurrences are over 5 miles from the project site. However, the barn and other structures located within the project site and trees within the immediate vicinity of the project site may provide marginal roosting habitat for this species.

Townsend's Big-Eared Bat

Townsend's big-eared bat (*Corynorhinus townsendii)* is a State Species of Special Concern and is covered under the SJMSCP. This species is found throughout California, but details regarding its

[12] California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Database (CNDDB). Website: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed April 24, 2020.

[13] Ibid.

[14] Ibid.

distribution are not well known. This species is found in all but alpine and sub-alpine habitats. It is most common in mesic habitats where it gleans from trees or feeds along habitat edges. This species requires caves, tunnels, buildings, or other anthropogenic structures for roosting.[15] The project site generally lacks suitable habitat for this species and all recorded occurrences are over 5 miles from the project site. However, the barn and other structures located within the project site may provide marginal roosting habitat for this species.

Western Mastiff Bat

Western mastiff bat (*Eumops perotis californicus)* is a State Species of Special Concern and is covered under the SJMSCP. This species occurs in a wide variety of habitats from desert scrub to chaparral and oak woodland. This species is primarily a crevice dwelling species and roosts are often found under large slabs of granite, sandstone, or in columnar basalt. This species also roosts within the cracks in buildings.[16] The project site generally lacks suitable habitat for this species and all recorded occurrences are over 5 miles from the project site. However, the barn and other structures located within the project site and trees within the immediate vicinity of the project site may provide marginal roosting habitat for this species.

Birds

Song Sparrow

Song sparrow (*Melospiza melodia; "*Modesto" population) is a State Species of Special Concern. This species occurs in emergent freshwater marshes dominated by cattails as well as riparian willow thickets. Species also nest in riparian forests of Valley Oak with a sufficient understory of blackberry along vegetated irrigation canals and levees. Marginal nesting habitat is present within the cattail marsh located in the northern portion of the project site, within the Zuriakat parcel.

Tricolored Blackbird

Tricolored blackbird (*Agelaius tricolor)* has been listed as a Threatened species under CESA and is covered under the SJMSCP. Nesting colonies of this species are addressed in the SJMSCP. Tricolored blackbird nests have typically been reported within extensive cattail marshes, willow canopies, or blackberry or thistle thickets. The species' basic requirements for selecting breeding sites are open accessible water; a protected nesting substrate, including either flooded or thorny or spiny vegetation; and a suitable foraging space providing adequate insect prey within a mile or two of the nesting colony. Emergent vegetation within the cattail marsh represents potential nesting habitat, albeit marginal. No tricolored blackbirds, nests, or signs of previous nesting activity in the cattail marsh within the Zuriakat parcel on the project site were observed. However, it cannot be ruled out that tricolored blackbird nesting may occur in the cattail marsh within the Zuriakat parcel.

Burrowing Owl

Burrowing owl (*Athene cunicularia)* is a California Species of Special Concern, and impacts including loss of habitat for this species is also covered under the SJMSCP. This is species is often found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. It is considered a subterranean nester that is dependent upon burrowing mammals,

[15] California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Database (CNDDB). Website: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed April 24, 2020.

[16] Elizabeth Pierson and William Rainey, Terrestrial Mammal Species of Special Concern in California, Bolster, B.C., Ed 1998.

most notably the California ground squirrel. During the field survey, two California ground squirrels were observed on the highly disturbed, developed and currently used residential area within the project site. No burrows or burrow complexes suitable for burrowing owl or signs of presence of burrowing owl were observed during the field survey; however, it cannot be ruled out that a burrowing owl may occupy the project site before or during construction.

Swainson's Hawk

Swainson's hawk (*Buteo swainsoni)* is listed as a Threatened species under CESA and is also covered under the SJMSCP. This species can be found in scattered trees, riparian areas, savannas, and scattered on lines of trees on agricultural lands. Swainson's hawk requires adjacent foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.

Suitable foraging habitat is present on the project site and suitable nesting habitat is present within the immediate vicinity of the project site. This species was observed during the field survey.

Migratory and Nesting Birds

Trees within the project site provide suitable nesting habitat for various avian species, including those protected under the MBTA. Some species protected under the MBTA that were observed during the field survey include Say's phoebe (*Sayornis saya*), mourning dove (*Zenaida macroura)*, and killdeer (*Charadrius vociferus)*.

Wildlife Movement Corridors

City of Tracy

Terrestrial habitat throughout the City and its SOI ranges from high to low quality and varies in accessibility and continuity for wildlife movement. Wetland and riparian habitats provide wildlife movement corridors for numerous fish and bird species. In addition, the Pacific Flyway (a major north–south flyway for migratory birds in America) encompasses the entire West Coast, and migrating bird species utilize the wetland and riparian habitats for foraging and nesting.

Project Site

FCS Biologists evaluated the project site for evidence of a wildlife movement corridor during the biological resources survey, and concluded that the project site is not part of or within a wildlife movement corridor. The project site is surrounded by industrial developments and is situated in a semi-urban landscape with high amounts of traffic from local industrial operations. Further, Interstate 205 (I-205) separates the project site from the closest wildlife corridor to the north, and I-5 and Business I-205 potentially preclude non-volant wildlife movement from the east and southeast.

Regulated Trees

The City of Tracy Municipal Code, Chapter 7.08, pertains to the alteration or removal of street trees, which are not present on the project site. The City does not have an adopted Tree Protection Ordinance relating to alteration or removal of trees on private property.

The site contains a pecan orchard and several ornamental trees, which were observed during the field survey.

3.4.4 - Regulatory Framework

Federal

Endangered Species Act

The USFWS has jurisdiction over species listed as threatened or endangered under the Endangered Species Act. Section 9 of the Endangered Species Act protects listed species from "take," which is broadly defined as actions taken to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." The Endangered Species Act protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process. Procedures for addressing impacts to federally listed species follow two principal pathways, both of which require consultation with the USFWS, which administers the Endangered Species Act for all terrestrial species. The first pathway is the Section 10(a) incidental take permit, which applies to situations where a non-federal government entity must resolve potential adverse impacts to species protected under the Endangered Species Act. The second pathway is Section 7 consultation, which applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval.

Migratory Bird Treaty Act

The MBTA implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit.

All migratory birds and their nests listed in the MBTA are protected from take or disturbance under the MBTA (16 United States Code [USC] § 703, *et seq*.).

Clean Water Act

The United States Army Corp of Engineers (USACE) and the United States Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (CWA). Waters of the United States include wetlands, lakes, and rivers, streams, and their tributaries. Wetlands that fall under the jurisdiction of the USACE (referred to as jurisdictional wetlands) are defined as areas "inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Areas not considered jurisdictional waters include, for example, non-tidal drainage and irrigation ditches excavated on dry land; artificially irrigated or created bodies such as small ponds, lakes or swimming pools; and waterfilled depressions (33 Code of Federal Regulations [CFR] 328.3; 40 CFR 230.3).

The applicants for development on any project parcel must obtain a permit from the USACE for all discharges of fill material into waters of the United States, including jurisdictional wetlands, before proceeding with a proposed action. If wetlands are jurisdictional and could be filled as part of the

proposed project, the USACE may issue either an individual permit or a general permit. Individual permits are prepared on a project-specific basis for projects that are expected to have adverse effects on the aquatic environment. General permits are pre-authorized permits issued to cover similar activities that are expected to cause only minimal individual and cumulative adverse environmental effects.

As stated in Section 401 of the CWA, "any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must obtain a Section 401 Water Quality Certification from the RWQCB.

State

California Endangered Species Act

The State of California enacted CESA in 1984. CESA pertains to State listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

California Department of Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California's rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under CESA. Fish and Game Code Section 2081 established an incidental take permit program for State listed species. The CDFW maintains a list of "candidate species," which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq*.) prohibits the taking, possessing, or sale within the State of any plants with a State designation of Rare, Threatened, or Endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify the CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from "take" prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way." Project impacts to these species

are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

The CDFW also maintains lists of "Species of Special Concern" that serve as species "watch lists." The CDFW has identified many Species of Special Concern. Species with this status have limited distribution or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the CNPS List ranked 1A, 1B, and 2 would typically require evaluation under CEQA.

Fish and Game Code Sections 3500 to 5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research, live capture, and relocation of such species pursuant to a permit for the protection of livestock.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State listed endangered or threatened species may be present in the project study area and determine whether the proposed project would have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Amending protections granted to non-game migratory birds in Fish and Game Code Sections 3513, the California Migratory Bird Protection Act makes unlawful the taking or possession of any migratory non-game bird designated in the federal MBTA before January 1, 2017, any additional migratory non-game bird that may be designated in the federal act after that date, or any part of those migratory non-game birds, except as provided by rules and regulations adopted by the United States Secretary of the Interior under the federal act before January 1, 2017, or subsequent rules or regulations adopted pursuant to the federal act, unless those rules or regulations are inconsistent with the Fish and Game Code.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State listed species are fully protected under the mandates of CESA. "Take" of protected

species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that "may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake" or "deposit debris, waste, or other materials that could pass into any river, stream, or lake." "River, stream, or lake" includes waters that are episodic and perennial, and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement would be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water.

California Department of Fish and Wildlife Species of Concern

In addition to formal listing under the Endangered Species Act and CESA, certain species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. It tracks species in California whose numbers, reproductive success, or habitat may be threatened. In addition to Species of Special Concern, the CDFW identifies animals that are tracked by the CNDDB, but warrant no federal interest and no legal protection. These species are identified as California Special Animals.

California Native Plant Society

The CNPS maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. The following identifies the definitions of the CNPS ranks:

- **Rank 1A**: Plants presumed extirpated in California and either rare or extinct elsewhere
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere
- **Rank 2A:** Plants presumed extirpated in California but common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more common elsewhere
- **Rank 3:** Plants about which more information is needed
- **Rank 4:** Watch List: Plants of limited distribution

All plants appearing on CNPS List 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA.

Porter-Cologne Water Quality Control Act

The RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the State" (Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. "Waters of the State" are defined as "any

surface water or groundwater, including saline waters, within the boundaries of the State" (Water Code § 13050(e)).

California Code of Regulations (Wetlands and Waters Definition)

In accordance with the Porter-Cologne Water Quality Control Act (Water Code, § 13000 *et seq*.), the California State Water Resources Control Board (State Water Board) and the RWQCB are authorized to regulate discharges of waste, which includes discharges of dredged or fill material that may affect the quality of waters of the State. As described below, waters of the State include some, but not all, features that are defined as wetlands, as well as other features, including the ocean, lakes, and rivers. The State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State[17] defines a wetland as follows: An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

Under California State law, waters of the State means "any surface water or groundwater, including saline waters, within the boundaries of the State." As such, water quality laws apply to both surface water and groundwater. After the United States Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (531 USC 159), the Office of Chief Counsel of the State Water Board released a legal memorandum confirming the State's jurisdiction over isolated wetlands. The memorandum stated that under the California Porter-Cologne Water Quality Control Act, discharges to wetlands and other waters of the State are subject to State regulation, and this includes isolated wetlands. In general, the State Water Board regulates discharges to isolated waters in much the same way as it does for waters of the United States, using Porter-Cologne rather than CWA authority.

The CDFW is a trustee agency that has jurisdiction under Section 1600 *et seq*. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify the CDFW if a project or plan will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds…except when the department has been notified pursuant to Section 1601." Additionally, the CDFW may assert jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4 inches diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFW may propose reasonable measures that will allow protection of those resources. If the applicant agrees to these measures, the applicant may enter into an agreement with the CDFW identifying the covered activities, impacts to the CDFW jurisdictional features, and compensatory mitigation.

[17] State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. State Water Resources Control Board. Adopted April 2, 2019. Website: https://www.waterboards.ca.gov/board_info/agendas/2019/apr/040219_10_staff_rpt_comparison_to_january_2019_032219version.pdf. Accessed January 19, 2021.

Local

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

The SJMSCP was adopted in 2000 to provide a strategy for balancing the need to conserve Open Space and the need to convert Open Space to non-Open Space uses while protecting the region's agricultural economy; preserving landowner property rights; providing for the long-term management of plant, fish and wildlife species, especially those that are currently listed, or may be listed in the future, under the Endangered Species Act or CESA; providing and maintaining multiple-use Open Spaces that contribute to the quality of life of the residents of San Joaquin County; and accommodating a growing population while minimizing costs to project applicants and society at large. The SJMSCP is administered by the San Joaquin Council of Governments (SJCOG). The SJMSCP, in accordance with Endangered Species Act Section 10(a)(1)(B) and CESA Section 2081(b) Incidental Take Permits, provides compensation for the Conversion of Open Space to non-Open Space uses which affect the plant, fish and wildlife species covered by the SJMSCP. The SJMSCP compensates for Conversions of Open Space for the following activities: urban development, mining, expansion of existing urban boundaries, nonagricultural activities occurring outside of urban boundaries, levee maintenance undertaken by the San Joaquin Area Flood Control Agency, transportation projects, school expansions, non-federal flood control projects, new parks and trails, maintenance of existing facilities for non-federal irrigation district projects, utility installation, maintenance activities, managing Preserves, and similar public agency projects.

This Draft EIR is intended to provide the information needed to evaluate the proposed project's compliance with the SJMSCP to make the SJCOG Biologist's review as efficient as possible. The project site is located within the Central Zone; Category C, Agriculture Habitat Open Spaces; Pay Zone B (Agricultural) of the SJMSCP. Adoption and implementation of the SJMSCP is intended to provide full compensation and mitigation for potential environmental impacts to plants, fish and wildlife and demonstrate compliance pursuant to the State and federal laws such as CEQA, the National Environmental Policy Act (NEPA), Planning and Zoning Law, the State Subdivision Map Act, the Porter-Cologne Act, and the Cortese-Knox Act with respect to species covered under the SJMSCP.

3.4.5 - Impacts and Mitigation Measures

Significance Criteria

The City is using Appendix G of the State CEQA Guidelines as thresholds of significance for this project. According to CEQA Guidelines Appendix G, to determine whether impacts related to biological resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?

b) Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?

c) Has a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

Approach to Analysis

FCS Biologists evaluated impacts on biological resources based on the likelihood that special-status species, sensitive habitats, wildlife corridors, and protected trees are present within the project site area, and the likely effects of construction or operation of the proposed project on these resources. For the purposes of this Draft EIR, the word "substantial" as used in the significance thresholds above is defined by the following three principal components:

- Magnitude and duration of the impact (e.g., substantial/not substantial),
- Uniqueness of the affected resource (rarity), and
- Susceptibility of the affected resource to disturbance.

Impacts Evaluation

Special-status Species

Impact BIO-1:	**The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.**

Construction

An impact to special-status plant and wildlife species would be considered significant if construction of the proposed project would result in a substantial, adverse change in any of the physical conditions through habitat modification, or direct impacts to special-status species within the project site. For purposes of this analysis, impacts would be potentially significant if implementation of the proposed project would:

- Result in direct take or habitat removal (including foraging habitat) or alteration for candidate, sensitive, or special-status species.
- Remove vegetation or damage water quality related to riparian habitat or other sensitive natural community.
- Remove, fill, or damage a federally protected wetland.

Special-status Plant Species

Special-status plant species or communities are unlikely to occur on the project site, based on multiple database searches, literature review, and on-site field survey observations. The Special-status Species Table (Appendix C) provides both the habitat description and a description of the potential for special-status plant species to occur on the project site. As detailed more fully in Appendix C, the project site does not contain suitable habitat components for any special-status plant species, including valley and foothill grasslands, native perennial bunch grass communities, or alkaline soils.

None of the six special-status plant species identified in the Special-status Species Table were observed or expected to be present on the project site. Based on FCS Biologist field surveys and the lack of suitable habitat coupled with the level of past and ongoing disturbance through tilling, mowing, weed control, irrigation, and other agricultural activities, no significant impacts to special-status plant species are expected to result from construction because no such plant species are likely to be on-site.

Special-status Wildlife Species

Eight special-status wildlife species as well as birds protected under the MBTA have the potential to occur on the project site. As discussed more fully in Appendix C and below, the special-status wildlife species potentially occurring on the project site include song sparrow, tricolored blackbird, Swainson's hawk, burrowing owl, San Joaquin kit fox, pallid bat, Townsend big-eared bat, and western mastiff bat.

Song Sparrow

Song sparrow requires dense vegetation for nesting sites, song perches, and cover for refuge from predators. Where vegetation is too short and sparse, song sparrow nests are more likely to be exposed to predators. The cattail marsh vegetation within the northeastern area of the project site within the Zuriakat parcel may provide potentially suitable nesting for song sparrow. Although unlikely, the potential for this species to nest on the project site cannot be ruled out. If the cattail marsh is proposed to be removed during the nesting season, this could result in a significant impact. Therefore, Mitigation Measure (MM) BIO-1a requires a pre-construction survey be conducted to confirm that no song sparrow nest (or nest of other protected bird species) is present. If the species is found during the pre-construction survey, a setback sufficient to avoid nest failure as determined by a qualified Biologist (typically 75 feet for this species) shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave the nest(s). The setback would apply whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Setbacks shall be marked by nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape to ensure maintenance of the buffer. Implementation of MM BIO-1a would reduce potential impacts to song sparrow to a less than significant level under CEQA.

Tricolored Blackbird

Emergent vegetation within the cattail marsh adjacent to California Avenue within the Zuriakat parcel represent potential nesting habitat, albeit marginal. No tricolored blackbird were observed during the site visit. The presence of a tricolored blackbird nesting colony on the project site before

or during construction is highly unlikely, but cannot be ruled out. Therefore, this constitutes a significant impact. Thus, if the cattail marsh is proposed to be removed during the nesting season, the applicants for development on any portion of the Zuriakat parcel shall implement MM BIO-1a, which requires a pre-construction survey to clear the applicable portion(s) of the project site (and setback area, if applicable) of tricolored blackbird. Additionally, minimization measures specific to tricolored blackbird nesting colonies as defined in the SJMSCP Section 5.2.4.16, and which would be imposed on project development within the Zuriakat parcel, require that a setback of 500 feet from colonial nesting areas shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave the nest(s). This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Setbacks shall be marked by nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape to ensure maintenance of the buffer. Implementation of MM BIO-1a would reduce potential impacts to tricolored blackbird to a less than significant level under CEQA.

Swainson's Hawk

Swainson's hawk nests have been observed within the greater project site vicinity; the closest recorded occurrence is across Paradise Street, directly west of the project site.[18] Additionally, this species was observed during the field survey. The SJMSCP defines known or potential Swainson's hawk nest trees as trees "that hawks are known to have nested in within the past three years or trees, such as large oaks, which the hawks prefer for nesting." The large trees present around the barn and homestead sites within the project site are not known to have supported a Swainson's hawk nest in the last 3 years but could provide potential nesting opportunity for this species. It is likely that the species utilizes the agricultural fields as foraging habitat during harvesting activities as the project site provides a small-mammal prey base for birds of prey, including Swainson's hawk.

The agricultural fields include approximately 111.84 acres of alfalfa and approximately 28.75 acres of hay, both of which provide potential foraging habitat for Swainson's hawk. Project construction would result in the loss of this foraging habitat, totaling approximately 140.59 acres, which constitutes a significant impact, and therefore must be mitigated either through payment of mitigation from the SJMSCP fee, or through a separate permitting process with the applicable resource agencies during which the required mitigation ratios will be specified. MM BIO-1b details the requirements to address the loss of foraging habitat, which would reduce potential impacts to Swainson's hawk foraging habitat to a less than significant level under CEQA. MM BIO-1b also requires a pre-construction survey and further avoidance and minimization measures (if necessary), which would reduce potential impacts to nesting Swainson's hawks to a less than significant level under CEQA with mitigation.

Burrowing Owl

Multiple recorded occurrences of burrowing owl have been documented in the vicinity of the project site. Specifically, two natal burrow complexes were reported in 2008, directly along Paradise Road

[18] California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Database (CNDDB). Website: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed April 24, 2020.

between Skylark Way and Chrisman Road.[19] However, these areas have been developed since that time, and what used to be suitable burrowing owl habitat consists now of paved road and sidewalks, as well as compacted and managed landscaped areas. The closest record of an active nest that is still suitable habitat is located approximately 1.5 miles to the south. Two California ground squirrels were observed on the developed residential area within the project site during the field survey. While no suitable burrows or signs of presence of burrowing owls were observed during the field survey, it cannot be ruled out that a burrowing owl may occupy the project site before or during construction and therefore constitutes a significant impact.

Project development could result in the removal of potential habitat for burrowing owl. Implementation of MM BIO-1c, which requires a pre-construction survey and further avoidance and minimization measures (if necessary), would reduce potential impacts to burrowing owl to a less than significant level under CEQA.

San Joaquin Kit Fox

San Joaquin kit fox has been sporadically reported in the southern areas of Tracy, approximately 4 miles from the project site.[20] While San Joaquin kit fox is unlikely to occur on the project site and no dens or other signs of San Joaquin kit fox were observed during the field survey, it cannot be ruled out that a stray or migrating San Joaquin kit fox may be found on the project site before or during construction.

Project construction could result in the removal of potential habitat for San Joaquin kit fox. Implementation of MM BIO-1d, which requires a pre-construction survey and further avoidance and minimization measures (if necessary, based on the survey), would reduce potential impacts to San Joaquin kit fox to a less than significant level under CEQA.

Nesting Birds

The trees along the southwestern boundary and trees located on-site and within the immediate vicinity may provide suitable nesting habitat for birds protected under the MBTA and other special-status birds covered by Fish and Game Code Section 3503.5, and/or CESA.

Potential direct and indirect impacts could occur to resident and migratory species during project construction, which would render the project temporarily unsuitable for birds because of the noise, vibrations, and increased activity levels associated with various construction activities. These activities could potentially subject birds to risk of death or injury, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual birds by displacing them into adjacent territories belonging to other individuals. Accordingly, this constitutes a significant impact requiring mitigation.

Furthermore, construction activities that occur during the nesting season (generally February 1 to August 31) could disturb nesting sites for birds protected by the MBTA and Fish and Game Code.

[19] California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Database (CNDDB). Website: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed April 24, 2020.

[20] Ibid.

No action is necessary if no active nests are found or if construction occurs during the nonbreeding season (generally September 1 through January 31).

Implementation of MM BIO-1e, which requires the relevant applicant(s) for development on any areas within the project site to each conduct a pre-construction survey and implement further avoidance and minimization measures (if necessary and required by the survey), would reduce potential impacts to nesting birds to a less than significant level under CEQA. (Note that potential impacts to song sparrow, tricolored blackbird, and Swainson's hawk are addressed separately above. Mitigation measures for these species are included separately and thus are not included in MM BIO-1e).

Roosting Bats

Buildings located within the southwestern portion of the project site may provide suitable nesting habitat for bats. Section 2000 and 4150 of the California Fish and Wildlife Code states that it unlawful to take or possess a number of species, including bats, without a license or permit as required by Section 3007. Potential direct and indirect impacts could occur to roosting bats during project construction due to removal of potential roosting habitat. These activities could potentially subject bats to risk of death or injury, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual bats by displacing them into adjacent territories belonging to other individuals. Accordingly, this constitutes a significant impact requiring mitigation.

Implementation of MM BIO-1f, which requires the relevant applicant(s) for development on any areas within the project site to each conduct a pre-construction survey and further avoidance and minimization measures (if necessary), would reduce potential impacts to roosting bats to a less than significant level under CEQA.

Operation

An impact to special-status plant and wildlife species would be considered significant if operation of the proposed project resulted in a substantial, adverse change in ambient noise. The project site is currently surrounded by industrial developments and is situated in a semi-urban landscape with high amounts of traffic from local industrial operations, which create a baseline of fairly substantial ambient noise. As discussed in more detail in Section 12, Noise, the proposed project would increase traffic on local roadways and would introduce stationary noise sources through the operation of new industrial facilities; however, noise emitted from the operation of the proposed project would be required to adhere to applicable established standards and would not result in a significant increase in the ambient environment. Therefore, project implementation would not constitute a significant impact to wildlife species from operational noise including traffic noise.

Bird Strike

There is a potential impact related to bird mortality caused from collisions with the glass windows on the buildings. Research on bird mortality caused by window collision remains in its early stages, and researchers have yet to agree on a collision rate metric. Additionally, there are several factors impacting the probability of birds colliding with glass windows, such as window space, opacity, glare, and other weather conditions. The proposed project would consist of several industrial buildings and related improvements, and the reflective window material used would not pose a greater hazard

than any other typical industrial buildings in the project vicinity or in the City. Window elements would not be expansive and would be predominately located at building corners or inset into the buildings. Therefore, impacts to birds associated with glass windows would be less than significant.

As such, all operational impacts would be considered less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

MM BIO-1a Song Sparrow and Tricolored Blackbird Mitigation

Implementation of the following avoidance and minimization measures would avoid or minimize potential effects to song sparrow and tricolored blackbird as a result of project implementation within the Zuriakat parcel in and adjacent to the project site. These measures shall be implemented for construction work that occurs during the nesting season (February 1 through August 31):

- If construction or habitat removal is proposed during the breeding/nesting season (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for song sparrow and tricolored blackbird within potential nesting habitat of the construction area, (special attention should be paid to the cattail marsh within the Zuriakat parcel) including a 500-foot survey buffer for tricolored blackbird and a 75-foot survey buffer for song sparrow, no more than 7 days prior to the start of ground-disturbing activities in the construction area. If no active nests are detected within the construction area on the project site or within the relevant buffer survey area, then no additional measures are required.
- If an active nest is located during pre-construction surveys, the California Department of Fish and Wildlife (CDFW) (as appropriate) shall be notified (as appropriate) regarding the status of the nest. A setback of 500 feet (for tricolored blackbird) and 75 feet (for song sparrow) shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Furthermore, construction activities shall be restricted in the construction area as necessary to avoid disturbance of the nest until it is abandoned, or a qualified Biologist deems disturbance potential to be minimal. Restrictions shall include consultation with a qualified Biologist to determine appropriate buffer zones or alteration of the construction schedule in the relevant area.
  - A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

MM BIO-1b Swainson's Hawk

Foraging: Prior to any activities that would result in ground disturbance to the project site, the relevant applicant(s) for the subject development on any portion of the project site shall each ensure **c**overage of the relevant portion(s) of the project site under the SJMSCP and pay the applicable fee purchase adequate mitigation through the SJMSCP for 140.59 acres of potential foraging habitat (recommended) or alternatively provide applicant-responsible compensatory mitigation at a 1:1 ratio (such as procurement of credits through a mitigation bank or dedicated of a conservation easement).

Nesting: The following measures shall be implemented for construction work during the nesting season (February 1 through August 31):

- Implementation of the following avoidance and minimization measures would avoid or minimize potential effects to Swainson's hawk as a result of project implementation and adjacent to the project site. These measures shall be implemented for construction work that occurs during the nesting season (February 1 through August 31):
  - If construction or habitat removal is proposed during the breeding/nesting season (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for Swainson's hawk within the construction area, (special attention should be paid to trees with past recorded occurrences) including a 0.5- mile survey buffer, no more than 7 days prior to the start of ground-disturbing activities in the construction area. If no active nests are detected within the construction area site or within the buffer survey area, then no additional measures are required.
  - If active Swainson's hawk nests are found within the construction area or the 0.5-mile survey buffer of the project site, a qualified Biologist shall determine what nest avoidance buffers may be necessary so that construction-related activities do not cause nest abandonment. The avoidance buffer shall be submitted to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) for approval. The qualified Biologist shall monitor construction activities to ensure construction activities do not result in adverse effects to the nest, fledglings, or adults. The Biologist shall submit a memorandum documenting construction compliance to the appropriate agencies.

MM BIO-1c Burrowing Owl

- A qualified Biologist shall conduct a pre-construction survey no later than 30 days prior to commencement of any ground-disturbing construction activities on the construction area. The survey shall be conducted in accordance with the *Staff report on Burrowing Owl Mitigation.*[21] All suitable habitats within the construction area site and adjacent buffer (within 500 feet) shall be surveyed. If no burrowing owl are detected during the surveys, then no additional measures are required.
- If pre-construction surveys during the breeding season (February 1- August 31) detect active burrows within the construction area or near the adjacent buffer survey area site, a qualified Biologist shall establish and delineate an appropriate buffer zone around the nest until the breeding season is over as determined by the Biologist. Buffer areas shall be established using the guidelines within the *Staff report on Burrowing Owl Mitigation*.
- If pre-construction surveys detect active burrows during the nonbreeding season (September 1- January 31) the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) allows for eviction or passive relocation of owls. A passive relocation plan shall be prepared and submitted to SJMSCP for approval.

MM BIO-1d San Joaquin Kit Fox

Measures to protect San Joaquin kit fox shall consist of the following:

- A qualified Biologist shall conduct a pre-construction survey of the construction area and a 200-foot buffer, between 14 and 30 days prior to the commencement of ground disturbance. If the surveys do not identify any San Joaquin kit fox activity or locate any potential dens, then no further measures are necessary.
- If the survey identifies potential dens (potential dens are defined as burrows at least 4 inches in diameter that open up within 2 feet), den entrances shall be dusted for 3 calendar days to register track of any San Joaquin kit fox present. If no San Joaquin kit fox activity is identified, potential dens may be destroyed. If San Joaquin kit fox activity is identified, then dens shall be monitored by a qualified Biologist to determine whether occupation is by an adult fox only or is a natal den (natal dens usually have multiple openings).
- If the den is occupied by an adult only, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den until the Biologist determines that the den has been vacated. Where San Joaquin kit fox are identified, the provisions of the United States Fish and Wildlife Service (USFWS) published *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During*

[21] California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. March 7. Website: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline=true. Accessed on April 29, 2020.

Ground Disturbance[22] shall apply (except that pre-construction survey protocols shall remain as established in this paragraph). These standards include provisions for educating construction workers regarding the San Joaquin kit fox and keeping heavy equipment operating at safe speeds.

MM BIO-1e Migratory Birds

- To prevent significant impacts to Migratory Bird Treaty Act (MBTA)-protected birds, nesting raptors, and their nests, removal of trees shall be limited to only those necessary to feasibly construct the proposed project as shown on the individual development plans approved by the City pursuant to the mapping and/or development review process.
- If any tree removal is necessary, then it should occur outside the nesting season between September 1 through January 31 to the extent feasible. If trees cannot feasibly be removed outside the nesting season, pre-construction surveys shall be conducted no more than 7 days prior to tree removal to verify the absence of active nests.
- If an active nest is located during pre-construction surveys, the United States Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW) (as appropriate) shall be notified regarding the status of the nest. Construction activities shall be restricted in the construction area as necessary to avoid disturbance of the nest until it is abandoned, or the agencies deem disturbance potential to be minimal. Restrictions shall consist of the include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around an active raptor nest and an appropriate radius around an active migratory bird nest depending on the species) or alteration of the construction schedule.
- A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

MM BIO-1f Roosting Bats

- A qualified wildlife Biologist shall conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the construction area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.).

[22] United States Fish and Wildlife Service (USFWS). 1999. Standardized recommendations for protection of the San Joaquin Kit Fox Prior to or during ground disturbance. Website: https://www.fws.gov/ventura/docs/species/protocols/sjkf/sanjoaquinkitfox_protection.pdf. Accessed April 29, 2020.

- Visual surveys shall include trees within 0.25 mile of project construction activities. Not more than two weeks prior to building demolition, the Tracy Alliance parcel applicants for development on any project parcel, shall ensure that a qualified Biologist (i.e., one familiar with the identification of bats and signs of bats) survey buildings proposed for demolition for the presence of roosting bats or evidence of bats. If no roosting bats or evidence of bats are found in the structure, demolition may proceed. If the Biologist determines or presumes bats are present (if there are site access issues or structural safety concerns), the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Building demolition of the subject structure shall only commence after the Biologist verifies seven to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid significant impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts shall also be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation Incorporated

Sensitive Natural Communities

Impact BIO-2:	**The proposed project would not have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.**

Construction

An impact to sensitive natural communities or riparian habitat would be considered significant if the construction of the proposed project resulted in a substantial, adverse change in any of the physical conditions (such as removal of vegetation or fill within riparian habitat) within the area affected by development.

As noted above, a small portion of the project site contains approximately 0.07 acre of cattail marsh in the channel along California Avenue, on the northern boundary of the project site within the Zuriakat parcel. The majority of the cattails consisted of broadleaf cattails; this vegetation type is not classified as a sensitive natural community, but rather a California Natural Community by the CDFW (Type 52.050.04– Typha [*latifolia, angustifolia]*) and is not applicable to this resource category. This community is discussed in further detail below in Impact BIO-3.

The project site does not contain any riparian habitat or sensitive natural communities identified in local or regional plans, policies, or regulations, by the CDFW or USFWS. As such, impacts would be less than significant under CEQA.

Operation

The project site does not contain any riparian habitat or other sensitive natural communities. As such, all operational impacts would be considered less than significant.

Level of Significance

Less Than Significant Impact. No Mitigation Required.

Wetlands

Impact BIO-3:	**The proposed project could have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**

Construction

Impacts to State or federally protected wetlands would be considered significant if the proposed operations resulted in a substantial, adverse change in any of the physical conditions (i.e., fill) of wetlands.

A preliminary assessment of potentially jurisdictional features was conducted as part of the literature review and reconnaissance-level survey for the site. There are aquatic resources located within the project site in the form of irrigation/drainage channels (approximately 10,344 linear feet) and a potential ditch wetland/cattail marsh (approximately 0.07 acre) located on the Zuriakat parcel.

Ditch Wetland/Cattail Marsh

The ditch wetland/cattail marsh located on the Zuriakat parcel along California Avenue is likely formed due to the drainage patterns created as a result of surrounding agricultural production. This potential Zuriakat parcel wetland feature contained standing water during the field visit, contained dense stands of broadleaf cattail (rated an obligate wetland plant by the USACE and a California Natural Community), and supports Northern Pacific tree frogs. This potentially jurisdictional wetland feature is approximately 300 feet long by 8 feet wide.

Irrigation/Drainage Channels

The irrigation/drainage channels appear to have a potential hydrological connection to the San Joaquin River, a traditional navigable water of the United States. The man-made channels have all been excavated within upland habitat for the purpose of on-site agricultural irrigation and drainage. These channels are mostly devoid of hydrophytic vegetation, are actively managed, and provide little to no habitat value to special-status species. This potential aquatic feature is approximately 10,344 linear feet. For the foregoing reasons, these features are generally not considered jurisdictional.

The determination whether an aquatic feature is regulated pursuant to CWA Section 404 can only be made by the USACE following a formal delineation of aquatic resources and proposed jurisdictional determination. Similarly, the RWQCB intends to follow jurisdictional exclusions of the USACE; however, California Water Code Section 13050(a) defines “waters of the State” broadly to include “any surface water or groundwater, including saline waters, within the boundaries of the State,” and the determination whether impacts to parts of the irrigation/drainage ditches and/or the cattail marsh on-site are regulated as waters of the State is be made by the RWQCB. If the proposed project

construction would result in the placement of fill that would potentially result in impacts to these aquatic resources, then implementation of MM BIO-3 would reduce potential impacts to a less than significant level under CEQA.

Operation

Impacts related to the project's potential effect on State or federally protected wetlands are limited to construction impacts. As such, all operational impacts would be considered less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

MM BIO-3 Conduct Delineation of Potentially Jurisdictional Aquatic Resources (Channels and Wetlands)

The applicant(s) for development on any project parcel shall complete a formal jurisdictional delineation to document and quantify the full extent of potentially jurisdictional waters for the relevant project parcel(s) in coordination with the applicable regulatory agencies. The applicant(s) for development on any project parcel shall also coordinate, to the extent required under applicable laws and regulations, with the applicable regulatory agencies (United States Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB], and/or California Department of Fish and Wildlife [CDFW]) to determine whether the irrigation/drainage channels and/or cattail marsh on the project site is protected under Section 404 and 401 of the Clean Water Act (CWA) and/or Section 1602 of the California Fish and Game Code.

Obtain CWA Sections 401 and 404 Permits Prior to Construction

- Prior to the fill of any potentially jurisdictional waters within the project site, the relevant project applicant(s) for the subject project parcel(s) shall consult with the USACE and Regional Water Quality Control Board, to the extent required under applicable laws and regulations, to determine the extent, if at all, that waters of the United States and State may be impacted by the proposed project.
- If required, the relevant applicant(s) for development of the subject project parcel(s) shall obtain a Section 404 CWA permit for impacts to waters of the United States. That same applicant, for development of the subject project parcel(s), will also obtain a Section 401 Water Quality Certification from the RWQCB, if required. Any such required permit and certification shall be obtained prior to issuance of grading permits for the implementation of the individual development proposal on the subject project parcel(s).
- The applicant(s) for development on any project parcel shall design the project to result in no net loss of functions and values of waters of the United States and State by incorporating impact avoidance, impact minimization, and/or

compensatory mitigation for the impact, as set forth in the subject Section 404 permit and 401 water quality certification.

- Compensatory mitigation may consist of (1) obtaining credits from a mitigation bank; (2) making a payment to an in-lieu fee program that would conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities; and/or (3) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This final type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). This project/permit applicant shall retains responsibility for the implementation and success of the mitigation approach.

Obtain Approval of and File Notification of Streambed Alteration Agreement Prior to Construction

The applicant(s) for development on any project parcel shall ensure that the cattail marsh is not obstructed and human intrusion into the area is minimized. In compliance with Section 1600 of the California Fish and Game Code, the relevant applicant(s) of an individual development proposal within the project site shall obtain approval and file a notification of a Streambed Alteration Agreement prior to conducting any construction activities within irrigation/drainage channels that qualify as streams under CDFW jurisdiction (i.e., those having bed and bank and at least periodical flow) if and to the extent required under applicable laws and regulations. Those same applicant(s) shall implement all mitigation measures imposed by the CDFW related to the subject Streambed Alteration Agreement, which may include but not be limited to the implementation of erosion and bank stabilization measures, riparian habitat enhancement, and/or restoration and revegetation of the stream corridor habitat at no less than a 1:1 ratio, as determined by the CDFW.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation Incorporated

Fish and Wildlife Movement Corridors

Impact BIO-4:	**The proposed project would not substantially interfere with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.**

Construction

An impact to fish or wildlife movement would be considered significant if the proposed construction or operation resulted in a substantial, adverse change in any of the physical conditions (such as the interruption of a channel or terrestrial movement corridor) within the area affected by the proposed

project. Fish or wildlife movement that have the potential to be impacted are discussed in detail below.

FCS Biologists evaluated the project site for evidence of a wildlife movement corridor during the biological resources survey. As noted above, the site is surrounded by industrial developments and is situated in a semi-urban landscape with high amounts of traffic from local industrial operations. Further, I-205 separates the site from the closest wildlife corridor to the north, I-5 and Business I-205 preclude non-volant wildlife movement from the east and southeast. The project site is not part of or within a wildlife movement corridor and, for this reason, construction-related impacts would be less than significant under CEQA.

Operation

As noted above, the project site is not part of or within a wildlife movement corridor. As such, all operational impacts would be considered less than significant.

Level of Significance

Less Than Significant Impact

Local Biological Resources Policies/Ordinances Consistency

Impact BIO-5:	**The proposed project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Construction and Operation

The project site contains a pecan orchard as well as ornamental trees but no street trees. As noted in Section 3.4.3, the City of Tracy regulates the alteration or removal street trees, but does not have a Tree Protection Ordinance related to private property. Therefore, because the project site does not contain any street trees, the proposed project would not conflict with any tree preservation policy or ordinance. Additionally, the proposed project would not conflict with General Plan policies or ordinances protecting biological resources. As such, no impacts related to construction would occur and no mitigation is necessary.

Level of Significance

No Impact

Habitat/Natural Community Conservation Plan Consistency

Impact BIO-6:	**The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.**

Construction

The project site is located within the SJMSCP Planning Area, and the City is a signatory to the SJMSCP, and the proposed project would be required to adhere to the relevant provisions of the SJMSCP. Participation in the SJMSCP ensures that potential impacts for covered species are mitigated below a level of significance in compliance with CEQA as well as the Endangered Species Act and CESA. Therefore, the proposed project would be subject to compliance to the SJMSCP, which may

include payment of development fees for the conversion of lands that may provide habitat for covered special-status species as well as implementation of other identified mitigation measures. Mitigation for loss of open space (agricultural field) would be achieved via the payment of habitat fees, or by the payment of endowment fees with in-lieu lands (conservation easements). Implementation of mitigation required under the SJMSCP and minimization measures (as identified above in Impact BIO-1) in conjunction with required compliance with the SJMSCP would reduce specific impacts to listed species to a less than significant level under CEQA.

Operation

Any potential conflicts with the SJMSCP would be limited to the construction phase of the proposed project and would be mitigated appropriately. Therefore, no operational impacts related to conflicts with the SJMSCP would occur.

Level of Significance

Less Than Significant Impact

3.4.6 - Cumulative Impacts

The general geographic scope of the cumulative biological resources analysis is concentrated south of I-205 and north of West Linne Road within the City of Tracy's SOI as project activity would only affect the surrounding project area. Cumulative projects in the geographic scope of the biological resources analysis include active agricultural fields consisting of alfalfa, almond tree orchards, and hay; associated agricultural and a few rural residential structures and irrigation/drainage channels are interspersed throughout the project site. Additionally, a ruderal/disturbed area is located within the southwestern corner of the project site along Grant Road Line that shows evidence of previous development but does not have current development. The project's immediate vicinity consists of agricultural and industrial development. project site and immediate vicinity

Special-status Wildlife and Plant Species

Planned developments listed in Chapter 3, Environmental Impact Analysis, Table 3-1 and shown in Exhibit 3-1, are predominantly located in areas that have already been built out or are located within highly fragmented habitats with limited potential to support special-status wildlife and plant species. The cumulative geographic context is partially developed and partially agricultural land, and there is a low likelihood of special-status wildlife and plants occurring within the cumulative project areas due to past urban development.

The following species have the potential to occur within the cumulative project areas: song sparrow, tricolored blackbird, Swainson's hawk, burrowing owl, San Joaquin kit fox, pallid bat, Townsend big-eared bat, and western mastiff bat. Additionally, nesting birds protected by the MBTA and/or California Fish and Game Code also have the potential to occur within the cumulative project areas. As described in the Regulatory Setting section, numerous laws and regulations are in place to protect biological resources within the cumulative project area, including, but not limited to, CESA, FESA, and the CWA. Future projects within the cumulative geographic context, would be required to comply with applicable federal, State, and local laws, regulations, and policies and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential

impacts on biological resources. Standard pre-construction surveys and, if necessary, avoidance procedures would be required for cumulative projects with the potential to impact special-status wildlife species (see, e.g., MM BIO-1a through MM BIO-1f). Because cumulative development would be required to comply with the above requirements, as well as General Plan and Municipal Code requirements (as described in the Regulatory Framework section), cumulative biological impacts would be less than significant.

Moreover, the proposed project's incremental contribution to these less than significant cumulative impacts would not be significant with adherence to the mitigation measures related to special-status wildlife species identified above and compliance with other applicable standards and requirements under the comprehensive regulatory framework. Therefore, the proposed project would have a less than significant incremental contribution to cumulative impacts to biological resources.

Sensitive Natural Communities and Wetlands

There are various aquatic resources that provide habitat for riparian species of flora and fauna within the cumulative project areas. The Great Valley Riparian Woodland communities lie north of I-205, along the Old River and Tom Paine Slough riparian zones. Corral Hollow Creek flows northeast and is located immediately east of I-580. These aquatic resources are largely found outside the cumulative project areas, which are concentrated south of I-205 and north of West Linne Road within the City of Tracy's SOI as projects activities would only affect the surrounding project areas. The majority of cumulative developments have been designed to address future growth problems and minimize developmental impacts to sensitive natural communities by designing projects, to the extent feasible, to occur in previously developed or highly disturbed areas that lack significant sensitive natural communities.

Within the cumulative project areas, development would not directly and significantly impact sensitive natural communities and/or the aquatic resources outlined above because they are largely sited in previously developed or highly disturbed areas. Furthermore, cumulative projects with the potential to impact sensitive natural communities (including wetlands or riparian habitat) would be required to consult with the applicable regulatory agencies, quantify their potential impacts in a formal jurisdictional delineation, and mitigate accordingly as may be required pursuant to applicable laws and regulations (see, e.g., MM BIO-3). As such, there is a less than significant cumulative impact. Moreover, as explained in Impact BIO-2 and Impact BIO-3, the proposed project would implement mitigation measures to address potential and the proposed project's contribution to the cumulative impact would be less than significant. Additionally, the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable. The proposed project, in conjunction with other cumulative projects, would result in a less than significant cumulative impact related to sensitive natural communities and associated habitat.

Local Tree Policies or Ordinances or Other Policies to Protect Biological Resources

The City of Tracy regulates the alteration or removal street trees but as previously stated, does not have a Tree Protection Ordinance related to private property. While other cumulative projects may result in the removal of street trees, these projects would be governed by the applicable local protection ordinance including relevant General Plan policies, which includes permitting and

mitigation requirements. Therefore, development of the proposed project and any related development of private property would not result in any conflicts with local tree policies or ordinances protecting trees or other biological resources. As such, there is a less than significant cumulative impact. Additionally, the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable.

Fish and Wildlife Movement Corridors

The cumulative project areas contain a variety of aquatic resources that act as potential movement corridors for fish and wildlife, such as Corral Hollow Creek and Tom Paine Slough. Any future development that occurs within the cumulative project areas would have to take into account the potential impact to these corridors and mitigate as required under applicable laws and regulations.

The site is surrounded by industrial developments and is situated in a semi-urban landscape with high amounts of traffic from local industrial operations. Further, I-205 separates the site from the closest wildlife corridor to the north, I-5 and Business I-205 preclude non-volant wildlife movement from the east and southeast. The project site is not part of or within a wildlife movement corridor and construction-related impacts would be less than significant under CEQA. Therefore, the proposed project's contribution to the less than significant cumulative impact related to fish, and wildlife movement would not be cumulatively considerable.

Habitat and Natural Community Conservation Plan Consistency

The proposed project, in addition to other cumulative projects, would be subject to compliance to the SJMSCP, which may include payment of development fees for conversion of lands that may provide habitat for covered special-status species and implementation of other identified mitigation measures under the SJMSCP. Compliance by the proposed project and other cumulative projects located within the cumulative project areas to the SJMSCP would fully mitigate any potentially significant impacts in this regard. As such, there is a less than significant cumulative impact. Additionally, the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable given that it also would be required to comply with all applicable provisions and mitigation requirements under the SJMSCP. Therefore, cumulative projects in conjunction with the proposed project would not conflict with the SJMSCP. As such, cumulative impacts would be less than significant.

Level of Cumulative Significance

Less Than Significant Impact With Mitigation Incorporated

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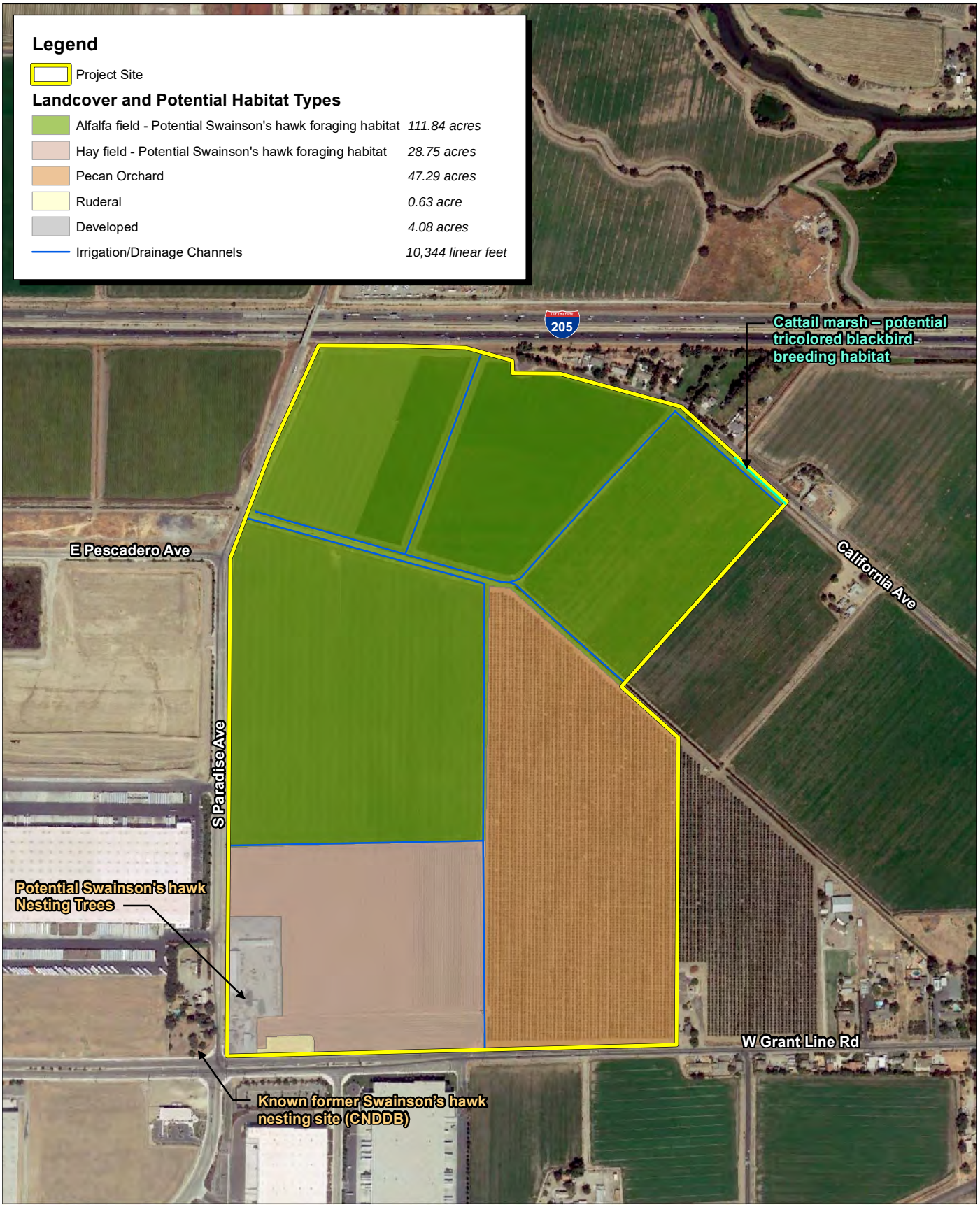

Source: Google Earth Aerial Imagery, August 2018.

FIRSTCARBON SOLUTIONS™

690 345 0 690 Feet

Exhibit 3.4-1
Biological Resources

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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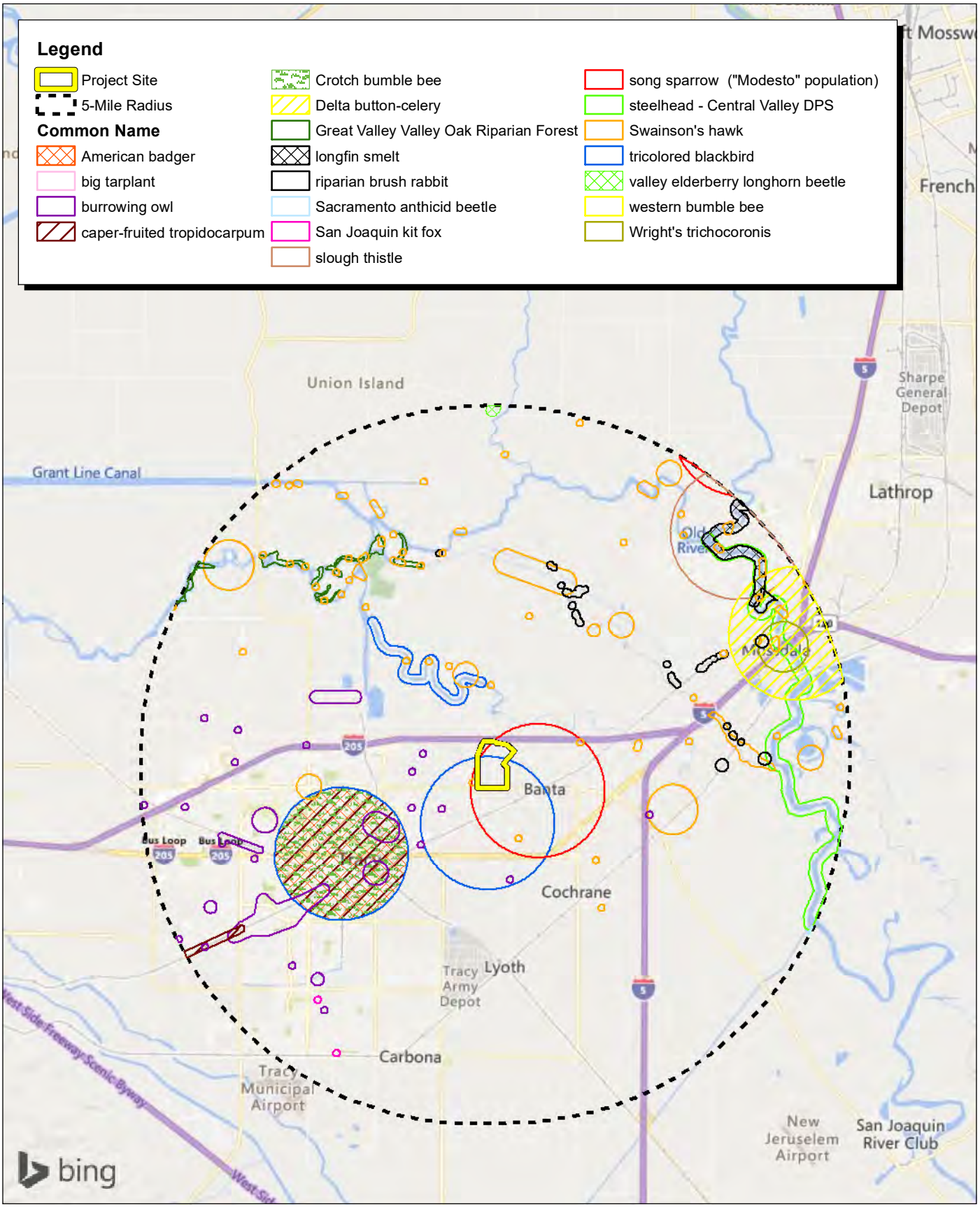

Source: Bing Street Imagery. California Natural Diversity Database (CNDDB), April 2020.

FIRSTCARBON SOLUTIONS™

2 1 0 2 Miles

Exhibit 3.4-2
CNDDB-Recorded Occurrences Within 5-Mile Radius

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3.5 - Cultural Resources

3.5.1 - Introduction

This section describes the existing environmental setting for cultural resources setting and the potential impacts on cultural resources on the project site and its surrounding area that may result from project implementation. The study area includes the project site and the 0.5-mile search radius around the project site. The descriptions and analysis in this section are based, in part, on information provided by the Native American Heritage Commission (NAHC), a records search of the Sacred Lands File, archival research, and a pedestrian survey, as presented in the Phase I Cultural Resource Assessment (Phase I CRA) that FirstCarbon Solutions (FCS) prepared for this project (see Appendix D). The recommendations provided in the Phase I CRA to address potential project impacts on cultural resources during ground-disturbing activities are incorporated into this section where appropriate.

3.5.2 - Environmental Setting

Cultural Resources Components

The term "cultural resources" encompasses historic resources, archaeological resources, and burial sites, which are generally defined as follows:

- **Historic Resources:** Historic resources are associated with the recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the State's history and are generally less than 200 years old. Historic resources often take the form of buildings, structures, and other elements of the built environment.
- **Archaeological Resources:** Archaeology is the study of artifacts and material culture with the aim of understanding human activities and cultures in the past. Archaeological resources may be associated with prehistoric indigenous cultures as well as historic periods.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred.

Overall Cultural Setting

Following is a brief overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites found in the vicinity of the project site. This section is not intended to be a comprehensive review of any specific resources in the project vicinity; rather, it serves as a general overview. Further details can be found in ethnographic studies, mission records, and major published sources.[1,2,3,4,5,6,7]

[1] Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, D.C. Smithsonian Institution.
[2] Beardsley, R.K. 1948. "Cultural Sequences in Central California Archaeology." American Antiquity 14:1-28.
[3] Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. Berkeley: University of California Anthropological Records 9(4):295-338.
[4] Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park: Stanford University Press.
[5] Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.
[6] Heizer, R. F., ed. 1978. Handbook of North American Indians, Vol. 8: California. Washington, D.C. Smithsonian Institute.
[7] Fredrickson, D.A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.

Prehistory and Ethnographic Background

The Northern San Joaquin Valley remains one of the least known ethnographic areas of California. Although little record of their culture has survived, research indicates Native Americans occupied portions of northern San Joaquin County for over 10,000 years.

Early archaeological investigations in Central California were conducted at sites located in the Sacramento-San Joaquin Delta region. The first published account documents investigations in the Lodi and Stockton area.[8] The initial archaeological reports typically contained descriptive narratives, with more systematic approaches sponsored by Sacramento Junior College in the 1930s. At the same time, University of California at Berkeley excavated several sites in the lower Sacramento Valley and Delta region, which resulted in recognizing archaeological site patterns based on variations of inter-site assemblages. Research during the 1930s identified temporal periods in Central California prehistory and provided an initial chronological sequence.[9,10] In 1939, Lillard noted that each cultural period led directly to the next and that influences spread from the Delta region to other regions in Central California.[11] In the late 1940s and early 1950s, Beardsley documented similarities in artifacts among sites in the San Francisco Bay region and the Delta and refined his findings into a cultural model that ultimately became known as the Central California Taxonomic System (CCTS). This system proposed a uniform, linear sequence of cultural succession.[12] The CCTS system was challenged by Gerow, whose work looked at radiocarbon dating to show that Early and Middle Horizon sites were not subsequent developments but, at least partially, contemporaneous.[13,14,15]

To address some of the flaws in the CCTS system, Fredrickson introduced a revision that incorporated a system of spatial and cultural integrative units.[16] Fredrickson separated cultural, temporal, and spatial units from each other and assigned them to six chronological periods: Paleo-Indian (12,000 to 8000 Before Present [BP]); Lower, Middle and Upper Archaic (8000 BP to 1500 BP), and Emergent (Upper and Lower, 1500 BP to historic period). The suggested temporal ranges are similar to earlier horizons, which are broad cultural units that can be arranged in a temporal sequence.[17] In addition, Fredrickson defined several patterns—a general way of life shared within a specific geographical region. These patterns include:

- Windmiller Pattern or Early Horizon (5000 to 3000 BP)
- Berkeley Pattern or Middle Horizon (3000 to 1500 BP)
- Augustine Pattern or Late Horizon (1500 BP to historic period)

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8 Schenck, W.E., and E.J. Dawson. 1929. Archaeology of the Northern San Joaquin Valley. American Archaeology and Ethnology 25:286–413.
9 Lillard, J.B. and W.K. Purves. 1936. The Archaeology of the Deer Creek-Cosumnes Area, Sacramento Co., California. Sacramento. Sacramento Junior College, Department of Anthropology Bulletin 1.
10 Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, Bulletin 2. Sacramento.
11 Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, Bulletin 2. Sacramento.
12 Beardsley, R.K. 1948. "Cultural Sequences in Central California Archaeology." American Antiquity 14:1-28.
13 Gerow, B.A. 1954. The Problem of Cultural Sequences in Central California Archaeology. Paper presented at the Annual Meeting of the American Association for the Advancement of Sciences.
14 Gerow, B.A. 1974. Comments on Fredrickson's Cultural Diversity. The Journal of California Anthropology 1(2):239–246.
15 Gerow, B.A., with R. Force. 1968. An Analysis of the University Village Complex with a Reappraisal of Central California Archaeology. Stanford University Press. Stanford., California.
16 Fredrickson, D.A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.
17 Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.

Brief descriptions of these temporal ranges and their unique characteristics follow.

Windmiller Pattern or Early Horizon (5000 to 3000 BP)

Characterized by the Windmiller Pattern, the Early Horizon was centered in the Cosumnes district of the Delta and emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but minimal obsidian. The large variety of projectile point types and faunal remains suggests exploitation of numerous types of terrestrial and aquatic species.[18,19] Burials occurred in cemeteries and intra-village graves. These burials typically were ventrally extended, although some dorsal extensions are known with a westerly orientation and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than on raw material. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell indicate an extensive trade network that may represent the arrival of Utian populations into Central California. Also indicative of this period are rectangular Haliotis and Olivella shell beads, and charmstones that usually were perforated.

Berkeley Pattern or Middle Horizon (3000 to 1500 BP)

The Middle Horizon is characterized by the Berkeley Pattern, which displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Fredrickson suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the San Francisco Bay Area.[20] Compared with the Early Horizon, there is a higher proportion of grinding implements at this time, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some cremations. As noted by Lillard, the practice of spreading ground ochre over the burial was common at this time.[21] Grave goods during this period are generally sparse and typically include only utilitarian items and a few ornamental objects. However, objects such as charmstones, quartz crystals, and bone whistles occasionally were present, which suggest the religious or ceremonial significance of the individual.[22] During this period, larger populations are suggested by the number and depth of sites compared with the Windmiller Pattern. According to Fredrickson, the Berkeley Pattern reflects gradual expansion or assimilation of different populations rather than sudden population replacement and a gradual shift in economic emphasis.[23]

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[18] Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. University of California Anthropological Records 9(4):295–338.

[19] Ragir, S.R. 1972. The Early Horizon in Central California Prehistory. Contributions of the University of California Archaeological Research Facility 15. Berkeley, CA.

[20] Fredrickson, D.A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.

[21] Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, Bulletin 2. Sacramento.

[22] Hughes, R.E. (editor). 1994. Toward a New Taxonomic Framework for Central California Archaeology: Essays by James A. Bennyhoff and David A. Fredrickson. Assembled and edited by Richard E. Hughes. Contributions of the University of California No. 52, Archaeological Research Facility, Berkeley, CA.

[23] Fredrickson, D.A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.

Augustine Pattern or Late Horizon (1500 BP to Historic Period)

The Late Horizon is characterized by the Augustine Pattern, which represents a shift in the general subsistence pattern. Changes include the introduction of bow and arrow technology; and most importantly, acorns became the predominant food resource. Trade systems expanded to include raw resources as well as finished products. There are more baked clay artifacts and extensive use of Haliotis ornaments of many elaborate shapes and forms. Burial patterns retained the use of flexed burials with variable orientation, but there was a reduction in the use of ochre and widespread evidence of cremation.[24] Judging from the number and types of grave goods associated with the two types of burials, cremation seems to have been reserved for individuals of higher status, whereas other individuals were buried in flexed positions. Research indicates that Augustine Pattern represents expansion of the Wintuan population from the north, which resulted in combining new traits with those established during the Berkeley Pattern.[25]

Central California research has expanded from an emphasis on defining chronological and cultural units to a more comprehensive look at settlement and subsistence systems. This shift is illustrated by the early use of burials to identify mortuary assemblages and more recent research using osteological data to determine the health of prehistoric populations.[26] Although debate continues over a single model or sequence for Central California, the general framework consisting of three temporal/cultural units is generally accepted, although the identification of regional and local variation is a major goal of current archaeological research.

Northern Valley Yokuts

Prior to European American contact, the Tracy area was inhabited by the Northern Valley Yokuts, whose range extended from the Calaveras River to the southern extent of the San Joaquin River. The Northern Valley Yokuts were one of three major subgroups that occupied much of the San Joaquin Valley: the Northern Valley, the Foothill, and the Southern Valley Yokuts. Each of these ethnolinguistic groups was composed of autonomous, culturally, and linguistically related tribes or tribelets. Ethnographic evidence suggests the project site was part of the Northern Valley Yokuts territory.

The Northern Valley Yokuts, who lived along the San Joaquin River and its tributaries and within the vicinity of the project site, are one of the least known of the California Indian groups. This is due to the almost complete destruction of their tribal life in the early 19th Century. What can be gleaned from the diaries and reports of Spanish soldiers and priests is that fish, waterfowl, and acorns were important food resources for the Northern Valley Yokuts. The local rivers and their tule marshes contained salmon, sturgeon, perch, suckers, and pike, which were caught using nets, weighted with stone sinkers and bone harpoons. Waterfowl, such as geese, ducks, and other aquatic birds, were abundant in the marshes and probably played a major role in the Northern Valley Yokuts subsistence base.[27] Dogs were domesticated and may have been raised for food, a taboo to some tribes but not

[24] Moratto, M.J. 1984. California Archaeology. San Diego. Academic Press.

[25] Johnson, J.J. 1976. Archaeological Investigations at the Blodgett Site (CA-SAC-267), Sloughhouse Locality, California. Report to the U.S. National Parks Service, Western Regional Office, Tucson, AZ.

[26] Dickel, D.N., P. D. Schulz, and H.M. McHenry. 1984. Central California: Prehistoric Subsistence Changes and Health. In Paleopathology at the Origins of Agriculture, edited by Mark Nathan Cohen and George J. Armelagos, pp. 439–462. Academic Press, Inc., Orlando, FL.

[27] Wallace, W.J. 1978. Northern Valley Yokuts. In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer, 448–461. Washington, DC. Smithsonian Institution.

the Yokuts.[28,29] Wild plant resources, especially acorns, were of prime importance and in a good year, a valley oak could produce 300 to 500 pounds of acorns, which were then ground into meal and cooked into porridge. Tule reed roots were likewise gathered and ground into meal that was traditionally served as porridge.[30]

Stone mortars and pestles, milling stones, hammers, choppers, and projectile points were manufactured from local rock sources. Notably, although obsidian was imported into the area, it was used infrequently for tools or weapons. Bone tools, particularly awls, were used in basket manufacture. Most villages were built near rivers on elevated land to avoid flooding during heavy rains or spring runoff from the Sierras. Archaeological excavations in Merced and Fresno counties indicate that houses were single-family dwellings, probably made with an oval framework of lightweight poles covered by mats of tule reeds. Hard-packed earthen floors 25 to 40 feet in diameter were constructed several feet below ground level. Communities typically contained a sweathouse and sometimes a large ceremonial structure. The size of the Yokuts communities is uncertain, but estimates indicate that the principal settlements contained 200–250 inhabitants.[31]

Several northern Yokut tribelets lived near what is now Tracy: including the Chulamni to the north, and the Hoyima to the southeast. The Chulamni tribelet built their villages near Tracy, along the banks of the Old River and San Joaquin River, and along creeks in the Diablo Range. The largest Chulamni village site near Tracy was named “Pescadero” by the Spanish during one of their first expeditions in 1810 and 1811.

Contact with Europeans was particularly devastating for the Northern Valley Yokuts. This group was adversely impacted by missionization in the early 1800s, European diseases, and the influx of miners and settlers as a result of the 1849 gold rush. Kroeber observed that their habitat in the open river valley left them especially vulnerable, compared to mountain dwellers, to “the full brunt of civilization.”[32]

Contact with the Spanish commenced early in the 19th Century and normally consisted of sporadic visits by small exploration parties. However, between 1805 and the 1820s, Franciscan priests from the coastal missions began recruiting converts from further inland, and a large portion of the Yokuts population was taken to various missions in San José, Santa Clara, Soledad, San Juan Bautista, and San Antonio. Many neophytes deserted and returned to their homes, but were sought and brought back by Spanish soldiers. A decade after the Mexican government claimed independence from Spain in 1822, the missions were converted into parish churches, and many Native Americans were released and returned to their former territory, though not necessarily to the specific location from which they came.

After the American conquest of California in 1846, the remaining Northern Valley Yokuts were driven off their land by miners heading south, farmers pursuing the locally rich soil, and the construction of

[28] Kroeber, A.L., 1925. Handbook of the Indians of California (No. 78). US Government Printing Office.Kyle, D.E., Rensch, H.E., Rensch, E.G., Hoover, M.B. and Abeloe, W., 2002. Historic spots in California. Stanford University Press.
[29] Wallace, W.J. 1978. Northern Valley Yokuts. In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer, 448–461. Washington, DC. Smithsonian Institution.
[30] Ibid.
[31] Ibid.
[32] Kroeber, A.L., 1925. Handbook of the Indians of California (No. 78). US Government Printing Office.Kyle, D.E., Rensch, H.E., Rensch, E.G., Hoover, M.B. and Abeloe, W., 2002. Historic spots in California. Stanford University Press.

various railroads. By the time scholars were interested in gathering information on California native groups, there were few people left to provide descriptions of native life before European contact.[33]

Regional Historic Background

Spanish Period (1769-1821)

The formalization of Spanish routes in California were established by Father Junípero Serra and Gaspar de Portolà in 1769, in what was known as the Portolà Expedition. Although the Portolà party were not the first Europeans nor the first people to pass through the region, it was their observations and discoveries that formalized the routes and locations of the Mission System and facilitate trade and travel through California.[34] The route used by Portolà was further explored in detail by Lieutenant Colonel Juan Bautista de Anza and Father Pedro Font during the Anza Expedition that lasted from 1775-1776. The Anza Expedition was considered pivotal as it helped establish practical relationships with the natives, who at the time were revolting in San Diego, and help further explore and map Monterey and the San Francisco Bay Area.[35] The region that would become San Joaquin Valley was periodically visited by Franciscan friars, scouting the area for mission sites, but it was a military expedition led by Gabriel Moraga in September and October of 1806 that fully mapped out the area. The expedition started in San Juan Bautista and extended to the San Joaquin Plain. Once there, Moraga traversed several tributaries that flow to the San Joaquin River and discovered and named the Merced River. Moraga additionally came upon the Tuolumne, Stanislaus, and Mokelumne Rivers. Moraga's Expedition took him from the foot of the Sierras and the Rancherias between Kings River and Kern River. In 1808, Moraga traveled to Stockton and headed east to scouting sites for future missions. Moraga's discoveries and mapping of the region contributed to the knowledge of the geography and ethnography of the area. This information served pivotal to Father Narciso Duran, Father Ramón Abella and Lieutenant Luis Antonio Argüello, who followed the San Joaquin River at least as far as the Stockton Channel in 1817, meticulously mapping the area for future mission establishments.[36,37] The diary kept by Father Duran helped illustrate how the region appeared prior to colonization as well as initial contact with the Yokut people.

The Mexican Period (1821-1848)

The Mexican revolt against Spain in 1822 and the secularization of the missions in 1834 changed land ownership patterns in California. The Spanish philosophy of government was directed at the founding of presidios, missions, and secular towns with the land held by the Crown, whereas the later Mexican policy stressed individual ownership of the land. Following Mexico's independence from Spain in 1822, the vast mission lands were granted to private citizens. The last of the mission land holdings were relinquished in 1845, which led the way for the large ranchos common to California in the mid-1800s.

[33] Wallace, W.J. 1978. Northern Valley Yokuts. In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer, 448–461. Washington, DC. Smithsonian Institution.
[34] Farquhar, F.P., 1928. Spanish discovery of the Sierra Nevada. San Francisco, Calif.: Sierra Club, Bulletin, XIII, (1), pp.54-61.
[35] Hyslop, S.G., 2019. Contest for California: From Spanish Colonization to the American Conquest (Vol. 2). University of Oklahoma Press.
[36] Kyle, D.E., Rensch, H.E., Rensch, E.G., Hoover, M.B. and Abeloe, W. 2002. Historic spots in California. Stanford University Press.
[37] Farquhar, F.P., 1928. Spanish discovery of the Sierra Nevada. San Francisco, Calif.: Sierra Club, Bulletin, XIII, (1), pp.54-61.

However, the constant threat of Russian invasion, the illegal squatting of American immigrants and growing threat of rebellion from the mission Indians prevented the region from achieving socio-political stability.[38] The growing tensions between Mexicans and American settlers led to the Bear Flag Revolt of 1846 led by U.S. Army Captain John C. Fremont and Ezekiel Merritt against Mexican General Mariano Vallejo who was attempting to bring aid to the Mexican governor of California in an attempt to suppress the growing wave of support for an American coup of California.[39] The rebellion concluded with the takeover of Sonoma, thus weakening the little control that Mexico had over Alta California and paving the way for the United States to seize control of the Pacific Coast shortly thereafter.[40]

By 1846, on the eve of the U.S.–Mexican War (1846 to 1848), the estimated population of California was 8,000 non-natives and 10,000 Native Americans. However, these estimates have been debated. Cook suggests the Native American population was 100,000 in 1850; the U.S. Census of 1880 reports the Native American population as 20,385.[41]

City of Tracy, San Joaquin County

San Joaquin County was incorporated on January 4, 1850 as one of the California's original 27 counties after acquiring statehood. San Joaquin County was named after the river that runs through the entire San Joaquin Valley. The county was formed from four land grants: El Pescadero, Campo de los Franceses, Los Moquelemos, and the Thompson Rancho, in addition to land that belonged to the State.[42] The county seat is in Stockton and has remained there since the inception of the City in 1850. In addition to Stockton, San Joaquin County includes the incorporated cities of Escalon, Lathrop, Lodi, Manteca, Ripon, and Tracy.[43] San Joaquin County is 1,391.32 square miles and has a population of 762,148 residents.[44]

The City of Tracy has deep roots with the railroad industry, as the community was founded after Southern Pacific Railroad established a new connecting rail line from "Oakland around the shores of San Francisco Bay, through Port Costa and Martinez, to connect with the Central Pacific line east of the Livermore hills and Altamont Pass."[45] Following the completion of the connecting rail line on September 8, 1878, the community of Tracy was formed and named after Southern Pacific Railroad executive, Lathrop J. Tracy.

Tracy grew rapidly with the addition of businesses associated with the rail line. Two hotels, Ludwig Hotel and Tracy Hotel, prompted residents from nearby towns to settle in the newly established community that was quickly becoming the railroad and commercial center of Tulare Township. This was followed by the relocation of the railroad headquarters on March 1, 1894 from Lathrop to Tracy, in addition, all railroad equipment, building and eating house accompanied the headquarters in the

[38] Branch, L.C., 1881. History of Stanislaus County, California: With Illustrations Descriptive of Its Scenery, Farms, Residences, Public Buildings with Biographical Sketches of Prominent Citizens. Elliott & Moore.
[39] National Park Service. 2015. Website: https://www.nps.gov/index.htm. Accessed October 20, 2020.
[40] National Park Service. 2015. Website: https://www.nps.gov/index.htm. Accessed October 20, 2020.
[41] Cook, S.F., 1976. The population of the California Indians, 1769-1970. University of California Press.
[42] Tinkham, G.H., 1923. History of San Joaquin County, California: With Biographical Sketches of the Leading Men and Women of the County who Have Been Identified with Its Growth and Development from the Early Days to the Present. Historic Record Company
[43] California State Association of Counties. 2014. Website: https://www.counties.org. Accessed November 18, 2020
[44] United States Census Bureau. 2019a. Website: https://www.census.gov/quickfacts/sanjoaquincountycalifornia. Accessed November 18, 2020.
[45] Tracy Historical Museum. 2018. Website: https://tracymuseum.org/tracy-history/. Accessed November 18, 2020

move. Toward the end of the 1800s, the community of Tracy experienced an agricultural boom following the construction of the Delta levee that provided irrigation to the crops that were rapidly becoming the main source of revenue for community. In 1910, Tracy was officially incorporated and continued to flourish agriculturally after its first irrigation district was established in 1915.[46]

Tracy remained a relatively small agricultural town well into the mid-20th century; however, with population growth in the Bay Area in the 1970s, Tracy saw in influx of people, taking advantage of its real estate while maintaining relatively close proximity the Bay Area. As of 2019, the City of Tracy boasted a population of about 94,740.[47]

Records Searches and Pedestrian Survey to Identify Existing Cultural Resources

Central Coastal Information Center

On April 2, 2020, a record search for the project site and a 0.5-mile radius[48] beyond the project boundaries was conducted at the Central California Information Center (CCIC) located at California State University, Stanislaus. The current inventories of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historical Landmarks (CHL) list, the California Points of Historical Interest (CPHI) list, and the Built Environment Resources Directory (BERD) for San Joaquin County were also reviewed to determine the existence of previously documented local historical resources.

The results from the CCIC indicate that five cultural resources have been recorded on-site or within 0.5 mile of the project site. The prehistoric resource (P-39-000258) and the historic resources (P-39-000002, P-39-000072, P-39-004373 and P-39-005104) are all located outside the project site (Table 3.5-1). The historic resource P-39-000072 is adjacent to and outside of the project site to the southwest, while historic resource P39-004373 is located along the southern boundary of the site, adjacent to and outside of the project site. Resources P-39-005104, P-39-000002, and P-39-000258 are not located in close proximity to areas of proposed development. All identified resources would remain unaffected by the project, as currently designed, because none of the resources are located within the project boundary. In addition, three area-specific survey reports are on file with the CCIC for the search radius; none of which are within the project site boundary indicating that the project site has not previously been surveyed for cultural resources (Table 3.5-2).

Table 3.5-1: Recorded Cultural Resources On-site or within a 0.50-mile Radius of the Project Site

Site Number	Resource Name/Description	Date Recorded
P-39-000002	Southern Pacific Railroad in San Joaquin County: AH02 Foundations/structure pads, AH04 Privies/dumps/trash scatters, AH07 Roads/trails/railroad grades, AH11 Walls/fences, HP11 Engineering structure.	1993, 1994, 1997, 2001, 2002, 2003, 2005, 2006, 2007, 2008, 2010, 2011, 2012, 2018

[46] City of Tracy. 2020. Website: https://www.cityoftracy.org/our-city/about-us/tracy-history. Accessed August 20, 2021.
[47] United States Census Bureau. 2019b. Website: https://www.census.gov/quickfacts/tracycitycalifornia. Accessed November 18, 2020.
[48] A 0.5-mile radius is a standard search radius used for California Historic Resources Information System requests.

Site Number	Resource Name/Description	Date Recorded
P-39-000072	Ender Ranch, 6811 and 6821 Grant Line Road, Tracy: HP33 Farm/ranch.	1996
P-39-000258	Barr's Banta, Site 39: AP02 Lithic scatter.	1955
P-39-004373	Grant Line Road, Lincoln Highway; TRWP-25: HP37 Highway/trail.	2003
P-39-005104	Valley/Banta Schools: HP15 Educational building.	1991
Source: Central California Information Center (CCIC) Record Search. April 2, 2020.		

Table 3.5-2: Previous Investigations within 0.5-mile of the Project Site

Report No.	Report Title/Project Focus	Author	Date
SJ-02748	A Cultural Resource Survey of the Northeast Industrial Property, Tracy, California.	John W. Foster	1996
SJ-04182*	Historic Property Survey Report–Negative Findings, Tracy Widening Stage II and III, 10-SJ-205, P.M. R3.0/R13.6, EA 300160.	B. Wickstrom	2001
SJ-04182	Department of Transportation Negative Archaeological Survey Report 10-SJO-205 P.M. R3.0/R13.6 EA 300160.	B. Wickstrom	2000
SJ-04182	Department of Transportation First Supplemental Archaeological Survey Report–Negative 10-SJO-205 R3.0/R13.6 EA 300160.	B. Wickstrom	2000
SJ-06625	Cultural Resources Survey, South County Surface Water Project, San Joaquin County, California, South San Joaquin Irrigation District.	ASI Archaeology and Cultural Resource Management	1998
Notes: * SJ-04182 contains two supplemental reports written in 2000. Source: Central California Information Center (CCIC) Record Search. April 2, 2020.			

Historic Aerials

A review of 10 historic aerials depicting the project site and vicinity from 1967 until 2016 indicate that beginning in 1967, the project site and the surrounding general land areas were developed for agricultural purposes along with a residential property within the southwest corner of the site.[49] The 1968 image depicts residential development southeast of the project site, and the expansion of dairy buildings in the southwest corner. Sometime between 1968 and 1982, Interstate 205 (I-205) was constructed, and the area became more urbanized; residential and commercial development was prevalent throughout the surrounding area. Aerials from 1993 to 2016 exhibit the continued agricultural uses of the project site, along with expansion and the continued use of the dairy farm.

[49] Historic Aerials. 2020. Website: https://www.historicaerials.com/viewer. Accessed: March 31, 2020.

Cultural Resources Pedestrian Survey

Prior to the current pedestrian survey, readily available historical United States Geological Survey (USGS) topographic maps, selected historical aerial photographs (at approximately 10- to 15-year intervals) and historical fire insurance maps produced by the Sanborn Map Company were reviewed to evaluate land development and obtain information concerning the history of development on and near the site. These records show undeveloped land with an unimproved road near the northeast corner (1914-1916); followed by the development of multiple farm structures near the southwestern corner and agricultural row crops, irrigation ditches, and/or vacant land on the remainder of the property (1937-2016).

On April 9, 2020, FCS Senior Archaeologist, Dr. Dana DePietro, conducted a pedestrian survey for unrecorded cultural resources within the Tracy Alliance, Suvik Farms, and Zuriakat project parcels that comprise the project site. The survey began in the north of the project boundary and moved south, using east–west transects spaced at approximately 5-meter intervals within the project boundary, where possible.

Visibility of native soils was very poor overall, given that approximately 90 percent of the Tracy Alliance and Zuriakat parcels were covered with thick vegetation. Soil visibility was better in the Suvik Farms parcels (70 percent visibility) due to the rowed almond orchard that occupies this portion of the site. Soils in these sections of poor visibility were intermittently inspected using a hand trowel and were largely composed of light brown (7.5YR 5/3) loam with low clay content. The soils were interspersed with small to large (3 to 30 cm) stones primarily composed of schist and chert.

Survey conditions were documented using digital photographs and field notes. During the survey, Dr. DePietro examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, tool-making debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics). Particular attention was paid to the Mattos Dairy Farm complex located in the southwest corner of the project site, which was found to be over 50 years old. An evaluation of the Mattos Dairy Farm complex's historic significance and eligibility for listing on the CRHR follows below.

Architectural and Historic Resources Assessment

The Mattos Dairy Farm complex is located in the southwest corner of the project site and contains buildings and structures over 50 years old that have not been evaluated for historic significance. Properties over 50 years in age are considered potentially eligible for listing in the NRHP, CRHR, or local listing and, consequently, could be considered historic resources under California Environmental Quality Act (CEQA) Guidelines. The Mattos Dairy Farm complex was evaluated relative to the following four CRHR eligibility criteria, which are in turn based on NRHP Standards A–D.

- **Criterion 1: Event.** It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.

- **Criterion 2: Person.** It is associated with the lives of persons important to local, California, or national history.
- **Criterion 3: Architecture.** It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
- **Criterion 4: Information Potential.** It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Mattos Dairy Farm Complex Descriptions

While a review of historic aerials and topographic maps shows the existence of farm structures at the project site as early as 1937, many of those structures have been demolished or replaced over the years. The majority of structures that are present date to the 1950s and 1960s. These i structures consist of a cattle storm shed, hay barn, calf barn and attached wooden shed, a machine shop/garage, a residence and garage located at 6599 West Grant Line Road, and a milk barn. A second residence is also located on the site at 6735 West Grant Line Road, which appears to date to the 1940s. A brief description of each structural element follows:

Cattle Storm Shed

This structure is a circa 1960s, symmetrical, rectangular-shaped, wood framed, cattle storm shed built using wooden-pier and beam construction. The shed is approximately 5,700 square feet in size, is open-walled on all sides, and is currently used to house machinery. The structure, which is in moderate to poor condition, is accessed via openings on the shorter east and west façades. The structure has a concrete and asphalt foundation, and is topped by a low-pitched, open-gabled roof. The roof is clad in corrugated sheet metal on all sides, with open rafters.

Calf Barn and Wooden Shed

This conjoined structure consists of a circa 1950s, symmetrical, rectangular-shaped, calf barn, and connected wooden shed attached to the barn's western façade. The barn is constructed of low cinderblock walls topped with wooden joists, windows, and shiplap siding similar to that used in the shed's construction. The barn and shed are a total of approximately 2,850 square feet in size, closed-walled on all sides, and are currently empty. The conjoined structure is in poor condition due to apparent fire and disrepair and is accessed via doors on the west and north façades. The structure has a concrete and asphalt foundation, and is topped by two low-pitched, open-gabled roofs. The roofs are clad in wooden shingles with open rafters.

Machine Shop/Garage

This structure is a circa 1950s, symmetrical, rectangular-shaped, wood framed, machine shop/garage built using wooden shiplap construction. The shop/garage is approximately 1,400 square feet in size and is currently used to house machinery. The structure, which is in moderate to poor condition, is primarily accessed via two rolling garage doors on the right of the western façade. The structure has a concrete and asphalt foundation, and is topped by a low-pitched, open-gabled roof. The roof is clad in corrugated sheet metal on all sides, with open rafters.

The Residence at 6599 West Grant Line Road

This structure is a circa 1950, 1-story, asymmetrical, square-shaped, minimal traditional-style single-family residence and detached garage. The 900-square-foot building, which is in poor condition and has been abandoned, is accessed by a small, two-stair, small concrete porch leading to a single door on the building's western façade. The building has a concrete foundation, light green stucco exterior, and a low-pitched cross-hipped roof with moderately sized eaves that wrap around the entire structure. The roof is clad in tan-gray composition shingling, and the rafters are semi-enclosed with plywood planking. The building's windows vary in size, shape, and placement, but are primarily aluminum-framed, rectangular-shaped, and double-hung sash-style. The property has almost no landscaping as the concrete foundation extends to the street, with the exception of a large tree growing to the left of the entrance on the eastern façade. An unattached, symmetrical two-car garage of identical construction is situated immediately south of the residence. The original windows and roof appear to have been replaced, but no other major exterior alterations were noted.

The Residence at 6735 West Grant Line Road

This structure is a circa 1940, 1-story, asymmetrical, rectangular-shaped, minimal traditional-style single-family residence. The 1,700-square-foot building, which is in moderate to poor condition, is accessed by a small, single-stair, enclosed concrete porch leading to a single door on the building's southern façade. The building has a concrete foundation, light green stucco exterior, and a low-pitched cross-hipped roof with small-sized eaves that wrap around the entire structure. The roof is clad in tan-gray composition shingling, and the rafters are semi-enclosed with plywood planking. The building's windows vary in size, shape, and placement, but are primarily aluminum-framed, rectangular-shaped, and double-hung sash-style. The property has minimal landscaping a lawn extending south and two trees growing to the left and right of the main entrance on the southern façade. The original windows and roof appear to have been replaced, but no other major exterior alterations were noted.

Milk Barn

This conjoined structure consists of a circa 1950s, symmetrical, rectangular milk barn and connected square, cinderblock loading-shed attached to the barn's southern façade. The barn is constructed of high cinderblock walls identical to use in the shed's construction, with regularly spaced aluminum open-faced windows along the barn's eastern and western sides. The conjoined barn and shed are a total of approximately 2,900 square feet in size, in fair condition, and are accessed primarily via doors on the north and south façades. The structure has a concrete and asphalt foundation that takes the form of a small, raised loading dock running along the southern façade of the shed. The shed is flat roofed and clad in tar-paper, while the barn is topped with an aluminum low-pitched, open-gabled roof.

NRHP, CRHR, and Local Historical Listing Evaluation

The existing Mattos Dairy Farm complex is part of the overall development and expansion of the agriculture industry following the establishment of the Central Pacific Railroad and the incorporation of the City in the early 20th century. The dairy industry continued to thrive in Tracy despite the decline of the railroad in the 1950s and 1960s and continues to be an important part of the regional economy to this day. The subject property is part of that process of expansion and growth, but does

not meet Criterion A: Event, as there are examples of many similar and better-known dairy farms built during this time in the greater Tracy area.

On November 26, 2018, Terracon Consultants interviewed Mr. Mike Mattos of Mike Mattos Farms, the current tenant of 6599 West Grant Line Road, while conducting site reconnaissance and by telephone. Mr. Mattos indicated that he has been familiar with the site for approximately 54 years and indicated the site was formerly owned by his grandparents, John and Virginia Mattos, who operated a dairy farm on the site from the 1950s through the early 1970s. On November 5, 2018, Terracon interviewed Ms. Deanna Morales, who indicated she is the current tenant of 6735 West Grant Line Road and indicated she has been living on the site for approximately 5 years. Additional research conducted at the City of Tracy Clerk's Office, San Joaquin County Community Development Department, Polk's City Directory, Haines Criss-Cross Directory, and Environmental Data Resources, Inc. (EDR) Digital Archive City directories revealed the names Manuel Madruga, Michael J. Mattos, and Christine Lopez are also associated with the history of the property. The relative absence of these individuals from published historical accounts of the City of Tracy or the California Digital Newspaper Archive (CDNA) indicate that they did not achieve a level of historic importance to be considered eligible for the CRHR or local historical listing, and thus the property does not meet the criteria for Criterion B: Person.

Under Criterion C: Architecture, the buildings and structures, built by unknown architects, display many features common to industrial dairy farms of the day, and residences of the traditional minimalist style: asymmetrical, shallow to medium pitched hipped roofs with no eaves, a small entry porch with simple pillars or columns, and a simple rectangular floorplan, often with small ells. These buildings possess few if any ornamental details and are standard, undistinguished examples of construction design and techniques from their respective periods. Furthermore, several buildings are in a poor state of repair, or have been renovated in recent years with modifications made to the original design. As such, none of the buildings appear eligible for listing under Criteria C.

Criterion D: Information Potential, is most often used to evaluate archaeological sites or buildings that employ unusual building techniques. There is no evidence that any of the buildings or structures in question exhibit any unusual construction features or have the ability to contribute significant information to the overall history of the City of Tracy.

Therefore, the Mattos Dairy Farm complex does not appear to meet any of the criteria for historic and/or architectural significance required for listing on the NRHP or CRHR. The structures that make up the complex also do not appear to possess sufficient artistic merit or historical association to meet a local standard for historical importance. The structures as a group do not contribute to the general character of the neighborhood through a unified historical period or architectural theme and thus cannot be considered as a contributing structure to a potential historic district. As such, the Mattos Dairy Farm complex should not be considered historical resources under CEQA. No analysis of integrity is required where the property fails to meet all four criteria.

Summary of Existing Cultural Resources at the Project Site

Historic Architectural Resources

Based on the architectural and historic resources assessment provided above, no known historic architectural resources are located within the project site boundaries.

Archaeological Resources

No known archaeological sites or burial sites are located within the project site boundaries. No known prehistoric or historic resources are located within the project site. However, as noted in Table 3.5-1, one known prehistoric resource and four historic era resources are located within 0.5 mile of the project site.

3.5.3 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the NRHP, which contains an inventory of the nation's significant prehistoric and historic properties. Under Title 36 Code of Federal Regulations Part 60, a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above. Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 United States Code [USC] 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected, and required special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) established federal policy to protect and preserve the inherent rights of freedom for Native American groups to believe, express, and exercise their traditional religions. These rights include but are not limited to access to sites, use and possession of sacred objects, and freedom to worship through ceremonials and traditional rites.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

CEQA Guidelines Section 15064.5(a)—CEQA Definition of Historical Resources

CEQA Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a "historical resource" as:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code, or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources.
4. The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is not included on any local, State, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource for the purposes of CEQA if there is substantial evidence supporting such a determination. A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the CRHR. Archaeological and historical sites are protected pursuant to a wide variety of State policies and regulations, as enumerated in the Public Resources Code. Cultural resources are recognized as nonrenewable resources and receive additional protection under the Public Resources Code and CEQA.

CEQA Guidelines Section 15064.5(a)(3)—California Register of Historical Resources Criteria

As defined by CEQA Guidelines, Section 15064.5(a)(3)(A-D), a resource shall be considered historically significant if the resource meets the criteria for listing on the CRHR. The CRHR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model (see criteria described above under the description of the NHPA), since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets NRHP criteria is clearly significant. In addition, a resource that does not meet NRHP standards may still be considered historically significant at a local or State level.

California Public Resources Code Section 5024.1—California Register of Historic Resources

Section 5024.1 of the Public Resources Code states that the CRHR is a guide to be used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected from substantial adverse change. Administration of the CRHR is to be overseen by the NAHC. Section 5024.1 indicates that the register shall include historical resources determined by the NAHC, according to adopted procedures, to be significant and to meet the criteria in subdivision (c).

CEQA Guidelines 15064.5(c)—Effects on Archaeological Resources

CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine whether they meet the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered. If an archaeological site is considered not to be a historical resource but meets the definition of a "unique archaeological resource" as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

CEQA Guidelines Section 15064.5(d)—Effects on Human Remains

Native American human remains and associated burial items may be significant to descendant communities and/or may be scientifically important for their informational value. They may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons. Human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines § 15064.5(d); PRC § 5097.98). CEQA and other State laws and regulations regarding Native American human remains provide the following procedural requirements to assist in avoiding potential

adverse effects on human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would affect Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the NAHC to develop an agreement for the treatment and disposal of the human remains and any associated burial items (CEQA Guidelines § 15064.5(d); PRC § 5097.98).
- If human remains are accidentally discovered, the county coroner must be contacted. If the county coroner determines that the human remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC must identify the Most Likely Descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items.
- If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (PRC § 5097.98).
- If potentially affected human remains or a burial site may have scientific significance, whether or not it has significance to Native Americans or other descendant communities, then under CEQA, the appropriate mitigation of effect may require the recovery of the scientific information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (CEQA Guidelines § 15064.5(c)(2)).

California Public Resources Code Section 5097.91—Native American Heritage Commission

Section 5097.91 of the Public Resources Code established the NAHC, whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Under Section 5097.91 of the Public Resources Code, a State policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites or sacred shrines located on public property. Section 5097.98 of the Public Resources Code specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner. Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

Local

City of Tracy General Plan

The Tracy General Plan includes the following goals, policies, and actions related to the protection of cultural resources that are relevant to the analysis to the proposed project.

Goal CC-3: Preserve and Enhance Historic Resources

Objective CC-3.1: Identify and Preserve Cultural and Historic Resources

Policies

Policy P1 The City shall encourage the preservation, enhancement, and conservation of historic and older neighborhoods, such as Lincoln Park, through its direct actions.

Policy P2 Identified cultural and historic landmarks and buildings shall be preserved

Policy P3 New development, redevelopment, alterations, and remodeling projects should be sensitive to surrounding historic context.

Policy P4 As part of the development review process, there shall be a standard condition of approval that if any resources are found during construction, all operations within the project area shall halt until an assessment can be made by appropriate professionals regarding the presence of archaeological and paleontological resources and the potential for adverse impacts on these resources.

Policy P5 Any archaeological or paleontological resources on private property shall be either preserved on their sites or adequately documented and conserved as a condition of removal. If any resources are found unexpectedly during development, then construction must cease immediately until accurate study and conservation measures are implemented.

Policy P6 If Native American artifacts are discovered on a site, the City shall consult representatives of the Native American community to ensure the respectful treatment of Native American sacred places.

City of Tracy Resolutions

The City of Tracy Resolution 3232, which was signed in 1978, designated 50 structures and sites to be historical landmarks in Tracy. The resolution followed a survey of architecturally and historically significant resources in the City. Resolution 2001-076 added two more buildings to the above-referenced list of designated properties. The Tracy Historic Landmarks designation encourages public recognition and protection of resources of architectural, cultural, or historical significance for local planning purposes. However, the City has not adopted a historic preservation ordinance or other protective or restrictive regulation. Accordingly, a Local Landmarks designation does not equate with permanent protection for a structure from demolition or alteration. None of the structures on the project site are identified on this list.

City of Tracy Municipal Code

Title 9 of the Tracy Municipal Ordinance addresses building regulations. Chapter 9.48 adopts the California Historical Building Code. The purpose of the chapter is to “provide regulations for the preservation, restoration, rehabilitation, relocation, or reconstruction of buildings or structures designated as qualified historical buildings or properties; provide alternative solutions for the preservation of qualified historical buildings or properties, to provide access for persons with

disabilities, to provide a cost-effective approach to preservation, and to provide for the reasonable safety of occupants or users."

3.5.4 - Project Impacts and Mitigation Measures

Significance Criteria

The City is utilizing Appendix G, Environmental Checklist, of the CEQA Guidelines, thresholds of significance for this project. Accordingly, cultural resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

c) Disturb any human remains, including those interred outside of formal cemeteries.

Approach to Analysis

This evaluation focuses on whether the project would impact historic, archaeological or human remains.

The project may have an impact on a historical resource if construction of the project would impair a resource's eligibility for inclusion in the CRHR. Analysis is based, in part, on information collected from record searches at the Northwest Information Center (NWIC), additional archival research, pedestrian surveys, and information from historic architectural assessment of existing properties more than 45 years in age located within the project boundaries. If an identified impact would leave a resource no longer able to convey its significance, meaning that the resource would no longer be eligible for listing in the CRHR, then the project's impact would be considered a significant adverse change. According to CEQA Guidelines Public Resources Code Section 15126.4(b)(1) (CEQA Guidelines), if a project adheres to the Secretary of Interior standards, the project's impact "shall generally be considered mitigated below a level of significance and thus is not significant."

The project may have an impact on an archaeological resource or human remains if construction of the project would physically damage or destroy archaeological data or human remains (including those interred outside of formal cemeteries). Analysis is based, in part, on information collected from record searches at the NWIC, the additional archival research, and pedestrian surveys.

Both direct and indirect effects of project implementation were considered for this analysis. Direct impacts are typically associated with construction and/or ground-disturbing activities, and have the potential to immediately alter, diminish, or destroy all or part of the character and quality of archaeological resources and/or historic architecture. Indirect impacts are typically associated with post-project implementation conditions that have the potential to alter or diminish the historical setting of a cultural resource (generally historic architecture) by introducing visual intrusions on existing historical structures that are considered undesirable.

Impacts Evaluation

Historic Resources

Impact CUL-1: The proposed project could cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.

Construction

The CCIC records search located four historic era resources within the 0.5-mile search radius. The closest known historical resources are located on the southwest corner of the project site (P-39-000072) and along the southern boundary of the project site (P39-004373). The remaining historic era resources are not in close proximity to the project boundary and all four resources would remain unaffected because no human remains have been previously recorded on the project site or in its vicinity. The southwest corner of project site contains buildings and structures over 50 years old associated with the Mattos Dairy Farm complex. As discussed above, the Mattos Dairy Farm complex was evaluated relative to the four CRHR eligibility criteria and found to be ineligible to meet any of the criteria for historic and/or architectural significance required for listing on the NRHP, CRHR, or at the local level.

While unlikely, subsurface construction activities always have the potential to damage or destroy previously undiscovered historic resources such as wood, stone, foundations, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramic, and other refuse, if encountered. This would represent a potentially significant impact related to historic resources.

Implementation of Mitigation Measure (MM) CUL-1 would require an inspection and spot-monitoring by a qualified Archaeologist after clearing and grubbing but before digging and trenching, when any historic resources would be visible. This would reduce potential impacts to historic resources that may be discovered during project construction. If a potential resource is identified, construction would be required to stop in the area of the finding(s) until appropriate identification and treatment measures are implemented. This measure would be consistent with the City's standard conditions of approval that require monitoring of construction sites in proximity to known resources. Therefore, direct, and indirect impacts related to historic resources would be less than significant with mitigation.

Operation

Impacts related to a project's potential to cause a substantial adverse change in the significance of a historical resource are limited to inadvertent discoveries. No respective operational impacts would occur.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

MM CUL-1 Archaeological Spot-Monitoring and Halt of Construction Upon Encountering Historical or Archaeological Materials

An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology shall inspect the site once grubbing and clearing are complete for the purpose of determining whether there are any previously undiscovered resources on-site, and prior to any grading or trenching into previously undisturbed soils. This shall be followed by regular periodic or "spot-check" archaeological monitoring as determined by the Archaeologist. If the Archaeologist believes that a reduction in monitoring activities is prudent, then a letter report detailing the rationale for making such a reduction and summarizing the monitoring results shall be provided to the City of Tracy for concurrence. In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers shall avoid altering the materials until an Archaeologist has evaluated the situation. The applicants for the development of the Tracy Alliance, Suvik Farms, and Zuriakat parcels shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. The Archaeologist shall evaluate any finding(s) and determine whether they are significant, and if so, shall make recommendations concerning appropriate measures that will be implemented to protect the significant resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered significant resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and shall be submitted to the City of Tracy, the Northwest Information Center (NWIC), and the California Office of Historic Preservation (OHP), as required.

Level of Significance After Mitigation

Less Than Significant Impact

Archaeological Resources

Impact CUL-2: The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

Construction

Records search from the CCIC indicated that one prehistoric archaeological resource has previously been recorded within the 0.5-mile radius of the project site and is not located within the project site boundary. No additional archaeological resources were encountered during the pedestrian field survey and evaluation; however, the presence of a prehistoric archaeological site within the 0.5-mile radius, coupled with poor soil visibility across the Tracy Alliance and Zuriakat project parcels

increases the possibility undiscovered cultural resources may be encountered during project construction. Such resources could consist of but are not limited to stone, bone, wood, or shell artifacts or features, including hearths and structural elements. This represents a potentially significant impact related to archaeological resources.

However, implementation of MM CUL-1 which requires inspection and spot-monitoring by a qualified Archaeologist after clearing and grubbing are complete, but before any digging or trenching begin, would reduce potential impacts to archaeological resources that may be discovered during project construction. If a potential resource is identified, construction would be required to stop until appropriate identification and treatment measures are implemented. Therefore, direct and indirect impacts related to archaeological resources would be less than significant with mitigation.

Operation

Impacts related to a project's potential to cause a substantial adverse change in the significance of an archaeological resource are limited to construction impacts. No respective direct or indirect operational impacts related to archaeological resource would occur.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

Implement MM CUL-1

Level of Significance After Mitigation

Less Than Significant Impact

Human Remains

Impact CUL-3:	**The proposed project could disturb human remains, including those interred outside of formal cemeteries.**

Construction

The potential for human remains to be discovered during ground-disturbing activities is considered low because no human remains have previously been discovered on the project site or in its vicinity. While it is unlikely that the presence of human remains exists within or near the project site, there is always the possibility that subsurface construction activities associated with the proposed project, such as grading or trenching, could potentially damage or destroy previously undiscovered human remains. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and 5097.98 must be followed. MM CUL-3 further specifies the procedures to follow in the event human remains are uncovered. Along with compliance with these guidelines and statutes, implementation of this mitigation would reduce potential impacts related to human remains to a less than significant level.

Operation

Impacts related to a proposed project's potential to disturb human remains are limited to construction impacts. No respective operational impacts would occur.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

MM CUL-3 Stop Construction Upon Encountering Human Remains

In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during the course of project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the county coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98.
2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission.
   - The descendant identified fails to make a recommendation.
   - The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American remains:

- When an initial study identifies the existence of, or the probable likelihood of, Native American remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicants for the development of the Tracy Alliance, Suvik Farms, and Zuriakat parcels may each develop a plan with respect to their individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC.

Level of Significance After Mitigation

Less Than Significant Impact

3.5.5 - Cumulative Impacts

The geographic scope for the cumulative analysis is described further below for each type of resource. This analysis evaluates whether the impacts of the proposed project, together with the impacts of cumulative development, could result in a cumulatively significant impact related to historical, archaeological, and cultural resources. This analysis then considers whether the incremental contribution of the impacts associated with the implementation of the proposed project would be significant. Both conditions must apply for the project's cumulative effects to rise to the level of significance.

Historic Resources

The relevant geographic scope for historic resources is the City. The cumulative setting includes existing agricultural and industrial uses. A portion of the southwest corner of the project site is currently occupied by several residences and agricultural structures. The Mattos Dairy Farm complex located on-site, while of historic age, is ineligible for local listing under City of Tracy Resolution 3232 and was found to be ineligible for listing on the CRHR. The dairy complex therefore does not qualify as a historic resource under CEQA, and its demolition will not contribute to a cumulative impact on the City.

All cumulative projects, except for Cumulative Project 29 and Cumulative Project 30, are all within the City. These cumulative projects have the potential to result in impacts to historic resources. However, potential cumulative impacts would be mitigated at an individual project level by adherence to applicable current State and federal laws and regulations, as well as other City and County laws, regulations and mitigations, such as adherence to standard conditions of approval that require monitoring of construction sites in proximity to known resources (similar touch as MM CUL-1). The combination of these efforts would reduce potential cumulative impacts related to historical resources to a less than significant level.

Archaeological Resources

The geographic scope of the cumulative archaeological resources analysis is the project vicinity. This is because archaeological resource impacts tend to be localized, because the integrity of any given

resource depends on what occurs in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 0.5-mile radius). As discussed above, the cumulative setting includes existing agricultural and industrial uses. Given that the project will not have a known, direct impact on any known archaeological resources, project impacts are less than significant in this regard.

Construction activities associated with the proposed project has the potential to encounter undiscovered cultural resources. The proposed project would be required to mitigate for impacts through compliance with applicable federal and State laws and regulations governing cultural resources.

Additionally, the implementation of standard construction mitigation measures (MM CUL-1 and MM CUL-3) would ensure that undiscovered cultural resources are not adversely affected by project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources in the project vicinity.

Cumulative Projects 15, 19, 27, 30, and 35 are all within a 0.5-mile radius of the project site. These cumulative projects would be subject to applicable current State and federal laws and regulations, as well as other local and City and County laws, regulations, and mitigations, such as adherence to standard conditions of approval that require monitoring of construction sites in proximity to known resources, immediate cessation of construction activity upon discovery of unidentified human remains, and the protection of cultural resources that are discovered. The combination of the above-mentioned efforts and other standard construction conditions and mitigation measures (similar touch as MM CUL-1 and MM CUL-3) would reduce potential cumulative impacts related to archaeological and cultural resources to a less-than-significant level.

Level of Cumulative Significance

Less Than Significant Impact With Mitigation Incorporated

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3.6 - Energy

3.6.1 - Introduction

This section describes the existing energy use setting as well as the relevant regulatory framework. This section also evaluates the potential impacts related to energy use that could result from implementation of the proposed project. Information in this section is based, in part, on project-specific energy use calculations included in Appendix E.

3.6.2 - Existing Setting

Energy Basics

Energy use, especially through fossil fuel consumption and combustion, relates directly to environmental quality since it can have the potential to adversely affect air quality and generate greenhouse gas (GHG) emissions that may contribute to climate change. Electrical power is generated through a variety of sources, including fossil fuel combustion, hydropower, wind, solar, biofuels, and others. Natural gas is widely used to heat buildings, prepare food in restaurants and residences, and fuel vehicles, among other uses. Fuel use for transportation is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes such as auto, carpool, and public transit; and miles traveled by these modes, and generally based on petroleum-based fuels such as diesel and gasoline. Electric vehicles (EVs) may not have any direct emissions but do have indirect emissions via the source of electricity generated to power the vehicle. Construction and routine operation and maintenance of transportation infrastructure also consume energy.

Electricity Generation, Distribution, and Use

State of California

In 2018, California's in-State electric generation totaled 194,842 gigawatt-hours (GWh).[1] Primary fuel sources for the State's electricity generation in 2018 included natural gas (46.5 percent), large hydro (11.3 percent), solar photovoltaic (PV) (13.9 percent), nuclear (9.4 percent), wind (7.2 percent), geothermal (5.9 percent), small hydro (2.2 percent), biomass (3.0 percent), coal (0.2 percent), petroleum coke and waste heat (0.2 percent), and oil (<0.1 percent).[2] In-state electricity generation capacity reached approximately 80,000 megawatts (MW) in 2018.[3]

According to the California Energy Commission (CEC), California consumed approximately 285,488 GWh in 2018, down 2 percent from 2017.[4] According to the CEC's Energy Consumption Database, residential electricity demand accounted for approximately 32.9 percent of California's electricity consumption in 2018 while nonresidential demand account for approximately 67.1 percent.[5]

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1 California Energy Commission (CEC). 2021. "Total System Electric Generation." Website: https://ww2.energy.ca.gov/almanac/electricity_data/total_system_power.html#:~:text=California%20has%20approximately%2080%2C000%20MW,and%206%2C000%20MW%20from%20wind. Accessed February 2, 2021.

2 Ibid.

3 Ibid.

4 Ibid.

5 "Electricity Consumption by County." Website: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed January 28, 2021.

City of Tracy

The City of Tracy is served solely by Pacific Gas and Electric Company (PG&E) to meet electrical power demands. As of 2018, PG&E's portfolio contains 39 percent electricity generated from renewable sources.[6]

The smallest scale at which electricity consumption information is readily available is the county level. Therefore, electricity consumption in San Joaquin County is used herein to also characterize the City's existing electricity consumption. San Joaquin County includes seven cities and a large unincorporated area. According to the CEC, San Joaquin County consumed approximately 5,583.3 GWh in 2019.[7]

Natural Gas Generation, Distribution, and Use

State of California

Natural gas continues to play an important and varied role in California; however, California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[8] The State's net natural gas production for 2019 was approximately 193.9 billion cubic feet, representing a decrease of approximately 4.3 percent from 2018 production.[9]

In 2018, California consumed a total of 12,666 million U.S. therms of natural gas, or approximately 1,266 trillion British Thermal Unit (BTU),[10] with approximately 28.8 percent going directly to electricity generation.[11] According to the CEC's Energy Consumption Database, residential natural gas demand accounted for approximately 34.7 percent of California's total natural gas demand while nonresidential natural gas demand accounted for approximately 65.3 percent.[12]

City of Tracy

The City of Tracy is served solely by PG&E to meet natural gas demands. PG&E has detailed information regarding a commitment to use renewable gas sources in the future but has not provided a current figure for renewable gas in their portfolio.

The smallest scale at which natural gas consumption information is readily available is at the county level; therefore, natural gas consumption in San Joaquin County is used herein to also characterize the City's existing natural gas consumption.

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6 Pacific Gas and Electric Company (PG&E). 2020. https://www.pgecorp.com/corp_responsibility/reports/2020/bu07_renewable_energy.html. Accessed January 28, 2021.

7 California Energy Commission (CEC). 2020. "Electricity Consumption by County." Website: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed January 28, 2021.

8 California Energy Commission (CEC). 2019. "Supply and Demand of Natural Gas in California." Website: https://ww2.energy.ca.gov/almanac/naturalgas_data/overview.html. Accessed June 2, 2020.

9 United State Energy Information Administration (EIA). 2020. "Natural Gas Gross Withdrawals and Production." May. Website: https://www.eia.gov/dnav/ng/ng_prod_sum_a_EPG0_VGM_mmcf_a.htm. Accessed June 2, 2020.

10 California Energy Commission (CEC). 2020. "Gas Consumption by County." Website: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed January 28, 2021.

11 United State Energy Information Administration (EIA). 2020. Table F18: Natural Gas Consumption Estimates, 2018. January 3. Website: https://www.eia.gov/state/seds/seds-data-fuel.php?sid=CA#NaturalGas. Accessed June 10, 2020.

12 California Energy Commission (CEC). 2018. "Gas Consumption by County." Website: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed June 15, 2020.

According to the CEC, San Joaquin County consumed approximately 259.4 million U.S. therms of natural gas in 2019, or approximately 25,400 billion BTU.[13]

Transportation Fuel Use

State of California

California is one of the top producers of petroleum in the nation, with drilling operations occurring throughout the State. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay Area, and the Central Valley. California oil refineries also process Alaskan and foreign crude oil received in ports in Los Angeles, Long Beach, and the San Francisco Bay Area. Crude oil production in California and Alaska is in decline, and California refineries have become increasingly dependent on foreign imports.[14] Since 2012, foreign suppliers, led by Saudi Arabia, provide over half of the crude oil refined in California.[15,16] According to the United States Energy Information Administration (EIA), California's field production of crude oil has steadily declined since the mid-1980s, totaling approximately 161.5 million barrels in 2019.[17]

According to the EIA, transportation accounted for nearly 40 percent of California's total energy demand, amounting to approximately 3,170 trillion BTU in 2018.[18] California's transportation sector, including rail and aviation, consumed roughly 584 million barrels of petroleum fuels in 2018.[19] In 2018, petroleum-based fuels were used for approximately 86 percent of the State's total transportation activity.[20] The CEC produces the California Annual Retail Fuel Outlet Report, which is a compilation of gasoline and diesel fuel sales data from across the State available at the county level. According to the CEC, California's 2017 fuel sales totaled 15,471 million gallons of gasoline and 3,417 million gallons of diesel.[21]

Alternative Fuels

A variety of alternative fuels are used to reduce petroleum-based fuel demand. The use of these fuels is encouraged through various Statewide regulations and plans, such as the Low Carbon Fuel Standard (LCFS) and Senate Bill (SB) 32. Conventional gasoline and diesel may be replaced, depending on the capability of the vehicle, with transportation fuels including hydrogen, biodiesel, and electricity. Currently, 44 public hydrogen refueling stations exist in California; however, none are

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[13] California Energy Commission (CEC). 2020. "Gas Consumption by County." Website: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed January 28, 2021.

[14] California Energy Commission (CEC). 2020. "Oil Supply Sources to California Refineries." Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/oil-supply-sources-california-refineries. Accessed June 2, 2020.

[15] California Energy Commission (CEC). 2019. "Foreign Sources of Crude Oil Imports to California 2018." March. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-sources-crude-oil-imports. Accessed June 2, 2020.

[16] California Energy Commission (CEC). 2020. "Oil Supply Sources to California Refineries." Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/oil-supply-sources-california-refineries. Accessed June 2, 2020.

[17] United State Department of Energy, Alternative Fuels Data Center. 2020. "Alternative Fueling Station Locator [Interactive Database]." Website: https://afdc.energy.gov/stations/#/find/nearest. Accessed June 2, 2020.

[18] United State Energy Information Administration (EIA). 2020. Table F33: Total Energy Consumption, Price, and Expenditure Estimates, 2018. May 29. Website: https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_te.pdf. Accessed June 10, 2020.

[19] United State Energy Information Administration (EIA). 2020. Table F16: Total Petroleum Consumption Estimates, 2018. April 24. Website: https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_use_pa.pdf. Accessed June 10, 2020.

[20] United State Energy Information Administration (EIA). 2020. Table F18: Natural Gas Consumption Estimates, 2018. January 3. Website: https://www.eia.gov/state/seds/seds-data-fuel.php?sid=CA#NaturalGas. Accessed June 10, 2020.

[21] California Energy Commission (CEC). 2019. 2010-2018 CEC-A15 Results and Analysis. Website: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting. Accessed June 15, 2020.

in the City.[22,23] Currently, 10 public biodiesel refueling stations are in California, with none of them in the City.[24]

Electric Vehicles

Electricity can be used to power electric and plug-in hybrid EVs directly from the power grid. Electricity used to power vehicles is generally provided by the electricity grid and stored in the vehicle's batteries. Fuel cells are being explored to use electricity generated onboard the vehicle to power electric motors. Currently, California has approximately 6,433 EV charging stations, 12 of which are located in the City.

City of Tracy

Petroleum fuels are generally purchased by individual users such as residents and employees. There are approximately 15 gasoline stations in the City, the closest of which is located approximately 1.5 miles west of the project site.[25]

The smallest scale at which gasoline and diesel fuel sales information is readily available is the county level. Therefore, fuel sales in San Joaquin County are used herein to also characterize the City's existing gasoline and diesel fuel consumption. According to the CEC, San Joaquin County consumed an estimated 352 million gallons of gasoline and 113 million gallons of diesel fuel in 2019.[26]

3.6.3 - Regulatory Framework

Federal

Until the early 2000s, there were no specific federal laws and regulations for GHG emissions or major planning for climate change adaptation. Since then, federal activity has increased. The following are actions regarding the federal government, GHG emissions, and fuel efficiency.

GHG Endangerment

Massachusetts v. EPA (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, which involved a matter wherein the United States Environmental Protection Agency (EPA) sought to regulate four GHGs, including CO_2, under Section 202(a)(1) of the Clean Air Act. A decision was made on April 2, 2007, in which the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act. The Court held that the Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two

[22] United State Department of Energy, Alternative Fuels Data Center. 2020. "Alternative Fueling Station Locator [Interactive Database]." Website: https://afdc.energy.gov/stations/#/find/nearest. Accessed January 28, 2021.

[23] United State Department of Energy, Alternative Fuels Data Center. 2020b. "Alternative Fueling Station Counts by State." June. Website: https://afdc.energy.gov/stations/states. Accessed January 28, 2021.

[24] Ibid.

[25] Google. 2021. "Google Maps [Interactive Database]." Website: https://www.google.com/maps/search/tracy+ca+gas+stations/@37.7434779,-121.5006973,13z/data=!3m1!4b1. Accessed January 28, 2021.

[26] California Energy Commission (CEC). 2020. 2010-2019 CEC-A15 Results and Analysis. Website: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting. Accessed January 28, 2021.

distinct findings regarding GHGs under Section 202(a) of the Clean Air Act. These findings do not impose requirements on industry generally or specific types of entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below. After a lengthy legal challenge, the United States Supreme Court declined to review an appellate court ruling upholding the EPA Administrator's findings.

Clean Vehicles

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applies to passenger cars, light duty trucks, and medium duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons (MMT) and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the National Highway Safety Administration issued final rules on a second-phase joint rulemaking, establishing national standards for light duty vehicles for model years 2017 through 2025 in August 2012.[27] The new standards for model years 2017 through 2025 apply to passenger cars, light duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The EPA and the United States Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies proposed engine and vehicle standards that began in the 2014 model year and achieve up to a 20 percent reduction in CO_2 emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies proposed separate gasoline and diesel truck standards, which phased in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles, and a 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Finally, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

[27] United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Website: http://www.epa.gov/otaq/climate/documents/420f12051.pdf. Accessed February 10. 2021.

Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units

As required by a settlement agreement, the EPA proposed new performance standards for CO_2 emissions for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 MW would be required to meet an output-based standard of 1,000 pounds of CO_2 per megawatt-hour (MWh), based on the performance of widely used natural gas combined cycle technology.

California

Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation, much of which is centered on energy efficiency and clean fuels. Legislation such as Title 24 and Title 20 energy standards were adopted for energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 1493, Pavley Regulations and Fuel Efficiency Standards

California Assembly Bill (AB) 1493, enacted on July 22, 2002, required the California Air Resources Board (ARB) to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the by the United States District Court for the District of Columbia in 2011.[28] The standards were to be phased in during the 2009 through 2016 model years.[29]

The second phase of the implementation for the Pavley Bill was incorporated into amendments to the Low Emission Vehicle (LEV) Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation is anticipated to reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EVs and hydrogen fuel cell cars. The regulations will also help to ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.

Assembly Bill 32

The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include CO_2, CH_4, N_2O, hydrofluorocarbons,

[28] California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed February 2, 2021.

[29] California Air Resources Board (ARB). 2013. Facts About the Clean Cars Program. Website: http://www.arb.ca.gov/msprog/zevprog/factsheets/advanced_clean_cars_eng.pdf. Accessed February 2, 2021.

perfluorocarbons, and sulfur hexafluoride. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs.

The ARB is the State agency charged with monitoring and regulating sources of GHGs. The ARB approved the 1990 GHG emissions level of 427 MMT carbon dioxide equivalent (CO_2e) on December 6, 2007.[30] Therefore, to meet the State's target, emissions generated in California in 2020 were required to be equal to or less than 427 MMT CO_2e. Emissions in 2020 in a Business as Usual (BAU) scenario were estimated to be 596 MMT CO_2e, which do not account for reductions from AB 32 regulations.[31] At that rate, a 29 percent reduction was required to achieve the 427 MMT CO_2e 1990 inventory.[32] In October 2010, the ARB prepared an updated 2020 forecast to account for the effects of the 2008 recession and slower forecasted growth. Under the updated forecast, a 21.7 percent reduction from BAU was required to achieve 1990 levels.[33]

California Air Resources Board Scoping Plan

The ARB Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32.[34] The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a Statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the LCFS; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

[30] California Air Resources Board (ARB). 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. November 16, 2007. Website: www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed February 2, 2021.

[31] California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 2, 2021.

[32] San Joaquin Valley Air Pollution Control District (Valley Air District) 2009. "Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act." December 2009. Website: https://www.valleyair.org/Programs/CCAP/12-17-09/1%20CCAP%20-%20FINAL%20CEQA%20GHG%20Staff%20Report%20-%20Dec%2017%202009.pdf. Accessed April 1, 2022.

[33] California Air Resources Board (ARB). 2010. 2020 Greenhouse Gas Emissions Projection and BAU Scenario Emissions Estimate. Website: http://www.arb.ca.gov/cc/inventory/archive/captrade_2010_projection.pdf. Accessed February 2, 2021.

[34] California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 2, 2021.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. Capped strategies are subject to the proposed cap-and-trade program. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. Uncapped strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.[35]

The ARB approved the First Update to the Scoping Plan in May of 2014 and the 2017 Scoping Plan Update in November of 2017. The First Update built upon the Initial Scoping Plan while the 2017 Scoping Plan Update builds the Initial Scoping Plan and First Update to the Scoping Plan with new strategies and recommendations.

Senate Bill 32

The Governor signed SB 32 in September of 2016, giving the ARB statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states, "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

1. SB 350
   - Achieve 50 percent Renewables Portfolio Standard by 2030.
   - Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard
   - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
   - Maintaining existing GHG standards for light- and heavy-duty vehicles.
   - Put 4.2 million Zero-Emission Vehicles (ZEVs) on the roads.
   - Increase ZEV buses, delivery and other trucks.
4. Sustainable Freight Action Plan
   - Improve freight system efficiency.
   - Maximize use of near Zero-Emission Vehicles and equipment powered by renewable energy.
   - Deploy over 100,000 zero-emission trucks and equipment by 2030.
5. Short-Lived Climate Pollutant Reduction Strategy
   - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
   - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.

[35] California Air Resources Board (ARB). 2008 (includes edits made in 2009). Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 2, 2021.

6. SB 375 Sustainable Communities Strategies
    - Increased stringency of 2035 targets.
7. Post-2020 Cap-and-Trade Program
    - Declining capacities, continued linkage with Québec, and linkage to Ontario, Canada.
    - The ARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In Fall 2016, the ARB staff described potential future amendments including reducing the offset usage limit, redesigning the allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.
8. 20 percent reduction in GHG emissions from the refinery sector.
9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Senate Bill 375—the Sustainable Communities and Climate Protection Act of 2008

SB 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Senate Bill 1078—Renewable Electricity Standards

On September 12, 2002, Governor Gray Davis signed SB 1078, requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 1078 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. The ARB Board approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23.

Senate Bill 350—Clean Energy and Pollution Reduction Act of 2015

The Legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for EV charging stations. Specifically, SB 350 requires the following to reduce Statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.

- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the role of the Independent System Operator (ISO) to develop more regional electricity transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

Senate Bill 100—The 100 Percent Clean Energy Act of 2018

The legislation directs the CPUC, CEC, and the ARB to plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. This Act amends Sections 399.11, 399.15, and 399.30 of, and adds Section 454.53 to, the Public Utilities Code, relating to energy.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce energy consumption through the use of Executive Orders. While merely directive, meaning they are not enforceable regulation, Executive Orders set the tone for the State and guide the actions of State agencies.

Executive Order S-01-07—Low Carbon Fuel Standard

The Governor signed Executive Order S 01-07 on January 18, 2007. The Executive Order mandates that a Statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established a LCFS and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the "lifecycle carbon intensity" of transportation fuels. The ARB adopted the LCFS on April 23, 2009.

The LCFS was subject to legal challenge in 2011. Ultimately, on August 8, 2013, the Fifth District Court of Appeal (California) ruled that ARB failed to comply with CEQA and the Administrative Procedure Act when adopting regulations for LCFS. In a partially published opinion, the Court of Appeal directed that Resolution 09-31 and two Executive Orders of the ARB approving LCFS regulations promulgated to reduce GHG emissions be set aside. However, the Court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while the ARB complies with the identified procedural requirements.

To address the Court ruling, a new LCFS regulation was considered by the ARB in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low carbon fuels, offer additional flexibility to regulated parties, update critical technical information, simplify, and streamline program operations, and enhance enforcement. The second public hearing for the new LCFS regulation was held on September 24, 2015, and September 25, 2015, where the LCFS regulation was adopted. The Final Rulemaking Package adopting the regulation was filed with the Office of Administrative Law on October 2, 2015. The OAL approved the regulation on November 16, 2015.

Executive Order N-79-20

On September 23, 2020, Governor Gavin Newsom issued an Executive Order establishing a goal that 100 percent of new passenger cars and trucks sold in California shall be zero-emission by 2035. The Executive Order also sets a goal that, where feasible, all operations include zero-emission medium- and heavy-duty trucks by 2045, and drayage trucks by 2035. Off-road vehicles have a goal to transition to 100 percent ZEVs by 2035, where feasible.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations

California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.[36]

Title 24 Energy Efficiency Standards

California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The newest version of Title 24 adopted by the CEC went into effect on January 1, 2017.[37] The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020. Buildings whose permit applications are dated on or after January 1, 2020, must comply with the 2019 Standards. The CEC updates the standards every three years. One of the notable changes in the 2019 Title 24 Standards includes the solar photovoltaic systems requirement for new low-rise residential homes.

Title 24 California Green Building Standards Code

California Code of Regulations, Title 24, Part 11 is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The code is updated on a regular basis, with the most recent update consisting of the 2019 California Green

[36] Bay Area Air Quality Management District (BAAQMD). 2017. CEQA Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed February 2, 2021.

[37] California Energy Commission (CEC). 2016. 2016 Building Energy Efficiency Standards Frequently Asked Questions. Website: http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf. Accessed February 2, 2021.

Building Code Standards that became effective January 1, 2020.[38] Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. The State Building Code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official. The 2019 California Green Building Code Standards are also considered some of the most stringent energy efficiency and green building standards in the country.

Local

City of Tracy

City of Tracy General Plan

The City of Tracy General Plan contains several goals, objectives, and policies intended to facilitate the conservation of energy and improve energy efficiency in the City. Listed below are the General Plan goals, objectives and policies relevant to this analysis.

Goal OSC-5 Efficient use of resources throughout the City of Tracy

Objective OSC-5.1 Promote resource conservation.

Policies

Policy P1 The City shall promote development patterns and construction standards that conserve resources through appropriate planning, housing types and design, and energy conservation practices.

Policy P2 The City shall encourage landscaping that is water- and energy efficient.

Policy P3 The City shall encourage buildings to incorporate energy- and water-efficient technologies.

Policy P4 The City shall encourage buildings to incorporate energy- and water-efficient technologies.

Objective OSC-5.2 Ensure that development is designed for maximum energy efficiency.

Policies

Policy P1 New development projects should be designed for solar access and orientation. Maximum efficiency is gained by siting homes on an east–west axis.

Policy P2 New development projects should include measures to reduce energy consumption through site and building design, material selection and mechanical systems.

Policy P3 Use of on-site alternative energy sources, such as photovoltaic (PV) cells for commercial, residential, and industrial users shall be encouraged.

[38] California Building Standards Commission (CBC). 2016. Green Building Standards. Website: https://www.ladbs.org/docs/default-source/publications/code-amendments/2016-calgreen_complete.pdf?sfvrsn=6. Accessed February 2, 2021.

Policy P4 The City shall encourage buildings to incorporate energy- and water-efficient technologies.

Objective OSC-5.3 Promote sustainability and energy efficiency and conservation through the City's direct actions.

Policies

Policy P1 The City shall use local renewable energy resources when feasible.

Policy P2 New vehicles purchased and leased by the City should be alternatively fueled to the extent feasible. Common alternative fuel technologies include hybrid, electric biobased fuels and compressed natural gas (CNG).

Policy P3 The City shall consider including alternative energy systems such as solar thermal, photovoltaic and other clean energy systems in the design and construction of City facilities.

Policy P4 The City shall proactively support long-term strategies, State and federal legislation and partnerships that assure affordable and reliable production and delivery of electrical power to the community.

Policy P5 The City shall support public and private efforts to develop and operate alternative systems of wind, solar and other electrical production that take advantage of local renewable resources.

Policy P6 Future development projects shall consider the following design features, during the Specific Plan, PUD, subdivision, and design/development review: solar access and orientation, natural ventilation, energy efficient landscaping and energy efficient and conserving building design and technologies.

Policy P7 The City shall encourage, and support voluntary retrofit energy programs for residential, commercial, and industrial buildings, and shall encourage new or major rehabilitations of large nonresidential projects to incorporate renewable energy generation.

Policy P8 The City shall implement energy efficiency improvements for existing and future City facilities as opportunities arise.

Policy P9 City purchasing policies shall require purchase of energy efficient products, products that contain recycled materials, and products that reduce waste generated when feasible.

Policy P10 The City shall support land use patterns that maximize energy efficiency, both by minimizing transportation and by making use of existing capital improvements.

Goal AQ-1 Improved air quality and reduced greenhouse gas emissions.

Objective AQ-1.2 Promote development that minimizes air pollutant and greenhouse gas emissions and their impact on sensitive receptors as a result of indirect and stationary sources.

Policies

Policy P4 New development projects should incorporate energy efficient design features for HVAC, lighting systems and insulation that exceed Title 24.

Policy P5 Use of solar water and pool heaters is encouraged.

Policy P6 Installation of solar voltaic panels on new homes and businesses shall be encouraged.

Policy P7 Trees should be planted on the south- and west-facing sides of new buildings or building undergoing substantial renovation in order to reduce energy usage.

City of Tracy Sustainability Action Plan

The City of Tracy Sustainability Action Plan was adopted in 2011 to achieve sustainability in numerous sectors including GHG emissions, energy, and transportation and land use. The Sustainability Action Plan includes specific measures to be implemented that the City estimates will reduce GHG emissions by 378,461 to 482,154 metric tons (MT) of CO_2e. These reductions would come in part from reductions in Vehicle Miles Traveled (VMT) and energy consumption, with the relevant sustainability measures listed below.

Energy

E-1:Green Building Ordinance

Develop an incentives-based Green Building Ordinance that promotes energy efficient design for new buildings.

E-2: Energy Efficiency in Site Planning and Design

Amend the Zoning Ordinance, City Standards, or Subdivision Guidelines to do the following:

a) Establish measures that reduce energy use through solar orientation by taking advantage of landscaping and sunscreens.

b) Allow increased height limits and greater development flexibility in exchange for incorporating energy efficient green building practices. Provide permitting-related and other incentives for energy efficient building projects, for example by giving green projects priority in plan review, processing and field inspection services.

c) Establish guidelines for cool pavements and strategically placed shade trees.

d) Require all new development and major rehabilitation (i.e., additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) projects to

incorporate any combination of the following strategies to reduce heat gain for 50 percent of the non-roof impervious site landscape, which includes sidewalks, courtyards, parking lots, and driveways: shaded within five years of occupancy; use of paving materials with a Solar Reflectance Index (SRI) of at least 29; open grid pavement system; or locating parking spaces under deck, under roof, or under a building.

e) Require outdoor lighting fixtures to be energy efficient. Require parking lot light fixtures and light fixtures on buildings to be on full cut-off fixtures, except emergency exit or safety lighting, and all permanently installed exterior lighting shall be controlled by adjustable timers. Prohibit continuous all night outdoor lighting in sports stadiums, construction sites, and rural areas unless they are required for security reasons.

f) Where feasible, increase solar access by requiring that new streets be designed so that the blocks have one axis within plus or minus 15 degrees of geographical east/west, and the east/west length of those blocks are at least as long, or longer, as the north/south length of the block. Areas with topological constraints, among others, may be excluded from this requirement.

E-3: Green Building and Energy Efficiency Design and Education

a) Amend the City of Tracy Design Goals and Standards to do the following:
   i. Integrate guidelines from the Green Building Ordinance.
   ii. Integrate guidelines related to cool pavements in the City Standards.
   iii. Balance tradeoffs between solar access and landscape tree shading.

b) Conduct the following public education and outreach campaigns:
   i. Provide information about green building, marketing, training, and technical assistance to property owners, development professionals, schools, and special districts.
   ii. Develop an "energy efficiency challenge" campaign for community residents or businesses.
   iii. Provide public education and publicity about renewable resources, energy efficiency and emissions reduction programs and incentives.

E-4: Energy Efficient Products and Retrofits

a) Partner with PG&E to do the following, using outside funds:
   i. Promote the use of energy efficient appliances that meet Energy Star standards when higher than Title 24.
   ii. Distribute compact fluorescent light (CFL) bulbs and/or fixtures to community members.
   iii. Offer a halogen torchiere lamp exchange to community members.
   iv. Promote energy efficiency audits of existing buildings to check, repair, and readjust heating, ventilation, air conditioning, lighting, water heating equipment, insulation and weatherization.
   v. Encourage energy audits to be performed when residential and commercial buildings are sold. Energy audits will include information regarding the opportunities for energy

efficiency improvements, and will be presented to the buyer. Commercial buildings are encouraged to be "benchmarked" using EPA's ENERGY STAR Portfolio Manager Tool.

vi. Encourage individualized energy management planning and related services for large energy users.

vii. Fund and schedule energy efficiency retrofits or "tune-ups" of existing buildings.

b) Support San Joaquin Valley Unified Air Pollution Control District's lawnmower exchange program for residents to exchange conventional gas-powered lawnmowers for electric and rechargeable battery-powered lawnmowers.

c) Encourage new development to provide exterior electrical outlets so that electric lawnmowers and other landscaping equipment can be sufficiently powered.

d) Encourage the installation of programmable thermostat timers.

e) Encourage the installation of energy efficient boilers.

E-5: Weatherization Assistance

Continue to fund weatherization projects for households that meet the income eligibility criteria by utilizing the Community Development Agency's Downtown Rehabilitation Loan and Grant programs.

E-6: Financing for Energy Efficiency and Renewable Energy Projects

Develop a program under AB 811 to offer innovative, low-interest financing for energy efficiency and renewable energy projects for existing and new development, including heating, ventilation, air conditioning, lighting, water heating equipment, insulation, weatherization, and solar.

E-7: Energy Efficient Retrofits for City Street Lights

Retrofit City streetlights to LED or induction lighting.

E-8: Solar Panel Installations on Municipal Facilities

Install solar panels on municipal facilities.

E-9: Energy Efficiency Settings for City Desktop Computers

Change the settings for all City desktop computers to achieve the following:

a) All monitors shall go into sleep mode after 15 minutes of inactivity.
b) All computers shall go into sleep mode after 90 minutes of inactivity. Install solar panels on municipal facilities.

Transportation and Land Use

T-1: Live-Work and Work-Live Uses

Amend the Zoning Ordinance to allow live-work and work-live uses in existing and future residential development and adopt more flexible home occupation requirements.

T-2: Reduced Parking Requirements

Amend the Zoning Ordinance to allow a reduction in parking requirements under the following circumstances:

a) Multiple uses with staggered parking demand
b) Actual demand lower than as required in code as demonstrated by a parking study
c) Proximity to bus stop/transit
d) Mixed use project
e) In-lieu fee in Downtown

T-3: Support for Bicycling

Promote bicycle usage through the following:

a) Continue to require bicycle parking for nonresidential and multi-family uses.
b) Amend the Zoning Ordinance to require shower facilities and dressing areas for significant new or redevelopment of nonresidential uses.
c) Create a bicycle-sharing program.
d) Provide bicycle parking near transit.

T-4: Support for Transit

Promote transit ridership through the following:

a) Add to the Transportation Master Plan, where justified by ridership and funding availability, an increase transit route coverage to within ½ mile of all residents in the developed city and to within ¼ mile of 75 percent of residents within new development areas.
b) Continue to implement the City's program to provide covered and partially enclosed shelters that are adequate to buffer wind and rain and with at least one bench at each existing public transit stop and to provide local public transit information in transit shelters.
c) Provide information to City employees through the Human Resources Department and the City's Transit Coordinator on commute alternatives and incentives, including carpool/vanpool programs, transit service schedules, transit vouchers, alternative work week plans, telecommuting options, and incentives that can be used to increase employee use of alternative modes or work schedules.
d) Work with the San Joaquin Regional Rail Commission to study the feasibility of creating rail service in Tracy's downtown.
e) Continue to provide Citywide door to door service for Americans with Disabilities Act (ADA) customers and seniors on the City's Tracer service.

f) Continue to run Tracer along commuter routes during peak times, providing remaining service to all the middle and high schools and high employment areas, such as the West Valley Mall.

g) Encourage affordable housing to be located in transit-oriented development whenever feasible.

T-5: Smart Growth, Urban Design and Planning

Promote pedestrian safety, neighborhood connectivity and walkable neighborhoods through the following:

a) Create development standards for commercial, office, and retail zones to promote a principal functional entry that faces a public street. In the Zoning Code, evaluate more restrictive parking requirements to achieve greater pedestrian connections between streets and building entrances. Require all new buildings within the Corridor Overlay Zone and the Village Center (VC) Zone to be located an appropriate distance from the street to promote walkability, such as 10 feet. Within these zones, increase use of windows or storefronts with views into the building along a minimum of portion of the ground floor building walls fronting the primary street, depending on the building context.

b) Amend the Municipal Code or create subdivision design standards to require all new development within applicable areas to do the following:
   i. Include an interconnected grid of collectors and arterials within the developed city and connecting to and through new development areas with the goal of ¼-mile to ½-mile minimum spacing of two- and four-lane roadways and minimal reliance on six-lane arterials.
   ii. Include at least one through-street and/or non-motorized right-of-way (non-motorized rights-of-way may count for no more than 10 percent of the total) intersecting the project boundary at least every 400 feet, or at existing abutting street intervals, whichever is less.
   iii. Have internal connectivity such that there are at least 200 intersections per square mile.

c) Amend the Zoning Ordinance to require adequate pedestrian access through all commercial, residential, and mixed-use development.

d) Amend the Zoning Ordinance or create new subdivision standards to require new projects to include a pedestrian or bicycle through-connection in any new cul-de-sacs, except where prohibited by topographical conditions.

e) Add to the Transportation Master Plan a program to close sidewalk gaps on key routes within the developed city, contingent on grant funding.

f) Establish a ½-mile walkability standard for residents to access goods, services, and recreational facilities.

T-6: Traffic Smoothing Through Congestion Management

Add to the Transportation Master Plan a program to implement traffic smoothing and congestion reduction at intersections along Eleventh Street, Grant Line Road, Schulte Road, Lammers Road, Tracy Boulevard, MacArthur Drive, and Chrisman Road corridors.

T-7: San Joaquin County Park and Ride Lot Master Plan Implementation

Implement the County's Park and Ride Lot Master Plan, which identifies key locations for park and ride lots in Tracy.

T-8: Alternative Transportation Choices for Students

Promote alternative transportation choices for students through the following:

a) Continue to provide free or reduced bus passes for school students.
b) Work with school districts to expand "Safe Routes to Schools" programs.
c) Work with school districts to create ridesharing or "walking school bus" programs for students.

T-9: Comprehensive Signal Coordination Program

Continue to implement a comprehensive signal coordination program for key routes in the developed city, connecting to and through new development areas and to the Interstate-205 interchanges. Include Intelligent Transportation System (ITS) elements to maximize effectiveness, such as adaptive traffic control, synchronized signals, transit and emergency signal priority, and other traffic flow management techniques.

T-10: Ramp Metering on Interstate 205

Work with Caltrans and San Joaquin Council of Governments (SJCOG) to implement ramp metering on Interstate 205 to minimize congestion-related GHG emissions from both through trips and trips generated by Tracy that use Interstate 205.

T-11: Increased Transit to Bay Area Cities and San Joaquin Valley Employment Centers

Work with regional transit agencies to increase the frequency and capacity of intercity buses connecting Tracy to Bay Area cities, Stockton, and other San Joaquin Valley employment centers.

T-12: Altamont Route Approval and Transit-Oriented Development Around Rail

Work with Altamont Corridor Express (ACE) and the High-Speed Rail Authority to approve the Altamont Route and achieve successful integration of rail transit into a transit-oriented development zone, including an intracity feeder bus system.

T-13: Reduce Commute Trips

Support regional efforts to reduce commute trips, including the following:

a) Support San Joaquin Valley Unified Air Pollution Control District requirements that large employers establish employee trip reduction programs such as Rule 9410.
b) Promote the San Joaquin Council of Governments Commute Connection program, which provides information about commute options and connects commuters for carpooling, ridesharing and other activities.

T-14: Parking Cash-Out Programs for Employees

Encourage businesses to offer parking cash-out programs and offer incentives to employees for giving up their employee provided parking space.

T-15: Reduced Commuting from Out of the Region

Develop a program that will do the following:

a) Encourage and support the development of satellite office space or "hoteling" space for use by employees of Bay Area firms who may be assigned to work temporarily in Tracy by offering development incentives to these types of projects. Incentives may include less restrictive height limit, setback, and parking requirements.
b) Conduct public education and outreach to promote telecommuting and/or offices/businesses from home.

T-16: Transit Passes for Residents and Employees of New Developments

The City shall provide transit passes valid for at least one year to each resident or employee of new development projects for a period of at least the first three years of project occupancy.

T-17: Increased Use of Low Carbon Fueled Vehicles

Conduct the following to promote the use of low carbon fueled vehicles:

a) Use the Zoning Ordinance to allow no/low carbon fueling stations as part of the "gas and service station" land use category.
b) Amend the Zoning Ordinance or City Standards to require new projects to provide parking spaces reserved for hybrid or electric vehicles (EVs), carpool, or car share vehicles.
c) Require dedicated parking spots for alternative fuel, hybrid, carpool, or car share vehicles in City parking lots and consider installing charging connections.
d) Encourage employers to create vanpool or shuttle programs for employees.
e) Encourage the use of hybrid and electric construction equipment and the use of alternative fuels for construction equipment.

f) Convert the municipal automotive fleet to cleaner fuels and lower emissions. Convert the municipal nonautomotive fleet to cleaner fuels and lower emissions where technologically possible.

T-18: Carbon Sequestration on Municipal Property

Develop a City program for maximizing carbon sequestration on municipal property through tree-planting.

T-19: Mixed-Use and Traditional Residential Development

Continue City efforts to develop specific areas of the city as follows:

a) Redevelop the Bowtie area with mixed use development.
b) Where appropriate, develop new neighborhoods based on traditional residential development patterns and mixed use in a variety of densities with a pedestrian-friendly network of streets and parks.

T-20: Employment-Generating and High-Density Infill Projects

Promote smart growth in Tracy through the following:

a) Increase the development of employment-generating uses, in particular in West Tracy areas.
b) Require mixed use nodes surrounded by high density development that transition to lower density development.
c) In keeping with the City's Growth Management Ordinance Guidelines, prioritize high density infill projects within Redevelopment Areas and Village Centers that have a high level of vehicular and pedestrian connectivity both internally and externally to the project through the allocation of Residential Growth Allotments.
d) Develop each phase of Tracy Hills with an appropriate mix of density and uses consistent with the Tracy Hills Specific Plan.
e) Develop each phase of new development in Tracy as close to existing development as practical and maximize the density and range of uses for each phase of development in a manner consistent with the applicable General Plan and Zoning designations.

T-21: Compressed Natural Gas Buses for the City's Fleet

Continue to use CNG buses for the City's bus fleet and evaluate the conversion of the bus fleet to diesel-electric hybrid.

3.6.4 - Impacts and Mitigation Measures

The City, in its discretion, is utilizing Appendix G to the State CEQA Guidelines as thresholds of significance for this proposed project. According CEQA Guidelines Appendix G, to determine whether

impacts related to energy are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Approach to Analysis

A discussion of the proposed project's energy use is presented below. The proposed project's anticipated energy use was estimated, including natural gas, electricity, and fuel consumption (for vehicles traveling to and from the project), for project construction and operation. Energy calculations are included as part of Appendix E of this Draft EIR.

Impact Evaluation

Energy Use

Impact ENER-1:	**The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.**

Construction

For purposes of a conservative analysis, the anticipated construction schedule for all three phases of development was assumed to begin in April 2022 and conclude in March 2025. It is important to note that if the construction schedule were to move to later year(s), construction energy demand would likely decrease because of improvements in technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. Even in a scenario where all three construction phases overlap, the impacts related to energy consumption would not be materially different from the phased construction analyzed here. That is because concurrent construction would not result in an increased use of fuel and electricity beyond that needed for a phased construction. The proposed project would require demolition, site preparation, grading, building construction, architectural coating, and paving activities. Project construction would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., demolition, site clearing, and grading), and the actual construction of the buildings and other site improvements. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

The types of on-site equipment used during construction of the proposed project could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, frontend loaders, forklifts, and cranes. Construction equipment is estimated to consume a total of approximately 446,864 gallons of diesel fuel over the entire construction duration (Appendix E).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to/from the project

site was based on reasonable assumptions associated with (1) the projected number of trips the project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB Emissions Factors model (EMFAC) mobile source emission model. The specific parameters used to estimate fuel usage are included in Appendix E. In total, the proposed project is estimated to generate approximately 2,937,391 VMT and a combined approximately 155,123 gallons of gasoline and diesel for vehicle travel during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 21,562 kWh during the 3-year construction phase (Appendix E).

Limitations on idling of vehicles and equipment along with requirements that equipment be properly maintained would result in fuel savings. Similarly, compliance with applicable State laws and regulations would limit idling from both on-road and off-road diesel-powered equipment and are part of a comprehensive regulatory framework that is implemented by the ARB. Additionally, as a practical matter, it is reasonable to assume that the overall construction schedule and process would be designed to be as efficient as feasible in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for further future efficiency gains during construction are limited. For the foregoing reasons, it is anticipated that the construction phase of the project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Operation

The proposed project would consume energy as part of building operations and transportation activities. Project energy consumption is summarized in Table 3.6-1.

Table 3.6-1: Estimated Annual Project Energy Consumption

Energy Consumption Activity	Annual Consumption (approximate)
Electricity Consumption	16,056,160 kWh/year
Natural Gas Consumption	21,072,650 kBTU/year
Total Fuel Consumption	805,478 gallons of gasoline and diesel

Notes:
kBTU = kilo-British Thermal Unit
kWh = kilowatt-hour
VMT = Vehicle Miles Traveled
Operational Fuel Consumption based on EMFAC2014 Emissions Inventory, Vehicle Classification (Fleet Mix) EMFAC2007 Categories. The calculations are for the year 2025 when the full buildout of the project is expected to be operational and for San Joaquin County, where the project site is located (Appendix E).

Operation of the proposed project would consume an estimated 16,056,160 kWh of electricity and an estimated 21,072,650 kBTU of natural gas on an annual basis. The proposed project's buildings would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Title 24 Energy Efficiency Standards for Nonresidential Buildings and Green Building Code Standards. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting, are widely regarded as the some of the most advanced and stringent building energy efficiency standards in the country. Moreover, as specified in Chapter 5, Part 11 of the Title 24 standards, the proposed project would be required to incorporate electrical conduit to facilitate future installation of EV charging infrastructure. In addition, as specified in Subchapter 6, Part 6 of the Title 24 standards, the proposed project would be required to design the proposed buildings to structurally accommodate future installation of a rooftop solar system. As such, the design of the proposed project would facilitate the future commitment to renewable energy resources. Therefore, building energy consumption would not be considered wasteful, inefficient, or unnecessary.

Project-related vehicle trips would consume an estimated 805,478 gallons of gasoline and diesel annually. In addition, the proposed project would include the installation of bicycle parking fixtures at 5 percent of the proposed automobile parking spaces, encouraging the use of alternative modes of transportation for worker commutes. Regional access to the project site is provided via US Interstate 205, which borders the project site. Moreover, as discussed in Section 3.14, Transportation, the proposed project would be required to implement various Transportation Demand Management (TDM) that would contribute to fuel savings through incentives for project staff to utilize non-motorized transportation modes. Thus, transportation fuel consumption would not be wasteful, inefficient, or unnecessary. Impacts would be less than significant.

Level of Significance

Less Than Significant Impact

Energy Efficiency and Renewable Energy Standards Consistency

Impact ENER-2: The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

The proposed project would be served with electricity provided by PG&E. In 2018, PG&E's electricity-generating portfolio contains 39 percent electricity generated from renewable sources. The utility is required to meet the future objective of 60 percent of electricity from renewable energy sources by 2030. The buildings would be designed in accordance with all applicable laws and regulations including the provisions of Title 24, California's Energy Efficiency Standards for Nonresidential Buildings and Title 24, Green Building Code Standards. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), and indoor and outdoor lighting. The incorporation of the Title 24 standards into the design of the proposed project would ensure that the proposed project would not result in the use of energy in a wasteful manner.

The City's Sustainability Action Plan and General Plan contain goals, objectives and policies related to energy conservation that are relevant to this analysis as listed in Section 3.6.3 above. While several of these goals, objectives and policies are voluntary or cannot be implemented by an individual development project, compliance with applicable Title 24 standards would ensure that the proposed project would not conflict with any of the Sustainability Action Plan energy conservation policies related to the proposed project's building envelope, mechanical systems, and indoor and outdoor lighting.

The proposed project would be required to comply with applicable State energy standards and with energy conservation policies contained in the Tracy Sustainability Action Plan. As such, the proposed project would not conflict with or obstruct the applicable State plans and policies for renewable energy and energy efficiency. Impacts would be less than significant.

Level of Significance

Less Than Significant Impact

3.6.5 - Cumulative Impacts

The geographic scope of the cumulative energy analysis is the portion of PG&E's service area that covers incorporated and unincorporated San Joaquin County. Cumulative projects considered as part of this cumulative analysis include the project, other cumulative projects identified in Table 3-1 in Chapter 3, Environmental Impact Analysis, and other past, present, and reasonably foreseeable future projects within the PG&E service area that covers the incorporated and unincorporated areas of San Joaquin County.

Electricity and Natural Gas

During operation, cumulative projects would be required to comply with applicable provisions of Title 24 Building Energy Efficiency Standards and CALGreen. Specifically, the buildings and other improvements that would be constructed as part of the various cumulative projects would be required to be designed in accordance with Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings as applicable. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), and indoor and outdoor lighting. Future cumulative development would also be required to meet even more stringent energy efficiency requirements through local and Statewide policy, such as Title 24, Part 6, which would require, for example, that newly constructed residential homes include on-site photovoltaic solar systems, with some exceptions. Furthermore, PG&E, which supplies electricity to the project site and vicinity, would be required by SB 100 to incrementally increase the proportion of renewable electricity generation supplying its in-state retail sales until it reaches 100 percent carbon-free electricity generation by 2045.

Electricity would also be consumed during construction of the cumulative projects from the use of construction trailers and any electrically driven equipment, vehicles, or tools. Electricity consumed during construction of the cumulative projects would also be subject to the renewable electricity generation requirements established by SB 100, as PG&E would be the anticipated electricity supplier for the cumulative project areas. The incorporation of these regulations into the design of

the cumulative projects would ensure that they would not result in the inefficient, unnecessary, or wasteful consumption of electricity or natural gas. and thus they would not have a significant cumulative impact.

Similarly, the proposed project's energy use would be limited to that which is necessary for the construction and operation of the proposed project. As discussed above, the proposed project would be required to comply with applicable Statewide and local policies and standards pertaining to energy efficiency and can reasonably be assumed to pursue greater energy efficiencies to the extent commercially practicable in its operation, in the interest of reducing operating costs. As such, the proposed project's incremental contribution to the less than significant cumulative impact would not be considerable with respect to energy consumption in the form of electricity and natural gas.

Fuel

Cumulative projects would be required to comply with California Code of Regulations Title 13, Sections 2449(d)(3) and 2485, that limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. Additionally, various federal and State regulations, including the LCFS, Pavley Clean Car Standards, and LEV Program, would serve to reduce the transportation fuel demand of cumulative projects. Compliance with these regulations by the cumulative projects would ensure that they would not result in the inefficient, unnecessary, or wasteful consumption of fuel and their cumulative impact would be less than significant.

As discussed in more detail above, the proposed project would consume vehicle fuel during both construction and operation. As previously discussed, the proposed project would also be required to use fuels which conform to various federal and State regulations, such as the LCFS, Pavley Clean Car Standards, and LEV Program. In addition, the proposed project would consume fuels in an amount necessary to construct and operate the proposed project and would not consume excessive amounts of fuel beyond what is necessary in the interest of avoiding unnecessary construction or operation costs. Therefore, the proposed project's incremental contribution to the less than significant cumulative impact would not be considerable with respect to the wasteful or inefficient use of energy.

Level of Cumulative Significance

Less Than Significant Impact

3.7 - Geology and Soils

3.7.1 - Introduction

This section describes the existing geology and soils setting and the potential effects from implementation of the Tracy Alliance Project (proposed project). The descriptions and analysis in this section are based, in part, on information provided in the Geotechnical Engineering Report prepared by Terracon Consultants, Inc. (Appendix F), the City of Tracy 2035 General Plan (General Plan), City of Tracy 2035 General Plan Environmental Impact Report (General Plan EIR), and the Northeast Industrial (NEI) Specific Plan. No comments were received during the Notice of Preparation (NOP) comment period related to Geology and Soils.

3.7.2 - Environmental Setting

Geologic Setting

San Joaquin County

San Joaquin County lies within the geologic region of California referred to as the Great Valley geomorphic province. The Great Valley geomorphic province is characterized by a long alluvial plain that extends approximately 400 miles through Central California. The Great Valley can be further divided into the northern Sacramento Valley and the southern San Joaquin Valley. The valleys were created as a result of the uplift of the two mountain ranges that flank them, the Coast Ranges to the west and the Sierra Nevada mountain range to the east.[1]

City of Tracy

The City of Tracy is located on the western margin of the Great Valley geologic province of California, adjacent to the Coast Range Province. Most of the City lies within the Great Valley between the Sierra Nevada geomorphic province to the east and the Coast Ranges to the west. These portions of the City fall into one of three categories of geomorphic unit: dissected uplands, low alluvial plains and fans, or river flood plains and channels.[2]

The southwestern portion of the City is located within the Diablo Range and generally consists of rolling hills cut by drainage channels. Starting from the vicinity of I-580 and proceeding northeast to the City, the topography flattens into the “low alluvial plains and fans” geomorphic unit. These gently sloping, broad fans are dissected by fewer drainage channels than the uplands. Surface water flow is directed to the northeast, except for engineered flow in human-made features such as the Delta-Mendota Canal and the California Aqueduct. Northeast of the canals, extending to the boundaries of the City Sphere of Influence (SOI), the “river flood plains and channels” geomorphic unit consists of relatively level topography, slightly sloping to the north.

[1] Environmental Science Associates. 2014. San Joaquin County 2035 General Plan EIR, page 4.I-1.
[2] City of Tracy. 1993. *Final Environmental Impact Report for the City of Tracy Urban Management Plan/General Plan 1993*, SCH No. 91092060, p. 249.

Project Site

The project site is located in the northeastern portion of the City and is part of the low alluvial plains and fans geomorphic unit.

Existing Soils

San Joaquin County

Different soil types exist within San Joaquin County that are closely associated with alluvial action and deposition. Sand to gravel soils have been deposited along waterways due to the ancient course of the San Joaquin River. Areas in between waterways are rich in fine grained clays and silts with extensive peat deposits present in the Delta. Silt and clay soils are fertile and support agriculture within San Joaquin County for a wide variety of crops. These fertile silts and clays pose some risk to structures, as they can be expansive and cause significant damage. Peat deposits are subject to compaction through extraction of groundwater, oil and gas, loading, or natural causes. Peat compaction can lead to subsidence and significant damage to structures.[3]

The Natural Resources Conservation Service of the United States Department of Agriculture has mapped the soils throughout the County as part of its soil survey program. According to the most recent soil survey data, a total of 183 different soil units have been identified within the County. Although no one unit is predominantly found within the area, the Tokay fine sandy loam and the Rindge Muck units are more widely found (at 3.6 and 3.4 percent of the total area) than any of the other units.[4]

City of Tracy

The dominant soil types found within the City and its SOI include Capay Clay and Capay-Urban Land Complex and Stomar Clay Loam. Other soil types within Tracy and its SOI include the following:[5]

- Calla-Carbona complex, 8 to 30 percent slopes (CGE/CZE)
- Carbona clay loam, 2 to 8 percent slopes (AC)
- Zacharias gravelly clay loam, 0 to 2 percent slopes (LR)
- Zacharias clay loam, 0 to 2 percent slopes (LS)

Project Site

As part of the Geotechnical Engineering Report prepared for the project site, Terracon conducted 41 test soil borings ranging in depth from 6.5 feet to 51.5 feet below ground surface (bgs). Based on those soil borings, the project site contains the following soil types: lean clay, soft to stiff fine grained soil, and silty sand. The lean clay soils range in depth from 3.5 feet to approximately 20 feet bgs. Below the surface clays were interbedded layers of silts, sands, and clays.[6] Terracon also conducted soil corrosivity testing on project site soils. Laboratory testing of soil samples determined that project site soils have a high sulfate level, which indicates the soil would be corrosive to concrete used in project building materials. Table 3.7-1 summarizes the corrosivity testing results.

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3 Environmental Science Associates. 2014. San Joaquin County 2035 General Plan EIR, page 4.I-3.
4 Ibid.
5 Design, Community, and Environment. 2005. City of Tracy General Plan Draft EIR (prepared for the City of Tracy), page 4.11-13
6 Terracon. 2019. Geotechnical Engineering Report, page i.

Table 3.7-1: Soil Corrosivity Test Results

Soil Boring Number	Sample Depth (feet below ground surface level)	Soil Description	Soluble Sulfate (ppm)	Soluble Chloride (ppm)	Electrical Resistivity (Ω-cm)	pH
B1	1–2.5	Lean Clay	116	30	1164	8.04
B13	1–2.5	Lean Clay	234	70	970	7.98
B21/23	1–2.5	Lean Clay	278	60	970	7.87

Notes:
ppm = parts per million
Source: Terracon. 2019. Geotechnical Engineering Report.

Seismicity

The State of California is one of the most seismically active areas in the United States. The term seismicity describes the effects of seismic waves that are radiated from an earthquake fault in motion. While most of the energy released during an earthquake results in the permanent displacement of the ground, as much as 10 percent of the energy may dissipate immediately in the form of seismic waves. Seismicity can result in seismic-related hazards such as fault rupture, ground shaking, and liquefaction. Faults form in rocks when stresses overcome the internal strength of the rock, and fault rupture occurs when movement on a fault breaks through to the surface and can result in damage to buildings, infrastructure, and persons. Ground movement during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. Strong ground shaking from an earthquake can result in damage, with buildings shifted off their foundations and underground pipes broken.

San Joaquin County

San Joaquin County is located in a region that lies between two areas of seismic activity. The main active faults near the County are associated with the San Andreas Fault System of the greater San Francisco Bay Area and the Marsh Creek-Greenville active fault located immediately west of the southern tip of the County.[7]

City of Tracy

The City of Tracy is located near several earthquake faults including the San Andreas, Calaveras, Hayward, and Greenville Faults. Exhibit 3.7-1 illustrates the proximity of the City to the closest earthquake faults. The California Geologic Survey does not list the City on its list of cities affected by Alquist-Priolo Earthquake Fault Zones.[8] The Tracy-Stockton Fault, a Pre-Quaternary fault that passes beneath the City is considered inactive.[9] An active fault is defined by the State Mining and Geology Board as one that has had surface displacement within Holocene time (about the last 11,000 years).

[7] Environmental Science Associates. 2014. San Joaquin County 2035 General Plan EIR, page 4.I-7.
[8] California Department of Conservation. No date. CGS Information Warehouse: Regulatory Maps. Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/. Accessed April 6, 2020.
[9] Design, Community, and Environment. 2005. City of Tracy General Plan Draft Environmental Impact Report (prepared for the City of Tracy), page 4.11-7

The City has a low-to-moderate seismic history; the largest recorded measurable magnitude earthquake in the City measured 3.9 on the Richter Scale.[10]

Project Site

The project site is located northwest and adjacent to the City. As such, the project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known active faults cross the site.

Slope Disturbance

Slope disturbance from long-term geologic cycle of uplift, mass wasting, intense precipitation or wind, and gravity can result in slope failure in the form of mudslides and rock fall. Mass wasting refers to a variety of erosional processes from gradual downhill soil creep to mudslides, debris flows, landslides, and rock fall—processes that are commonly triggered by intense precipitation or wind, which varies according to climactic shifts. Often, various forms of mass wasting are grouped together as landslides, which are generally used to describe the downhill movement of rock and soil. Soil creep is a long-term, gradual downhill migration of soil under the influence of gravity and is generally on the order of a fraction of an inch per year. These soils can creep away downslope sides of foundations and reduce lateral support.

Liquefaction is another earthquake hazard that can result in slope disturbance. Liquefaction is a transformation of soil from a solid to a liquefied state during which saturated soil temporarily loses strength resulting from the buildup of excess pore water pressure. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Four kinds of ground failure commonly result from liquefaction: lateral spread, flow failure, ground oscillation, and loss of bearing strength.[11]

San Joaquin County

San Joaquin County is expected to experience slope disturbance and seismic hazards associated with ground shaking caused by earthquakes. The main seismic hazards in the County are ground shaking, liquefaction, and earthquake induced settlement.[12]

City of Tracy

While there are seismically active faults outside of the Tracy Planning Area that can cause ground shaking within the City and its SOI, there are no known active faults within the City limits. The largest recorded measurable magnitude earthquake in Tracy was measured as 3.9 on the Richter Scale. A magnitude of 3.9 does not typically cause damage. The northern portion of the City has soils that have a low liquefaction potential. However, the south-central portion of the City is moderately susceptible to liquefaction due to loose, coarse-grained soil deposits.[13] The City contains a low risk for landslides due to its relatively level elevation. The only areas in the City potentially susceptible to

[10] Pacific Municipal Consultants. 1996. Northeast Industrial Concept Development Plan Draft Environmental Impact Report (prepared for the City of Tracy), page 4.16.
[11] Environmental Science Associates. 2014. San Joaquin County 2035 General Plan EIR, page 4.I-11.
[12] Ibid.
[13] Design, Community, and Environment. 2005. City of Tracy General Plan Draft Environmental Impact Report (prepared for the City of Tracy, page 4.11-12.

landslides are the foothill areas in the southwest portion of the City and along riverbanks.[14] The City of Tracy contains expansive soils due to the clay-type soils located throughout the City and its SOI. In particular, areas in the northern and western portions of the City as well as soils in the vicinity of I-580 have high shrink/swell potential.

Project Site

The project site is relatively flat and low in elevation (approximately 15-30 feet above mean sea level) with a gentle topographic slope in the northeast direction.[15] The project site does not contain active faults that would cause geologic uplifting, ground rupture; nor does the site contain steep slopes that would be susceptible to landslides. The project site is not designated as a liquefaction zone as identified by the California Geologic Survey (CGS). However, the project site would be susceptible to liquefaction because the project site contains layers of relatively loose sandy and clay soils, which contain properties that are susceptible to liquefaction.[16]

Paleontological Resources

San Joaquin County

The majority of paleontological resources from San Joaquin County have been found in rock formations in the foothills of the Diablo Mountain Range. However, such resources could be found anywhere in the County, especially along watercourses such as the San Joaquin River and its tributaries.[17]

City of Tracy

The Neroly Formation, Moreno Shale deposits, and Panoche Formations could be indicators of potential paleontological resources. According to a records search of the University of California Museum of Paleontology (UCMP) Collections, 80 fossils have been found and recorded within San Joaquin County. Over half of them are dated to the Tertiary period, with quaternary being the second most frequent period. These are the first and second periods of the Cenozoic Era respectively, during which modern flora, apes, large mammals, and eventually humans developed. The majority of fossils found within the City and its SOI have been vertebrate in nature. Additionally, one paleobotany fossil and one microfossil have been found. Sites are mainly located south of I-205, along the I-580 corridor and the Delta-Mendota Canal; some clustering is found in the southwest portion of the City, in the slopes of the Diablo Range foothills.[18]

Project Site

A Paleontological Records Search was conducted for the project site by Kenneth L. Finger, PhD (Appendix F) on April 3, 2020.[19] The project site and all areas within the standard 0.5-mile search

[14] Design, Community, and Environment. 2005. City of Tracy General Plan Draft Environmental Impact Report (prepared for the City of Tracy, page 4.11-12.
[15] Terracon Consultants, Inc. 2018. Phase I Environmental Site Assessment: Tracy Ridge. December 21.
[16] Terracon. 2019. Geotechnical Engineering Report, page 16.
[17] Environmental Science Associates. 2014. San Joaquin County 2035 General Plan EIR, page 4.E-2.
[18] Design, Community, and Environment. 2005. City of Tracy General Plan Draft Environmental Impact Report (prepared for the City of Tracy, page 4.5-9.
[19] Finger, Kenneth L., Ph.D. 2020. Paleontological Records Search: Tracy Alliance Project. April.

area are located on an extensive geologic unit of unnamed alluvial fan deposits (Qf) Just north of the search area, the younger Dos Palos Alluvium (Qdp) is surficial.

3.7.3 - Regulatory Framework

Federal

National Earthquake Hazards Reduction Program

The National Earthquake Hazards Reduction Program (NEHRP) was established by the United States Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law 95–124. In establishing the NEHRP, Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early warning systems, coordinated emergency preparedness plans, and public education and involvement programs. The four basic goals remain unchanged:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods, and their use.
- Improve the understanding of earthquakes and their effects.

Several key federal agencies contribute to earthquake mitigation efforts. There are four primary NEHRP agencies:

- National Institute of Standards and Technology of the Department of Commerce
- National Science Foundation
- United States Geological Survey (USGS) of the Department of the Interior
- Federal Emergency Management Agency (FEMA) of the Department of Homeland Security

Implementation of NEHRP priorities is accomplished primarily through original research, publications, and recommendations to assist and guide state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program, authorized by Section 402(p) of the federal Clean Water Act, controls water pollution by regulating point sources, such as construction sites and industrial operations that discharge pollutants into waters of the United States. A Storm Water Pollution Prevention Plan (SWPPP) is required to control discharges from a project site, including soil erosion, to protect waterways. A SWPPP describes the measures or practices to control discharges during both the construction and operational phases of the project. A SWPPP identifies project design features and structural and nonstructural Best Management Practices (BMPs) that will be used to control, prevent, remove, or reduce stormwater pollution from the site, including sediment from erosion.

Society of Vertebrate Paleontology Guidelines

The Society of Vertebrate Paleontology (SVP), a national scientific organization of professional vertebrate paleontologists, has established standard guidelines that outline acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, specimen preparation, analysis, and curation. Most practicing professional Paleontologists in the nation adhere to the Society of Vertebrate Paleontology's assessment, mitigation, and monitoring requirements, as specifically spelled out in its standard guidelines.[20]

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PRC] §§ 2621 to 2630) was passed in 1972 to provide a Statewide mechanism for reducing the hazard of surface fault rupture to structures used for human occupancy. The main purpose of the Act is to prevent the siting of buildings used for human occupancy across the traces of active faults. It should be noted that the Act addresses the potential hazard of surface fault rupture and is not directed toward other earthquake hazards, such as seismically induced ground shaking or landslides.

The law requires the State Geologist to identify regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults, and to depict these zones on topographic base maps, typically at a scale of 1 inch to 2,000 feet. Earthquake Fault Zones vary in width, although they are often 0.75-mile wide. Once published, the maps are distributed to the affected cities, counties, and State agencies for their use in planning and controlling new or renewed construction. Except for single-family wood-frame and steel-frame dwellings that are not part of a larger development (i.e., four units or more), local agencies are required to regulate development within the mapped zones. In general, construction within 50 feet of an active fault zone is prohibited.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (PRC §§ 2690–2699.6), which was passed in 1990, addresses earthquake hazards other than surface fault rupture. These hazards include strong ground shaking, earthquake induced landslides, liquefaction, or other ground failures. Much like the Alquist-Priolo Earthquake Fault Zoning Act discussed above, these seismic hazard zones are mapped by the State Geologist to assist local government in the land use planning process. The Act states, "it is necessary to identify and map seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety." The Act also states, "cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard."

[20] The Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Website: http://vertpaleo.org/the-Society/Governance-Documents/SVP_Impact_Mitigation_Guidelines.aspx.

California Building Code

The State of California provides minimum standards for building design through the California Building Standards Code (California Code of Regulations [CCR], Title 24). Where no other building codes apply, Chapter 29 regulates excavation, foundations, and retaining walls. The California Building Standards Code (CBC) applies to building design and construction in the State and is based on the federal Uniform Building Code (UBC) used widely throughout the country (generally adopted on a state-by-state or district-by-district basis). The CBC has been modified for California conditions with more detailed and/or more stringent regulations.

The State earthquake protection law (California Health and Safety Code § 19100 *et seq.*) requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the CBC. The CBC identifies seismic factors that must be considered in structural design. Chapter 18 of the CBC regulates the excavation of foundations and retaining walls, and Appendix Chapter A33 regulates grading activities, including drainage and erosion control and construction on unstable soils, such as expansive soils and areas subject to liquefaction.

The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control (Chapter 18, Appendix J). City of Tracy Ordinance 1247 adopts the 2019 Building and Fire Codes and amends the code to address local conditions.

Local Regulations

City of Tracy General Plan

The General Plan establishes the following guiding and implementing policies associated with geology, soils, and seismicity that are relevant to this analysis:

General Plan Safety Element

Goal SA-1 A reduction in risks to the Community from earthquakes and other geologic hazards.

Objective SA-1.1 Minimize the impacts of geologic hazards on land development.

Policies

Policy P1 Underground utilities, particularly water and natural gas mains, shall be designed to withstand seismic forces.

Policy P2 Geotechnical reports shall be required for development in areas where potentially serious geologic risks exist. These reports should address the degree of hazard, design parameters for the project based on the hazard, and appropriate mitigation measures.

Objective SA-1.2 Implement measures related to site preparation and building construction that protect life and property from seismic hazards.

Policies

Policy P1 All construction in Tracy shall conform to the California Building Code and the Tracy Municipal Code including provisions addressing unreinforced masonry buildings.

Objective CC-3.1 Identify and preserve cultural and historic resources.

Policies

Policy P5 Any archaeological or paleontological resources on private property shall be either preserved on their sites or adequately documented and conserved as a condition of removal. If any resources are found unexpectedly during development, then construction must cease immediately until accurate study and conservation. measures are implemented.

City of Tracy Municipal Code

Chapter 9.04–Building Code

The City adopted the 2016 CBC and included it in Municipal Code Chapter 9.04. Municipal Code Section 9.04.030, Permits, incorporates the 2016 California Building Code including Volumes 1 and 2 and Appendices C, F, H and K by reference, which applies to new construction and alterations within city limits. New development is required to adhere to building code requirements and industry standard seismic safety building practices.

Chapter 11.28–Water Management

Chapter 11.28.410, Grading Design Plan, requires a grading plan to be submitted as part of a Landscape Documentation Package. The grading plan would be created to minimize soil erosion, runoff, and water waste. The City requires grading design plans to include measures to prevent excessive erosion and runoff from entering surface water systems, and recommend that project applicants:

(A) Grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;

(B) Avoid disruption of natural drainage patterns and undisturbed soil; and

(C) Avoid soil compaction in landscape areas.

Chapter 11.34–Construction Activity Stormwater Measures

Chapter 11.34.220, Construction Activity Stormwater Measures, requires projects that request a building permit to comply with State stormwater requirements and submit a SWPPP. In addition, this Chapter requires that projects maintain a copy of the SWPPP on-site for verification by a City inspector.

3.7.4 - Impacts and Mitigation Measures

Significance Criteria

The City is using Appendix G of the State California Environmental Quality Act (CEQA) Guidelines as thresholds of significance for this project. According to CEQA Guidelines, Appendix G Environmental Checklist, to determine whether impacts to geology and soils are significant environmental effects, the following questions are analyzed and evaluated. Would the proposed project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:
    i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
    ii. Strong seismic ground shaking?
    iii. Seismic-related ground failure, including liquefaction?
    iv. Landslides?
b) Result in substantial soil erosion or the loss of topsoil?
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Approach to Analysis

Impacts related to geology and soils were determined by reviewing information contained in the Geotechnical Engineering Report and a Paleontological Records Search prepared for the project site, both of which are provided in Appendix F.

As part of the Geotechnical Engineering Report, Terracon performed a field exploration of the project site as summarized in the project-specific Geotechnical Report dated January 30, 2019, (Appendix F). Terracon conducted 41 test soil borings, ranging in depth from 6.5 to 51.5 feet bgs and conducted 13 Cone Penetration Tests (CPTs) at depths ranging from 20.5 to 50.5 feet bgs. The laboratory testing results and specific locations of the test borings and CPTs are included in the Geotechnical Engineering Report. Published geologic and geotechnical information that summarizes the site conditions were also reviewed.

Additional evaluations of potential geologic and soil impacts of the project site were based on review of available documentation, including General Plan EIR; the Association of Bay Area Governments (ABAG), and California Geological Survey.

Impacts to paleontological resources were determined by reviewing the Paleontological Records Search prepared by Dr. Kenneth Finger, a consulting Paleontologist. Dr. Finger performed a records search on the UCMP database for the project site.[21]

Impacts Evaluation

Earthquakes

Impact GEO-1: **The proposed project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:**

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction.

iv) Landslides.

Construction

Impacts related to risks associated with seismic-related hazards are limited to operational impacts. No respective construction impacts would occur.

Operation

i) Ground Rupture

Based on Geotechnical Engineering Report (Appendix F), the potential for ground rupture is low. There are no known active faults directly crossing the project site or the City of Tracy, and neither the project site nor the City is located within a designated Alquist-Priolo Earthquake Fault Zone. The closest fault to the project site is the San Joaquin Fault located in the southeast portion of the City approximately 7 miles away, precluding the potential for ground rupture to occur. Therefore, no impact related to fault rupture would occur.

ii) Strong Seismic Ground Shaking

The project site is located in a seismically active region that could experience strong ground shaking during a seismic event. It could experience significant ground shaking from maximum credible earthquakes occurring on the Calaveras, Hayward, San Andreas, or Greenville Faults. The intensity of future shaking will depend on the distance to the earthquake epicenter, magnitude of the earthquake, and the response of the underlying soil and bedrock. This represents a potentially significant impact.

[21] Finger, Kenneth L., Ph.D. 2020. Paleontological Records Search: Tracy Alliance Project. April.

The Geotechnical Engineering Report provided recommendations for excavation, foundation type, and building material in order to ensure new construction associated with the proposed project can withstand strong to very strong ground shaking. Mitigation Measure (MM) GEO-1 would ensure that implementation of the proposed project would incorporate recommendations contained in the Geotechnical Engineering Report as well as all applicable seismic safety building standards contained in the CBC including seismic design provisions, which would reduce the risk of loss, injury or death. Furthermore, compliance with General Plan Policy P2 and Chapter 9.02 of the Municipal Code requires all construction to conform to the most recent edition of the CBC. As such, with implementation of MM GEO-1 and compliance with other applicable policies, requirements and standards, the proposed project would not expose people or structures to substantial adverse effects associated with seismic ground shaking. Therefore, impacts would be less than significant with mitigation.

iii) Seismic-related Ground Failure

The project site is not listed as a liquefaction hazard zone by the CGS; however, the Geotechnical Engineering Report determined that on-site soils are susceptible to liquefaction because of the shallow groundwater depth and soil conditions. The Geotechnical Engineering Report provided liquefaction modeling and determined that the project site could experience up to 1 inch of soil settlement. If unmitigated, soil settlement could cause building foundations to crack and risk the loss of life and property, a potentially significant impact.

In order to reduce or avoid impacts related to liquefaction or other seismic-related ground failure, the Geotechnical Engineering Report included earthwork recommendations that contained criteria for grading, excavation, and fill replacement. The recommendations included criteria for site preparation, fill material types, and fill compaction that would reduce the potential for soil settlement to the maximum extent practicable. Implementation of MM GEO-1 would ensure that the recommendations contained in the Geotechnical Engineering Report are incorporated into the proposed project construction and design plans. Therefore, impacts related to seismic-related ground failure risk would be less than significant with mitigation.

iv) Landslides

Susceptibility to landslide risk is increased where a property contains steep slopes, exposed hillsides or near-vertical cuts often found near creek banks. The project site does not contain steep slopes, exposed hillsides, or vertical cuts. Because of the gently sloping nature of the project site, it does not contain a significant potential for landslides. As a result, implementation of the proposed project would not expose people or structures to a landslide hazard, and impacts related to landslides would be less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

MM GEO-1 Prepare Grading and Construction Plans that Incorporate Geotechnical Engineering Report Recommendations

Prior to issuance of the grading permits for the proposed project, development of the final grading, foundation, and construction plans shall incorporate the site-specific earthwork, foundation, floor slab, lateral earth pressure, and pavement design recommendations, as detailed in the Geotechnical Engineering Report prepared by Terracon dated January 30, 2019. The applicant(s) for development of individual development proposal(s) within the project site shall each coordinate with a City-approved Geotechnical Engineer and Engineering Geologist to tailor the grading and foundation plans for the relevant development proposal, as needed, to reduce risk related to known soil and geologic hazards. The final grading and construction plans for the relevant development proposal shall be reviewed by the City-approved Geotechnical Engineer to confirm compliance with this MM GEO-1.

Grading operations shall meet the applicable requirements of the recommendations included in the Geotechnical Engineering Report prepared by Terracon on January 30, 2019. During construction, the City-approved Geotechnical Engineer shall monitor construction of the relevant development proposal to ensure the earthwork operations are properly performed in accordance with the foregoing recommendations.

Level of Significance After Mitigation

Less Than Significant Impact

Soil Erosion or Topsoil Loss

Impact GEO-2:	**The proposed project would not result in substantial soil erosion or the loss of topsoil.**

Construction

During construction, the proposed project would include grading and excavation that would expose approximately 500,000 cubic yards of soils. The proposed project would disturb at least 1 acre of land and therefore would be required to obtain a Construction General Permit from the State Water Resources Control Board (State Water Board), consistent with the City's General Permit (No. CAS000004) and to comply with its conditions and requirements, which are designed to minimize potential erosion issues. Consistent with Chapter 11.34 of the Municipal Code, compliance with the City's NPDES permit would ensure the applicant(s) for individual development proposals within the project site would each obtain and implement a SWPPP in connection with the individual development proposal at issue where BMPs are implemented that would prevent sediments and other pollutants from entering the stormwater system. Additionally, compliance with Municipal Code Chapter 11.28 would ensure that each relevant development proposal would obtain and implement a grading plan during construction, which would prevent significant erosion of soils. Therefore, with adherence to these existing requirements, impacts from construction would not result in substantial soil erosion or loss of topsoil. Therefore, construction-related impacts related to soil erosion and loss of topsoil would be less than significant.

Operation

Impacts related to soil erosion or loss of topsoil are limited to construction impacts. No respective operational impacts would occur.

Level of Significance

Less Than Significant Impact

Unstable Geologic Location

Impact GEO-3:	**The proposed project could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.**

Construction

Impacts related to risks associated with location on an unstable geologic unit or soil are limited to operational impacts. No respective construction impacts would occur.

Operation

As discussed previously in Impact GEO-1(iii), the Geotechnical Engineering Report (Appendix F) identified soils that could be expected to experience up to 1 inch of liquefaction-induced settlement. Any such settlement across the project site would represent a significant impact. Additionally, project site soils would be corrosive to concrete used in building foundations and slabs, which could result in unstable building conditions leading to building collapse or damage. This is a potentially a significant impact.

In order to reduce or avoid impacts related to unstable soils, corrosive soils, or other seismic-related ground failure, the Geotechnical Engineering Report included earthwork recommendations. These recommendations included criteria for grading, excavation, and fill replacement that would prevent significant settlement of soils. In addition, the recommendations included concrete mix specifications that would prevent significant impacts from corrosive soils. Implementation of MM GEO-1 would ensure that the recommendations contained in the Geotechnical Engineering Report are incorporated into the project construction and design plans. Therefore, impacts related to seismic-related ground failure risk would be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

Implement MM GEO-1

Level of Significance After Mitigation

Less Than Significant Impact

Expansive Soil

Impact GEO-4: The proposed project could be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Construction

The Geotechnical Engineering Report determined that expansive soils exist on-site. Without mitigation, the near-surface stiff to hard medium plasticity lean clay and high plasticity clay could become unstable during construction activity and after precipitation events, a potentially significant impact. The Geotechnical Engineering Report includes recommendations for site preparation, excavation, and replacement fill that would include ground modifications that would spread out the loads from foundations and reduce the influence of the construction loads on soft soil layers, thus reducing the potential for unacceptable settlements. In addition, the Geotechnical Engineering Report provides options for providing stable foundations by including building floor slabs with foundation systems on a minimum of 18 inches of lime treated subgrade, or excavation and replacement with engineered fill or a sand/slurry mixture.[22] Implementation of MM GEO-1 would ensure recommendations contained in the Geotechnical Engineering Report are included in the grading plans and design of the proposed project. Therefore, impacts related to expansive soils would be less than significant with mitigation.

Operation

The Geotechnical Engineering Report determined that expansive soils exist on-site. The near-surface stiff to hard medium plasticity lean clay and high plasticity clay could become unstable after precipitation events. Additionally, these soils have the potential to swell and shrink as they gain and lose moisture, which could cause building foundations to crack or heave, resulting in substantial risks to life or property, which represents a potentially significant impact. However, the Geotechnical Engineering Report includes recommendations for site preparation, excavation, and foundation design that would address the site-specific conditions. Implementation of MM GEO-1 would ensure recommendations contained in the Geotechnical Engineering Report are included in the design of the proposed project. Therefore, impacts related to expansive soils would be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

Implement MM GEO-1

Level of Significance After Mitigation

Less Than Significant Impact

[22] Terracon. 2019. Geotechnical Engineering Report, page 5.

Wastewater Disposal Systems

Impact GEO-5: The proposed project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Construction

Impacts related to soil capability of supporting the use of alternative wastewater disposal systems are limited to operational impacts. No respective construction impacts would occur.

Operation

All development on the project site would connect to the City's wastewater collection system and no alternative wastewater disposal system would be operated. Furthermore, General Plan Objective 7.3 requires that new development within the City demonstrate adequate wastewater treatment for the proposed project. Wastewater treatment capacity impacts are discussed further under Section 3.16, Utilities and Service Systems. Thus, there would be no operational impact related to soil capability of supporting the use of alternative wastewater disposal systems.

Level of Significance

No Impact

Impact GEO-6: The proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Construction

The Paleontological Report (Appendix F) concluded that the project site is located on Holocene alluvium, which is too young to be fossiliferous. The valley fill on the project site is at least hundreds of feet thick; thus, subsurface late Pleistocene or older deposits, which have the potential to be fossiliferous, are located at depths well below any excavation required for project construction.[23] Additionally, the Paleontological Report states that the closest paleontological resources to the project site were microfossils uncovered 7 miles to the east.

However, while it is unlikely that paleontological resources exist within or near the project site, there is always the possibility that subsurface construction activities associated with the proposed project, such as grading or trenching, could potentially damage or destroy previously undiscovered paleontological resources, which is a potentially significant impact. MM GEO-6 specifies the procedures to follow in the event a paleontological resource is uncovered. As a result, the proposed project would not directly or indirectly destroy a unique paleontological resource or feature with the implementation of MM GEO-6, and impacts would be less than significant with mitigation.

Operation

Impacts related to the potential to cause substantial adverse change in the significance of a unique paleontological resource or unique geologic feature are limited to construction. No respective operational impacts would occur.

[23] Kenneth L. Finger, PhD, Consulting Paleontologist. Paleontological Records Search. April 3,2020.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

MM GEO-6 Inadvertent Discovery of Paleontological Resources During Project Construction

In the event a fossil is discovered during construction for the proposed project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist in accordance with Society of Vertebrate Paleontology standards. The applicants for development of individual proposals within the project site shall each include a standard inadvertent discovery clause in every proposed project-related construction contract to inform their respective contractors of this requirement. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and implement a data recovery plan that is consistent with the applicable Society of Vertebrate Paleontology standards. Any recovered fossil should be deposited in an appropriate repository, such as the UCMP, where it will be properly curated and made accessible for future studies.

Level of Significance After Mitigation

Less Than Significant Impact

3.7.5 - Cumulative Impacts

The geographic scope of the cumulative geology and soils analysis is the project site and its vicinity. This is because adverse effects associated with many geological and soils issues tend to be localized; therefore, an area generally within a 0.5-mile radius of the project site would be the area most affected by such activities for purposes of this cumulative analysis. Chapter 3, Environmental Impact Analysis, Table 3-1, Cumulative Project No. 35 and Cumulative Project No. 19 would be within 0.5 mile of the project site. The cumulative setting includes Cumulative Projects No. 19 and No. 35, along with existing agricultural and industrial uses.

Seismic-related Hazards

Cumulative projects have the potential to experience strong ground shaking from earthquakes, and would be exposed to the same ground shaking hazards and likewise would be subject to the same requirements under the comprehensive regulatory framework. Cumulative projects would be required to adhere to the applicable provisions of the CBC, and policies of the General Plan and Tracy Municipal Code reducing potential hazards associated with seismic ground shaking and ground failure. As such, cumulative impacts would be less than significant.

Additionally, as discussed above, the proposed project would not have a significant impact in this regard, with incorporation of the identified mitigation. Therefore, the proposed project, in conjunction with other cumulative projects, would not result in a cumulatively considerable contribution to a cumulative impact associated with seismic-related hazards.

Soil-related Hazards

Soil conditions associated with the proposed project, such as differential settlement, liquefaction, expansive soils, and soil creep, are specific to the project site and generally do not contribute to a cumulative effect. Some or all other cumulative projects may have similar conditions, but they also would not contribute to a general geologic or soil cumulative effect. Therefore, there is no potentially significant cumulative impact. Furthermore, the proposed project would be subject to all applicable General Plan policies, Municipal Code provisions, and the CBC, as well as being required to implement the required mitigation, all of which would reduce soil-related hazard impacts to a less than significant level. Other cumulative projects would similarly be required to adhere to standards and practices that include stringent geologic and soil-related hazard mitigations. As such, the proposed project, in conjunction with other cumulative projects, would not result in a cumulatively considerable contribution to a cumulative impact associated with soil-related hazards.

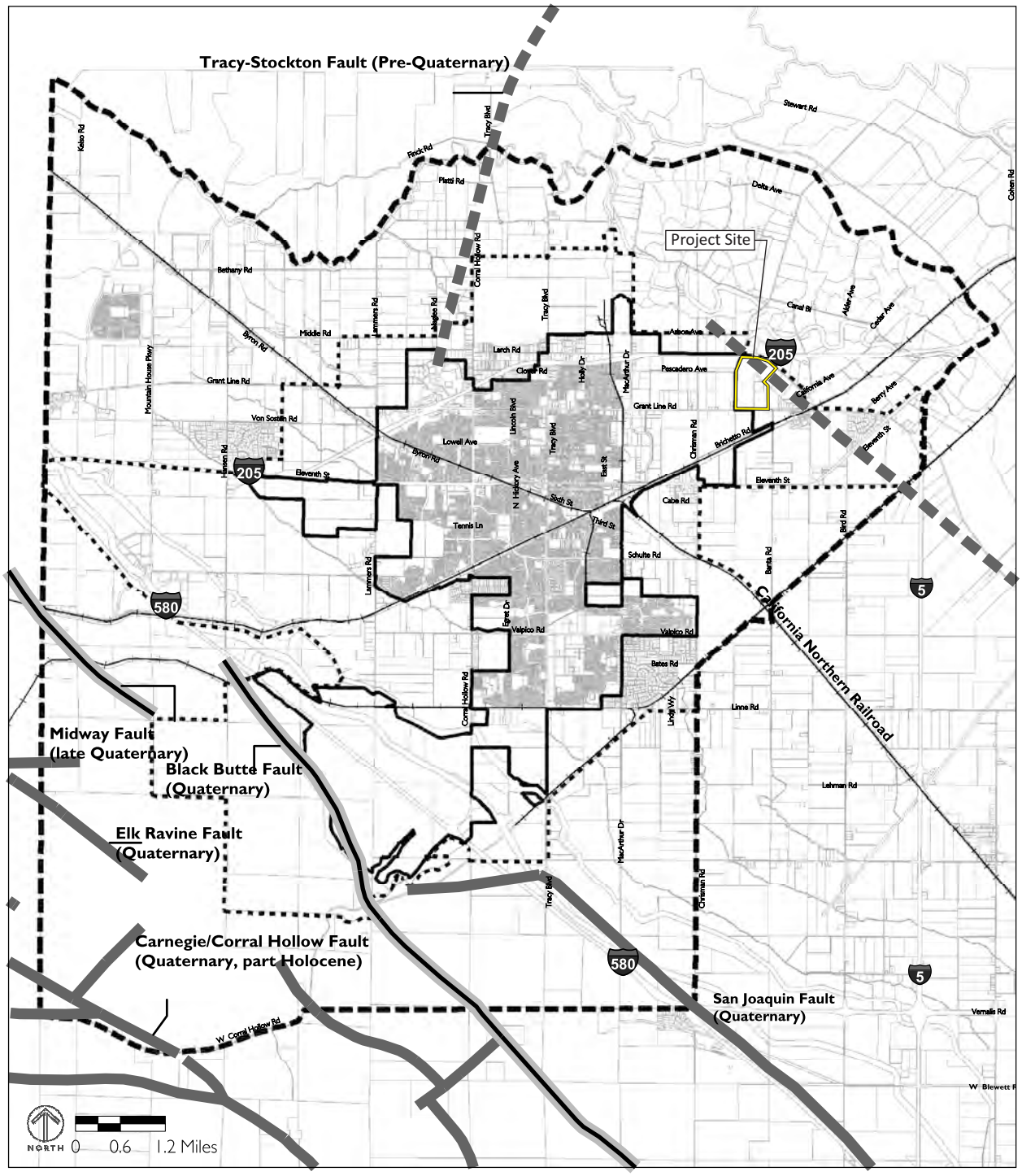
Paleontological Resources and Unique Geologic Feature

The geographic scope of the cumulative unique geologic resources and paleontological resources analysis is the project site and its immediate vicinity. This is because geologic resources and paleontological resource impacts tend to be localized since the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils.

Construction activities associated with development of cumulative projects in within the vicinity of the project site may have the potential to encounter undiscovered geologic resources and paleontological resources. These cumulative projects would be required to mitigate for impacts through compliance with applicable federal and State laws governing geologic resources and paleontological resources and other applicable mitigation measures. Moreover, the likelihood that geologic resources and paleontological resources are present on the cumulative project areas is relatively low, given that the majority of soil disturbance associated with these cumulative projects would take place within Holocene soils too young to be fossiliferous. Although there is the possibility that previously undiscovered resources could be encountered by subsurface earthwork activities, the implementation of standard construction mitigation measures and General Plan Objective CC-3.1 and Policy 5, would ensure that undiscovered geologic and paleontological resources are not adversely affected by cumulative project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources in the vicinity of the project site. Therefore, potential cumulative impacts are less than significant. Additionally, as discussed above, the proposed project would not have a significant impact in this regard, with incorporation of the identified mitigation. Given the low potential for disruption and the comprehensiveness of mitigation measures that would apply to the cumulative projects in the vicinity, the proposed project, in conjunction with other cumulative projects, would not result in a cumulatively considerable contribution to a cumulative impact related to unique geologic and paleontological resources.

Level of Cumulative Significance

Less Than Significant Impact With Mitigation



Proposed Sphere of Influence
City limits
Planning Area
Approximately located fault
Certain fault location
Concealed fault location

Data Sources:
Fault locations: "GIS Data for the Geologic Map of California," California Dept. of Conservation, Division of Mines and Geology (2000); and "Recent Earthquake Activity, California-Nevada," U.S. Geological Survey (http://quake.usgs.gov/recenteqs/latest.htm; accessed 7/6/05).
Fault Names: "Final Environmental Impact Report for the City of Tracy Urban Management Plan" (1993).

Source: City of Tracy

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Exhibit 3.7-1
Regional Earthquake Fault Map

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3.8 - Greenhouse Gas Emissions

3.8.1 - Introduction

This section describes the existing greenhouse gas (GHG) emissions setting as well as the relevant regulatory framework. This section also evaluates the potential impacts related to GHG emissions that could result from implementation of the project. Information in this section is based, in part, on project-specific GHG emissions modeling outputs included in Appendix B.

3.8.2 - Environmental Setting

Global Climate Change

Climate change is a change in the average weather of the Earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. In its Fourth Assessment Report, the IPCC predicted that the global mean temperature changes from 1990 to 2100, given six scenarios, could range from 1.1°C (degrees Celsius) to 6.4°C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios.[1] The report also concluded that "[w]arming of the climate system is unequivocal," and that "[m]ost of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations."

An individual project cannot generate enough GHG emissions to effect a discernible change in global climate. However, each individual project participates in the potential for global climate change by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on global climate change.

Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as GHGs. The effect is analogous to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO_2), methane (CH_4), oxides of nitrogen (NO_x), chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride (SF_6), ozone, and aerosols. Natural processes and human activities emit GHGs. The presence of GHGs in the atmosphere affects the earth's temperature. It is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the

[1] Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Website: www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html.

concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Climate change is driven by forcings and feedbacks. Radiative forcing is the difference between the incoming energy and outgoing energy in the climate system. Positive forcing tends to warm the surface while negative forcing tends to cool it. Radiative forcing values are typically expressed in watts per square meter. A feedback is a climate process that can strengthen or weaken a forcing. For example, when ice or snow melts, it reveals darker land underneath which absorbs more radiation and causes more warming. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. The global warming potential of a gas is essentially a measurement of the radiative forcing of a GHG compared with the reference gas, CO_2.

Individual GHG compounds have varying global warming potential and atmospheric lifetimes. CO_2, the reference gas for global warming potential, has a global warming potential of one. The global warming potential of a GHG is a measure of how much a given mass of a GHG is estimated to contribute to global warming. To describe how much global warming a given type and amount of GHG may cause, the carbon dioxide equivalent (CO_2e) is used. The calculation of CO_2e is a consistent methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent reference gas, CO_2. For example, CH_4's warming potential of 21 indicates that CH_4 has 21 times greater warming effect than CO_2 on a molecule-per-molecule basis. CO_2e is the mass emissions of an individual GHG multiplied by its global warming potential. GHGs defined by Assembly Bill (AB) 32 (see the Climate Change Regulatory Environment section for a description) include CO_2, CH_4, NO_x, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. They are described in Table 3.8-1: Description of Greenhouse Gases. A seventh GHG, nitrogen trifluoride (NF_3), was added to Health and Safety Code Section 38505(g)(7) as a GHG of concern.

Table 3.8-1: Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (laughing gas) is a colorless GHG. It has a lifetime of 114 years. Its global warming potential is 310.	Microbial processes in soil and water, fuel combustion, and industrial processes.
Methane	Methane is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 21.	Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter.
Carbon dioxide	Carbon dioxide (CO_2) is an odorless, colorless, natural GHG. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.

Greenhouse Gas	Description and Physical Properties	Sources
Chlorofluorocarbons	These are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). Global warming potentials range from 3,800 to 8,100.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987.
Hydrofluorocarbons	Hydrofluorocarbons are a group of GHGs containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
Perfluorocarbons	Perfluorocarbons have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Global warming potentials range from 6,500 to 9,200.	Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas.
Nitrogen trifluoride	Nitrogen trifluoride (NF_3) was added to Health and Safety Code Section 38505(g)(7) as a GHG of concern. It has a high global warming potential of 17,200.	This gas is used in electronics manufacture for semiconductors and liquid crystal displays.

Sources:
Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Website: www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html. Accessed February 14, 2021.

Intergovernmental Panel on Climate Change (IPCC). 2007b. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Core Writing Team, Pachauri, R.K. and Reisinger, A. [eds.]). IPCC, Geneva, Switzerland. Website: www.ipcc.ch/publications_and_data/ar4/syr/en/contents.html. Accessed February 14, 2021.

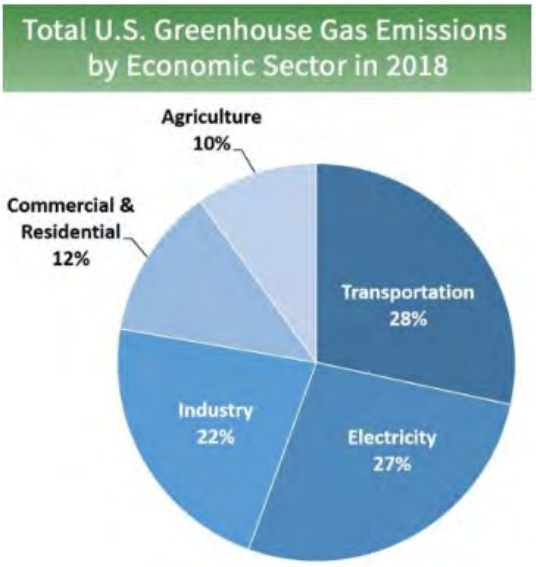
The State of California has begun the process of addressing pollutants referred to as short-lived climate pollutants. The short-lived climate pollutants include three main components: black carbon, fluorinated gases, and methane. The California Air Resources Board (ARB) approved the Short-Lived Climate Pollutant Reduction Strategy in March 2017. The ARB has completed an emission inventory of these pollutants, identified research needs, identified existing and potential new control measures that offer co-benefits, and coordinated with other State agencies and districts to develop measures.

Sources of black carbon are already regulated by the ARB, and air district criteria pollutant and toxic regulations that control fine particulate emissions from diesel engines and other combustion sources.[2] Additional controls on the sources of black carbon specifically for their GHG impacts beyond those required for toxic and fine particulates are not likely to be needed.

Greenhouse Gas Emissions Inventories

United States GHG Inventory

In 2018, total United States GHG emissions totaled 6,677 million metric tons (MMT) CO_2e. Figure 3.8-1 presents 2018 United States GHG emissions by economic sector. Emissions increased from 2017 to 2018 by approximately three (3) percent. This increase was largely driven by an increase in emissions from fossil fuel combustion, which was a result of multiple factors, including more electricity use due to greater heating and cooling needs due to a colder winter and hotter summer in 2018 in comparison to 2017. Total GHG emissions in the United States increased by 3.7 percent from 1990 to 2018 (from 6,437 MMT CO_2e in 1990 to 6,677 MMT CO_2e in 2018). Since 1990, United States emissions have increased at an average annual rate of 0.1 percent. GHG emissions in 2018 were 10.2 percent below 2005 levels.[3]



Note: Emissions shown do not include carbon sinks such as change in land uses and forestry.

Source: United States Environmental Protection Agency (EPA). 2020. Inventory of U.S. Greenhouse Gas Emissions and Sinks. April. Website: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed June 24, 2020.

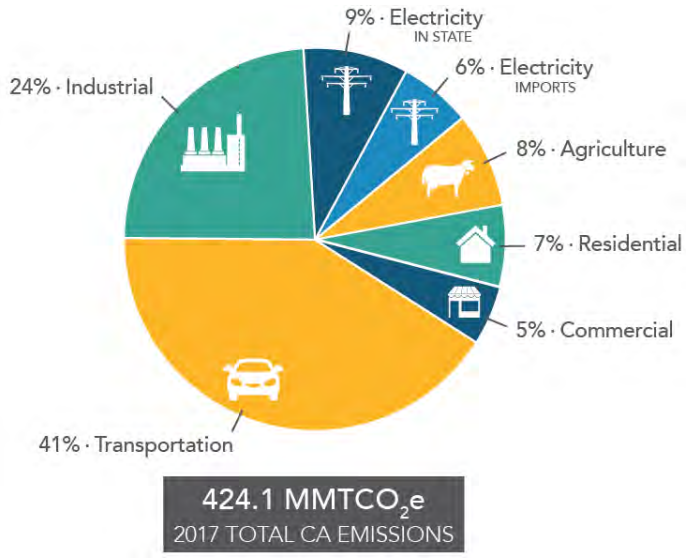
Figure 3.8-1: 2018 United States Greenhouse Gas Emissions by Economic Sector

[2] California Air Resources Board (ARB). 2015. Short-Lived Climate Pollutant Reduction Strategy, Concept Paper. May. Website: http://www.arb.ca.gov/cc/shortlived/concept_paper.pdf. Accessed January 21, 2021.

[3] United States Environmental Protection Agency (EPA). 2020. Inventory of U.S. Greenhouse Gas Emissions and Sinks. April. Website: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed June 24, 2020.

California GHG Inventory

California contributes a large quantity of GHG emissions to the atmosphere. In 2017, emissions from GHG emitting activities Statewide were 424.1 MMT CO_2e, 5 MMT CO_2e lower than 2016 levels and 7 MMT CO_2e below the 2020 GHG Limit of 431 MMT CO_2e. Emissions of CO_2 are byproducts of fossil fuel combustion and are attributable in large part to human activities associated with transportation, industry, electricity and natural gas consumption, and agriculture. In California, the transportation sector is the largest emitter at 41 percent of GHG emissions, followed by industry at 24 percent of GHG emissions (Figure 3.8-2).[4]



Source: California Air Resources Board (ARB). 2019. California Greenhouse Gas Emission Inventory – 2019 Edition. August 12. Website: https://www.arb.ca.gov/cc/inventory/data/data.htm. Accessed June 24, 2020.

Figure 3.8-2: California Greenhouse Gas Emissions by Sector

Environmental Effects of Climate Change in California

In California, climate change may result in consequences such as the following.[5,6]

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.

[4] California Air Resources Board (ARB). 2019. California Greenhouse Gas Emissions for 2000 to 2017. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf. Accessed June 24, 2020.

[5] California Climate Change Center (CCCC). 2006. Our Changing Climate, Assessing the Risks to California: A Summary Report from the California Climate Change Center. July 2006. CEC-500-2006-077. Website: www.scc.ca.gov/webmaster/ftp/pdf/climate_change/assessing _risks.pdf. Accessed January 21, 2021.

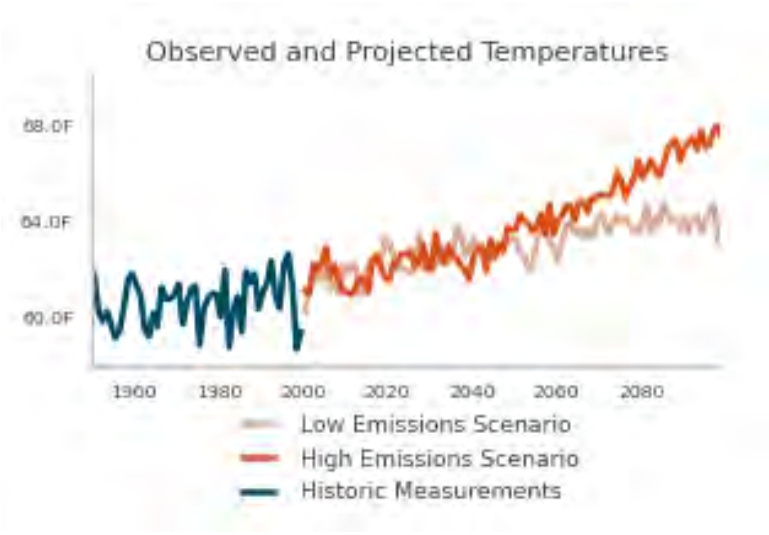
[6] Moser et al. 2009. Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071. Website: www.energy.ca.gov/2008publications/CEC-500-2008-071/CEC-500-2008-071.PDF. Accessed January 21, 2021.

- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of Southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more Northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase in temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California's forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

Consequences of Climate Change in the Tracy Area

Figure 3.8-3 displays a chart of measured historical and projected annual average temperatures in the Tracy area. As shown in the figure, temperatures are expected to rise in the low and high GHG emissions scenarios. The results indicate that temperatures are predicted to increase by 3.4°F (degrees Fahrenheit) under the low emission scenario and 5.9°F under the high emissions scenario.[7]

[7] Cal-Adapt. 2021. Local Climate Snapshots. Website: http://v1.cal-adapt.org/tools/factsheet/#. Accessed January 28, 2021.



Source: Cal-Adapt. 2021. Local Climate Snapshots. Website: http://v1.cal-adapt.org/tools/factsheet/#. Accessed January 28, 2021.

Figure 3.8-3: Observed and Projected Temperatures for Climate Change in the City of Tracy Area

Human Health Effects of GHG Emissions

GHG emissions from development projects would not result in concentrations that would directly impact public health. However, the cumulative effects of GHG emissions on climate change have the potential to cause adverse effects to human health.

The United States Global Change Research Program, in its report, Global Climate Change Impacts in the United States (2009),[8] has analyzed the degree to which impacts on human health are expected to impact the United States.

Potential effects of climate change on public health include:

- **Direct Temperature Effects:** Climate change may directly affect human health through increases in average temperatures, which are predicted to increase the incidence of heat waves and hot extremes.
- **Extreme Events:** Climate change may affect the frequency and severity of extreme weather events, such as hurricanes and extreme heat and floods, which can be destructive to human health and well-being.
- **Climate-Sensitive Diseases:** Climate change may increase the risk of some infectious diseases, particularly those diseases that appear in warm areas and are spread by mosquitoes and other insects, such as malaria, dengue fever, yellow fever, and encephalitis.
- **Air Quality:** Respiratory disorders may be exacerbated by warming-induced increases in the frequency of smog (ground-level ozone) events and particulate air pollution.[9]

[8] The United States Global Change Research Program. Global Climate Change Impacts in the United States. 2009. Website: https://downloads.globalchange.gov/usimpacts/pdfs/climate-impacts-report.pdf. Accessed January 21, 2021.
[9] Ibid.

Although there could be health effects resulting from changes in the climate and the consequences that can occur, inhalation of GHGs at levels currently in the atmosphere would not result in adverse health effects, with the exception of ozone and aerosols (particulate matter). At very high indoor concentrations (not at levels existing outside), CO, CH_4, sulfur hexafluoride, and some chlorofluorocarbons can cause suffocation as the gases can displace oxygen.[10,11]

3.8.3 - Regulatory Framework

International Regulations

International organizations such as the ones discussed below have made substantial efforts to reduce GHGs. Preventing human-induced climate change will require the participation of all nations in solutions to address the issue.

Intergovernmental Panel on Climate Change. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations Framework Convention on Climate Change (Convention). On March 21, 1994, the United States joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

Kyoto Protocol. The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at average of 5 percent against 1990 levels over the five-year period from 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of “common but differentiated responsibilities.”

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2°C above preindustrial levels, subject to a review in 2015. The UN Climate Change Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar

[10] Centers for Disease Control and Prevention (CDC). 2010. Department of Health and Human Services, the National Institute for Occupational Safety and Health. Carbon Dioxide. Website: www.cdc.gov/niosh/npg/npgd0103.html. Accessed February 14, 2017.

[11] Occupational Safety and Health Administration (OSHA). 2003. United States Department of Labor. Safety and Health Topics: Methane. Website: www.osha.gov/dts/chemicalsampling/data/CH_250700.html. Accessed January 21, 2021.

in November 2012; and Warsaw, Poland in November 2013. The meetings are gradually gaining consensus among participants on individual climate change issues.

Paris Climate Change Agreement. On September 23, 2014, more than 100 heads of state and government, and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the United Nations. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the U.N. Framework Convention on Climate Change (UNFCCC) reached a landmark agreement on December 12 in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts, and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st Session of the UNFCCC Conference of the Parties, or COP 21.[12] Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2 degrees Celsius, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they will "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries, too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly will not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and

[12] Center for Climate and Energy Solutions (C2ES). 2015. Outcomes of the U.N. Climate Change Conference. Website: http://www.c2es.org/international/negotiations/cop21-paris/summary. Accessed January 21, 2021.

- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC (C2ES 2015a).

On June 1, 2017, President Trump announced the decision for the United States to withdraw from the Paris Climate Accord;[13] California remains committed to combating climate change through programs aimed to reduce GHGs.[14] On January 20, 2021, President Biden signed an Executive Order for the United States to rejoin the Paris Climate Accord, which became effective at the completion of a mandatory 30-day notice period.

Federal Regulations

The following are actions taken at the federal level relating to GHG emissions.

Greenhouse Gas Endangerment. *Massachusetts v. EPA* (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which the United States Environmental Protection Agency (EPA) sought to regulate four GHGs, including carbon dioxide, under Section 202(a)(1) of the Clean Air Act. A decision was made on April 2, 2007, in which the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act. The Court held that the Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHG emissions—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution, which threatens public health and welfare.

These findings do not impose requirements on industry generally or specific entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below. After a lengthy legal challenge, the United States Supreme Court declined to review an Appeals Court ruling upholding that upheld the EPA Administrator findings.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all

[13] The White House. Statement by President Trump on the Paris Climate Accord. Website: https://www.whitehouse.gov/the-press-office/2017/06/01/statement-president-trump-paris-climate-accord. Accessed January 21, 2021.

[14] California Air Resources Board (ARB). 2017. New Release: California and China Team Up to Push for Millions More Zero-emission Vehicles. Website: https://www.arb.ca.gov/newsreel/newsrelease.php?id=934. Accessed January 21, 2021.

new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applies to passenger cars, light duty trucks, and medium duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the National Highway Safety Administration issued final rules on a second phase joint rulemaking, establishing national standards for light duty vehicles for model years 2017 through 2025 in August 2012.[15] The new standards for model years 2017 through 2025 apply to passenger cars, light duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that began in the 2014 model year and achieve up to a 20 percent reduction in CO_2 emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles, and a 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Finally, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

Mandatory Reporting of Greenhouse Gases. The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the EPA.

New Source Review. The EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant

[15] United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Website: http://www.epa.gov/otaq/climate/documents/420f12051.pdf. Accessed January 21, 2021.

Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these Clean Air Act permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

> This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to greenhouse gas sources, starting with the largest greenhouse gas emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources, but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for greenhouse gas emissions until at least April 30, 2016.

The EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units. As required by a settlement agreement, the EPA proposed new performance standards for emissions of carbon dioxide for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts would be required to meet an output-based standard of 1,000 pounds of carbon dioxide per megawatt-hour, based on the performance of widely used natural gas combined cycle technology.

Cap and Trade. Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Regional Greenhouse Gas Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps carbon dioxide emissions from power plants, auctions carbon dioxide emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners are California,

British Columbia, Manitoba, Ontario, and Québec. Currently only California and Québec are participating in the cap-and-trade program.[16]

State Regulations

The laws and regulations enacted at the State level that indirectly reduce GHGs are listed below.

Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation such as the landmark AB 32 California Global Warming Solutions Act of 2006 was specifically enacted to address GHG emissions. Other legislation such as Title 24 and Title 20 energy standards were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of these legislative efforts.

Assembly Bill 32. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs.

The ARB is the State agency charged with monitoring and regulating sources of GHGs. The ARB approved the 1990 GHG emissions level of 427 MMT CO_2e on December 6, 2007.[17] Therefore, to meet the State's target, emissions generated in California in 2020 were required to be equal to or less than 427 MMT CO_2e. Emissions in 2020 in a business-as-usual (BAU) scenario were estimated to be 596 MMT CO_2e, which do not account for reductions from AB 32 regulations.[18] At that rate, a 28 percent reduction was required to achieve the 427 MMT CO_2e 1990 inventory. In October 2010, the ARB prepared an updated 2020 forecast to account for the effects of the 2008 recession and slower forecasted growth. Under the updated forecast, a 21.7 percent reduction from BAU was required to achieve 1990 levels.[19]

California Air Resources Board Scoping Plan. The ARB Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32.[20] The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and

[16] Center for Climate and Energy Solutions (C2ES). 2015. Multi-State Climate Initiatives. Website: http://www.c2es.org/us-states-regions/regional-climate-initiatives. Accessed January 21, 2021.

[17] California Air Resources Board (ARB). 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. November 16, 2007. Website: www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed January 21, 2021.

[18] California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed January 21, 2021.

[19] California Air Resources Board (ARB). 2010. 2020 Greenhouse Gas Emissions Projection and BAU Scenario Emissions Estimate. Website: http://www.arb.ca.gov/cc/inventory/archive/captrade_2010_projection.pdf. Accessed January 21, 2021.

[20] California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed January 21, 2021.

electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a Statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS); and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. Capped strategies are subject to the proposed cap-and-trade program. Implementation of the capped strategies was calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. Uncapped strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.[21]

The ARB approved the First Update to the Scoping Plan in May of 2014 and the 2017 Scoping Plan Update in November of 2017. The First Update built upon the Initial Scoping Plan while the 2017 Scoping Plan Update builds upon the First Update to the Scoping Plan with new strategies and recommendations.[22]

Senate Bill 32. The Governor signed Senate Bill (SB) 32 in September of 2016, giving the ARB statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states, "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions authorized by this division, the State [Air Resources] Board shall ensure that Statewide GHG emissions are reduced to at least 40 percent below the Statewide GHG emissions limit no later than December 31, 2030." The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

[21] California Air Resources Board (ARB). 2008 (includes edits made in 2009). Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed January 21, 2021.

[22] California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed January 21, 2021.

1. SB 350
   - Achieve 50 percent Renewables Portfolio Standard by 2030.
   - Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard
   - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
   - Maintaining existing GHG standards for light- and heavy-duty vehicles.
   - Put 4.2 million Zero-Emission Vehicles (ZEVs) on the roads.
   - Increase ZEV buses, delivery and other trucks.
4. Sustainable Freight Action Plan
   - Improve freight system efficiency.
   - Maximize use of near Zero-Emission Vehicles and equipment powered by renewable energy.
   - Deploy over 100,000 zero-emission trucks and equipment by 2030.
5. Short-Lived Climate Pollutant Reduction Strategy
   - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
   - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
6. SB 375 Sustainable Communities Strategies
   - Increased stringency of 2035 targets.
7. Post-2020 Cap-and-Trade Program
   - Declining capacities, continued linkage with Québec, and linkage to Ontario, Canada.
   - The ARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In fall 2016, the ARB staff described potential future amendments including reducing the offset usage limit, redesigning the allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.
8. 20 percent reduction in GHG emissions from the refinery sector.
9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Senate Bill 375—the Sustainable Communities and Climate Protection Act of 2008. SB 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning the California Environmental Quality Act (CEQA), SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings determinations for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts or (2) any project-specific or cumulative impacts from cars and light duty truck trips generated by the project on global warming or the regional transportation network if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that the ARB accepts as achieving the greenhouse gas emission reduction targets;
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies); and
3. Incorporates the mitigation measures required by an applicable prior environmental document.

Assembly Bill 1493 Pavley Regulations and Fuel Efficiency Standards. California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulations was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the United States District Court for the District of Columbia in 2011.[23] The standards were to be phased in during the 2009 through 2016 model years.[24]

The second phase of the implementation for the Pavley Bill was incorporated into amendments to the Low Emission Vehicle Program referred to as Low Emission Vehicle (LEV) III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulations are anticipated to reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars. The regulations will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.[25]

Senate Bill 1368—Emission Performance Standards. In 2006, the State Legislature adopted SB 1368, which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this

[23] California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed January 21, 2021.
[24] California Air Resources Board (ARB). 2013. Facts About the Clean Cars Program. Website: http://www.arb.ca.gov/msprog/zevprog/factsheets/advanced_clean_cars_eng.pdf. Accessed January 21, 2021.
[25] California Air Resources Board (ARB). 2011. Status of Scoping Plan Recommended Measures. Website: www.arb.ca.gov/cc/scoping plan/sp_measures_implementation_timeline.pdf. Accessed January 21, 2021.

standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 pounds CO_2 per megawatt-hour (MWh).

Senate Bill 1078—Renewable Electricity Standards. On September 12, 2002, Governor Gray Davis signed SB 1078, requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. The ARB Board approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23.

Senate Bill 350—Clean Energy and Pollution Reduction Act of 2015. The Clean Energy and Pollution Reduction Act (SB 350) established clean energy, clean air, and GHG reduction goals. The California Energy Commission (CEC) is working with other State agencies to implement the bill. Key provisions include an increase in the Renewables Portfolio Standard (RPS), higher energy efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Provisions for a 50 percent reduction in the use of petroleum Statewide were removed from the bill due to opposition and concern that it would prevent the bill's passage. Specifically, SB 350 requires the following to reduce Statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the role of the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.[26]

SBX 7-7—The Water Conservation Act of 2009. The legislation directs urban retail water suppliers to set individual 2020 per capita water use targets and to begin implementing conservation measures to achieve those goals. Meeting this Statewide goal of 20 percent decrease in demand will result in a reduction of almost 2 million acre-feet in urban water use in 2020.

[26] California Legislative Information (California Leginfo). 2015. Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015. Website: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed January 21, 2021.

Senate Bill 100—The 100 Percent Clean Energy Act of 2018. The legislation directs the CPUC, CEC, and ARB to plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. This Act amends Sections 399.11, 399.15, and 399.30 of, and adds Section 454.53 to, the Public Utilities Code, relating to energy.

Executive Orders Related to GHG Emissions

California's executive branch has taken several actions to reduce GHGs through the use of Executive Orders. While directive in nature and not regulatory, they set the tone for the State and guide the actions of State agencies.

Executive Order S-3-05. Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an Executive Order, the goals are not legally enforceable for local governments or the private sector.

Executive Order B-30-15. On April 29, 2015, Governor Edmund G. Brown Jr. issued an Executive Order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's Executive Order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The Executive Order sets a new interim Statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050, and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MM CO_2e. The Executive Order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Executive Order is not legally enforceable against local governments and the private sector. Legislation that would update AB 32 to make post-2020 targets and requirements a mandate is in process in the State Legislature.

Executive Order S-01-07—Low Carbon Fuel Standard. The Governor signed Executive Order S 01-07 on January 18, 2007. The order mandates that a Statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established a LCFS and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the "lifecycle carbon intensity" of transportation fuels. The ARB adopted the LCFS on April 23, 2009.

The LCFS was subject to legal challenge in 2011. Ultimately, on August 8, 2013, the Fifth District Court of Appeal (California) ruled that the ARB failed to comply with CEQA and the Administrative Procedure Act when adopting regulations for LCFS. In a partially published opinion, the Court of Appeal directed that Resolution 09-31 and two Executive Orders of the ARB approving LCFS regulations promulgated to reduce GHG emissions be set aside. However, the Court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while the ARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, the ARB prepared and considered a new LCFS regulation in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low carbon fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The second public hearing for the new LCFS regulation was held on September 24, 2015, and September 25, 2015, where the LCFS regulation was adopted. The Final Rulemaking Package adopting the regulation was filed with the Office of Administrative Law (OAL) on October 2, 2015. The OAL approved the regulation on November 16, 2015.[27]

Executive Order S-13-08. Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy[28] was adopted, which is the ". . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order N-79-20. On September 23, 2020, Governor Gavin Newsom issued an Executive Order establishing a goal that 100 percent of new passenger cars and trucks sold in California shall be zero-emission by 2035. The Executive Order also sets a goal that, where feasible, all operations include zero-emission medium- and heavy-duty trucks by 2045, and drayage trucks by 2035. Off-road vehicles have a goal to transition to 100 percent ZEVs by 2035, where feasible.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations. California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally

[27] California Air Resources Board (ARB). 2015. Low Carbon Fuel Standard Regulation. Website: http://www.arb.ca.gov/regact/2015/lcfs2015/lcfs2015.htm. Accessed January 21, 2021.

[28] California Natural Resources Agency. 2009. 2009 California Climate Adaptation Strategy. Website: http://www.climatechange.ca.gov/adaptation/strategy/index.html.

regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.[29]

Title 24 Energy Efficiency Standards. California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The newest version of Title 24 adopted by the CEC went into effect on January 1, 2017.[30] The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020. One of the notable changes in the 2019 Title 24 Standards includes the solar photovoltaic systems requirement for new low-rise residential homes.

Title 24 California Green Building Standards Code. California Code of Regulations, Title 24, Part 11 is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The code is updated on a regular basis, with the most recent update consisting of the 2019 California Green Building Code Standards that became effective January 1, 2020.[31] Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. The State Building Code provides the minimum standard that buildings need to meet to be certified for occupancy, which is generally considered one of the most stringent building codes in the country and is enforced by the local building official.

Model Water Efficient Landscape Ordinance. The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881 Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected with implementation of the Ordinance. Governor Brown's Drought Executive Order of April 1, 2015 (Executive Order B-29-15) directed the California Department of Water Resources (DWR) to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015, which became effective on December 15, 2015. New development projects that include landscaped areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems
- Incentives for graywater usage

[29] Bay Area Air Quality Management District (BAAQMD). 2017. CEQA Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed January 21, 2021.

[30] California Energy Commission (CEC). 2016. 2016 Building Energy Efficiency Standards Frequently Asked Questions. Website: http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf. Accessed February 2, 2021.

[31] California Building Standards Commission. 2019. 2019 California Green Building Standards Code, Title 24, Part 11. Website: https://codes.iccsafe.org/content/CAGBSC2019/cover. Accessed July 20, 2021.

- Improvements in on-site stormwater capture
- Limiting the portion of landscapes that can be planted with high water use plants
- Reporting requirements for local agencies.

Senate Bill 97 and the CEQA Guidelines Update. Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The Code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)."

Section 21097 was also added to the Public Resources Code, which provided an exemption until January 1, 2010, for transportation projects funded by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 or projects funded by the Disaster Preparedness and Flood Prevention Bond Act of 2006, in stating that the failure to analyze adequately the effects of GHGs would not violate CEQA. The Natural Resources Agency completed the approval process, and the amendments became effective on March 18, 2010.

The 2010 CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change.

Section 15064.4(b) of the CEQA Guidelines provides direction for lead agencies for assessing the significance of impacts of GHG emissions:

- The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The CEQA Guidelines amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Instead, they call for a "good-faith effort, based on available information, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project." The amendments encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies' discretion to make

their own determinations based upon substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

Also amended were CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts, respectively. GHG mitigation measures are referenced in general terms, but no specific measures are championed. The revision to the cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze GHG emissions in an Environmental Impact Report (EIR) when a project's incremental contribution of emissions may be cumulatively considerable; however, it does not answer the question of when emissions are cumulatively considerable.

Section 15183.5 permits programmatic GHG analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to Section 15183.5(b).

In addition, the amendments revised Appendix F of the CEQA Guidelines, which focuses on Energy Conservation. The sample environmental checklist in Appendix G was amended to include GHG questions.

CEQA emphasizes that the effects of GHG emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (see CEQA Guidelines Section 15130(f)).

California Supreme Court GHG Ruling

In a November 30, 2015, ruling on the Newhall Ranch project, the California Supreme Court in *Center for Biological Diversity v. California Department of Fish and Wildlife* (*Newhall Ranch*) concluded that whether the project was consistent with meeting Statewide emission reduction goals is a legally permissible criterion of significance, but the significance finding for the project was not supported by a reasoned explanation based on substantial evidence.[32] The Court offered potential solutions to address this issue summarized below:

Specifically, the Court advised that:

- **Substantiation of Project Reductions from BAU**. A lead agency may use a BAU comparison based on the Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with Statewide goals. (page 25).
- **Compliance with Regulatory Programs or Performance Based Standards**. A lead agency "might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities." (page 26).

[32] Supreme Court of California. 2015. Center for Biological Diversity v. California Department of Fish and Wildlife. November 30. Website: http://climatecasechart.com/case/center-for-biological-diversity-v-california-department-of-fish-and-wildlife/. Accessed February 14, 2021.

- **Compliance with GHG Reduction Plans or Climate Action Plans**. A lead agency may utilize "geographically specific GHG emission reduction plans" such as climate action plans or greenhouse gas emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis (page 26).
- **Compliance with Local Air District Thresholds**. A lead agency may rely on "existing numerical thresholds of significance for greenhouse gas emissions" adopted by, for example, local air districts (page 27).

Therefore, for purposes of this analysis, consistent with CEQA Guidelines Appendix G, the three factors identified in CEQA Guidelines Section 15064.4 and the Newhall Ranch opinion, the GHG impacts would be considered significant if the proposed project would:

- Conflict with a compliant GHG Reduction Plan if adopted by the lead agency;
- Exceed the San Joaquin Air Pollution Control District (Valley Air District) GHG Reduction Threshold; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs.

As further discussed under Section 3.8.4, Impacts and Mitigation Measures, these thresholds are consistent with the Appendix G Environmental Checklist questions from the CEQA Guidelines for GHG emissions.

San Joaquin Air Pollution Control District Regulations

Climate Change Action Plan

On August 21, 2008, the Valley Air District Governing Board approved a proposal called the Climate Change Action Plan (CCAP). The CCAP began with a public process bringing together stakeholders, land use agencies, environmental groups, and business groups to conduct public workshops to develop comprehensive policies for CEQA Guidelines, a carbon exchange bank, and voluntary GHG emissions mitigation agreements for the Governing Board's consideration. The CCAP contains the following goals and actions:

- Develop GHG significance thresholds to address CEQA projects with GHG emission increases.
- Develop the San Joaquin Valley Carbon Exchange for banking and trading GHG reductions.
- Authorize use of the SJVAPCD [Valley Air District's] existing inventory reporting system to allow use for GHG reporting required by AB 32 regulations.
- Develop and administer GHG reduction agreements to mitigate proposed emission increases from new projects.
- Support climate protection measures that reduce greenhouse gas emissions as well as toxic and criteria pollutants. Oppose measures that result in a significant increase in toxic or criteria pollutant emissions in already impacted areas.

On December 17, 2009, the Valley Air District Governing Board adopted "Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA," and the policy "District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency." The Valley Air District concluded that the existing science is inadequate to support quantification of the impacts that project-specific GHG emissions have on global climatic change. The Valley Air District found the effects of project-specific emissions to be cumulative, and without mitigation, their incremental contribution to global climatic change could be considered cumulatively considerable. The Valley Air District found that this cumulative impact is best addressed by requiring all projects to reduce their GHG emissions, whether through project design elements or mitigation.

The Valley Air District's approach is intended to streamline the process of determining whether project-specific GHG emissions would have a significant effect. Projects exempt from the requirements of CEQA, and projects complying with an approved plan or mitigation program would be determined to have a less than significant cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and must have a certified final CEQA document.

For non-exempt projects, those projects for which there is no applicable approved plan or program, or those projects not complying with an approved plan or program, the lead agency must evaluate the project against performance-based standards and would require the adoption of design elements, known as a Best Performance Standard, to reduce GHG emissions. The Best Performance Standards (BPS) have not yet fully been established, though they must be designed to affect a 29 percent reduction when compared with the BAU projections identified in the ARB's AB 32 Scoping Plan.

BAU represents the emissions that would occur in 2020 if the average baseline emissions during the 2002–2004 period were grown to 2020 levels, without control. These standards thus would carry with them pre-quantified emissions reductions, eliminating the need for project-specific quantification. Therefore, projects incorporating BPS would not require specific quantification of GHG emissions, and automatically would be determined to have a less than significant cumulative impact for GHG emissions.

For stationary source permitting projects, BPS means, "The most stringent of the identified alternatives for control of GHG emissions, including type of equipment, design of equipment and operational and maintenance practices, which are achieved-in-practice for the identified service, operation, or emissions unit class." The Valley Air District has identified BPS for the following sources: boilers; dryers and dehydrators; oil and gas extraction, storage, transportation, and refining operations; cogeneration; gasoline dispensing facilities; volatile organic compound control technology; and steam generators.

For development projects, BPS means, "Any combination of identified GHG emission reduction measures, including project design elements and land use decisions that reduce project-specific GHG emission reductions by at least 29 percent compared with business as usual."

Projects not incorporating BPS would require quantification of GHG emissions and demonstration that BAU GHG emissions have been reduced or mitigated by 29 percent. As stated earlier, the ARB's adjusted inventory reduced the amount required by the State to achieve 1990 emission levels from 29 percent to 21.7 percent to account for slower growth experienced since the 2008 recession. According to Valley Air District guidance, quantification of GHG emissions would be required for all projects for which the lead agency has determined that an EIR is required, regardless of whether the project incorporates BPS.

San Joaquin Valley Carbon Exchange

The Valley Air District initiated work on the San Joaquin Valley Carbon Exchange in November 2008. The purpose of the carbon exchange is to quantify, verify, and track voluntary GHG emissions reductions generated within the San Joaquin Valley. However, the Valley Air District has pursued an alternative strategy that incorporates the GHG emissions into its existing Rule 2301—Emission Reduction Credit Offset Banking that formerly only addressed criteria pollutants. The Valley Air District is also participating with the California Air Pollution Control Officers Association (CAPCOA), of which it is a member, in the CAPCOA Greenhouse Gas Reduction Exchange (GHG Rx). The GHG Rx is operated cooperatively by air districts that have elected to participate. Participating districts have signed a Memorandum of Understanding (MOU) with CAPCOA and agree to post only those credits that meet the Rx standards for quality. The objective is to provide a secure, low-cost, high-quality, GHG exchange for credits created in California. The GHG Rx is intended to help fulfill compliance obligations, or mitigation needs of local projects subject to environmental review, reducing the uncertainty of using credits generated in distant locations.

Rule 2301

While the CCAP indicated that the GHG emission reduction program would be called the San Joaquin Valley Carbon Exchange, the Valley Air District incorporated a method to register voluntary GHG emission reductions into its existing Rule 2301-Emission Reduction Credit Banking through amendments of the rule. Amendments to the rule were adopted on January 19, 2012. The purposes of the amendments to the rule include the following:

- Provide an administrative mechanism for sources to bank voluntary GHG emission reductions for later use.
- Provide an administrative mechanism for sources to transfer banked GHG emission reductions to others for any use.
- Define eligibility standards, quantitative procedures, and administrative practices to ensure that banked GHG emission reductions are real, permanent, quantifiable, surplus, and enforceable.

Local Regulations

The City of Tracy does not currently have a formal GHG emissions reduction plan or recommended emissions thresholds for determining significance associated with GHG emissions from development projects. It does, however, have an adopted Sustainability Action Plan.

City of Tracy General Plan

Goal AQ-1 Improved air quality and reduced greenhouse gas emissions.

Objective AQ-1.2 Promote development that minimizes air pollutant and greenhouse gas emissions and their impact on sensitive receptors as a result of indirect and stationary sources.

Policies

Policy P4 New development projects should incorporate energy efficient design features for HVAC, lighting systems and insulation that exceed Title 24.

Policy P5 Use of solar water and pool heaters is encouraged.

Policy P6 Installation of solar voltaic panels on new homes and businesses shall be encouraged.

Policy P7 Trees should be planted on the south- and west-facing sides of new buildings or building undergoing substantial renovation in order to reduce energy usage.

City of Tracy Sustainability Action Plan

The City of Tracy adopted its Sustainability Action Plan in 2011. The City's plan outlines the sustainability targets for the year 2020. Those targets relating to GHG emissions and their corresponding sustainability measures are presented below.

Greenhouse Gas Emissions

- **Target No. 1:** 15 percent reduction in per capita emissions from the 2006 baseline of 11.6 metric ton (MT) of CO_2e.

E-1: Green Building Ordinance

Develop an incentives-based Green Building Ordinance that promotes energy efficient design for new buildings. As part of this Ordinance:

a) Adopt the 2010 California Green Building Standards Code (Title 24, Part 11, CCR).
b) Encourage energy efficiency measures for new warehouses and warehousing in association with other commercial and industrial uses, including the use of reflective pavement and natural gas or electricity use for yard equipment.
c) Encourage the use of cement substitutes and recycled building materials for new construction.
d) Encourage the use of energy efficient appliances that meet Energy Star standards when higher than Title 24 and the use of energy efficient lighting technologies that meet or exceed Title 24 standards.
e) Encourage all new buildings to be constructed to allow for the easy, cost-effective installation of future solar energy systems. "Solar ready" features should include proper solar orientation (i.e., south facing roof area sloped at 20° to 55° from the horizontal); clear access on the south sloped roof (i.e., no chimneys, heating vents, plumbing vents, etc.); electrical conduit

installed for solar electric system wiring; plumbing installed for solar hot water system; and space provided for a solar hot water storage tank.

f) Encourage any roof to have a Solar Reflectance Index (SRI) of at least 29.

g) Encourage that residential projects of six units or more participate in the California Energy Commission's New Solar Homes Partnership, which provides rebates to developers of six units or more who offer solar power in 50 percent of new units and is a component of the California Solar Initiative or a similar program with solar power requirements equal to or greater than those of the California Energy Commission's New Solar Homes Partnership.

h) Partner with Pacific Gas and Electric or other appropriate energy providers and the California Public Utilities Commission to develop an incentive program for solar installation on new and retrofitted warehouses. Consider a mandatory minimum solar requirement for new warehouse space.

i) Encourage that new or major rehabilitations of commercial, office, or industrial development greater than or equal to 25,000 square feet in size incorporate solar or other renewable energy generation to provide 15 percent or more of the project's energy needs. Major rehabilitations are defined as additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area.

j) In partnership with Pacific Gas and Electric and other appropriate energy providers, develop a program that provides incentives that meet or exceed those of AB 1470. AB 1470, the Solar Hot Water Energy Efficiency Act of 2007, directs the California Energy Commission to establish a 10-year, Statewide incentive program to encourage the installation of 200,000 solar water heating systems to offset natural gas usage for water and space heating. The incentives would be funded by a utility company surcharge on certain natural gas customers up to $250 million over 10 years.

k) Develop a public-private partnership to provide incentives for cogeneration projects for commercial and industrial facilities using outside funds.

l) Encourage the development of alternative energy projects and conduct a review of City policies and ordinances to address alternative energy production. Develop protocols for alternative energy storage, such as biodiesel, hydrogen, and/or compressed air. Continue to research the location needs for alternative energy producers and send direct, targeted marketing pieces to alternative energy producers that are appropriate for Tracy. Identify possible City-owned sites for production of local renewable energy sources such as solar, wind, small hydro, and biogas.

m) Encourage the inclusion of alternative energy facilities that are a secondary use to another project. Identify the best means to avoid noise, aesthetic, and other potential land use compatibility conflicts for alternative energy facilities (e.g., installing tracking solar photovoltaics [PV] or angling fixed solar PV in a manner that reduces glare to surrounding land uses). Identify and remove regulatory or procedural barriers to producing renewable energy as a secondary use to another project, such as updating codes, guidelines, and zoning.

n) Encourage the use of locally-sourced, sustainable, salvaged and recycled-content materials and other materials that have low production energy costs for building materials, hard surfaces, and non-plant landscaping.

E-2: Energy Efficiency in Site Planning and Design

Energy

- **Target No. 4a:** 15 percent reduction in community energy consumption from 2006 baseline levels.
- **Target No. 4b:** 10 percent reduction in the municipal peak electrical load from 2006 baseline levels.

Transportation and Land Use

- **Target No. 6a:** 20 percent reduction in the community [Vehicle Miles Traveled] VMT per capita from current (2006) levels.
- **Target No. 6b:** 20 percent reduction in the municipal VMT from 2006 baseline levels.

Economic Development

- **Target No. 18:** 10,000 square feet of neighborhood-serving retail within ¼ mile of 75 percent of all residents.
- **Target No. 20:** 10 percent of jobs are "green" by practice or product.

City of Tracy General Plan

In February of 2011, the City of Tracy adopted its current General Plan. The City's General Plan applicable goals and policies relating to the reduction of greenhouse gas emissions are listed below.

Air Quality Element

Goal AQ-1 Improved air quality and reduced greenhouse gas emissions

Objective AQ-1.1 Improve air quality and reduce greenhouse gas emissions through land use planning decisions.

Policies:

Policy P1 The City shall promote land use patterns that reduce the number and length of motor vehicle trips.

Objective AQ-1.2 Promote development that minimizes air pollutant and greenhouse gas emissions and their impact on sensitive receptors as a result of indirect and stationary sources.

Policies:

Policy P3 Developers shall implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects.

Policy P4 New development projects should incorporate energy efficient design features for HVAC, lighting systems and insulation that exceed Title 24.

Policy P5 Use of solar water and pool heaters is encouraged.

Policy P6 Installation of solar voltaic panels on new homes and businesses shall be encouraged.

Policy P7 Trees should be planted on the south- and west-facing sides of new buildings or building undergoing substantial renovation in order to reduce energy usage.

Policy P8 In accordance with San Joaquin Air Pollution Control District regulations, woodburning fireplaces shall not be installed in new and significantly renovated residential projects.

Policy P9 New developments shall follow the current requirements of the SJVAPCD [Valley Air District] with respect to woodburning fireplaces and heaters.

Objective AQ-1.3 Provide a diverse and efficient transportation system that minimizes air pollutant and greenhouse gas emissions.

Policies:

Policy P1 The City shall continue to work with the San Joaquin Council of Governments on regional transportation solutions.

Policy P2 The City shall encourage Caltrans to implement High Occupancy Vehicle (HOV) lanes on regional freeways in and around the Tracy Planning Area.

Policy P4 The City shall support efforts to retain the railroad right-of-way for future public transit and bicycle facilities.

Policy P5 The City shall require direct pedestrian and bicycle linkages from residential areas to parks, schools, retail areas, high-frequency transit facilities and major employment areas.

Policy P6 The City shall coordinate with regional rideshare and transit incentive programs.

Objective AQ-1.4 Support local and regional air quality improvement efforts.

Policies:

Policy P1 The City shall continue to consult with other local, regional and State agencies on air quality planning efforts as well as encourage community participation in air quality planning.

Policy P2 The City shall be proactive in educating the public about the linkages between land use, transportation, and air quality.

Circulation Element

Goal CIR-1 A roadway system that provides access and mobility for all of Tracy's residents and businesses while maintaining the quality of life in the community.

Objective CIR-1.2 Provide a high level of street connectivity.

Policies:

Policy P1 The City shall ensure that the street system results in a high level of connectivity, especially between residences and common local destinations, such as schools, Village Centers, retail areas and parks.

Policy P2 The City shall implement a connected street pattern with multiple route options for vehicles, bikes and pedestrians.

Policy P3 New development shall be designed to provide vehicular, bicycle and pedestrian connections with adjacent developments.

Objective CIR-1.6 Maximize traffic safety for automobile, transit, bicycle users, and pedestrians.

Policies:

Policy P1 The City shall design streets using context-sensitive design principles that enhance safety for all modes of travel.

Objective CIR-1.8 Minimize transportation-related energy use and impacts on the environment.

Policies:

Policy P3 The City shall encourage the use of non-motorized transportation and low emission vehicles.

Goal CIR-3 Safe and convenient bicycle and pedestrian travel as alternative modes of transportation in and around the City.

Objective CIR-3.1 Achieve a comprehensive system of citywide bikeways and pedestrian facilities.

Policies:

Policy P4 The City's bicycle and pedestrian system shall have a high level of connectivity, especially between residences and common local destinations, such as schools, shopping and parks. A higher level of bicycle and pedestrian connectivity is defined as a shorter or similar distance to common destinations for bicycles and pedestrians compared to distances for vehicles.

Objective CIR-4.1 Promote public transit as an alternative to the automobile.

Policies:

Policy P1 The City shall promote efficient and affordable public transportation that serves all users.

Economic Development Element

Policies:

Policy P1 The City shall encourage businesses that use green practices.

Policy P2 The City shall conduct public education and outreach to support employment opportunities that minimize the need for automobile trips, such as live/work, telecommuting, satellite work centers, and home occupations, in addition to mixed-use development strategies.

3.8.4 - Impacts and Mitigation Measures

Significance Criteria

As previously discussed, under CEQA and as held in the California Supreme Court's decision in *Center for Biological Diversity v. California Department of Fish and Wildlife*, GHG impacts would be considered significant if the proposed project would:

- Conflict with a compliant GHG Reduction Plan if adopted by the lead agency;
- Exceed the San Joaquin Air Pollution Control District (Valley Air District) GHG Reduction Threshold; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs.

As previously mentioned, these thresholds are consistent with the Appendix G Environmental Checklist questions of the CEQA Guidelines. The City of Tracy does not currently have a formal GHG emissions reduction plan or recommended emissions thresholds for determining significance associated with GHG emissions from development projects. Therefore, the first impact criterion, "conflict with a compliant GHG Reduction Plan if adopted by the lead agency," is not applicable for the proposed project. Moreover, the other two impact criteria presented above closely align with the two Appendix G Environmental Checklist questions for GHG emissions. Therefore, the City is utilizing Appendix G of the State CEQA Guidelines as thresholds for the proposed project.

According to the CEQA Guidelines Appendix G Environmental Checklist, to determine whether greenhouse emissions impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Section 15064.4(b) of the CEQA Guidelines' amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- **Consideration No. 1**: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

- **Consideration No. 2**: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration No. 3**: The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The City of Tracy has not adopted its own GHG thresholds or prepared a Climate Action Plan that can be used as a basis for determining project significance, although it has adopted a Sustainability Action Plan, which is a non-qualifying GHG Reduction Plan. The Valley Air District Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA includes thresholds based on whether the project will reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels.[33] This level of GHG reduction is based on the target established by ARB's AB 32 Scoping Plan, approved in 2008.

As explained more fully above, the 2010 Cap and Trade Inventory Update provided revised inventory projections to reflect slower growth in emissions during the recession and lower future year projections. The State's 2020 BAU inventory was reduced from 596 MMT CO_2e to 545 MMT CO_2e. The new GHG reduction level for the State to reach 1990 emission levels by 2020 is 21.7 percent from BAU in 2020. The First Update to the Climate Change Scoping Plan confirmed that the State is on track to achieve the 2020 target and to maintain and continue reductions beyond 2020 as required by AB 32.[34] In addition, the State has reported that the 2016 greenhouse gas inventory was below the 2020 target for the first time. Furthermore, the 2017 Scoping Plan states that California is on track to achieve the 2020 target. The proposed project is expected to become operational in phases beginning in 2023 and completely operational in 2025, which is beyond the AB 32 target year. Until a new threshold or BPS are identified for projects constructed after-2020, significance is based on making continued progress toward the SB 32 2030 goal.

For the reasons explained above, this analysis addresses consistency with the SB 32 targets and the 2017 Scoping Plan Update with an assessment of the project's reduction from BAU based on emissions in 2030 compared with the 21.7 percent reduction and with a consistency analysis. This approach provides estimates of project emissions in the new 2030 milestone year with the existing threshold to show the extent of progress achieved with existing regulations and the incorporation of specific project design features to address Considerations 1 and 2 above.

[33] San Joaquin Valley Air Pollution Control District (Valley Air District) 2009. "Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act." December 2009. Website: https://www.valleyair.org/Programs/CCAP/12-17-09/1%20CCAP%20-%20FINAL%20CEQA%20GHG%20Staff%20Report%20-%20Dec%2017%202009.pdf. Accessed January 29, 2021.

[34] California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. May. Website: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed January 29, 2021.

Newhall Ranch

As discussed above, on November 30, 2015, the California Supreme Court issued its decision in *Newhall Ranch* invalidating the GHG analysis for a large master planned residential development in Los Angeles County consisting of over 20,000 residential dwelling units and other uses. In particular, the Court upheld: (1) the use of the Statewide emissions reduction goal in AB 32 as a significance criterion (pages 15–19), (2) the use of the Scoping Plan's BAU model "as a comparative tool for evaluating efficiency and conservation efforts" of the project (pages 18–19), and (3) a comparison of the project's expected emissions to a BAU model rather than a baseline of pre-project conditions (pages 15–19). However, the Court invalidated the GHG analysis on the grounds that the "administrative record discloses no substantial evidence that the Newhall Ranch's project-level reduction of 31 percent in comparison to [BAU] is consistent with achieving AB 32's Statewide goal of a 29 percent reduction from [BAU]." The Court indicated that a lead agency may use a BAU comparison based on the Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with Statewide goals. The Court suggested a lead agency could examine the "data behind the Scoping Plan's business-as-usual model" to determine the necessary project-level reductions from new land use development at the proposed location (page 25). "Second, a lead agency might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities."

The substantial evidence needed to support a project BAU threshold can be derived from data used to develop the Scoping Plan inventory and control strategy and from analysis conducted by the ARB to track progress in achieving the AB 32 2020 target. The critical factor in determining the appropriate project threshold is whether the State requires additional reductions beyond that achieved by regulations to achieve its target. If no additional reductions are required from individual projects, no nexus exists to require a project to mitigate its emissions. In that case the percentage reductions achieved by projects is the amount needed to reach the AB 32 target.

The State's regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted, and the effectiveness of those regulations has been estimated by the agencies during the adoption process and then tracked to verify their effectiveness after implementation. The combined effect of this successful effort is that the State now projects that it will meet the 2020 target and achieve continued progress toward meeting post-2020 targets. Governor Brown, in the introduction to Executive Order B-30-15, states "California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32)."

The Supreme Court was concerned that new development may need to do more than existing development to reduce GHGs to demonstrate that it is doing its fair share of reductions. As will be shown below, new development does do more than existing development and, due to the nature of the sources of GHG emissions related to development, existing development is equally responsible for reducing emissions from the most important sources of emissions. It is important to note that most of the State's regulatory program applies to new and existing development.

The Scoping Plan reduction from BAU accounts for growth projected in the State and assumes that existing development would continue to emit GHGs at the same rate that occurred in the base year (2002–2004 average). The California Department of Finance Report E-5 predicted that population growth in California from 2005 to 2020 would be 13.2 percent. This means that development that existed in 2005 would have produced nearly 87 percent of the State's emissions in 2020. Conversely, new development would only be responsible for about 13 percent of the emissions generated during this timeframe. Accordingly, if measures to reduce emissions from existing development were not available, new development could not provide sufficient reductions to reach the 2020 target even if their emissions were reduced to net zero.

The State's regulatory program is able to target both new and existing development because the two most important strategies, motor vehicle fuel efficiency and emissions from electricity generation, obtain reductions equally from existing sources and new sources. This is because all vehicle operators use cleaner low carbon fuels and buy vehicles subject to the fuel efficiency regulations and all building owners or operators purchase cleaner energy from the grid that is produced by increasing percentages of renewable fuels. This includes regulations on mobile sources such as the Pavley standards that apply to all vehicles purchased in California, the LCFS that applies to all fuel used in California, and the RPS and Renewable Energy Standard that apply to utilities providing electricity to all California homes and businesses. The reduction strategy where new development is required to do more than existing development is building energy efficiency and energy use related to water conservation regulations. For example, new projects are subject to updated Title 24 Energy Efficiency Standards and the California Green Building Standards Code (CALGreen) and Model Water Efficient Landscape Ordinance (MWELO) water conservation requirements. Buildings constructed to the 2013 Title 24 standards use 30 percent less energy than buildings complying with the 2008 standards, with continued improvement expected under the new 2016 and 2019 standards. New buildings and landscapes are much more energy efficient and water efficient than the development that has been built over the past decades and will require much less energy.

As described above, the State requires an average reduction from all sources of the emission inventory of about 22 percent. The Scoping Plan strategy will achieve more than average reductions from energy and mobile source sectors, which are the primary sources related to development projects, and lower than average reductions from other sources such as agriculture. The amount of reduction estimated for each sector was based on technical feasibility and cost effectiveness. Review of the Scoping Plan inventory and strategy by FirstCarbon Solutions (FCS) for purposes of this analysis shows that the reduction from all development related sources is approximately 29 percent from BAU in order to make up for the below-average sectors and achieve the required 22 percent average reduction.

Consistent with the Newhall Ranch Court decision, a project BAU analysis, based on substantial evidence in the record, was prepared for this project that assesses "consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities." As detailed more fully below, the analysis shows the extent to which the proposed project complies with adopted regulations and the additional amount that will be achieved through specific project design features. At this point in time, no additional

reductions are required from new development beyond regulations for the State to achieve its target. Therefore, this analysis meets the consistency test described by the Supreme Court.

The analysis prepared for the proposed project also includes a qualitative assessment of compliance with Scoping Plan and relevant General Plan measures to support GHG significance findings under Impact GHG-2. There are no measures that identify specific requirements on individual development projects, but the analysis shows how the applicable measures affect project emission sources.

To determine significance, the analysis first quantifies project-related GHG emissions under a BAU scenario, and then compares these emissions with those emissions that would occur when all project-related design features are accounted for, and when compliance with applicable regulatory measures is assumed. The standard and methodology is explained in further detail, below.

Impact Analysis

Greenhouse Gas Emissions

Impact GHG-1:	**The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**

Construction

The project site is composed of six different parcels that are anticipated to be developed in separate phases (Phases 1, 2, and 3), each with their own development schedule. Phase 1 is the Tracy Alliance parcels, with construction assumed to be occurring in 2022 through 2023 and with operation assumed to begin in 2023. Phase 2 is the Suvik Farms parcels, with construction assumed to occur in 2023 through 2024 and operation assumed to begin in 2024. Phase 3 is the Zuriakat parcel, with construction assumed to occur in 2024 through 2025 and operation assumed beginning in 2025. Total GHG emissions generated during construction of the three phases were estimated using California Emissions Estimator Model (CalEEMod) Version 2016.3.2 and are presented in Table 3.8-2,

Table 3.8-3 and Table 3.8-4. The foregoing assumptions reflect a conservative analysis. This is because if the construction dates move out to later years, emissions are expected to decrease because of turnover for newer, cleaner, off-road construction equipment changes in emission factors used to calculate emissions of off-road equipment. However, in order to be conservative, this analysis also considers the possibility that there may be some degree of overlap between the phases. In a scenario where all three construction phrases overlap, the GHG emissions would increase only marginally due to slightly different vehicle fuel efficiencies for different model years and would not substantively affect the analysis and findings discussed below.

The Valley Air District does not specifically recommend assessing the significance of construction-related emissions. Moreover, any construction-related emissions would be temporary. However, other jurisdictions such as the South Coast Air Quality Management District (South Coast AQMD) and the Sacramento Metropolitan Air Quality Management District (SMAQMD) have concluded that construction emissions should be included since they may remain in the atmosphere for years after construction is complete. To provide a robust and conservative analysis, the City, in its discretion, has determined to include construction emissions, which were quantified for all phases of the

development and then amortized over a 30-year period. For buildings in general, it is reasonable to look at a 30-year time frame since this is a typical interval before a new building would reasonably require its first major renovation.[35] These amortized emissions were then added to operational emissions.

Table 3.8-2: Construction GHG Emissions–Phase 1

Construction Phase	On-site	Off-site[1]	Total MT CO_2e
2022			
Demolition + Site Preparation + Grading + Building Construction	2,290.28	973.14	3,263.42
2023			
Building Construction + Paving + Architectural Coating	588.08	270.01	858.09
		Total Construction Emissions	**4,121.51**
		Amortized over 30 years	**137.38**

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
[1] Off-site emissions refer to emissions which are generated during off-site activities associated with on-site development, such as truck traffic, worker vehicle trips, and equipment transport to and from the project site. Off-site emissions presented here do not refer to development activities or improvements which occur off-site.
Because of rounding, total MT CO_2e may be marginally different from CalEEMod output.
Source: CalEEMod output (Appendix B).

Table 3.8-3: Construction GHG Emissions–Phase 2

Construction Phase	On-site	Off-site[1]	Total MT CO_2e
2023			
Site Preparation + Grading + Building Construction	903.04	408.20	1,311.24
2024			
Building Construction + Paving + Architectural Coating	233.90	117.59	351.49
		Total Construction Emissions	**1,662.73**
		Amortized over 30 years	**55.42**

[35] International Energy Agency (IEA). 2008, July. Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings.

Construction Phase	On-site	Off-site[1]	Total MT CO_2e
Notes: MT CO_2e = metric tons of carbon dioxide equivalent [1] Off-site emissions refer to emissions which are generated during off-site activities associated with on-site development, such as truck traffic, worker vehicle trips, and equipment transport to and from the project site. Off-site emissions presented here do not refer to development activities or improvements which occur off-site. Because of rounding, total MT CO_2e may be marginally different from CalEEMod output. Source: CalEEMod output (Appendix B).			

Table 3.8-4: Construction GHG Emissions–Phase 3

Construction Phase	On-site	Off-site[1]	Total MT CO_2e
2024			
Site Preparation + Grading + Building Construction	121.20	10.06	131.26
2025			
Building Construction + Paving + Architectural Coating	12.71	44.19	156.90
		Total Construction Emissions	**288.16**
		Amortized over 30 years	**9.61**
Notes: MT CO_2e = metric tons of carbon dioxide equivalents [1] Off-site emissions refer to emissions which are generated during off-site activities associated with on-site development, such as truck traffic, worker vehicle trips, and equipment transport to and from the project site. Off-site emissions presented here do not refer to development activities or improvements which occur off-site. Because of rounding, total MT CO_2e may be marginally different from CalEEMod output. Source: CalEEMod output (Appendix B).			

Operation

Operational or long-term emissions occur over the life of a development project. Sources of emissions may include motor vehicles and trucks, energy usage, water usage, waste generation, and area sources, such as landscaping activities and residential woodburning. As mentioned, for purposes of this analysis, project operation is assumed to begin in 2023 for Phase 1, 2024 for Phase 2 and 2025 for Phase 3.

Business As Usual Operational Emissions

Operational emissions under the BAU scenario were modeled using CalEEMod Version 2016.3.2. Modeling assumptions for the year 2005 were used to represent 2023, 2024, 2025 and 2030 BAU conditions (without incorporating the benefit of regulations adopted to reduce GHG emissions). The Valley Air District guidance recommends using emissions in 2002–2004 in the baseline scenario to represent conditions—as if regulations had not been adopted—to allow the effect of projected growth on achieving reduction targets to be clearly defined. CalEEMod defaults were used for project energy usage, water usage, waste generation, and area sources (architectural coating,

consumer products, and landscaping). The vehicle fleet mix in each model was revised to reflect the employee and truck fleet mixes for the respective buildout years.

2023, 2024, 2025, and 2030 Operational Emissions

Operational emissions were modeled for the years 2023, 2024, 2025 and 2030 using CalEEMod. CalEEMod assumes compliance with some, but not all, applicable rules and regulations regarding energy efficiency, vehicle fuel efficiency, renewable energy usage, and other GHG reduction policies, as described in the CalEEMod User's Guide.[36] The reductions obtained from each regulation and the source of the reduction amount used in the analysis are described below.

Emissions Accounting for Applicable Regulations

The following regulations are incorporated into the CalEEMod emission factors:

- Pavley I and Pavley II (LEV III) motor vehicle emission standards
- ARB Medium and Heavy-Duty Vehicle Regulation
- 2005, 2008, 2013, and 2016 Title 24 Energy Efficiency Standards

The following regulations have not been incorporated into the CalEEMod emission factors and require alternative methods to account for emission reductions provided by these regulations:

- Renewable Portfolio Standards
- Low Carbon Fuel Standard
- 2019 Title 24 Energy Efficiency Standards
- Green Building Code Standards (indoor water use)
- California Model Water Efficient Landscape Ordinance (Outdoor Water)

Pavley II/LEV III standards have been incorporated in the latest version of CalEEMod. The ARB estimates a 3 percent reduction in 2020 and a 19 percent reduction from the vehicle categories subject to the regulation by 2030.[37,38]

The ARB GHG Regulation for Medium and Heavy-Duty Engines and Vehicles applies to trucks that will be accessing the project site. The benefits of the regulation were incorporated into CalEEMod Version 2016.3.2. The ARB estimates that this regulation will reduce GHG emissions from the affected vehicles by 7.2 percent.[39]

[36] South Coast Air Quality Management District (South Coast AQMD). 2017. User's Guide for CalEEMod Version 2016.3.2. Website: http://www.aqmd.gov/caleemod/user's-guide. Accessed September 24, 2020.

[37] California Air Resources Board (ARB). 2010. Pavley 1 + Low Carbon Fuel Standard Postprocessor Version 1.0 User's Guide. Website: https://www.arb.ca.gov/cc/sb375/tools/pavleylcfsuserguide.pdf. Accessed February 5, 2020.

[38] California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed February 2, 2021.

[39] California Air Resources Board (ARB). 2013. Initial Statement of Reasons for Proposed Rulemaking, Proposed GHG Regulations for Medium and Heavy-Duty Engines and Vehicles. Website: https://www.arb.ca.gov/regact/2013/hdghg2013/hdghg2013isor.pdf. Accessed February 2, 2021.

The LCFS is estimated to achieve a 10 percent reduction in emissions by 2020 and an 18 percent reduction by 2030. CalEEMod does not include credit for the LCFS, so the reduction is calculated off-model based on reductions required by the regulation.

Title 24 reductions for 2013 and 2016 updates are included in CalEEMod Version 2016.3.2. Compliance with 2019 Title 24 is expected to reduce nonresidential energy use by 30 percent beyond 2016 Title 24 standards.[40]

RPS is not accounted for in CalEEMod Version 2016.3.2. Reductions from RPS are addressed by revising the electricity emission intensity factor in CalEEMod to account for the utility RPS rate forecast for 2022 and 2030.[41] Pacific Gas and Electric Company (PG&E) provides emission factors for the electricity it provides to customers and projections for its energy portfolio for each year through 2030 that is used to estimate project emissions.[42]

Energy savings from water conservation resulting from the Green Building Code Standards for indoor water use and California MWELO for outdoor water use are not included in CalEEMod. The Water Conservation Act of 2009 mandates a 20 percent reduction in urban water use that is implemented with these regulations.[43] As such, the GHG emissions generated from electricity consumption associated with potential reductions in water use conservative do not account for compliance with the Water Conservation Act of 2009.

Reductions in emissions from solid waste are based on the City achieving the CalRecycle 75 Percent Initiative by 2020 compared with a 50 percent baseline for 2005.

Regulations applicable to project sources and the percent reduction anticipated from each source are shown in Table 3.8-5. The percentage reductions are only applied to the specific sources subject to the regulations. For example, the Pavley LEV Standards apply only to light duty cars and trucks.

Table 3.8-5: Summary of Applicable Greenhouse Gas Regulations

Regulation	Project Applicability
Pavley Low Emission Vehicle Standards	Nitrous oxide (laughing gas) is a colorless GHG. It has a lifetime of 114 years. Its global warming potential is 310.
Truck and Bus Regulation	Heavy-duty trucks accessing the site for deliveries and services are subject to the regulation.
Low Carbon Fuel Standard	Vehicles accessing the site would use fuel subject to the LCFS.

[40] California Energy Commission (CEC). 2018. 2019 Building Energy Efficiency Standards Frequently Asked Questions. Website: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf. Accessed July 20, 2021.

[41] California Public Utilities Commission. (CPUC). 2016. Renewable Portfolio Standard Quarterly Report. Website: https://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Reports_and_White_Papers/Q4_2016_RPS_Report_to_the_Legislature_FINAL.pdf. Accessed February 2, 2021.

[42] California Energy Commission (CEC). 2019. Review of Turlock Irrigation District's 2018-2030 Integrated Resource Plan. August. Website: https://www.energy.ca.gov/filebrowser/download/1905. Accessed September 30, 2020.

[43] California Department of Water Resources (DWR). 2013. California Water Plan Update 2013, Chapter 3 Urban Water Use Efficiency. Website: http://www.water.ca.gov/calendar/materials/vol3_urbanwue_apr_release_16033.pdf. No longer available on the DWR website.

Regulation	Project Applicability
Title 24 Energy Efficiency Standards	Project buildings would be required to be constructed to meet the latest version of Title 24 (currently 2019). Reduction applies only to energy consumption subject to the regulation.
Green Building Code Standards	The project would be required to include water conservation features mandated by the standard.
Water Efficient Land Use Ordinance	The project landscaping would be required to comply with the regulation.
Renewable Portfolio Standard	Electricity purchased for use at the project site is subject to the 33 percent RPS mandate.
Solid waste	The solid waste service provider would be required to provide programs to increase diversion and recycling to meet the 75 percent mandate, to which the project would be required to adhere.

In addition to rules and regulations, the project would obtain benefits from its location and infrastructure that would reduce project VMT compared with default values, as further detailed in Section 14, Transportation. The project would locate industrial uses close to major transportation corridors, for example.

Note that CalEEMod nominally labels the foregoing design elements and conditions as "mitigation measures," despite their inclusion in the project description as project design features. Therefore, reported operational emissions are considered to represent unmitigated project conditions despite the "mitigated" label applied by CalEEMod. Full assumptions and model outputs are provided in Appendix B and results of this analysis for the three phases are presented in Table 3.8-6, Table 3.8-7 and Table 3.8-8. A second set of analyses for 2030 is presented in Table 3.8-9 through Table 3.8-11.

Table 3.8-6: Project Operational Greenhouse Gases 2023–Phase 1

	Emissions (MT CO_2e per year)	
Source	Business as Usual	2023 (with reductions)
Area	0	-1
Energy	3,968	1,043
Mobile	10,844	8,132
Waste	874	861
Water	1,255	790
Amortized Construction Emissions	137	137
Total	**17,080**	**10,962**
Reduction from BAU		6,117
Percent Reduction		**49.7**

Source	Emissions (MT CO_2e per year)	
	Business as Usual	2023 (with reductions)
Significance Threshold		**29**
Are emissions significant?		**No**

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
The project achieves the Valley Air District 29 percent reduction from BAU threshold and the 21.7 percent required to show consistency with AB 32 targets.
Source of BAU emissions: CalEEMod output using 2005 modeling year to represent emissions in 2020 without regulations (Appendix B).
Source of 2023 emissions: CalEEMod output (Appendix B).

Table 3.8-7: Project Operational Greenhouse Gases 2024–Phase 2

Source	Emissions (MT CO_2e per year)	
	Business as Usual	2024 (with reductions)
Area	0	0
Energy	2,036	555
Mobile	5,953	4,424
Waste	484	484
Water	696	446
Amortized Construction Emissions	55	55
Total	**9,224**	**5,964**
Reduction from BAU		3,260
Percent Reduction		**48.7**
Significance Threshold		**29**
Are emissions significant?		**No**

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
The project achieves the Valley Air District 29 percent reduction from BAU threshold and the 21.7 percent required to show consistency with AB 32 targets.
Source of BAU emissions: CalEEMod output using 2005 modeling year to represent emissions in 2020 without regulations (Appendix B).
Source of 2024 emissions: CalEEMod output (Appendix B).

Table 3.8-8: Project Operational Greenhouse Gases 2025–Phase 3

Source	Emissions (MT CO_2e per year)	
	Business as Usual	2025 (with reductions)
Area	0	0
Energy	954	260

Source	Emissions (MT CO_2e per year)	
	Business as Usual	2025 (with reductions)
Mobile	2,206	1,635
Waste	227	227
Water	326	209
Amortized Construction Emissions	10	10
Total	**3,722**	**2,746**
Reduction from BAU		976
Percent Reduction		**31.6**
Significance Threshold		**29**
Are emissions significant?		**No**

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
The project achieves the Valley Air District 29 percent reduction from BAU threshold and the 21.7 percent required to show consistency with AB 32 targets.
Source of BAU emissions: CalEEMod output using 2005 modeling year to represent emissions in 2020 without regulations (Appendix B).
Source of 2025 emissions: CalEEMod output (Appendix B).

As shown in Tables 3.8-6 through 3.8-8, Phase 1 would achieve a reduction of 49.7 percent from BAU by the year 2023 with regulations and design features incorporated, Phase 2 would achieve a 48.7 percent reduction by 2024, and Phase 3 would achieve a 31.6 percent reduction by 2025. Each phase would achieve more than the 29 percent reduction required by the Valley Air District threshold, and also more than the 21.7 percent average reduction from all sources of GHG emissions now required to achieve AB 32 targets. As explained above, the ARB originally identified a reduction of 29 percent from BAU as needed to achieve AB 32 targets. The 2008 recession and slower growth in the years since 2008 have reduced the growth forecasted for 2020, and the amount needed to be reduced to achieve 1990 levels as required by AB 32. The California Department of Finance population forecast for 2020 to 2030 predicts growth in the State of 8.1 percent by the 2030 target year or 0.8 percent per year.[44]

The percent reductions from BAU for the three phases are all well beyond the average 29 percent reduction required by the State from all sources to achieve the AB 32 2020 target and therefore addresses the concern expressed in the *Newhall Ranch* decision that projects should likely do more than the average to ensure they are providing a fair share of emission reductions. As previously mentioned, the emission reductions achieved by the proposed project would primarily come from improved building energy efficiency, increasing transportation fuel content standards, and increasing vehicle fuel efficiency standards when compared with a 2005 BAU scenario.

[44] State of California, Department of Finance. 2017. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark. May. Website: http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/. Accessed September 25, 2020.

As previously discussed, this analysis also addresses consistency with the SB 32 targets and the 2017 Scoping Plan Update with an assessment of the project's reduction from BAU levels based on emissions in 2030 compared with the 21.7 percent reduction. The Valley Air District's *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* includes thresholds based on whether the project will reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels.[45] Therefore, because the project buildout would occur after 2020, operational emissions from the project beginning in 2030 are summarized in Table 3.8-9 through Table 3.8-11 and compared with the applicable Valley Air District's threshold of a 29 percent reduction from BAU emission levels.

Table 3.8-9: Project Operational Greenhouse Gases 2030–Phase 1

Source	Emissions (MT CO_2e per year)	
	Business as Usual	2030 (with reductions)
Area	0	0
Energy	3,968	985
Mobile	10,844	6,817
Waste	874	874
Water	1,255	774
Amortized Construction Emissions	137	137
Total	**17,080**	**9,587**
Reduction from BAU		7,492
Percent Reduction		**43.9**
Significance Threshold		**29**
Are emissions significant?		**No**

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
The proposed project more than achieves the Valley Air District 29 percent reduction from BAU threshold and the 21.7 percent required to show consistency with AB 32 targets.
Source of BAU emissions: CalEEMod output using 2005 modeling year to represent emissions in 2030 without regulations (Appendix B).
Source of 2030 emissions: CalEEMod output (Appendix B).

[45] San Joaquin Valley Air Pollution Control District (Valley Air District) 2009. "Final Staff Report, Addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act." December 2009. Website: https://www.valleyair.org/Programs/CCAP/12-17-09/1%20CCAP%20-%20FINAL%20CEQA%20GHG%20Staff%20Report%20-%20Dec%2017%202009.pdf. Accessed January 29, 2021.

Table 3.8-10: Project Operational Greenhouse Gases 2030–Phase 2

Source	Emissions (MT CO_2e per year)	
	Business as Usual	2030 (with reductions)
Area	0	0
Energy	2,036	516
Mobile	5,953	3,742
Waste	484	484
Water	696	431
Amortized Construction Emissions	55	55
Total	**9,224**	**5,228**
Reduction from BAU		3,996
Percent Reduction		**43.3**
Significance Threshold		**29**
Are emissions significant?		**No**

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
The project exceeds the Valley Air District 29 percent reduction from BAU threshold and the 21.7 percent required to show consistency with AB 32 targets.
Source of BAU emissions: CalEEMod output using 2005 modeling year to represent emissions in 2030 without regulations (Appendix B).
Source of 2030 emissions: CalEEMod output (Appendix B).

Table 3.8-11: Project Operational Greenhouse Gases 2030–Phase 3

Source	Emissions (MT CO_2e per year)	
	Business as Usual	2030 (with reductions)
Area	0	0
Energy	954	242
Mobile	2,206	1,404
Waste	227	227
Water	326	202
Amortized Construction Emissions	10	10
Total	**3,722**	**2,084**
Reduction from BAU		1,638
Percent Reduction		**44.0**
Significance Threshold		**29**
Are emissions significant?		**No**

Source	Emissions (MT CO_2e per year)	
	Business as Usual	2030 (with reductions)

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
The project exceeds the Valley Air District 29 percent reduction from BAU threshold and the 21.7 percent required to show consistency with AB 32 targets.
Source of BAU emissions: CalEEMod output using 2005 modeling year to represent emissions in 2030 without regulations (Appendix B).
Source of 2030 emissions: CalEEMod output (Appendix B).

As shown in Table 3.8-9 through 3.8-11, Phase 1 would achieve a reduction of 43.9 percent from BAU by the year 2030 with regulations and design features incorporated, Phase 2 would achieve a 43.3-percent reduction by 2030, and Phase 3 would achieve a 44 percent reduction by 2030. No new threshold has been adopted by the City of Tracy for the 2030 target, so in the interim the project must make continued progress toward the 2030 goal.

In conclusion, each of the project phases would achieve reductions beyond the ARB 2020 21.7 percent target and the Valley Air District 29 percent reduction from BAU requirements from adopted regulations in their respective operational years. No new threshold has been adopted by the City for the SB 32 2030 target; however, the emission estimates presented in Table 3.8-9 through 3.8-11 demonstrate that the project would achieve greater reductions than the Valley Air District-established threshold of 29 percent, resulting in annual reductions ranging from 43.3 to 44 percent. Based on this progress and the 2017 Scoping Plan Update, it is reasonable to conclude that the project is consistent with the 2017 Scoping Plan and would make a reasonable fair share contribution to achieving the 2030 target. The fair share may very well be achieved through compliance with increasingly stringent State regulations that apply to new development, such as Title 24 and CALGreen; regulations on energy production, fuels, and motor vehicles that apply to both new and existing development; and voluntary actions to improve energy efficiency in existing development. In addition, compliance with the VMT targets, to the extent feasible, adopted to comply with SB 375 and implemented through the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and updated VMT guidelines adopted by the Governor's Office of Planning and Research (OPR) and implemented by the City (see Section 14, Transportation) may be considered to adequately address GHG emissions from passenger cars and light duty trucks. Additionally, the State strategy relies on the Cap-and-Trade Program to make up any shortfalls that may occur from the other regulatory strategies. The costs of Cap-and-Trade emission reductions will ultimately be passed on to the consumers of fuels, electricity and products produced by regulated industries which include future residents of development projects and other purchasers of products and services. Given the above information and that the proposed project would not exceed Valley Air District-established GHG significance thresholds, this impact would be less than significant.

Level of Significance

Less Than Significant Impact

Conflict with Plan, Policy, or Regulation that Reduces Emissions

Impact GHG-2: The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

The following analysis assesses the project's compliance with Consideration No. 3 regarding consistency with adopted plans to reduce GHG emissions. The City of Tracy has not adopted a GHG Reduction Plan. In addition, the City has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines amendments adopted for SB 97 and clarifications provided in the CEQA Guidelines amendments adopted on December 28, 2018. The Valley Air District has adopted a Climate Action Plan, but it does not contain measures that are applicable to individual development projects such as the proposed project. Therefore, the Valley Air District CCAP cannot be applied to the project for purposes of streamlining under CEQA. Since no other local or regional Climate Action Plan is in place, the project is assessed for its consistency with ARB's adopted Scoping Plans. This would be achieved with an assessment of the project's compliance with relevant Scoping Plan measures contained in the 2008 Scoping Plan and the 2017 Scoping Plan Update.

Consistency with California's Post-2020 Targets

As discussed above, the State's executive branch adopted several Executive Orders related to GHG emissions. Executive Orders S-3-05 and B-30-15 are two examples. Executive Order S-3-05 sets goals to reduce emissions to 1990 levels by 2020 and 80 percent below 1990 levels by 2050. The goal of Executive Order S-3-05 to reduce GHG emissions to 1990 levels by 2020 was codified by AB 32. The proposed project, for the reasons analyzed above, is consistent with AB 32. Therefore, the proposed project does not conflict with this component of Executive Order S-3-05. Executive Order B-30-15 establishes an interim goal to reduce GHG emissions to 40 percent below 1990 levels by 2030.

The 2030 goal was codified under SB 32 and is now addressed by the 2017 Scoping Plan Update. The new plan provides a strategy that is capable of reaching the SB 32 target if the measures included in the plan are implemented and achieve reductions within the ranges expected. Under the Scoping Plan Update, local government plays a supporting role through its land use authority and control over local transportation infrastructure. The 2017 Scoping Plan Update includes reductions from implementation of SB 375 that applies to VMT from passenger vehicles. San Joaquin County targets for SB 375 are a 12 percent per capita reduction by 2020 and a 16 percent per capita reduction by 2035 relative to 2005 levels. SB 375 is implemented with the San Joaquin Council of Governments (San Joaquin COG) RTP/SCS. The RTP/SCS envisions an increase in development density that would encourage fewer and shorter trips and more trips by transit, walking, and bicycling in amounts sufficient to achieve the SB 375 targets.

Now that the 2017 Scoping Plan has been adopted, new methodologies and threshold approaches are required to determine the fair-share contributions City development projects would need to make to achieve the 2030 target. In the meantime, however, the discussion under "Consistency with SB 32" below addresses the consistency of the proposed project with SB 32, which provides the statutory underpinning of the 2017 Scoping Plan. The SB 32 target requires GHG emissions to be

reduced from 1990 levels. No consensus has been reached around the State on a new quantitative target for new development based on consistency with the SB 32 targets.

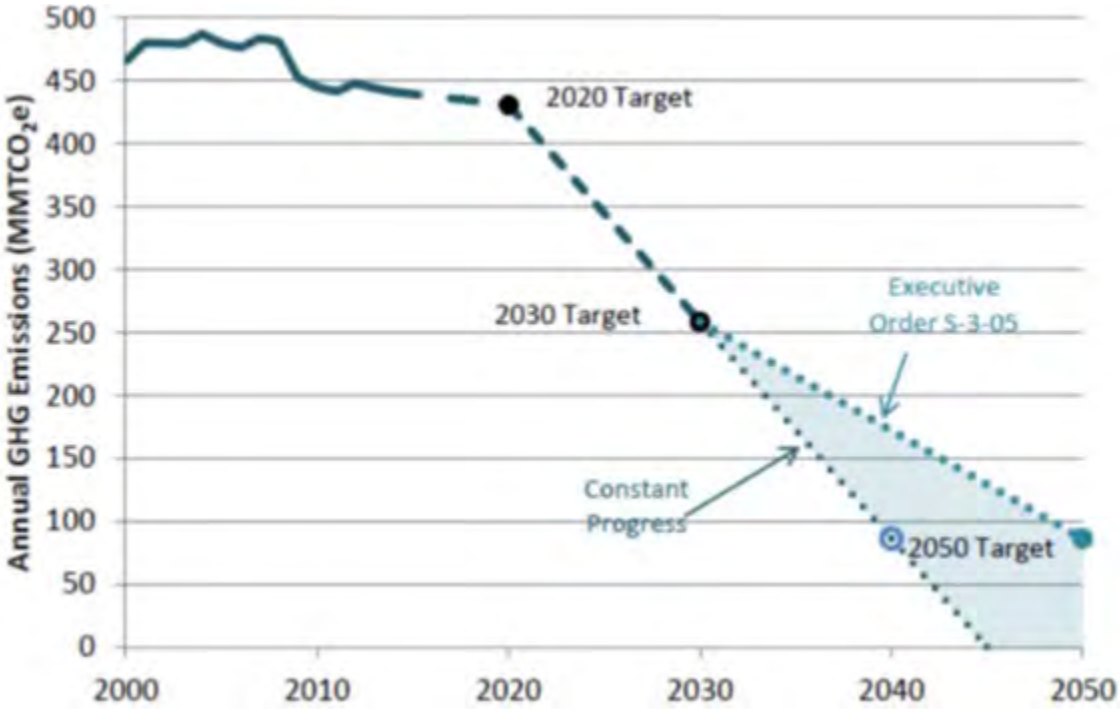
The Executive Order S-3-05 2050 target has not been codified by legislation. However, studies have shown that, in order to meet the 2050 target, aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. Because of the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the project's impacts further relative to the 2050 goal is speculative for purposes of CEQA.[46]

The ARB recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate." In addition, the ARB's First Update "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by the ARB would serve to reduce the proposed project's post-2020 emissions level to the extent applicable by law:

- **Energy Sector**: Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the proposed project's emissions level. Additionally, further additions to California's renewable resource portfolio would favorably influence the project's emissions level.
- **Transportation Sector**: Anticipated deployment of improved vehicle efficiency, zero-emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the project's emissions level.
- **Water Sector**: The project's emissions level will be reduced as a result of further desired enhancements to water conservation technologies.
- **Waste Management Sector**: Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the project's emissions level.

For the reasons described above, the project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets. The trajectory required to achieve the post-2020 targets is shown in Figure 3.8-4.

[46] California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed February 5, 2020.



Source: California Air Resources Board (ARB). 2017. The 2017 Climate Change Scoping Plan Update. January 20. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed February 2, 2021.

Figure 3.8-4: California's Path to Achieving the 2050 Target

In his January 2015 inaugural address, Governor Brown expressed a commitment to achieve "three ambitious goals" that he would like to see accomplished by 2030 to reduce the State's GHG emissions:

- Increasing the State's Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030;
- Cutting the petroleum use in cars and trucks in half; and
- Doubling the efficiency of existing buildings and making heating fuels cleaner.

These expressions of executive branch policy may be manifested in adopted legislative or regulatory action through the State agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change.[47]

Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the Statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.[48]

[47] Brown, Edmund G. Jr. 2015. Press Release: California Establishes Most Ambitious Greenhouse Gas Goal in North America. April 29. Website: https://www.gov.ca.gov/news.php?id=18938. Accessed February 2, 2021.
[48] Energy and Environmental Economics. 2015. Pathways to Deep Decarbonization in the United States. Website:

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends—such as the increasing importance of web-based shopping, the emergence of different driving patterns, and the increasing effect of web-based applications on transportation choices—are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years and will require the creation of new models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions. For the reasons described above, the proposed project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets.

Consistency with SB 32

As explained above, the 2017 Scoping Plan Update includes the strategy that the State intends to pursue to achieve the 2030 targets of Executive Order S-3-05 and SB 32. The 2017 Scoping Plan includes the following summary of its overall strategy for reaching the 2030 target:

- SB 350
  - Achieve 50 percent Renewables Portfolio Standard by 2030.
  - Doubling of energy efficiency savings by 2030.
- Low Carbon Fuel Standard
  - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
- Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
  - Maintaining existing GHG standards for light- and heavy-duty vehicles.
  - Put 4.2 million zero-emission vehicles (ZEVs) on the roads.
  - Increase ZEV buses, delivery, and other trucks.
- Sustainable Freight Action Plan
  - Improve freight system efficiency.
  - Maximize use of near Zero-Emission Vehicles and equipment powered by renewable energy.
  - Deploy over 100,000 zero-emission trucks and equipment by 2030.
- Short-Lived Climate Pollutant (SLCP) Reduction Strategy
  - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
  - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
- SB 375 Sustainable Communities Strategies
  - Increased stringency of 2035 targets.
- Post-2020 Cap-and-Trade Program
  - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
  - The ARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In fall 2016, ARB staff described potential future amendments including reducing the offset usage limit, redesigning the

http://deepdecarbonization.org/wp-content/uploads/2015/11/US_Deep_Decarbonization_Technical_Report_Exec_Summary.pdf. Accessed February 2, 2021.

allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.

- By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Table 3.8-12 provides an analysis of the project's consistency with the 2017 Scoping Plan Update measures.

Table 3.8-12: Consistency with SB 32 2017 Scoping Plan Update

Scoping Plan Measure	Project Consistency
SB 350 50 percent Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33 percent in 2020 to 50 percent in 2030.	Not applicable. This measure would apply to utilities and not to individual development projects. The proposed project would purchase electricity from a utility subject to the SB 350 Renewable Mandate and the RPS requirements. SB 100 has increased the 2030 RPS standards to 60 percent by 2030, superseding the increase required by SB 350.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.	**Not applicable**. This measure applies to existing buildings. The proposed project would not utilize existing buildings. New structures would be required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency over time. The proposed project would be required to comply with the applicable Title 24 Energy Efficiency Standards in effect at the time building permits are received.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Not applicable.** This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the project site would be required to adhere to these standards.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Consistent**. The proposed project is industrial in nature and would support truck and freight operations. It is expected that deliveries throughout the State would be made with an increasing number of ZEV delivery trucks, including trips that would be coming to and from the project site.
Sustainable Freight Action Plan. The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero-emission operation and maximize near zero-emission freight vehicles and equipment powered by renewable energy by 2030.	**Consistent.** This measure applies to owners and operators of trucks and freight operations. The proposed project is industrial in nature and would support truck and freight operations that would benefit from this efficiency increase.

Scoping Plan Measure	Project Consistency
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Consistent.** The proposed project would not include major sources of black carbon. This measure revolves around ARB's SLCP Reduction Strategy that was released in April 2016 as a result of SB 650. SB 650 required the State to develop a strategy to reduce emissions of SLCPs. Diesel particulate matter (DPM) reductions have come from strong efforts to reduce on-road vehicle emissions. Car and truck engines used to be the largest sources of anthropogenic black carbon emissions in California, but the State's existing air quality policies will virtually eliminate black carbon emissions from on-road diesel engines within 10 years. These policies are based on existing technologies.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	**Not applicable.** The proposed project does not include the development of a Regional Transportation Plan.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Not applicable.** The proposed project is not one targeted by the cap-and-trade system regulations, and therefore, this measure does not apply to the project. However, the post-2020 Cap-and-Trade Program indirectly affects people and entities who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers.
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, State, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	**Not Applicable.** The majority of the project site consists of active farmland producing row crops. However, the project site is designated as Industrial (I) by the City of Tracy General Plan.
Source: California Air Resources Board (ARB). 2017. The 2017 Climate Change Scoping Plan Update. January 20. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed February 2, 2021.	

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the project would be required to comply with whatever measures are enacted that State lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. In its 2008 Scoping Plan, the ARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the First Scoping Plan Update; however, the ARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large scale electrification

of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately." The 2017 Scoping Plan Update provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target.

Accordingly, taking into account the proposed project's emissions, and the progress being made by the State toward reducing emissions in key sectors such as transportation, industry, and electricity, the project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment.

Level of Significance

Less Than Significant Impact

3.8.5 - Cumulative Impacts

GHG emissions and global climate change inherently represent cumulative impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the GHG emissions from past, present, and reasonably foreseeable future projects and activities have contributed to and would contribute to global climate change and its associated environmental impacts. According to the Valley Air District, project GHG emissions are inherently cumulative and do not require the estimation of cumulative projects in the region of the project. Thus, the determination of GHG cumulative impacts is based on the State target established by AB 32 to reduce GHG emissions to 1990 levels by 2020. In order to ensure that this goal would be achieved, as discussed above in detail, Air Districts and Lead Agencies developed GHG thresholds to ensure compliance with the State target. Projects with GHG emissions in conformance with these thresholds, therefore, would not be considered significant for purposes of CEQA. In addition, although the emissions from such cumulative projects would add an incremental amount to the overall GHG emissions that cause global climate change impacts, emissions from projects consistent with these thresholds would not be a "cumulatively considerable" contribution under CEQA. Such projects would not be "cumulatively considerable," because they would be helping to solve the cumulative problem as a part of the AB 32 process. Given that it has been determined the proposed project would be consistent with the applicable thresholds as evaluated above in detail, the project would result in a less than significant cumulative impact related to generation of GHG emissions.

Level of Cumulative Significance

Less Than Significant Impact

3.9 - Hazards and Hazardous Materials

3.9.1 - Introduction

This section describes the existing hazards and hazardous materials conditions on the project site and vicinity area as well as the relevant regulatory framework. This section also evaluates the potential impacts related to hazards and hazardous materials that could result from implementation of the proposed project. Information included in this section is based, in part, on the Phase I Environmental Site Assessment (Phase I ESA) and the Limited Site Investigation prepared for the Tracy Alliance parcels, as well as the Phase I ESA prepared for the Zuriakat and Suvik Farms parcels, all included as Appendix G. The following comments were received during the Notice of Preparation (NOP) scoping period related to hazards and hazardous materials:

- The Environmental Impact Report (EIR) should acknowledge the potential for historic or future activities on or near the project site that could result in the release of hazardous wastes/substances on the project site. The EIR should also identify the mechanism(s) to initiate any required investigation or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.
- Because of the potential for Aerially Deposited Lead (ADL), the California Department of Substance Control (DTSC) recommends collecting soils samples for lead analysis prior to construction.
- The DTSC recommends that any project sites with current and/or former mining operations on-site or in the project site area should be evaluated for mine waste.
- If buildings or other structures are to be demolished as part of the proposed project, surveys should be conducted for the presence of lead-based paint (LBP) or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted.
- If the proposed project requires the import of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination.
- If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR.

3.9.2 - Environmental Setting

Fundamentals

Hazards

This description of existing conditions focuses on hazards from fire and overhead power lines, as well as hazardous materials and wastes. A hazard is a situation that poses a level of threat to life, health, property, or the environment. Hazards can be dormant or potential, with only a theoretical risk of

harm. However, once a hazard becomes active, it can create an emergency. A hazardous situation that has already occurred is called an incident. Emergency response is action taken in response to an unexpected and dangerous occurrence to mitigate its impact on people, structures, or the environment. Emergency situations can range from natural disasters to problems with hazardous materials and transportation incidents.

Hazardous Materials and Wastes

Hazardous materials include but are not limited to hazardous materials, hazardous substances, and hazardous wastes, as defined in Section 25501 and Section 25117, respectively, of the California Health and Safety Code. A hazardous material is any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released; and any material that a handler or an administering regulatory agency under Health and Safety Code Section 25501 has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment. Various properties of a substance may cause that substance to be considered hazardous, including:

- Toxicity—causes human health effects;
- Ignitability—has the ability to burn;
- Corrosivity—causes severe burns or damage to materials; and
- Reactivity—causes explosions or generates toxic gases.

Hazardous Building Materials

Many older buildings contain building materials consisting of hazardous materials. These materials include LBP, asbestos-containing material (ACM), and polychlorinated biphenyls (PCBs).

Prior to the United States Environmental Protection Agency (EPA) ban in 1978, LBP was commonly used on interior and exterior surfaces of buildings. Disturbances such as sanding and scraping activities, renovation work, gradual wear and tear, old peeling paint, and paint dust particulates have been found to contaminate surface soils or cause lead dust to migrate and affect indoor air quality. Exposure to residual lead can cause severe health effects, especially in children.

Asbestos is a naturally occurring fibrous material that was extensively used as a fireproofing and insulating agent in building construction materials before such uses were banned by the EPA in the 1970s. In addition, many types of electrical equipment contained PCBs as an insulator, including transformers and capacitors. After PCBs were determined to be a carcinogen in the mid to late 1970s, the EPA banned PCB use in new equipment and began a program to phase out certain existing PCB-containing equipment. For example, fluorescent lighting ballasts manufactured after January 1, 1978, do not contain PCBs and are required to have a label clearly stating that PCBs are not present in the unit.

Hazardous Substances

A hazardous substance can be any biological, natural, or chemical substance, whether solid, liquid, or gas, that may cause harm to human health. Hazardous substances are classified based on their potential health effects, whether acute (immediate) or chronic (long-term). Dangerous goods are classified based on immediate physical or chemical effects, such as fire, explosion, corrosion, and

poisoning. An accident involving dangerous goods could seriously harm human health or damage property or the environment. Harm to human health may happen suddenly (acute), such as dizziness, nausea, and itchy eyes or skin; or it may happen gradually over years (chronic), such as dermatitis or cancer. Some people can be more susceptible than others. Hazardous substances and dangerous goods can include antiseptic used for a cut, paint for walls, a cleaning product for the bathroom, chlorine in a pool, carbon monoxide from a motor vehicle, fumes from welding, vapors from adhesives, or dust from cement, stone, or rubber operations. Such hazardous substances can make humans very sick if they are not used properly.

Hazardous Wastes

Hazardous waste is any hazardous material that is to be discarded, abandoned, or recycled. The criteria that define a material as hazardous also define a waste as hazardous. Specifically, materials and waste may be considered hazardous if they are poisonous (toxic); can be ignited by open flame (ignitable); corrode other materials (corrosive); or react violently, explode, or generate vapors when mixed with water (reactive). Soil or groundwater contaminated with hazardous materials above specified regulatory State or federal thresholds is considered hazardous waste if it is removed from a site for disposal. If handled, disposed, or otherwise treated improperly, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20–24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Hazardous Materials Listing

The Cortese List is a list of known hazardous materials or hazardous waste facilities that meet one or more of the provisions of Government Code Section 65962.5, including:

- The list of hazardous waste and substances sites from the DTSC EnviroStor database.[1]
- The list of Leaking Underground Storage Tank (LUST) sites by county and fiscal year from the California State Water Resources Control Board (State Water Board) GeoTracker database.[2]
- The list of solid waste disposal sites identified by the State Water Board with waste constituents exceeding hazardous waste levels outside the waste management unit.[3]
- The list of active cease-and-desist orders and cleanup and abatement orders from the State Water Board.[4]

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[1] California Department of Toxic Substances Control (DTSC). "Cortese" list of DTSC's EnviroStor database list of Hazardous Waste and Substances sites. DTSC's Hazardous Waste and Substances Site List—Site Cleanup (Cortese List). Website: https://www.envirostor.dtsc.ca.gov/public/. Accessed October 27, 2020.

[2] California State Water Resources Control Board (State Water Board). GeoTracker Database Map. Website: https://geotracker.waterboards.ca.gov/map/. Accessed October 27, 2020.

[3] California Environmental Protection Agency (Cal/EPA). 2020. Site Portal. Website: https://siteportal.calepa.ca.gov/nsite/map/results. Accessed October 27, 2020.

[4] Ibid.

- The list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, as identified by the DTSC.[5]

Existing Fire Related Conditions and Presence of Hazardous Materials

The hazards in the City of Tracy and its Sphere of Influence (SOI), including the project site, discussed in this section are related primarily to fire hazards and hazardous materials. Fire hazards and hazards from hazardous materials are typically site-specific, so existing conditions related to fire hazards and the transport, use, and disposal of hazardous materials are discussed below under "project site."

Fire hazards present a considerable problem to vegetation and wildlife habitats throughout the City of Tracy and its SOI. Grassland fires are easily ignited, particularly in dry seasons. These fires are relatively easily controlled if they can be reached by fire equipment; the burned slopes, however, are highly subject to erosion and gullying. While brushlands are naturally adapted to frequent light fires, fire protection in recent decades has resulted in heavy fuel accumulation on the ground. Wildfire is a serious hazard in outlying residential parcels and open lands adjacent to residential areas.[6]

City of Tracy

The City of Tracy contains extensive heavy industrial development that may be associated with hazardous materials uses within the Northeast Industrial (NEI) Specific Plan area that may be associated with hazardous materials uses. Heavy industrial uses present potential risks to public safety because of materials or machinery that may result in an explosion or the release of hazardous substances, should an accident occur. In addition, natural gas wells are located throughout the NEI Specific Plan area.[7] No particular routes for hazardous materials transportation are designated in the City;[8] however, the California Highway Patrol designates through-routes to be used for the transportation of hazardous materials. Hazardous materials such as asbestos and lead are also likely present in building materials and paints in older structures.

The Tracy Fire Department provides fire protection and emergency medical services to 160 square miles and over 100,000 people, encompassing the City as well as all surrounding rural areas from the Stanislaus County line to the Alameda County line.[9] The City created a new Joint Exercise of Powers Agreement between the Tracy Fire Department and the Tracy Rural Fire Protection District forming the South San Joaquin County Fire Authority (South County Fire) in 2018. Emergency response in the City of Tracy and for the project site is coordinated by the Tracy Fire Department and South County Fire, with South County Fire providing response services to hazardous materials incidents, as well as fire protection and emergency medical services, as discussed further in Section 3.13, Public Services.

[5] California Environmental Protection Agency (Cal/EPA). "Cortese" list of sites subject to Corrective Action pursuant to Health and Safety Code 25187.5. Website: https://www.calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/. Accessed October 27, 2020.
[6] Design, Community, and Environment. 2011. City of Tracy General Plan (prepared for City of Tracy). Page 8-16.
[7] Pacific Municipal Consultants.1996. Draft Environmental Impact Report Northeast Industrial Concept Development Plan (prepared for City of Tracy). Page 4-10.
[8] Design, Community, and Environment. 2011. City of Tracy General Plan (prepared for City of Tracy).
[9] South San Joaquin County Fire Authority (South County Fire). No date. History. Website: http://southcountyfa.org/history.html. Accessed May 11, 2020.

The South County Fire Community Risk Reduction Division is responsible for planning, outreach, and training for disaster management and emergency preparedness.[10]

The City of Tracy contains mostly urban uses with little open space or foothill areas susceptible to wildfire hazards. The southwestern most areas within the City's SOI contain some "Moderate" fire hazard zones.[11] According to the California Department of Forestry and Fire Protection (CAL FIRE) there are no High or Very High Fire Hazard Severity Zones in San Joaquin County, and therefore none in the City of Tracy; according to the California Public Utilities Commission (CPUC), there are no Tier 2-Elevated Zones or Tier 3-Extreme Zones within the City of Tracy.[12]

Project Site

The project site is currently used for agricultural purposes. Several documents were prepared to evaluate the site for the potential presence of hazardous materials, including organochlorinated pesticides and other chemicals commonly associated with agricultural operations, as summarized below.

A Phase I ESA and a subsequent Limited Site Investigation were completed for the Tracy Alliance parcels by Terracon Consultants, Inc. (Terracon) dated December 21, 2018,[13] and May 10, 2019,[14] respectively. A Phase I ESA was completed by Environmental Assessment Specialists, Inc. (EAS) on June 12, 2020, for the Zuriakat and Suvik Farms parcels.[15] The results are summarized below.

Tracy Alliance Parcel

Phase I ESA

The project site has historically been utilized for agricultural operations. Currently, approximately 118 acres of the site are used for row crop production. Approximately 4 acres of the southwestern corner of the site are used for farming activities including an equipment storage yard, equipment and/or automotive maintenance, and hazardous material storage. Equipment maintenance associated with the farm activities is reportedly performed on the concrete pad on the east side of the haybarn. The hazardous material storage area was located primarily east of the haybarn and included pesticide, herbicide, and unlabeled oily drums. Pesticides and herbicides are reportedly mixed in the field and applied to the crops. A residential automotive maintenance area was observed in the residential garage and the gravel driveway south of the garage.

According to the Phase I ESA, the properties at 6599 and 6735 West Grant Line Road have the following Recognized Environmental Conditions (RECs) or Controlled RECs (CRECs) identified in connection with the site as shown in Exhibit 3.9-1a and Exhibit 3.9-b:

- **Wastewater Pond (western portion of the site):** Based on the duration of operations (approximately 25 years), unlined construction of the pond, absence of information pertaining to the management and regulatory oversight of the pond, reported operations (dairy farm),

[10] South San Joaquin County Fire Authority (South County Fire) No date. Community Risk Reduction. http://southcountyfa.org/community-risk-reduction.html.
[11] California Department of Forestry and Fire Protection (CAL FIRE). 2007. San Joaquin County Draft Fire Hazard Severity Zones in LRA.
[12] California Public Utilities Commission (CPUC). 2019. FireMap. Website: https://ia.cpuc.ca.gov/firemap/. Accessed October 28, 2020.
[13] Terracon Consultants, Inc. 2018. Phase I Environmental Site Assessment Tracy Ridge 6599 and 6735 W. Grant Line Road. December 21.
[14] Terracon Consultants, Inc. 2019. Limited Site Investigation Tracy Ridge 6599 and 6735 West Grant Line Road. May 10.
[15] Environmental Assessment Specialists, Inc. (EAS). 2020. Phase I Environmental Site Assessment Suvik and Zuriakat Properties 6103, 6281, and 6301 West Grant Line Road and 6050 West California Avenue. June 12.

absence of subsurface investigation, and shallow depth to groundwater in the site vicinity (approximately 12.5 and 20 feet below ground surface [bgs]), the former wastewater pond located on the western portion of the site is a REC.

- **Absence of Removal Records Associated with Historic Underground Storage Tank(s):** Underground storage tank (UST) removal records were not available for at least two 350-gallon gasoline USTs identified on the site, believed to be installed in the 1970s. The exact location of the USTs is unknown, though it is presumed to be near the residential garage near the southwestern portion of the site. At least one of the USTs was removed, and the status of the second reported UST is not known. Based on the absence of UST removal records, the historical USTs represents a significant data gap and is considered a REC.
- **Historical Aboveground Storage Tank Fueling Areas:** Three gasoline and/or diesel fueling aboveground storage tanks (ASTs) ranging between approximately 200 gallons and 500 gallons in size were observed at the southwestern portion of the site. During the site reconnaissance, the ASTs were observed on soil and not within secondary containment. Based on the site's history of petroleum hydrocarbon use, absence of secondary containment, and poor housekeeping practices, the historical AST fueling areas is a REC.
- **Petroleum Hydrocarbon Staining:** Multiple areas were observed to have surface stains at the southwestern corner of the site. Based on-site observations, the potential cause of the stains appeared to be from spills and/or leaks associated with vehicle and/or equipment maintenance activities and leaking containers and/or improper storage or disposal of hazardous material containers. Based on the site's history of petroleum hydrocarbon use, unknown nature of released materials, and poor housekeeping practices, the petroleum hydrocarbon staining represents a REC.
- **Unlabeled 55-Gallon Drum Storage Area:** Approximately ten 55-gallon unlabeled drums stored on soil were observed south of the cattle storm shed. Staining was not observed beneath the former drum area after removal; however, based on the unknown nature of materials stored in the drums and poor housekeeping practices, the former drum storage area represents a REC.
- **Burn Disposal Areas:** Two burn disposal areas approximately 35 square feet in size were observed east of the residence garage and north of the milk barn near the southwestern portion of the site. Although there is no evidence that hazardous substances were disposed of at the burn area, the unknown nature of materials burned at this location and their potential for site contamination/releases represent a REC.
- **Off-site Groundwater Impacts from Adjoining Western Open-Inactive Leaking Underground Storage Tank Facility:** Herbicide, pesticide, and petroleum hydrocarbon contamination impacting groundwater was identified at the western-adjoining former Haley's Flying Service property at concentrations above screening levels. Based on shallow depth to groundwater (11 feet bgs), open regulatory status, and reported pesticide, herbicide, and petroleum hydrocarbon contamination above screening levels, Haley's Flying Service represented a REC to the site.

In addition, three domestic groundwater wells were found on-site as shown in Exhibit 3.9-1b.

Limited Site Investigation

Based on the conclusions of the Phase I ESA, a Limited Site Investigation was prepared to assess the potential impacts from the RECs previously identified in the southwestern corner of the project site. According to the Limited Site Investigation, a total of 21 discrete samples from various depths and locations on-site were collected.[16]

On April 9, 2019, Ground Penetrating Radar Services (GRPS), the subcontracted geophysical professional, performed a geophysical survey. GPRS utilized ground-penetrating radar and magnetometer survey methods to perform the survey. The purpose of the survey was to attempt to determine the presence or absence of septic tanks, USTs, product pipelines, and buried utilities in the vicinity of the proposed boring locations prior to subsurface exploration.

The geophysical survey consisted of scanning the area of interest first with an electromagnetic instrument followed by a ground-penetrating radar scan to further evaluate any electromagnetic anomalies if present. The geophysical survey was performed in the specific soil boring locations.

Evidence of utility lines were identified near the residence. The proposed boring locations were adjusted in the field based on indications of utilities. Evidence of USTs were not identified during the geophysical survey.

On April 9 and 10, 2019, Terracon field representative, Mr. Patrick Keicher, oversaw the drilling of 19 soil borings B-1 through B-19, and the collection of two ash samples ASH-1 and ASH-2 (ash/burn areas); the locations of soil boring locations are shown in Exhibit 3.9-1a and Exhibit 3.9-1b. The soil borings were taken at locations of potentially contaminated soil. Yellow indicates the location of an AST, red indicates the location of drums/storage containers, orange indicates stained soil, blue indicates the location of a domestic well, green indicates the location of a septic system, and gray indicates other areas of concern. The soil borings were completed by Woodward Drilling, a California State-licensed driller, using a limited access and track-mounted direct-push drill rig for borings B-1 (boring taken from site of former dairy pond), B-2 (boring taken from site of former dairy pond), B-17 (boring taken from site of septic system), B-18 and B-19 (boring taken from site of septic system), and with hand augers for B-3 through B-16.

In general, Terracon encountered medium to high plasticity, brown, moist, very stiff lean clay near the surface to an approximate depth of 3 feet bgs. A medium plasticity, tan, moist, medium stiff silt was encountered beneath the lean clay to approximately 9 feet bgs, where a tannish-brown, dry to moist, medium dense poorly graded sand and a low plasticity, tannish brown, moist, medium stiff silt was encountered to the maximum explored depth of 10 feet bgs. Groundwater was not encountered at the maximum depth explored of 10 feet bgs.

The selected soil samples were analyzed for total petroleum hydrocarbons as gasoline, diesel, and motor oil (TPH-GRO, TPH-DRO and TPH-MORO) and volatile organic compounds (VOCs); Organochlorine pesticides (OCPs); chlorinated herbicides (CH); California Administrative Manual (CAM 17), and polycyclic aromatic hydrocarbons (PAHs).

[16] Terracon Consultants, Inc. 2019. Limited Site Investigation. May 10.

One 55-gallon drum of drill cuttings was containerized during the field activities. The drum will be properly disposed by a licensed disposal facility, and Terracon would forward the waste manifest to the co-applicants.

Soil Analytical Results

The following conclusions were made regarding the disposition of the soils on the project site:

- Staining or Photoionization detector (PID) readings indicative of a release were not identified or recorded during field sampling activities.
- OCP, CH, PAH, and VOCs were not detected in the analyzed soil samples above laboratory reporting limits (RLs).
- TPH-GRO, TPH-DRO, and TPH-MORO were not detected in the samples analyzed, except for TPH-DRO (41 mg/Kg) and TPH-MORO (120 mg/Kg) in sample ASH-1.
- Arsenic-impacted soils are present in the soil samples collected from the site. The arsenic impacts are within regional background concentrations, except for the ASH-2 sample.
- Metals were detected at various concentrations in the four soil samples above laboratory reporting limits. Arsenic concentrations in four samples exceed the residential screening levels, and two concentrations exceed the commercial/industrial non-cancer screening levels; however, the concentrations of arsenic detected appears consistent with naturally occurring arsenic as reported by the United States Geological Survey (USGS), except for the ASH-2 sample, which is likely associated with the material burned in the ash pile.

Based on the generally low concentrations of analytes observed in the soil samples, Terracon concluded that there does not appear to be a significant contaminant release from historical or current use of the property in the immediate area of the investigation. The Limited Site Investigation concluded that no further investigation or remediation was required.

Zuriakat and Suvik Farms Parcels

Historically, the Zuriakat and Suvik Farms parcels were vacant land as early as 1914 (Union Island, CA topographic map). The Zuriakat parcel was occupied by vacant land from at least 1937 to at least 1940 and then used as agricultural row crop land from at least 1957 to present. The Suvik Farms parcels have been used as agricultural land (row crops and orchards) from at least 1937 until present.

EAS completed their site reconnaissance on June 3, 2020. The Phase I ESA revealed no RECs in connection with the Zuriakat and Suvik Farm parcels. However, the following business environmental risks were identified:

- A wide variety of pesticides, including those containing persistent compounds such as lead and arsenic, may have been used during this period. No information was obtained indicating evidence of improper storage, disposal or application of these materials and a review of available historical aerial photographs did not show on-site improvements such as hangars, runways or large barns that would indicate significant storage, formulation, and handling of

these materials. However, given the planned extensive redevelopment and grading of the Zuriakat and Suvik Farms parcels and the limited regulation of the potential storage and usage of agricultural chemicals during a significant period of the land's historic agricultural land use, there is a potential for accumulation of elevated levels of the aforementioned constituents. On-site soils may contain pesticides/herbicides above actionable levels. Therefore, it is recommended that soil sampling and testing be performed on the Suvik Farms and Zuriakat parcels prior to redevelopment activities. Once the analysis has been completed, the results would verify that contaminated soils above action levels are/are not present.

- Markers indicating the presence of an underground petroleum pipeline owned by Chevron Pipeline Company were observed along the northern side of West Grant Line Road, adjacent to the south of the Suvik Farms parcels.
- Two on-site irrigation wells were observed within the unpaved access roads along the western properly line (the Suvik Farms parcels).
- One plastic aboveground fertilizer tank (10-1-10 NPK, gross estimate 24,020 lbs./2499-gallons per tank manifest) is located adjacent to an on-site irrigation channel to the southwest corner of the Zuriakat parcel as shown in Exhibit 3.9-2. The fertilizer tank and associated irrigation channel feeder lines appeared to be in good condition with no evidence of spills or leaks.

3.9.3 - Regulatory Framework

Federal

Occupational Health and Safety Act

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor is responsible for implementing and enforcing federal laws and regulations that address worker health and safety. OSHA requires specific training for hazardous materials users and handlers, provision of information (procedures for personal safety, hazardous materials storage and handling, and emergency response) to employees who may be exposed to hazardous materials, and acquisition of material safety data sheets from materials manufacturers. Material safety data sheets describe the risks, as well as proper handling and procedures, related to hazardous materials. Employee training must include response and remediation procedures for hazardous materials releases and exposures. Construction workers and operational employees at the project site would be subject to these requirements.

Code of Federal Regulations, Titles 29 and 40

Regulations in Code of Federal Regulations Title 29 include requirements to manage and control exposure to LBP and ACM. In California, these requirements are implemented by the California Occupational Safety and Health Administration (Cal/OSHA) under California Code of Regulations Title 8 (see further discussion of California Code of Regulations Title 8 below). The removal and handling of ACM is governed primarily by EPA regulations under Code of Federal Regulations Title 40. The regulations require that the appropriate State agency be notified before any demolition, or before any renovations, of buildings that could contain asbestos or ACM above a specified threshold.

Resource Conservation and Recovery Act and Comprehensive Environmental Response, Compensation, and Liability Act

The EPA is responsible for implementing and enforcing federal laws and regulations pertaining to hazardous materials. The primary legislation includes the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA) and the Emergency Planning and Community Right-to-Know Act (known as SARA Title III). RCRA and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and nonhazardous wastes and mandate that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment, including detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities. As permitted by RCRA, in 1992, the EPA approved California's program called the Hazardous Waste Control Law (HWCL), administered by DTSC, to regulate hazardous wastes in California, as discussed further below. The purpose of CERCLA is to identify and clean up chemically contaminated sites that pose a significant environmental health threat, and the Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities. SARA relates primarily to emergency management of accidental releases and requires annual reporting of continuous emissions and accidental releases of specified compounds that are compiled into a nationwide Toxics Release Inventory. Finally, SARA Title III requires formation of state and local emergency planning committees that are responsible for collecting material handling and transportation data for use as a basis for planning and provision of chemical inventory data to the community at large under the "right-to-know" provision of the law.

Hazardous Materials Transportation Act

Under the Hazardous Materials Transportation Act of 1975, the United States Department of Transportation (USDOT), Office of Hazardous Materials Safety regulates the transportation of hazardous materials on water, rail, highways, through air, or in pipelines, and enforces guidelines created to protect human health and the environment and reduce potential impacts by creating hazardous material packaging and transportation requirements. It also includes provisions for material classification, packaging, marking, labeling, placecarding, and shipping documentation. The USDOT provides hazardous materials safety training programs and supervises activities involving hazardous materials. In addition, the USDOT develops and recommends regulations governing the multimodal transportation of hazardous materials.

Aboveground Petroleum Storage Act, and Spill Prevention, Control, and Countermeasure Rule

The Aboveground Petroleum Storage Act of 1990, and the Spill Prevention, Control, and Countermeasure (SPCC) Rule (amended 2010) of the Oil Pollution Prevention regulation (40 Code of Federal Regulations [CFR] 112) require the owner or operator of a tank facility with an aggregate storage capacity greater than 1,320 gallons to notify the local Certified Unified Program Agency (CUPA) and prepare an SPCC plan. The SPCC plan must identify appropriate spill containment measures and equipment for diverting spills from sensitive areas and must discuss facility-specific requirements for the storage system, inspections, recordkeeping, security, and training.

Clean Water Act

The Clean Water Act (CWA) (Title 33 § 1251, *et seq*. of the United States Code [33 USC 1251, *et seq*.]) is the major federal legislation governing water quality. The CWA established the basic structure for regulating discharges of pollutants into waters of the United States (not including groundwater). The objective of the act is "to restore and maintain the chemical, physical, and biological integrity of the nation's waters."[17] The CWA establishes the basic structure for regulating the discharge of pollutants into waters of the United States. Responsibility for administering the CWA resides with the State Water Board and nine Regional Water Quality Control Boards (RWQCBs); the Central Valley RWQCB administers the CWA for western San Joaquin County. Section 404 of the CWA regulates temporary and permanent fill and disturbance of waters of the United States, including wetlands. The United States Army Corps of Engineers (USACE) requires that a permit be obtained if a project proposes to place fill in navigable waters and/or to alter waters of the United States below the ordinary high-water mark in non-tidal waters. Section 401 of the CWA requires compliance with State water quality standards for actions within State waters. Compliance with the water quality standards required under Section 401 is a condition for issuance of a Section 404 permit. Under Section 401 of the CWA, every applicant for a permit or license for any activity that may result in a discharge to a water body must obtain a State water quality certification from the RWQCB to demonstrate that the proposed activity would comply with State water quality standards.

State

California Hazardous Waste Control Law

The HWCL is the primary hazardous waste statute in the State of California, and implements RCRA as a "cradle-to-grave" waste management system for handling hazardous wastes in a manner that protects human health and the environment and reduces potential resulting impacts of hazardous waste. The law specifies that generators of hazardous waste have the primary duty to determine whether their waste is hazardous and to ensure proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous waste used or reused as raw materials. The law exceeds federal requirements by mandating source reduction planning and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates several types of waste and waste management activities that are not covered by federal law.

California Health and Safety Code

The California Health and Safety Code (Health and Safety Code [HSC] § 25141)[18] defines hazardous waste as a waste or combination of waste that may:

> . . . because of its quantity, concentration, or physical, chemical, or infection characteristics:
>
> (1) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitation-reversible illness.

[17] United States Environmental Protection Agency (EPA). 2018. Clean Water Act (CWA) and Federal Facilities. Website: https://www.epa.gov/enforcement/clean-water-act-cwa-and-federal-facilities#:~:text=CWA%20is%20the%20primary%20Federal,in%20compliance%20with%20a%20permit. Accessed November 5, 2020.

[18] FindLaw. 2020. California Code, Health and Safety Code–HSC § 25141. Website: https://codes.findlaw.com/ca/health-and-safety-code/hsc-sect-25141.html. Accessed November 5, 2020.

(2) Pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of or otherwise managed.

These regulations establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe management practices for hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous waste that commonly would be disposed of in landfills.

Under both the RCRA and the HWCL, hazardous waste manifests must be retained by the generator for a minimum of 3 years. The generator must match copies of the manifests with copies of manifest receipts from the treatment, disposal, or recycling facility.

In accordance with Chapter 6.11 of the California Health and Safety Code (HSC § 25404, *et seq*.), local regulatory agencies enforce many federal and State regulatory programs through the CUPA program, including:

- Hazardous Materials Business Plans (HMBP) (HSC § 25501, *et seq.*);
- Uniform Fire Code requirements (Uniform Fire Code [UFC] § 80.103, as adopted by the State Fire Marshal pursuant to HSC § 13143.9);
- Underground storage tanks (HSC § 25280, *et seq.*);
- Aboveground storage tanks (HSC § 25270.5(c)); and
- Hazardous Waste Generator requirements (HSC § 25100, *et seq.*).

San Joaquin Environmental Health Department is the CUPA for San Joaquin County (which includes the City).[19] As the CUPA, San Joaquin Environmental Health Department enforces State statutes and regulations through the Hazardous Materials Unified Program Agency (HMUPA). The HMUPA oversees aboveground petroleum tanks; generation of hazardous materials; storage and treatment; USTs; generation of medical waste; the Accidental Release Prevention Program; and the Local Oversight Program (LOP), which interfaces with the State Water Board and the Central Valley RWQCB on LUSTs and UST release sites. An HMBP must be submitted if a facility ever handles any individual hazardous material in an aggregate amount equal to or greater than 55 gallons (liquids), 500 pounds (solids), or 200 cubic feet (gases). An HMBP must include:

- Details that include facility floor plans and identify the business conducted at the site;
- An inventory of hazardous materials handled or stored on the site;
- An emergency response plan; and
- A training program in safety procedures and emergency response for new employees who may handle hazardous materials, with an annual refresher course in the same topics for those same employees.

[19] California Environmental Reporting System. 2015. Unified Program Regulatory Directory: San Joaquin County Environmental Health. Website: http://cersapps.calepa.ca.gov/Public/Directory/RegulatorDetails/1056. Accessed November 5, 2020.

California Code of Regulations, Title 8

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations. These regulations concern the use of hazardous materials in the workplace, including requirements for employee safety training; availability of safety equipment; accident and illness prevention programs; hazardous substance exposure warnings; and preparation of emergency action and fire prevention plans.

Cal/OSHA also enforces hazard communication program regulations, including procedures for identifying and labeling hazardous substances, and requires that safety data sheets be available for employee information and training programs. Cal/OSHA standards are generally more stringent than federal regulations.

California Code of Regulations, Title 8, Section 1529 authorizes Cal/OSHA to implement the survey requirements of Code of Federal Regulations Title 29 relating to asbestos. These federal and State regulations require facilities to take all necessary precautions to protect employees and the public from exposure to asbestos. Workers who conduct asbestos abatement must be trained in accordance with federal and State OSHA requirements. The San Joaquin Valley Air Pollution Control District (Valley Air District) oversees the removal of regulated ACM within San Joaquin County.

California Code of Regulations, Title 8, Section 1532.1 includes requirements to manage and control exposure to LBP. These regulations cover the demolition, removal, cleanup, transportation, storage, and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, monitoring, and compliance to ensure the safety of construction workers exposed to lead-based material. Loose and peeling LBP must be disposed of as a State and/or federal hazardous waste if the concentration of lead equals or exceeds applicable hazardous waste thresholds. Federal and State OSHA regulations require a supervisor who is certified in identifying existing and predictable lead hazards to oversee air monitoring and other protective measures during demolition activities in areas where LBP may be present. Special protective measures and notification of Cal/OSHA are required for highly hazardous construction tasks related to lead, such as manual demolition, abrasive blasting, welding, cutting, or torch burning of structures, where LBP is present.

California Code of Regulations Title 22, Division 4.5

California Code of Regulations, Title 22, Division 4.5 contains the Environmental Health Standards for the Management of Hazardous Waste, which includes California waste identification and classification regulations. California Code of Regulations, Title 22, Chapter 11, Article 3, “Soluble Threshold Limits Concentrations/Total Threshold Limits Concentration Regulatory Limits,” identifies the concentrations at which soil is determined to be a California hazardous waste. California’s Universal Waste Rule (22 CCR § 66273) provides an alternative set of management standards in lieu of regulation as hazardous wastes for certain common hazardous wastes, as defined in California Code of Regulations, Title 22, Section 66261.9. Universal wastes include fluorescent lamps, mercury thermostats, and other mercury-containing equipment. Existing structures may contain fluorescent light ballasts that could contain mercury or lead. The Alternative Management Standards for Treated Wood Waste (22 CCR § 67386) were developed by the DTSC to allow for disposal of treated wood as

a nonhazardous waste, to simplify and facilitate the safe and economical disposal of such waste. Chemically treated wood can contain elevated levels of hazardous chemicals (e.g., arsenic, chromium, copper, pentachlorophenol, or creosote) that equal or exceed applicable hazardous waste thresholds. The Alternative Management Standards provide for less stringent storage requirements and extended accumulation periods, allow shipments without a hazardous waste manifest and a hazardous waste hauler, and allow disposal at specific nonhazardous waste landfills.

Porter-Cologne Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act) is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State must adopt water quality policies, plans, and objectives that protect the State's waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The RWQCBs are required to formulate and adopt water quality control plans (also known as basin plans) for all areas of the region and establish water quality objectives in the plans. The Porter-Cologne Act sets forth the obligations of State Water Board and RWQCBs to adopt and periodically update water quality control plans that recognize and reflect the differences in existing water quality, the beneficial uses of the region's groundwater and surface water, and local water quality conditions and problems. It also authorizes the State Water Board and RWQCBs to issue and enforce waste discharge requirements and to implement programs for controlling pollution in State waters. Finally, the Porter-Cologne Act also authorizes the State Water Board and RWQCBs to oversee site investigation and cleanup for unauthorized releases of pollutants to soils and groundwater and in some cases to surface waters or sediments.

California Emergency Response Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the California Governor's Office of Emergency Services, which coordinates the responses of other agencies. The San Joaquin County Office of Emergency Services[20] coordinates response to emergencies in unincorporated areas of San Joaquin County.

California Department of Forestry and Fire Protection

CAL FIRE has mapped fire threat potential throughout California. CAL FIRE maps fire threat based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The threat levels include no fire threat, moderate, high, and very high fire threat. CAL FIRE produced a 2018 Strategic Fire Plan for California, which contains goals, objectives, and policies to prepare for and mitigate the effects of fire on California's natural and built environments. CAL FIRE's Office of the State Fire Marshal provides oversight of enforcement of the California Fire Code as well as overseeing hazardous liquid pipeline safety.

[20] San Joaquin County. 2019. Office of Emergency Services. Website: https://www.sjgov.org/department/oes/default. Accessed November 5, 2020.

California Building Code

The State of California provided a minimum standard for building design through the 2019 California Building Standards Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The 2019 CBC is based on the 2018 International Building Code, but has been modified for California conditions. It is generally adopted on a jurisdiction by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all new high-rise buildings and residential buildings; the establishment of fire resistance standards for fire doors, building material; and specific types of construction.

California Public Resources Code

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors[21] on construction equipment that use an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on-site for various types of work in fire prone areas.

These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC § 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period—from April 1 to December 1 (PRC § 4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain the appropriate fire suppression equipment (PRC § 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (PRC § 4431).

San Joaquin County

San Joaquin Valley Air Pollution Control District

The Valley Air District has jurisdiction over the City of Tracy, and unincorporated areas within San Joaquin County, and deals with pollutants, including hazardous air pollutants such as asbestos. Additional information on the Valley Air District and air quality is provided in Section 3.3, Air Quality, of this Draft EIR.

[21] A spark arrestor is a device that prohibits exhaust gases from an internal combustion engine from passing through the impeller blades where they could cause a spark. A carbon trap is commonly used to retain carbon particles from the exhaust.

San Joaquin County's Aviation System Airport Land Use Compatibility Plan

The State Aeronautics Act requires the preparation and implementation of Airport Land Use Compatibility Plans (ALUCPs) for nearly all public airports in the State. ALUCPs are intended to ensure that incompatible development does not occur on land surrounding airports. To accomplish this goal, the State Aeronautics Act established the Airport Land Use Commission (ALUC) in counties having public use airports. The ALUC is charged with developing, updating, and implementing ALUCPs.

The San Joaquin Council of Governments adopted the San Joaquin County ALUCP in 1983 and updated it in 2009. The most recent update for the ALUCP for the Tracy Airport was part of that update.

San Joaquin County Department of Environmental Health Certified Unified Program Agency

The San Joaquin County Department of Environmental Health CUPA is the administrative agency that coordinates and enforces numerous local, State, and federal hazardous materials management and environmental protection programs in the County. The programs include Aboveground Petroleum Storage Program, CUPA, Food and Restaurants Program, Hazardous Waste Generator Program, Housing Abatement Program, Land Use Program, Liquid Waste Program, Milk and Dairy Program, Recreational Health Program, Small Public Water Systems Program, UST Program, and California Accidental Release Program.

City of Tracy

City of Tracy Local Hazard Mitigation Plan

The City of Tracy updated its Hazard Mitigation Plan (HMP) in September of 2019. The HMP identifies potential natural and human-made hazards, assesses their potential risks, and includes mitigation methods to reduce risks and determined the City is susceptible to floods, wildfires, severe weather, and earthquake hazards. The HMP includes 20 mitigation actions including emergency response and evaluation plans, public outreach, building safety and retrofitting, emergency preparedness coordination, education, facility upgrades, and monitoring actions. The HMP contains the following Goals aimed at reducing the vulnerability from natural hazards within the City:

Goal 1 Minimize loss of life and property from hazards;

Goal 2 Support community resilience through continuity of essential services during a hazard event;

Goal 3 Increase education and awareness of vulnerability to and mitigation of hazards; and

Goal 4 Improve City coordination and capabilities to mitigate hazards.

General Plan

Safety Element

The Safety Element, Chapter 8 of the City of Tracy General Plan (General Plan), discusses hazardous wastes and materials in the context of operations within the City and its SOI. According to the General Plan, San Joaquin County has prepared a Hazardous Material Area Plan, in accordance with

the California Health and Safety Code (Division 20, Chapter 6.95, § 25500 *et seq.*) and California Code of Regulations (Title 19, Article 3, § 2270 *et seq.*). The Hazardous Material Area Plan is designed to protect human health and the environment through hazardous materials emergency planning, response and agency coordination and community right-to-know programs. The Hazardous Material Area Plan outlines the roles and responsibilities of federal, State, and local agencies in responding to hazardous material releases and incidents. The City of Tracy's Police and Fire Departments work with San Joaquin County to implement this plan.

Furthermore, the General Plan sets forth numerous goals, objectives, policies, and actions associated with hazards including the following:

Wildland Fires

Goal SA-3 Protection of lives and property from wildland fire hazards.

Objective SA-3.1 Evaluate the potential for wildland fire hazards when considering new development.

Policies

P1 All development in areas of potential wildland fire hazards shall include the following:
- Clearance around structures.
- Fire-resistant ground cover.
- Fire-resistant roofing materials.

P3 New developments shall satisfy fire flow and hydrant requirements, street widths and design requirements as established by the City.

Hazardous Materials and Waste

Goal SA-4 Protection from the harmful effects of hazardous materials and waste.

Objective SA-4.1 Minimize exposure to harmful hazardous materials and waste by Tracy residents.

Policies

P1 Adequate separation shall be provided between areas where hazardous materials are present and sensitive uses such as schools, residences and public facilities.

P2 When reviewing applications for new development and redevelopment in areas historically used for commercial or industrial uses, developers shall conduct the necessary level of environmental investigation to ensure that soils, groundwater and buildings affected by hazardous material releases from prior land uses and lead or asbestos potentially present in building materials, will not have a negative impact on the natural environment or health and safety of future property owners or users.

P3 The safe transport of hazardous materials through Tracy shall be promoted by implementing the following measures:

- Maintain formally-designated hazardous material carrier routes to direct hazardous materials away from populated and other sensitive areas.
- Prohibit the parking of vehicles transporting hazardous materials on City streets.
- Require that new pipelines and other channels carrying hazardous materials avoid residential areas and other immobile populations to the extent possible.

P4 Emergency response plans shall be submitted as part of use applications for all large generators of hazardous waste.

P5 The City shall continue to encourage the reduction of solid and hazardous wastes generated within the City, in accordance with countywide plans.

Airport Safety

Goal SA-5 Protection from the risks associated with aircraft operations at the Tracy Municipal Airport.

Objective SA-5.1 Ensure that land uses within the vicinity of the Tracy Municipal Airport are compatible with airport restrictions and operations.

Policies

P1 Ensure that new development shall be consistent with setbacks, height and land use restrictions as determined by the Federal Aviation Administration and the San Joaquin County Airport Land Use Commission, as well as the policies of the City's Airport Master Plan.

Emergency Preparedness

Goal SA-6 Preparation for emergencies.

Objective SA-6.1 Prepare and update City emergency procedures in the event of natural or man-made disasters.

Policies

P1 Emergency access routes shall be kept free of traffic impediments.

Northeast Industrial Specific Plan

The NEI Specific Plan includes policies related to hazardous wastes and hazardous materials.

Hazardous Wastes and Waster Pollutants

1. All new industries locating with the area will be required to obtain a Discharge Permit from the Director of Utilities prior to occupancy. This permit shall establish the amount and quality of wastes allowed to be discharged into the City's sanitary sewer.
2. The quality of wastewater entering the City sewage system from the proposed uses shall be measured by the Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) levels referenced in the local Water Quality Control Board 208 Plan. Users that are not expected to comply with these standards will be required to provide on-site pretreatment facilities.

3. The storage and distribution of hazardous materials shall be subject to the rules of the San Joaquin County Health District.
4. Industries regularly using significant quantities of hazardous chemicals as defined by State Law in the course of their operations shall be required to obtain a Conditional Use Permit.

City of Tracy Municipal Code

Chapter 3.24, Emergency Organization and Function, of the City of Tracy Municipal Code provides regulations regarding emergency organization, including structure, duties, and functions of City staff during an emergency. Article 12, Hazardous Materials and Hazardous Waste Handling, provides regulations for the use, storage, and disposal of hazardous materials and hazardous waste within the City of Tracy.

3.9.4 - Impacts and Mitigation Measures

Significance Criteria

The City is utilizing the questions in Appendix G of the State California Environmental Quality Act (CEQA) Guidelines to establish thresholds of significance for the proposed project. According to CEQA Guidelines Appendix G, to determine whether impacts related to hazards and hazardous materials have significant environmental effects, the following questions are analyzed and evaluated. Would the proposed project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, create a significant hazard to the public or the environment?
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and result in a safety hazard or excessive noise for people residing or working the project area?
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Approach to Analysis

This evaluation focuses on whether the proposed project would result in changes to the physical environment that would cause or exacerbate adverse effects related to the use, transportation, disposal, accidental release, or emission of hazardous materials. The evaluation also includes a determination of whether the proposed project would result in changes to the physical environment, or would impair or interfere with emergency response plans, or would expose people or structures to increased wildfire hazards (including dangers from overhead power lines). For the evaluation of potential construction-related and operational impacts from existing hazardous materials in project site soils, sediments, groundwater, surface water, and structures, the results of environmental sampling are compared to identified screening levels. The following analysis is based, in part, on information provided by the General Plan, the Phase I ESA and Limited Site Investigation prepared for the Tracy Alliance parcels and the Phase I ESA prepared for the Zuriakat and Suvik Farms parcel, and State of California websites.

Additional analyses regarding hazards and health risk related to emissions of toxic air contaminants (TACs) are addressed in Section 3.3, Air Quality. Flooding and inundation hazards, including those related to erosion and mudflow, are addressed in Section 3.10, Hydrology and Water Quality. Traffic-related safety hazards are addressed in Section 3.14, Transportation. Other geotechnical-related safety hazards, such as earthquakes, are addressed in Section 3.7, Geology and Soils. Finally, excessive noise exposure with respect to airport use or air traffic is addressed in Section 3.12, Noise.

Impact Evaluation

Routine Transport, Use, or Disposal of Hazardous Materials

Impact HAZ-1:	**The proposed project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**

Construction

During construction, the proposed project would be expected to involve the routine transport, use, and disposal of hazardous materials, such as diesel fuels, aerosols, and paints, which are typical for this type of industrial construction. The proposed project would be subject to the Hazardous Materials Transportation Act, California Public Resources Code, and other State and local laws and regulations that would reduce and limit the associated risks. Any handling, transporting, use, or disposal would be required to comply with applicable laws, policies, and programs set forth by various federal, State, and local agencies and regulations, including the EPA, RCRA, California Department of Transportation (Caltrans), and HMP.

During project site preparation and construction, the proposed project would require demolition and excavation. Potential release of hazardous materials associated with construction is discussed below.

Tracy Alliance Parcels

As described above, the Phase I ESA for the Tracy Alliance parcels noted several RECs including a wastewater pond (western portion of the site), absence of removal records associated with historic UST(s), historical AST fueling areas, petroleum hydrocarbon staining, unlabeled 55-gallon drum

storage area, burn disposal areas, and off-site groundwater impacts from adjoining western open-inactive LUST facility.

Because of these RECs, a Limited Site Investigation was prepared for these parcels. Based on the generally low concentrations of analytes observed in the soil samples, Terracon concluded that there does not appear to be a significant contaminant release from historical or current use of the parcels in the immediate area of the investigation. The Limited Site Investigation concluded that no further investigation or remediation was required.

Arsenic-impacted soils are present in the soil samples collected from the site. The arsenic impacts are within regional background concentrations, except for the ASH-2 sample. Therefore, Mitigation Measure (MM) HAZ-1a would be implemented to test soils for arsenic and to require remediation and documentation of no further action by the DTSC if site soils contain hazardous levels of arsenic.

Evidence of reported USTs on-site was identified. However, information pertaining to the location of the reported USTs was not identified in the regulatory databases or local agencies inquiries. In addition, three gasoline and/or diesel fueling ASTs ranging between approximately 200 gallons and 500 gallons in size were observed at the southwestern portion of the site. During the site reconnaissance, the ASTs were observed on soil and not within secondary containment. Therefore, if any of the reported USTs or ASTs are discovered during excavation activities, MM HAZ-1b would be implemented, which would require disposal and decommission of the USTs and ASTs in accordance with applicable regulations of the LOP and the American Petroleum Institute Standards, respectively.

Approximately ten 55-gallon unlabeled drums stored on soil were observed south of the cattle storm shed. Staining was not observed beneath the former drum area after removal; however, based on the unknown nature of materials stored in the drums and poor housekeeping practices, the former drum storage area represents a REC. MM HAZ-1b requires that any remaining unlabeled drums and containers be disposed of in accordance with applicable local, State, and federal laws and regulations.

Three domestic groundwater wells were found on-site. Because the wells are not to be used in the planned redevelopment of the project site, they must be properly abandoned, closed, or destroyed in accordance with local, State, and federal laws, regulations and guidelines.

The proposed project would demolish the existing buildings on-site. Given the age of the existing structures on the project site, it is conceivable that ACM and LBP may exist within these structures. Removal of these existing buildings could potentially create a significant hazard to the construction workers on the project site. This represents a potentially significant impact.

However, implementation of MM HAZ-1c would require the applicant for the development of the Tracy Alliance parcels to conduct asbestos and lead paint surveys prior to demolition activities and safely remove and dispose of any such materials in accordance with applicable State standards and other legal requirements, which would ensure impacts are reduced to a less than significant level.

Because of the nature of the agricultural uses on-site, standard dust mitigation measures would be implemented during all development and soil handling activities. During any grading or excavation activities of the Tracy Alliance parcels, development personnel must be made aware to look for unusual conditions suggesting buried debris or other potential adverse environmental conditions. In addition, if any abnormal soils are discovered during redevelopment, such as stained soils, hydrocarbon odors, or any other unusual odors, all construction activities would be stopped immediately and a qualified hazardous material consulting firm would be contacted for further assessment and monitoring, pursuant to MM HAZ-1d.

With implementation of MM HAZ-1a, MM HAZ-1b, MM HAZ-1c, and MM HAZ-1d construction impacts associated with hazardous materials on the Tracy Alliance parcels would be less than significant.

Zuriakat and Suvik Farms Parcels

Given the planned extensive development and grading of the Zuriakat and Suvik Farms parcels and the limited regulation of the potential storage and usage of agricultural chemicals during a significant period of these lands' historic agricultural land use, there is a potential for accumulation of elevated levels of lead and arsenic. On-site soils may contain pesticides/herbicides above actionable levels. Therefore, it is recommended that soil sampling and testing be performed on the Zuriakat and Suvik Farms parcels prior to redevelopment; MM HAZ-1a would be implemented to test soils for lead and arsenic and to require remediation and documentation of no further action by the San Joaquin Environmental Health Department if site soils contain hazardous levels of lead or arsenic.

Because of the nature of the agricultural uses on-site, implementation of standard dust mitigation measures during all redevelopment and soil handling activities would be required by MM HAZ-1d. During any grading or excavation activities of the Zuriakat or Suvik Farms parcels, development personnel must be made aware to look for unusual conditions suggesting buried debris or other potential adverse environmental conditions. In addition, if any abnormal soils are discovered during development, such as stained soils, hydrocarbon odors, or any other unusual odors, all construction activities would be stopped immediately and a qualified hazardous material consulting firm would be contacted for further assessment and monitoring, pursuant to MM HAZ-1d.

Markers indicating the presence of an underground petroleum pipeline owned by Chevron Pipeline Company were observed along the northern side of West Grant Line Road, adjacent to the Suvik Farms parcels. Pursuant to MM HAZ-1e, the applicant for development of the Suvik Farms parcels shall consult with Chevron and contact DigAlert prior to any ground disturbance and construction in that area.

Two on-site irrigation wells were observed within the unpaved access roads along the western properly line (the Suvik Farms parcels). Because the wells are not proposed to be used in the planned development of the project site, they would be required to be properly abandoned/closed or destroyed in accordance with local, State, and federal guidelines. This would be applied as a standard condition of approval**.**

Department performs routine inspections at facilities that are subject to HMBP requirements. The purpose of these inspections is to ensure compliance with existing laws and regulations concerning

HMBP requirements. Any routine storage, handling, transport, use, or disposal of hazardous materials during operation of the proposed project would be required to comply with all applicable laws, regulations, policies, and programs set forth by various federal, State, and local agencies, including the EPA, RCRA, Caltrans, the Hazardous Materials Transportation Act, and the City of Tracy HMP. Removal and disposal of hazardous materials would be conducted by a permitted and licensed contractor. Required compliance with applicable hazardous material laws and regulations would ensure that operation-related hazardous material use would not result in a significant hazard to the public or environment. Therefore, long-term operational impacts associated with hazardous materials are considered less than significant.

Level of Significance Before Mitigation

Potentially Significant

Mitigation Measures

MM HAZ-1a Conduct Soil Sampling (Tracy Alliance, Zuriakat, and Suvik Farms parcels)

Prior to the issuance of grading permits, the relevant applicant for an individual development proposal within the project site shall provide evidence of soil testing within the project boundary to confirm presence or absence of hazardous compounds such as lead and arsenic. The testing shall be conducted pursuant to a San Joaquin Environmental Health Department-approved sampling plan. If hazardous levels of hazardous compounds are found, excavated soils shall be sent off-site for disposal and any affected soils encountered should be properly characterized, treated and/or disposed of in accordance with applicable local, State, and federal laws and regulations. The relevant applicant shall complete any residual soil remediation in connection with the relevant individual development proposal to the satisfaction of San Joaquin Environmental Health Department, as evidenced by the submittal of a no further action letter. In addition, if hazardous contaminants related to the former agricultural use of the site (such as lead or arsenic) are found, a construction worker health and safety plan shall be prepared and shall be implemented during construction of the relevant individual development proposal.

MM HAZ-1b Proper Disposal and Decommission of Underground Storage Tanks, Aboveground Storage Tanks, and Unlabeled Drums (Tracy Alliance parcels only)

If any of the reported underground storage tanks (USTs) or aboveground storage tanks (ASTs) are discovered during excavation activities, the applicant for the development of the Tracy Alliance parcels shall dispose of and decommission the USTs and ASTs in accordance with applicable laws and regulations of the Local Oversight Program (LOP) and the American Petroleum Institute Standards, respectively. The unlabeled drums and containers observed during the site reconnaissance for the Phase I Environmental Site Assessment (Phase I ESA) for the Tracy Alliance parcels shall be characterized and disposed of in accordance with applicable local, State, and federal laws and regulations.

MM HAZ-1c Conduct Asbestos and Lead Surveys Prior to Demolition (Tracy Alliance parcels only)

Prior to the issuance of demolition permits for the existing buildings, the applicant for the development of the Tracy Alliance parcels shall retain a licensed professional to conduct asbestos and lead paint surveys. These surveys shall be conducted prior to the disturbance or removal of any suspect asbestos-containing materials (ACM) and lead-based paint (LBP), and these materials shall be characterized for asbestos and lead by a reliable method. All activities involving ACM and LBP shall be conducted in accordance with applicable laws and regulations, and all removal shall be conducted by properly licensed abatement contractors.

MM HAZ-1d Dust Mitigation and Soil Evaluation (Tracy Alliance, Zuriakat, and Suvik Farms parcels)

During any grading or excavation activities in connection with an individual development proposal within the project site, relevant development personnel shall be made aware to look for unusual conditions suggesting buried debris or other potential adverse environmental conditions. If any abnormal soils are discovered during development activities, such as stained soils, hydrocarbon odors, or any other unusual odors, all construction activities near the discovery shall be stopped immediately and the applicant for the relevant individual development proposal shall contact a qualified hazardous material consulting firm for further assessment and implementation of any appropriate actions as may be required under applicable laws and regulations before construction of the relevant individual proposal can begin again.

MM HAZ-1e Consultation with Chevron and DigAlert (Tracy Alliance and Suvik Farms parcel only)

Prior to any ground disturbance and construction along the northern side of West Grant Line Road, adjacent to the southern boundary of the Tracy Alliance and Suvik Farms parcels, the relevant applicant(s) for the development of the Tracy Alliance and/or Suvik Farms parcels shall consult with Chevron (www.chevron-pipeline.com; 800.762.3404) and DigAlert 811 to determine the location of the existing underground petroleum pipeline to facilitate avoidance during ground disturbance and construction activities.

Level of Significance After Mitigation

Less Than Significant

Hazardous Materials Upset Risk

Impact HAZ-2: The proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

Construction

Construction activity would be expected to involve the transport, use, and disposal of hazardous materials, such as diesel fuels, aerosols, and paints, which are typical for this type of light industrial uses. Transport, use, and disposal of hazardous materials can increase the risk of upset and accident conditions that could involve the likely release of hazardous materials into the environment. However, the use of these materials would be subject to the Hazardous Materials Transportation Act, California Public Resources Code, and other State and local laws and regulations that would reduce risks of accident by limiting the use of hazardous materials and reduce the associated risks of exposure. Any handling, transporting, use, or disposal would comply with applicable laws, regulations, policies, and programs set forth by various federal, State, and local agencies, including the EPA, RCRA, Caltrans, the Hazardous Materials Transportation Act, and the City of Tracy HMP, which are designed to reduce risk of upset and accident conditions involving the release of hazardous materials into the environment. Therefore, construction impacts related to hazardous materials upset risk would be less than significant.

Operation

During operation, tenants/operators may use potentially hazardous substances that are typical for this type of light industrial uses, including lubricants, hydraulic oils, and other substances. Small quantities of hazardous materials would be used on-site during operation of the proposed project, but not in sufficient quantities to create significant hazard in the unlikely event of upset or accident. These types of materials are common in such light industrial projects and represent a low risk to people and the environment when used and handled as intended and would not be expected to result in the release of hazardous materials into the environment. The handling, transport, and disposal of such substances must comply with all local, State, and federal laws and regulations, which reduce risks of accident conditions. As such, operational impacts related to hazardous materials upset risk would be less than significant.

Level of Significance

Less Than Significant

Hazardous Emissions Proximate to a School

Impact HAZ-3:	**The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.**

Construction

The project site is not located within 0.25 mile of an existing or proposed school. The closest school, Banta Elementary School, is located approximately 0.35 mile to the east. As such, the proposed project would not emit hazardous emissions or handle hazardous materials, substances, or waste within 0.25 mile of a school, and construction impacts would be less than significant.

For informational purposes, the following is provided. Construction activity would be expected to involve the transport, use, and disposal of hazardous materials that are typical for this type of light industrial uses, such as diesel fuels, aerosols, and paints. However, the handling, transport, use, and

disposal of hazardous materials must comply with the Hazardous Materials Transportation Act, California Public Resources Code, and other State and local laws and regulations, which further limits the risk of emissions or release of hazardous materials, substances, or waste. Therefore, construction impacts in this regard be less than significant.

Operation

The project site is not located within 0.25 mile of a school. As such, the proposed project would not emit hazardous emissions or handle hazardous materials, substances, or waste within 0.25 mile of a school, and operational impacts would be less than significant.

For informational purposes, the following is provided. Because of the distance to the nearest school, the low probability of significant quantities of hazardous materials to be present on-site, and required project compliance with applicable laws and regulations pertaining to handling, storage, use, and transport of hazardous materials, substances, or waste, less than significant impacts would occur. Therefore, operational impacts related to hazardous emissions proximate to a school would be less than significant.

Level of Significance

Less Than Significant

Government Code Section 65962.5 Sites

Impact HAZ-4: **The proposed project is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.**

Construction and Operation

Tracy Alliance Parcels

As part of the Phase I ESA prepared for the Tracy Alliance parcels, regulatory database information was provided by EDR, a contract information services company. The purpose of the records review was to identify RECs in connection with this portion of the project site.

Federal and State/Tribal Databases

Below are the facility listings identified on federal and State/tribal databases within the American Society of Testing and Materials (ASTM)-required search distances from the approximate site boundaries. Listings included in Federal Databases are provided in Table 3.9-1.

Table 3.9-1: Federal Databases

Database	Description	Distance (miles)	Listings
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System	0.5	0
CERCLIS /NFRAP	Comprehensive Environmental Response, Compensation, and Liability Information System/No Further Remedial Action Planned	0.5	1

Database	Description	Distance (miles)	Listings
ERNS	Emergency Response Notification System	Site	0
IC/EC	Institutional Control/Engineering Control	Site	0
NPL	National Priorities List	1.0	0
NPL (Delisted)	National Priorities Delisted List	0.5	0
RCRA CORRACTS/TSD	RCRA Corrective Action Activity	1.0	0
RCRA Generators	Resource Conservation and Recovery Act	Site and adjoining properties	0
RCRA Non CORRACTS/TSD	RCRA Non-Corrective Action Activity	0.5	0
Source: Terracon Consultants, Inc. 2018. Phase I Environmental Site Assessment Tracy Ridge 6599 and 6735 W. Grant Line Road. December 21.			

Listings included in Federal Databases are provided in Table 3.9-2. Facilities are listed in order of proximity to the site. Additional discussion for selected facilities is provided in Table 3.9-3.

Table 3.9-2: Federal Databases Summary Table

Database	Description	Distance (miles)	Listings
AST	Above Ground Storage Tank Facilities	0.25	0
CA FID UST	Facility Inventory Database	0.25	1
CALSITES	CalSites Database	1.0	0
CALSITES (AWP)	Active Annual Workplan Sites	1.0	0
CERS	CalEPA Regulated Site Portal Data	0.25	0
CERS HAZ WASTE	CERS Hazardous Waste	0.25	4
ENVIROSTOR	State and Tribal-Equivalent CERCLIS	1.0	1
HAZNET	Facility and Manifest Data	Site	1
HIST CORTESE	Hazardous Waste and Substance Site List	0.5	1
HIST UST	Hazardous Substance Storage Container Database 1	1.0	6
LUST	Leaking Underground Storage Tanks	0.5	1
MWMP	Medical Waste Management Program Listing	0.25	1
RCRA-SQG	RCRA–Small Quantity Generator	0.25	0
RESPONSE	State and Tribal-Equivalent NPL	1.0	0
SLIC	Spills, Leaks, Investigation and Cleanup	0.5	1
SWEEPS UST	Statewide Environmental Evaluation and Planning System	0.25	1
SWF/LF	Solid Waste Facilities/Landfills	0.5	0

Database	Description	Distance (miles)	Listings
UST	Underground Storage Tank Facilities	Site and adjoining properties	1
VCP	Voluntary Cleanup Program	0.5	1
WMUDS/SWAT	Waste Management Unit Database/Solid Waste Disposal Sites	0.5	1
Source: Terracon Consultants, Inc. 2018. Phase I Environmental Site Assessment Tracy Ridge 6599 and 6735 West Grant Line Road. December 21.			

Table 3.9-3: Federal Databases Listed Facilities

Facility Name and Location	Estimated Distance/Direction/Gradient	Database Listing	Is the Facility a REC, CREC, or HREC to the Site?
Legacy Real Estate 6599 West Grant Line Road	Site	HAZNET	REC, discussed below
Mattos Farms 6735 West Grant Line Road		HIST UST	
Mattos Farms 6735 West Grant Line Road		HIST UST	
AT&T Mobility-Tracy 6245 California Avenue	Adjacent/North/Down-Gradient	CERS HAZ WASTE, CERS	No, based on file review discussed in Appendix G
TravIn Toys 21200 Paradise Road	Adjacent/North/Down-Gradient	HAZNET, CERS, HAZ WASTE, CERS	No, based on file review discussed in Appendix G
Nelson Costa 6200 West Grant Line Road	Adjacent/South-Southwest/Up-to Cross-Gradient	HIST UST	No, based on file review discussed in Appendix G
Nelson Costa 6200 West Grant Line Road		SWEEPS UST, HIST UST, CA FID UST	
Airy Farm 6200 West Grant Line Road		HIST UST	
Best Buy Distribution 2300 Chabot Court	Adjacent/South-/Up-Gradient	CERS HAZ WASTE, CERS	No, based on file review discussed in Appendix G
Systems Services of America 2301 Chabot Court, Suite 1	Adjacent/South/Up-Gradient	CERS HAZ WASTE, CERS	No, based on file review discussed in Appendix G
Haley Flying Service 2395 East Pescadero Avenue	Adjacent/West/Cross-Gradient	CPS-SLIC, CERS	REC discussed below
Haley Flying Service 21000 Paradise Road		SEMS-ARCHIVE, RCRA-SQG, ENVIROSTOR, LUST, VCP, SWEEPS	

Facility Name and Location	Estimated Distance/Direction/Gradient	Database Listing	Is the Facility a REC, CREC, or HREC to the Site?
		UST, HIST UST, CA FID UST, LIENS, FINDS, ECHO, HIST CORTESE, CERS	
Haley Flying Service 21000 Paradise Road		WMUDS/SWAT	
Source: Terracon Consultants, Inc. 2018. Phase I Environmental Site Assessment Tracy Ridge 6599 and 6735 West Grant Line Road. December 21.			

Legacy Real Estate (6599 West Grant Line Road) and Mattos Farms (6735 West Grant Line Road)

Legacy Real Estate (6599 West Grant Line Road) and Mattos Farms (6735 West Grant Line Road), which are former users of the Tracy Alliance parcels, are identified on the regulatory database Facility and Manifest Data (HAZNET) and two Hazardous Substance Storage Container Database (HIST UST) listings. Based on a review of the HAZNET listing for Legacy Real Estate, approximately 4.8 tons of asbestos containing material was removed from the site in the year 2014 and reported to have been disposed at a landfill. The HAZNET listing corresponds to a building removal identified by the City of Tracy in the year 2014. Refer to Section 4.2 of Appendix G.1 for further discussion. Based on a review of the two HIST UST listings, two 350-gallon gasoline USTs were installed in the year 1973. During the site reconnaissance, Mr. Mattos pointed out an empty rusting AST located west of the cattle barn was a former UST. During a telephone conversation on November 26, 2018, Mr. Mattos recalled a UST was located approximately 5 feet south of the residence garage and recalled the UST had a crank pump attached to it. Mr. Mattos did not recall when the UST was removed and was not aware of a second UST on the site. Terracon requested UST removal records on file with the City, State and local agencies; however, information associated with the reported USTs was not found. Based on the absence of UST removal records, the historical USTs represent a significant data gap and REC in connection with these lands. Therefore, if any of the reported USTs are discovered during excavation activities, MM HAZ-1b would be implemented, which would require disposal and decommission of the USTs in accordance with applicable laws and regulations of the LOP.

Haley Flying Service (2395 East Pescadero Avenue, formerly 21000 Paradise Road)

Haley Flying Service (2395 East Pescadero Avenue), located to the adjoining west and hydrogeologically and topographically cross-gradient relative to the site, is identified on the Statewide Spills, Leaks, Investigation and Cleanup (SLIC) Cases GeoTracker (CPS-SLIC) and the California Environmental Reporting System (CERS) databases. Based on a review of the listing, the facility is an open and active cleanup case with potential pesticide and herbicide contamination. Terracon reviewed the facility's files available on State Regional Water Quality Control Board GeoTracker website. Based on a review of a memorandum dated from 1974, the facility was a former crop dusting operation with concerns regarding stormwater runoff and wastewater discharge. The memorandum indicated wastewater from aircraft washings discharged to a ditch behind the property which runs parallel to a water district irrigation distribution canal. A letter dated from 1988 from the RWQCB to Haley Flying Service, indicated the Water Board collected soil samples from an irrigation ditch at the facility and reported

low levels of pesticides and herbicides including 2,4-D, diuron, linuron, and endosulfan identified in the samples. A note on GeoTracker and inspection report dated 1990 indicated the facility's discharge system, including a sump and evaporation system, were not within regulatory compliance. There was no additional information available for the address on GeoTracker after the year 1990.

The facility was additionally identified at 21000 Paradise Road, a former property address, and was identified on the Superfund Enterprise Management System (SEMS-ARCHIVE), RCRA–Small Quantity Generator (RCRA-SQG), DTSC Envirostor website (ENVIROSTOR), LUSTs, Voluntary Cleanup Program (VCP), Waste Management Unit Database/Solid Waste Disposal Sites (WMUDS/SWAT), Environmental Liens Listings (LIENS), Facility Index System (FINDS), Enforcement Compliance History Information (ECHO), Hazardous Waste and Substance Site List (HIST CORTESE), SWEEPS UST, HIST UST, CA FID UST, and CERS databases. Based on a review of the listings, the facility was a small quantity hazardous waste generator of industrial waste which treats and/or disposes of liquid or semisolid waste; however, the facility did not have reporting requirements. Based on a review of the LUST listings, in 1988, a gasoline release affecting drinking water was reported and was listed as closed as of 1998. A HIST UST listing, indicated two 1,000-gallon gasoline USTs, and two 2,000-gallon waste USTs were reported on the property in the 1970s. The SWEEPS UST listing indicated a 1,000-gallon gasoline UST and 5,000-gallon aviation fuel UST were reported on the property in the 1990s. Terracon requested information regarding the LUST listings on file with the San Joaquin County Environmental Health Department; however, a response had not been received at the issuance of this report.

Based on a review of the ENVIROSTOR website, the facility was a former agricultural aerial operation which applied herbicides and pesticides to local agricultural fields. Spray tanks and airplanes were rinsed on the property and the tank rinse water was pumped into a concrete lined washout pit. The website noted improper hazardous material handling practices as the probable cause of soil contamination on the property. The website indicated in 1982 an unspecified amount of hazardous material was removed from the property. A site screening was performed in 1987 followed by a preliminary assessment in 1988. The facility entered a Voluntary Cleanup Act (VCP) agreement in 2005 and a Preliminary Endangerment Assessment (PEA) was prepared by Geo-Phase Environmental (Geo-Phase) in 2006. Based on a review of diagrams contained in the Geo-Phase PEA, the facility washdown areas and loading docks were located on the eastern portion of the property approximately 100 feet west of the Tracy Alliance parcels. The soil analytical results were reported in milligrams per kilogram (mg/kg) and the groundwater analytical results were reported in micrograms per liter (ug/L). The PEA indicated elevated levels of pesticides and herbicides were detected in soil and groundwater samples collected from the property. The PEA included a Human Health Hazard Assessment and indicated detected levels of chlordane, DDD, DDE, DDT, dieldrin, endosulfan, endrin, and toxaphene were above California Human Health Screening Levels (CCHSLs). Groundwater was reported at 11 feet bgs. The PEA recommended further site characterization including additional soil and groundwater analysis. A PEA approval letter dated February 9, 2006, from the DTSC to the property owner, indicated the property was "highly contaminated" and concurred with the Geo-Phase PEA recommendations.

Additionally, the PEA indicated in 1990 soil and groundwater samples collected during the removal of a 1,000-gallon gasoline UST and 5,000-gallon aviation fuel UST identified elevated levels of

petroleum hydrocarbons. The soil analytical results were reported in parts per million (ppm) equivalent to mg/kg and the groundwater analytical results were reported as parts per billion (ppb) which is equivalent to ug/L. Soil samples collected from the 5,000-gallon UST tank excavation identified gasoline hydrocarbons (610 mg/kg), benzene (6.5 mg/kg), toluene (62 mg/kg), ethylbenzene (41 mg/kg), and xylene (169 mg/kg) above Tier 1 Environmental Screening Levels (ESLs). Benzene (3.9 ug/L), toluene (19.4 ug/L), ethylbenzene (7.5 ug/L) and xylene (32 ug/L) were identified in a groundwater sample collected from the 5,000-gallon tank excavation of which benzene and xylene were reported above ESLs. The PEA noted mitigation records associated with the petroleum hydrocarbon LUST were misplaced in the County records and presumed the LUST release had been adequately mitigated and closed. There were no additional reports for the property after the year 2006. Based on proximity to the site, open regulatory status, reported impacts to soil and groundwater, and shallow depth to groundwater (11 feet), Haley's Flying Service represents a REC to the site.

Because of these RECs, a Limited Site Investigation was prepared for these parcels. Based on the generally low concentrations of analytes observed in the soil samples, Terracon concluded that there does not appear to be a significant contaminant release from historical or current use of the parcels in the immediate area of the investigation. The Limited Site Investigation concluded that no further investigation or remediation was required.

Arsenic-impacted soils are present in the soil samples collected from the site. The arsenic impacts are within regional background concentrations, except for the ASH-2 sample. Therefore, MM HAZ-1a would be implemented to test soils for arsenic and to require remediation and documentation of no further action by the San Joaquin Environmental Health Department if site soils contain hazardous levels of arsenic.

Zuriakat and Suvik Farms Parcels

As part of the Phase I ESA prepared for the Zuriakat and Suvik Farms parcels, EAS completed a regulatory records review of the following federal, State, and local regulatory agencies to identify use, generation, storage, treatment and/or disposal of hazardous materials and chemicals or release incidences of such materials.

- Federal National Priorities List (NPL) Sites
- Federal Delisted NPL Sites
- CERCLA
- Comprehensive Environmental Response, Compensation, and Liability Information System List (CERCLIS)
- Federal CERCLIS: No Further Remedial Action Planned (NFRAP) Site List
- Federal RCRA Generator's List
- Federal RCRA Non-CORRACTS TSD Facilities List
- Federal RCRA CORRACTS Facilities List

- Federal RCRA Treatment, Storage and Disposal Facilities (TSDF) List
- Federal Institutional Control/Engineering Control (IC/EC) Registries
- Federal Emergency Response Notification System (ERNS) List
- State and Tribal Lists of Hazardous Waste Site Identified for Investigation or Remediation
- State and Tribal-Equivalent NPL
- State and Tribal-Equivalent CERCLIS
- State and Tribal-Landfill and/or Solid Waste Disposal Site Lists
- State and Tribal-Leaking Storage Tanks Lists
- State and Tribal Registered Storage Tank Lists
- State and Tribal Institutional Control/Engineering Control Registries
- State and Tribal Voluntary Cleanup Sites
- State and Tribal Brownfield Sites
- Cal/EPA, State Water Board, GeoTracker
- State of California, DTSC Envirostor
- San Joaquin Valley Air Pollution Control District

The results are compiled in the Phase I ESA prepared for the Zuriakat and Suvik Farms parcels, included as Appendix G. Based on the findings of this assessment, the Zuriakat and Suvik Farms parcels were not included on any institution/engineering control databases that track activity and use limitation on properties. Therefore, impacts related to potential location on a hazardous materials site and, thus, creating a hazard to the public or environment would be less than significant.

Level of Significance Before Mitigation

Potentially Significant

Mitigation Measures

Implement MM HAZ-1a and MM HAZ-1b

Level of Significance After Mitigation

Less Than Significant

Proximity to Airport Safety Hazard

Impact HAZ-5:	**The proposed project would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area.**

Construction and Operation

The proposed project is located greater than 5 miles northeast from the Tracy Municipal Airport. At this distance, the proposed project would not be located within an airport land use plan or within 2 miles of a public airport. Therefore, no impact related to exposure of people to safety hazards or excessive noise in proximity to an airport would occur.

Level of Significance

No Impact

Emergency Response and Evacuation

Impact HAZ-6:	**The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**

Construction and Operation

During construction, it is expected that construction equipment and vehicles would be accessing and leaving the project site, which in turn could potentially impede evacuation or emergency vehicle access. During operation, employee vehicles would need to access and leave the project site. Neither the San Joaquin County Local HMP nor the City of Tracy Local HMP include specific evacuation routes. However, main arterial roads into and out of the project vicinity that would serve as evacuation routes in case of emergency would be Interstate 205 (I-205) in the east–west direction and I-5 in the north–south direction as well as Paradise Road and Grant Line Road. As discussed further in Section 3.17 (Wildlife), given there are several alternate routes that provide access to these evacuation routes, the proposed project would not impair implementation of or physically interfere with these evacuation routes. With adherence to the applicable procedures of the San Joaquin County Local HMP and the City of Tracy Local HMP, the proposed project would not conflict with the relevant General Plan safety policies. Therefore, construction and operational impacts related to emergency response and evacuation would be less than significant.

Level of Significance

Less Than Significant

Wildland Fires

Impact HAZ-7:	**The proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.**

Construction and Operation

The project site is located adjacent to the northeast of the city limits and I-205. The area surrounding the project site is mostly agricultural land and light industrial warehouses. In addition, the unincorporated community of Banta lies southeast of the project site. As such, the project site is surrounded by urban development and managed land without steep terrain or unmanaged open space areas prone to wildfires. The closest open space area is located approximately seven miles south of the project site. The project site has not previously experienced wildfire. Given that the project site is not located in or near an area of steep terrain or historical wildfire burn, there is a low likelihood that the project site would be prone to greater wildfire risk.

As described previously and discussed further in Section 3.17, Wildfire, neither the City nor the project site are in a High or Very High Fire Hazard Severity Zone as designated by CAL FIRE.[22] According to the CPUC, there are no Tier 2-Elevated Zones or Tier 3-Extreme Zones within the City of Tracy.[23] The closest fire prone areas located in a designated fire hazard zone are the southwest areas of the City's SOI, over seven miles southwest of the project site.

As discussed in more detail in Section 3.13, Public Services, Impact PUB-1, the proposed project would be adequately served by fire protection services from the Tracy Fire Department. Furthermore, project structures would be required to comply with applicable provisions of the California Fire Code with respect to emergency access and use of building materials that would limit the spread of wildfire to the greatest extent feasible. Compliance with applicable State and local plans, laws and regulations would decrease the risk of impacts related to wildland fire hazards. Specifically, the General Plan includes goals (Goal SA-3), objectives (Objective SA-3.1), and policies (PI and P3) that incorporate requirements for fire-safe construction into the land use planning process. Therefore, impacts related to wildland fire risk would be less than significant.

Level of Significance

Less Than Significant

3.9.5 - Cumulative Impacts

The geographic scope of the cumulative hazards and hazardous materials cumulative analysis is the City. The cumulative projects included in this analysis are those listed in Chapter 3, Environmental Impact Analysis, Table 3-1 as well as the proposed project.

Hazardous Materials Exposure Risk

In general, exposure to hazardous materials may cause localized adverse effects. A combination of federal, State, and local laws and regulations limit or otherwise minimize the potential for exposure to hazardous materials. Cumulative development listed in Table 3-1 consists predominantly of residential, industrial, commercial, public, and roadway improvements. The types and sizes of cumulative development anticipated in the project vicinity would not be anticipated to involve large quantities of hazardous materials or activities that transport or handle hazardous materials. Cumulative projects would be subject to the Hazardous Materials Transportation Act, California Public Resources Code, and other State and local laws and regulations that would reduce and limit the associated risks. Any handling, transporting, use, or disposal would be required to comply with applicable laws, regulations, policies, and programs set forth by various federal, State, and local agencies, including the EPA, RCRA, Caltrans, and HMP.

However, cumulative projects listed in Chapter 3, Environmental Impact Analysis, Table 3-1, may include demolition of existing structures that have the potential to contain hazardous building materials. Building materials may contain ACM and LBP. To address potential release of hazardous materials, the City would require the applicants of cumulative developments to assess structures and comply with standard conditions of approval/ mitigation measures (e.g., required testing,

[22] California Department of Forestry and Fire Protection (CAL FIRE). 2007. San Joaquin County Draft Fire Hazard Severity Zones in LRA.
[23] California Public Utilities Commission (CPUC). 2019. FireMap. Website: https://ia.cpuc.ca.gov/firemap/. Accessed October 28, 2020.

removal, and proper disposal) to minimize release prior to any demolition. Additionally, a comprehensive regulatory framework involving regional, State, and federal laws and regulations would apply to these cumulative projects, which would further ensure a less than significant cumulative impact related to exposure to hazardous materials.

With respect to the proposed project, similarly, it would be required to adhere to standard conditions of approval and identified mitigation, and otherwise ensure compliance with all applicable laws, regulations, plans and policies related to transport, use, and disposal of hazardous materials, as discussed above. For these reasons, the proposed project's incremental contribution to this less than significant cumulative impact would not be cumulatively considerable.

Hazards and Emergency Response

The main arterial streets that would act as the most likely evacuation routes for cumulative developments out of the City are I-205 (east–west), I-205 (north–south), and I-580 (east–west). Planned uses as proposed by the cumulative projects are contemplated in the General Plan, would result in predominantly in-fill development, and would not significantly increase need for emergency services, including those related to wildfires. Furthermore, all construction would be required to adhere to all applicable laws and regulations, including those in the California Fire Code, which are designed to minimize the potential for the release of hazardous materials or uncontrolled fires. Once development is proposed, the City would assess the needs for fire protection services and inform efforts to improve or expand needed facilities.

As listed in Table 3-1, cumulative development in the City consists predominantly of residential, industrial, commercial, public, and roadway improvements. The types of cumulative development would increase the population, as contemplated in the City's General Plan. All cumulative development would, however, be required to comply with emergency access requirements as standard conditions of approval. Furthermore, the cumulative development in the City would be required to ensure no permanent road closures, would not be permitted to impede established emergency access routes, or interfere with emergency response requirements. As such, there would be a less than significant cumulative impact associated with hazards and emergency response.

With respect to the proposed project, similarly, it would be required to adhere to standard conditions of approval and identified mitigation, and otherwise ensure compliance with all applicable laws, regulations, plans and policies related to emergency access routes and emergency response requirements. For these reasons, the proposed project's incremental contribution to this less than significant cumulative impact would not be cumulatively considerable.

Level of Cumulative Significance

Less Than Significant

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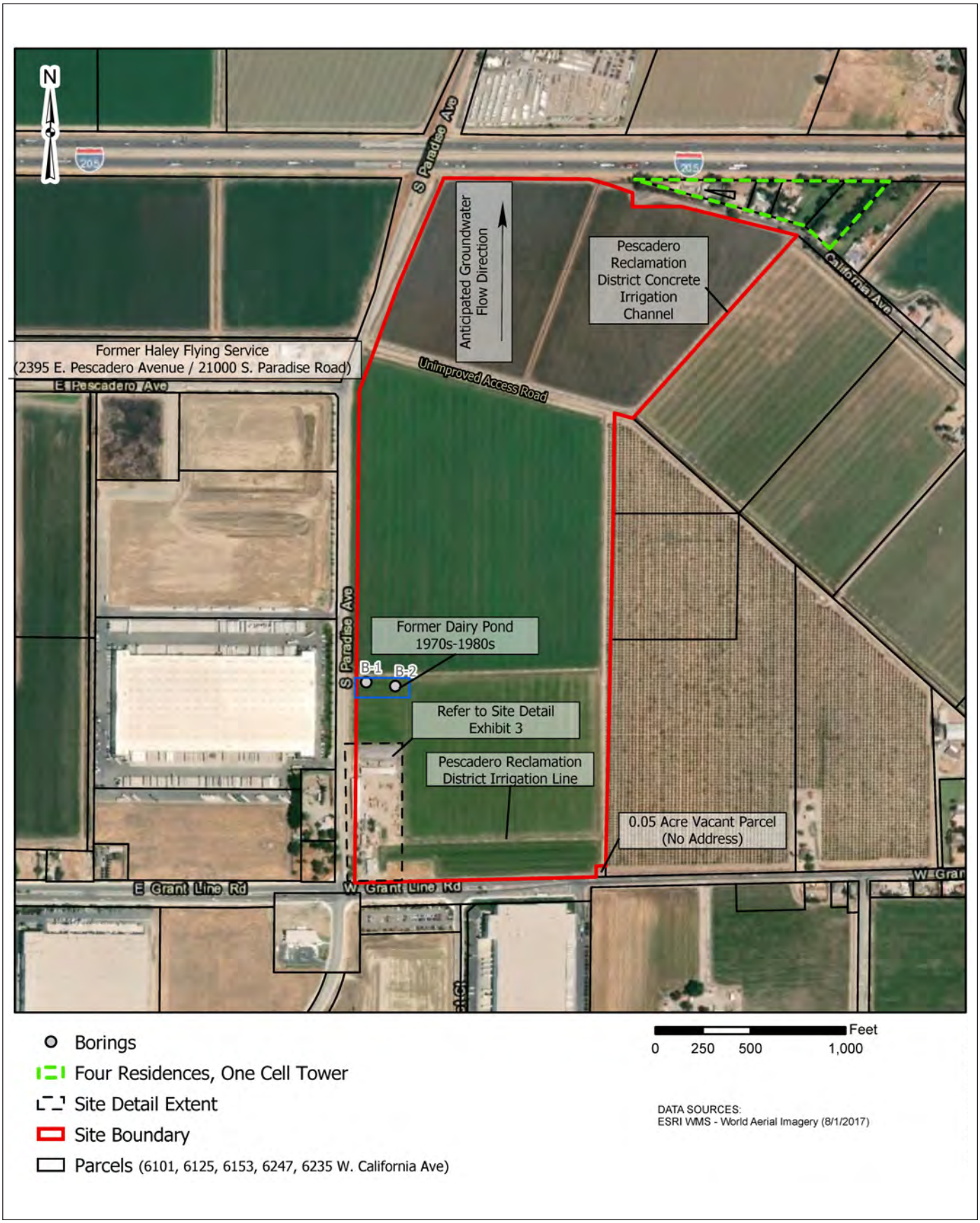

Source: Terracon, May 9, 2019.

FIRSTCARBON SOLUTIONS™

Exhibit 3.9-1a
Site Overview and Boring Locations (B-1 and B-2), Tracy Alliance Parcels

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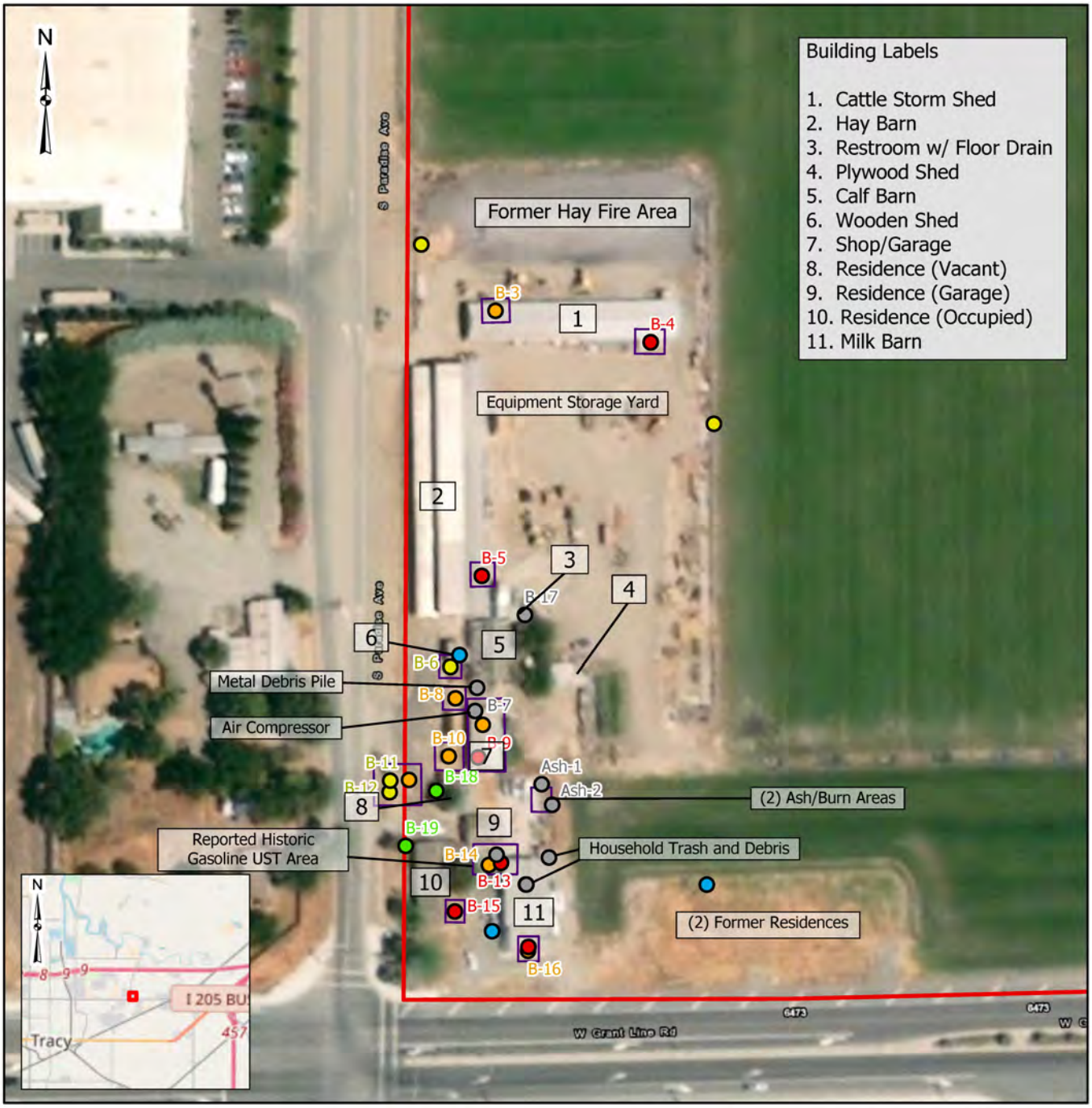

Source: Terracon, May 9, 2019.

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Exhibit 3.9-1b
Location of RECs, CECs, and
Soil Boring Locations, Tracy Alliance Parcels

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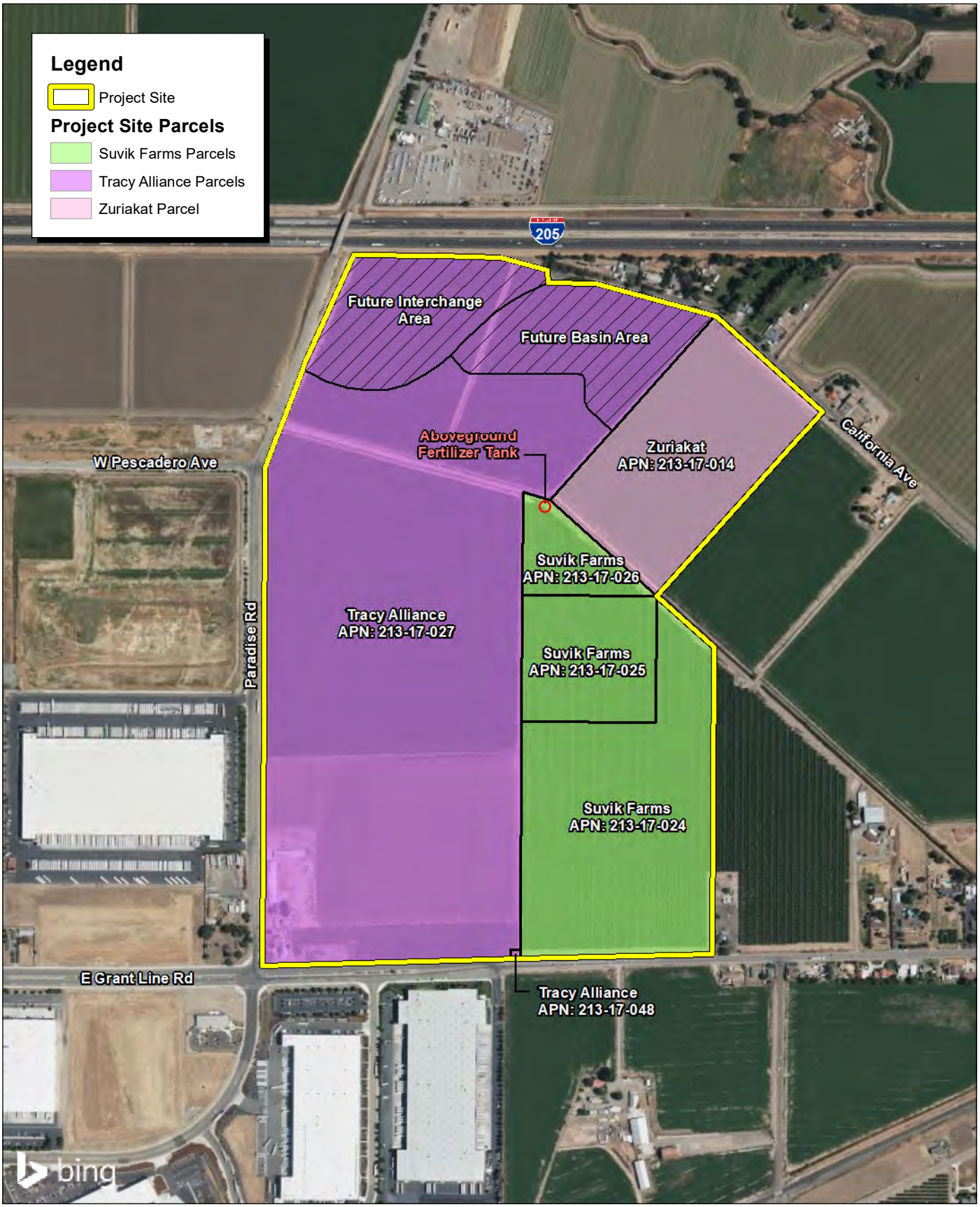

Source: Bing Aerial Imagery. County of San Joaquin.

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700 350 0 700 Feet

Exhibit 3.9-2
Location of Aboveground Fertilizer Tank, Zuriakat and Suvik Farms Parcels

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3.10 - Hydrology and Water Quality

3.10.1 - Introduction

This section describes the existing hydrology and water quality setting and potential effects from implementation of the Tracy Alliance Project (proposed project) on the site and its surrounding area. Descriptions and analysis in this section are based, in part, on information contained in the Technical Memorandum regarding Tracy Alliance Flood Protection prepared by Woods Rodgers (Flood Protection Technical Memorandum, provided in Appendix H), Water Supply Assessment (WSA), City of Tracy General Plan (General Plan), Northeast Industrial (NEI) Specific Plan and NEI Specific Plan Environmental Impact Report (EIR), San Joaquin County 2035 General Plan and San Joaquin County 2035 General Plan EIR, City of Tracy Erosion and Sediment Control Plan (ESCP), and the 2012 City of Tracy Citywide Storm Drainage Master Plan (2012 SDMP). The 2020 Draft Citywide Storm Drainage Master Plan Update (Draft 2020 SDMP) is currently being finalized, but this document has not yet been approved and adopted by the City. Because this document has not yet been approved and adopted, the technical analysis in this Draft EIR relies on the approved 2012 SDMP, which was the applicable plan in effect at the time of publication of the Notice of Preparation. The following comments were received during the Notice of Preparation (NOP) scoping period related to hydrology and water quality:

- The commenter explains the various RWQCB regulations and policies that would need to be discussed in the EIR and properly mitigated for with respect to water quality and discharges from the proposed project. In addition, the commenter explains the types of permits required for this project to comply with regulations meant to protect water quality.

3.10.2 - Environmental Setting

Surface Hydrology

San Joaquin River Basin

The San Joaquin River Basin covers 15,880 square miles and includes the entire area drained by the San Joaquin River. It includes all watersheds tributary to the San Joaquin River and the Delta south of the Sacramento River and south of the American River watershed. The principal streams in the basin are the San Joaquin River and its larger tributaries: the Cosumnes, Mokelumne, Calaveras, Stanislaus, Tuolumne, Merced, Chowchilla, and Fresno Rivers.[1]

Project Site

The project site is located within the San Joaquin River Basin. The main waterway near the project site is the Old River, a tributary of the San Joaquin River, located approximately 2,000 feet north of the project site.

[1] Central Valley Regional Water Quality Control Board (Central Valley RWQCB). 2018. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region. Fifth Edition, page 1-2. Website: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf. Accessed January 29, 2021.

Surface Water Quality

City of Tracy

The City and its Sphere of Influence (SOI) are located within the San Joaquin Hydrologic Basin Planning Area under the jurisdiction of the Central Valley Regional Water Quality Control Board (Central Valley RWQCB). The Central Valley RWQCB Basin Plan outlines the beneficial water uses that the California State Water Resources Control Board (State Water Board) will protect, water quality objectives, and strategies for achieving these objectives. The State of California requires small communities to implement development standards to protect water quality under the "General Permit for Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Order No. “2013-0001-DWQ" (MS4 Permit). On February 5, 2013, the second Phase II Small MS4 General Permit was adopted and became effective on July 1, 2013. The Cities of Lathrop, Lodi, Manteca, Patterson, Tracy, and San Joaquin County (Partners) collaborated to develop a Multi-Agency Post-Construction Standards Manual to meet the MS4 permit requirement.[2]

Project Site

The project site is located within the San Joaquin Hydrologic Basin Planning Area under the jurisdiction of the Central Valley RWQCB. No bodies of water under the jurisdiction of the Central Valley RWQCB are located on or near the project site. The closest water body to the project site is the Old River, which is approximately 0.4 mile north across Interstate 205 (I-205).

Groundwater

City of Tracy

The City and its SOI overlie the San Joaquin Valley Groundwater Basin-Tracy Groundwater Subbasin (Tracy Subbasin). The Tracy Subbasin underlies portions of San Joaquin, Contra Costa, and Alameda Counties and is bounded to the west by the Diablo Range, to the north by the Mokelumne and San Joaquin Rivers, to the east by the San Joaquin River, the south by the San Joaquin-Stanislaus County line.

Within the City of Tracy, groundwater is generally present below the ground surface at depths of 100 feet or more. However, depths to groundwater become very shallow toward the central and northern portions where the topography becomes flatter.

The City currently operates nine groundwater wells, with a total extraction capacity of approximately 18,300 gallons per minute (gpm), or 26 mgd.[3] Four wells (Production Wells 1, 2, 3 and 4) are located near the City’s John Jones Water Treatment Plant (JJWTP) and pump directly into the JJWTP clearwells where the groundwater is blended with treated surface water. The other wells (Lincoln Well, Lewis Manor Well [Well 5], Park and Ride Well [Well 6], Ball Park Well [Well 7], and Well 8) are located throughout the City and pump water directly into the distribution system after disinfection. The City’s newest well, Well 8, located near the intersection of Tracy Boulevard and 6th Street, was designed as an

[2] City of Tracy. 2021. Storm Water Management. Website: https://www.ci.tracy.ca.us/?navId=1679. Accessed April 15, 2020.
[3] GEI Consultants. 2015. Groundwater Assessment for Drought Emergency Conditions Requiring Groundwater to be Used as the Sole Source of Potable Water Supply (prepared for City of Tracy). August 10.

Aquifer Storage and Recovery (ASR) well and has been put into service as an ASR well as permitted by the RWQCB (see further discussion of ASR in Section 3.16, Utilities and Service Systems).

Basin Description

The following section describes the Tracy Subbasin, including its water-bearing formations, water levels, and water quality.

The Tracy Subbasin covers an area of approximately 373 square miles. It is bounded on the northwest by the Old River south to the tri-county confluence point and on the south by the Clifton Forebay where it then follows the Contra Costa-Alameda County line to the foothills of the Coastal Range mountains. The northeast boundary follows the San Joaquin River south to the San Joaquin County line with a slight jog to include the City of Lathrop on the west side of the river. The southern border of the Subbasin generally follows the San Joaquin-Stanislaus County line, with some irregular areas belonging to the Delta-Mendota Subbasin to the south. The western border follows the Coastal Range foothills from the San Joaquin-Stanislaus County line north to the Contra Costa-Alameda County line. The Subbasin is a mix of Delta islands (mostly agriculture) and waterways along with urban and agricultural communities on the southern edge.[4]

Adjacent to the Tracy Subbasin are the Eastern San Joaquin Subbasin to the east, the Delta-Mendota Subbasin to the south, and the Sacramento Valley Groundwater Basin to the north. The three subbasins, not including the Sacramento Valley Groundwater Basin, are part of the San Joaquin Valley Groundwater Basin. The San Joaquin River and one of its major west side tributaries, Corral Hollow Creek, provide drainage from the Tracy Subbasin. The San Joaquin River flows northward into the Sacramento and San Joaquin Delta and discharges into San Francisco Bay.

The Tracy Subbasin consists of continental deposits of Late Tertiary to Quaternary age. These deposits include the Tulare Formation, Older Alluvium, Flood Basin Deposits, and Younger Alluvium. The cumulative thickness of these deposits increases from a few hundred feet near the Coast Range foothills on the west to about 3,000 feet along the eastern margin of the Subbasin.

Each of these formations is described below.

- The Tulare Formation is exposed in the Coast Range foothills along the western margin of the subbasin and dips eastward toward the axis of the San Joaquin Valley. The Tulare Formation is approximately 1,400 feet thick and consists of semi-consolidated, poorly sorted, discontinuous deposits of clay, silt, and gravel. The Corcoran Clay occurs near the top of the Tulare Formation and confines the underlying freshwater deposits. The eastern limit of the Corcoran Clay is near the eastern boundary of the subbasin. The Tulare Formation is moderately permeable, with most of the larger agricultural, municipal, and industrial wells completed below the Corcoran Clay and capable of producing up to about 3,000 gpm. Smaller, domestic wells are typically completed above the Corcoran Clay, where the groundwater is often of poor quality. Specific yield values for the Tulare Formation in the San Joaquin Valley and Delta area range from 7 to 10 percent.

[4] GEI Consultants. 2020. Draft Tracy Subbasin Groundwater Sustainability Plan, Chapter 1-3. June.

- The Older Alluvium is approximately 150 feet thick and consists of loosely to moderately compacted sand, silt, and gravel deposited in alluvial fans during the Pliocene and Pleistocene eras. The Older Alluvium is widely exposed between the Coast Range foothills and the Delta and is moderately to locally highly permeable.
- The Flood Basin Deposits occur in the Delta portion of the subbasin and are the distal equivalents of the Tulare Formation and Older and Younger alluvial units. The Flood Basin Deposits consist primarily of silts and clays with occasional interbeds of gravel along the present waterways. Because of their fine-grained nature, the Flood Basin Deposits have low permeability and generally yield low quantities of water to wells. Occasional zones of fresh water are found in the Flood Basin Deposits, but they generally contain poor quality groundwater. The maximum thickness of the Flood Basin Deposits is about 1,400 feet.
- The Younger Alluvium includes those deposits that are currently accumulating, including sediments deposited in the channels of active streams, as well as overbank deposits and terraces of these active streams. The Younger Alluvium, consisting of unconsolidated silt, fine- to medium-grained sand, and gravel, is present to depths of less than 100 feet below ground surface (bgs) along the channel of Corral Hollow Creek. Sand and gravel zones in the Younger Alluvium are highly permeable and, where saturated, yield significant quantities of water to wells.

Groundwater Yield

In 2015, the City hired GEI Consultants (GEI) to perform an assessment on what the effect would be if the City were to pump between 16,000 and 22,000 acre-feet per year (AFY) for a single year to meet its demands during a drought emergency when no surface water supplies were available. The assessment considered potential impacts on groundwater levels, groundwater quality, and land subsidence. GEI's approach to this assessment was to estimate drawdown beneath the City, including drawdown caused by well interference, under scenarios wherein all of the City's wells were pumped for a single year at rates needed to meet the stated demands. Drawdown estimates were made using analytical methods and aquifer hydraulic property data from pumping tests performed at two of the City's wells. Results showed that the City does have capacity to pump its wells to meet these single dry year demands, but that drawdown in the City's wells and at locations proximate to the City would exceed that which has been historically observed. GEI estimated that groundwater levels would recover from their drawdown within approximately 7 years.[5]

Groundwater Quality

Groundwater quality in the Tracy Subbasin varies spatially and with depth. In general, the northern part of the Tracy Subbasin is characterized by a sodium water type, and the southern part of the Tracy Subbasin is characterized by calcium-sodium water type.[6] The northern part of the Tracy Subbasin is also characterized by a wide range of anionic water types, including bicarbonate;

[5] GEI Consultants. 2015. Groundwater Assessment for Drought Emergency Conditions Requiring Groundwater to be Used as the Sole Source of Potable Water Supply (prepared for City of Tracy). August 10.

[6] Sorenson, S.K. 1981. Chemical Quality of Groundwater in San Joaquin and Part of Contra Costa Counties, California, Water Resources Investigation 81-26, USGS.

chloride; and mixed bicarbonate-chloride. Major anions in the southern part of the Tracy Subbasin include sulfate-chloride and bicarbonate-chloride.

There is also a difference between the water quality in the water-bearing zones above the Corcoran Clay (termed the "semi-confined aquifer") and below the Corcoran Clay (termed the "confined aquifer"). Generally, the water quality of the confined aquifer is better than that of the semi-confined aquifer.[7]

Constituents present at elevated concentrations throughout the Tracy Subbasin in both the semi-confined and confined aquifers include chloride, nitrate, sulfate, and boron. Elevated chloride occurs in several areas near Tracy and along the San Joaquin River. Areas of elevated nitrate occur in the northwestern part of the Tracy Subbasin and in the vicinity of Tracy. Elevated boron occurs over a large portion of the Tracy Subbasin from south of Tracy extending to the northwest side of the Tracy Subbasin. Sulfate concentrations of up to 500 milligrams per liter (mg/L) have been detected in Tracy Subbasin groundwater. The groundwater near Tracy is considered to be very hard.[8]

The water quality conditions in groundwater represent conditions for source water, prior to treatment by the City and service to customers. One water quality concern that the City actively manages is total dissolved solids (TDS). The City's groundwater supply typically meets the primary maximum contaminant level (MCL) of 1,000 mg/L but frequently exceeds the secondary MCL of 500 mg/L. In 2019, the City's groundwater supply ranged from 386 to 876 mg/L of TDS, with an average concentration of 752 mg/L.[9] Because the TDS concentrations are significantly higher in the groundwater supply than in the City's other water supply sources, the City typically scales back its groundwater production from its estimated sustainable yield of 9,000 AFY, particularly in normal rainfall years in order to meet the secondary MCL in its overall water supply.

The City continues to rely on groundwater for peaking, and under drought conditions, it typically increases its groundwater production as needed to meet demands when surface water supplies become more limited. Groundwater quality is not expected to impact the reliability of available water supplies in the 2020 Urban Water Management Plan (2020 UWMP) planning horizon.[10]

Project Site

The project site is located within the City of Tracy's existing SOI and overlies the Tracy Subbasin. Groundwater on the project site was encountered at depths between 13.5 and 16 feet bgs level during soil boring testing.[11] The Tracy Alliance parcels contains three domestic wells. Neither the Suvik Farms or Zuriakat parcels include wells on-site.

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[7] Stoddard & Associates. 1996. Groundwater Management Plan for the Northern Agencies in the Delta-Mendota Canal Service Area and a Portion of San Joaquin County. Revised April 1996.
[8] Ibid.
[9] EKI Environment & Water, Inc. 2021. 2020 Urban Water Management Plan for City of Tracy. June.
[10] EKI Environment & Water, Inc. 2021. 2020 Urban Water Management Plan for City of Tracy. Section 7.1.1.8. June.
[11] Terracon. 2019. Geotechnical Engineering Report, page i.

Stormwater Runoff

City of Tracy

Existing developed areas within the City generally drain from south to north toward Old River. Drainage facilities serving these areas include surface drainage via streets, underground storm drains, open channels and channel parkways, irrigation tailwater facilities that accept urban runoff, detention basins, pumping facilities, and temporary retention basins.

There are five stormwater runoff watersheds within the City's SOI: Eastside Channel Watershed, Westside Channel Watershed, Lammers Watershed, Mountain House Watershed, and Tracy Hills Watershed. Most the City's stormwater runoff discharges to one of four outfalls that eventually discharge to the Old River to the north.

Project Site

The project site is located within the Eastside Channel Watershed. The Eastside Channel Watershed is the easternmost watershed in the City's SOI and is roughly 9.8 square miles in overall area. The primary drainage feature within the Eastside Channel Watershed is the Eastside Channel that extends north from Eleventh Street to the Sugar Cut Outfall north of I-205, generally along the alignment of MacArthur Drive (Exhibit 3.10-1). The Eastside Channel is a channel parkway that includes landscaping and a linear bike path from Eleventh Street to a location about 0.75 mile to the north, where it becomes a non-landscaped open channel extending to the Sugar Cut Outfall. A second, significant drainage feature within the Eastside Channel Watershed is the City Outfall Channel that extends north from Grant Line Road about 0.25 mile west of MacArthur Drive and joins the Eastside Channel on the south side of I-205. The City Outfall Channel is an open channel that provides a drainage outfall for three trunk line storm drains in Grant Line Road, draining the downtown area and established development areas to the north of the downtown area, including the project site.[12]

Flooding and Inundation

City of Tracy

Flood Hazard Zone

Flood zones are determined by the Federal Emergency Management Agency (FEMA) and used to create Flood Insurance Rate Maps (FIRMs) that designate these zones. The most recent FIRMs for the City were updated on October 16, 2009. Most of the land within the City's municipal boundaries is included in Zone X, which is the designation for lands outside of the 100-year floodplain. Portions of the northern area of the City's SOI fall within FIRM Zone A, which indicates the 100-year flood plain. Lands within the FEMA-designated 100-year floodplain or Zone A are subject to mandatory flood insurance purchase as required by FEMA. Because the City participates in the National Flood Insurance Program (NFIP), it must require development permits to ensure that construction materials and methods will mitigate future flood damage. Non-residential structures must have their utility systems above the base flood elevation or be of flood-proof construction.[13]

[12] Stantec. 2012. Citywide Storm Drainage Master Plan (SDMP) (prepared for the City of Tracy), page 2.3.
[13] Design, Community, and Environment CE. 2005. City of Tracy General Plan Draft EIR (prepared for the City of Tracy), page 4.12-3.

Dam Failure Inundation

Some areas in the northern portion of the City's SOI have the potential to be affected by dam failure inundation such as from the San Luis Reservoir, New Melones, and New Exchequer dams.[14] The northern part of the NEI Specific Plan area would have the potential of flooding in the event of dam failure resulting from an earthquake.[15]

Tsunami and Seiche Inundation

A seiche is a wave generated in a bay or lake, which is analogous to the back-and-forth sloshing of water in a bathtub. Seiches can be caused by winds, changes in atmospheric pressure, underwater earthquakes, or landslides into the water. Tsunamis are large sea waves generated by earthquakes. These waves travel across the ocean at hundreds of miles an hour and can cause waves cresting tens of feet high. Since the City has no ocean frontage and is located inland across several mountain ranges from the ocean, the risk of a tsunami is very low. In addition, the City is not located near a large standing body of water that would be affected by a seiche.[16]

Project Site

The northern portion of the project site is in the 100-year floodplain of the San Joaquin River according to the FEMA Special Flood Hazard Area (SFHA) shown on the FEMA FIRM Panel 06077C0595 with an effective date of October 16, 2009.[17] Exhibit 3.10-2 illustrates the FEMA 100-year floodplain inundation area on and near the project site. The flood zone's designation for the SFHA is Zone AE (Elevation 24) for the area of concern, which is east of Paradise Road and south of I-205. The elevations are on North American Vertical Datum of 1988.

The Flood Protection Technical Memorandum used the 2017 Central Valley Flood Protection Plan, hydrologic information contained therein, and hydraulic modeling to evaluate several scenarios for floodplain impacts. The scenarios evaluated were for 2017 conditions and 2067 conditions, which were considered to evaluate resiliency to climate change. To provide a reasonable worst-case scenario, the models considered likely levee breaches to determine maximum 200-year flood elevation levels on the project site. The closest evaluated levee breach is on the western bank of the Paradise Cut, approximately 0.5 mile to the south of I-5 and 4.13 miles east of the project site.

The Flood Protection Technical Memorandum also evaluated the proposed project's on-site stormwater detention basin because the proposed project would locate this basin at the lowest point on the site, which is within a 100-year floodplain. The project site currently drains into a ditch that discharges into a tributary to Tom Pain Slough. The City is requiring the proposed project's on-site stormwater detention basin that would serve the proposed project to be located at the project site's low point; and for a pump to be included in order to allow discharge into Detention Basin (DET), DET NEI, which would be pumped into the City's Eastside Channel.)

[14] Design, Community, and Environment CE. 2005. City of Tracy General Plan Draft EIR (prepared for the City of Tracy), page 4.12-3.
[15] Design, Community, and Environment CE. 2006. City of Tracy General Plan Amendment to the Draft EIR (prepared for the City of Tracy), page 104.
[16] Design, Community, and Environment CE. 2005. City of Tracy General Plan Draft EIR (prepared for the City of Tracy), page 4.12-4.
[17] Wood Rodgers. 2021. Technical Memorandum: Flood Protection at the Tracy Alliance Project Site. January 13.

Based on the foregoing analysis, the project site could be inundated with flood water associated with the failure of the San Luis Reservoir and the New Melones Dam.[18]

3.10.3 - Regulatory Framework

Federal

Clean Water Act

The Clean Water Act (CWA) (33 United States Code [USC] § 1251, *et seq*.) is the major federal legislation governing the water quality aspects of construction and operation of the proposed project. The CWA establishes the basic structure for regulating discharges of pollutants into waters of the United States (not including groundwater) and waters of the State. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the nation's waters." The CWA establishes the basic structure for regulating the discharge of pollutants into waters of the United States.

The CWA authorizes the United States Environmental Protection Agency (EPA) to implement pollution control programs. Under the CWA, it is unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a National Pollutant Discharge Elimination System (NPDES) permit is obtained. In addition, the CWA requires each state to adopt water quality standards for receiving water bodies and to have those standards approved by the EPA. Water quality standards consist of designated beneficial uses for a particular receiving water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality objectives necessary to support those uses.

Responsibility for protecting water quality in California resides with the State Water Board and nine RWQCBs. The State Water Board establishes Statewide policies and regulations for the implementation of water quality control programs mandated by federal and State water quality statutes and regulations. The RWQCBs develop and implement water quality control plans (basin plans) that consider regional beneficial uses, water quality characteristics, and water quality problems. Water quality standards applicable to the proposed project are listed in the Central Valley RWQCB Basin Plan.

Section 303—Water Quality Standards and Total Maximum Daily Loads

Section 303(c)(2)(b) of the CWA requires states to adopt water quality standards for all surface waters of the United States based on the water body's designated beneficial use. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based on biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards.

CWA Section 303(d) requires states and authorized Native American tribes to develop a list of water quality–impaired segments of waterways. The list includes waters that do not meet water quality standards necessary to support a waterway's beneficial uses even after the minimum required levels

[18] Design, Community, and Environment CE. 2005. City of Tracy General Plan Draft EIR (prepared for the City of Tracy), Figure 4.12-2.

of pollution control technology have been installed. Listed water bodies are to be priority ranked for development of a Total Maximum Daily Load (TMDL). A TMDL is a calculation of the total maximum daily load (amount) of a pollutant that a water body can receive daily and still safely meet water quality standards. The TMDLs include waste load allocations for urban stormwater runoff as well as municipal and industrial wastewater discharges, with allocations apportioned for individual MS4s and wastewater treatment plants, including those in the City. For stormwater, load reductions would be required to meet the TMDL waste load allocations within the 20 years required by the TMDLs.

The State Water Board, RWQCBs, and EPA are responsible for establishing TMDL waste load allocations and incorporating approved TMDLs into water quality control plans, NPDES permits, and Waste Discharge Requirements (WDRs) in accordance with a specified schedule for completion. The Central Valley RWQCB develops TMDLs for the City.

Section 401—Water Quality Certification

Section 401 of the CWA requires compliance with State water quality standards for actions within State waters. Under CWA Section 401, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must first obtain a certificate from the appropriate agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the State Water Board delegates authority to either grant water quality certification or waive the requirements to the nine RWQCBs. The Central Valley RWQCB is responsible for the project site.

Section 402—National Pollution Discharge Elimination System Permits

The RWQCBs administer the NPDES stormwater permitting program, under Section 402(d) of the federal CWA, on behalf of the EPA. The objective of the NPDES program is to control and reduce levels of pollutants in water bodies from discharges of municipal and industrial wastewater and stormwater runoff. CWA Section 402(d) establishes a framework for regulating nonpoint-source stormwater discharges (33 USC 1251). Under the CWA, discharges of pollutants to receiving water are prohibited unless the discharge complies with an NPDES permit. The NPDES permit specifies discharge prohibitions, effluent limitations, and other provisions, such as monitoring deemed necessary to protect water quality based on criteria specified in the National Toxics Rule (NTR), the California Toxics Rule (CTR), and a basin plan.

Discharge prohibitions and limitations in an NPDES permit for wastewater treatment plants are designed to maintain public health and safety, protect receiving water resources, and safeguard the water's designated beneficial uses. Discharge limitations typically define allowable effluent quantities for flow, biochemical oxygen demand, total suspended matter, residual chlorine, settleable matter, total coliform, oil and grease, pH, and toxic pollutants. Limitations also typically encompass narrative requirements regarding mineralization and toxicity to aquatic life. Under the NPDES permits issued to the City/County to operate the treatment plants, the City/County is required to implement a pretreatment program. This program must comply with the regulations incorporated in the CWA and the General Pretreatment Regulations (Code of Federal Regulations [CFR] Title 40, Part 403 [40 CFR 403]).

Section 404—Discharge of Dredged or Fill Materials Into Jurisdictional Waters

Section 404 of the CWA regulates temporary and permanent fill and disturbance of wetlands and waters of the United States. Under Section 404, the discharge (temporary or permanent) of dredged or fill material into waters of the United States, including wetlands, typically must be authorized by the United States Army Corps of Engineers (USACE) through either the Nationwide Permit (general categories of discharges with minimal effects) or the Individual Permit.

River and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires that regulated activities conducted below the ordinary high-water elevation of navigable waters of the United States be approved and permitted by the USACE. Regulated activities include the placement or removal of structures, work involving dredging, disposal of dredged material, filling, excavation, or any other disturbance of soils/sediments or modification of a navigable waterway. Navigable waters of the United States are those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high-water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce. Section 10 also regulates tributaries and backwater areas that are associated with navigable waters of the United States and are located below the ordinary high-water elevation of the adjacent navigable waterway.

A project proponent can apply for a permit/letter of permission for work regulated under Section 404 (CWA) and Section 10 (Rivers and Harbors Act) by completing and submitting one application form. An application for a USACE permit will serve as an application for both Section 404 and Section 10 permits.

Federal Antidegradation Policy

The federal antidegradation policy is designed to protect existing water uses, water quality, and national water resources. The federal policy directs states to adopt a statewide policy that includes the following primary provisions:

- Existing instream uses and the water quality necessary to protect those uses shall be maintained and protected.
- Where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development.
- Where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

National Toxics Rule and California Toxics Rule

In 1992, the EPA promulgated the NTR under the CWA to establish numeric criteria for priority toxic pollutants for 14 states to bring all states into compliance with the requirements of CWA Section 303(c)(2)(B). The NTR established water quality standards for 42 pollutants not covered under California's Statewide water quality regulations at that time. As a result of the court-ordered

revocation of California's Statewide basin plans in September 1994, the EPA initiated efforts to promulgate additional federal water quality standards for California. In May 2000, the EPA issued the CTR, which includes all the priority pollutants for which the EPA has issued numeric criteria not included in the NTR.

Executive Order 11988

Executive Order 11988, "Floodplain Management," directs all federal agencies to avoid, to the extent possible, long- and short-term adverse impacts of occupancy and modification of floodplains, and to avoid supporting development in a floodplain either directly or indirectly wherever there is a practicable alternative. Compliance requirements are outlined in 23 Code of Federal Regulations 650, Subpart A, "Location and Hydraulic Design of Encroachment on Floodplains."

If a project involves significant encroachment into the floodplain, the final environmental document must include:

- The reasons why the proposed action must be located in the floodplain,
- Alternatives considered and the reasons they were not practicable, and
- A statement indicating whether the action conforms to applicable state or local floodplain protection standards.

National Flood Insurance Act and Flood Disaster Protection Act

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 were enacted to reduce the need for flood protection structures and limit disaster relief costs by restricting development in floodplains. FEMA, established in 1979, is responsible for predicting hazards from flooding events and forecasting the level of inundation under various conditions. As part of its duty to develop standards for delineating fluvial and coastal floodplains, FEMA provides information on FIRMs about the potential for flood hazards and inundation and, where appropriate, designates regions as SFHAs. SFHAs are defined as areas that have a 1 percent chance of flooding in a given year.

FEMA also administers the NFIP, a federal program that enables property owners in participating communities to purchase insurance as protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act) is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State must adopt water quality policies, plans, and objectives that protect the State's waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The RWQCBs are required to formulate and adopt basin plans for all areas in the region and establish water quality objectives in the plans. The Porter-Cologne Act sets forth the obligations of the State Water Board and RWQCBs to adopt and periodically update basin plans. The Central Valley RWQCB is responsible for the project site.

Basin plans are the regional water quality control plans required by both the CWA and the Porter-Cologne Act that establish beneficial uses, water quality objectives, and implementation programs for each of the nine regions in California. The Porter-Cologne Act also requires waste dischargers to notify the RWQCBs of their activities by filing reports of waste discharge and authorizes the State Water Board and RWQCBs to issue and enforce WDRs, NPDES permits, CWA Section 401 water quality certifications, or other approvals. The RWQCBs are also authorized to issue waivers to reports of waste discharge and WDRs for broad categories of "low threat" discharge activities that have minimal potential to cause adverse water quality effects when implemented according to prescribed terms and conditions.

California Code of Regulations (Wetlands and Waters Definition)

The State Water Board indicates that no single accepted definition of wetlands exists at the State level, and that the RWQCBs may have different requirements and levels of analysis regarding the issuance of water quality certifications. Generally, an area is a wetland if, under normal circumstances:

(1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;

(2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and

(3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

Under California State law, waters of the State mean "any surface water or groundwater, including saline waters, within the boundaries of the state." As such, water quality laws apply to both surface water and groundwater. After the U.S. Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (53 USC 159), the Office of Chief Counsel of the State Water Board released a legal memorandum confirming the State's jurisdiction over isolated wetlands. The memorandum stated that under the Porter-Cologne Act, discharges to wetlands and other waters of the State are subject to State regulation, and this includes isolated wetlands. In general, the State Water Board regulates discharges to isolated waters in much the same way as it does for waters of the United States, using the Porter-Cologne Act rather than CWA authority.

National Pollutant Discharge Elimination System Stormwater Permit

The NPDES permits all involve similar processes, which include submitting notices of intent for discharging to water in areas under the Central Valley RWQCB's jurisdiction and implementing Best Management Practices (BMPs) to minimize those discharges. The Central Valley RWQCB may also issue site-specific WDRs, or waivers to WDRs, for certain waste discharges to land or waters of the State.

Construction Activity

The State Water Board stormwater general permit for construction activity (Order 2009-009-DWQ, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ) applies to all construction activities that would disturb 1 acre of land or more. Construction activities subject to the General

Construction Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters.

Through the NPDES and WDR processes, the State Water Board seeks to ensure that the conditions at a project site during and after construction do not cause or contribute to direct or indirect impacts on water quality (i.e., pollution and/or hydromodification) upstream and downstream. To comply with the requirements of the Construction General Permit, a project applicant must file a notice of intent with the State Water Board to obtain coverage under the permit; prepare a Storm Water Pollution Prevention Plan (SWPPP); and implement inspection, monitoring, and reporting requirements appropriate to the project's risk level as specified in the SWPPP. The SWPPP includes a site map, describes construction activities and potential pollutants, and identifies BMPs that will be employed to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources, such as petroleum products, solvents, paints, and cement. The permit also requires the discharger to consider using post-construction permanent BMPs that will remain in service to protect water quality throughout the life of the project. All NPDES permits also have inspection, monitoring, and reporting requirements.

Project sites served by the combined sewer system are not required to obtain coverage under the NPDES Construction General Permit.

Industrial General Stormwater Permit

The Statewide stormwater NPDES permit for general industrial activity (Order 2014-0057-DWQ, superseding Order 97-03-DWQ) regulates discharges associated with 10 broad categories of industrial activities, such as operation of wastewater treatment works and recycling facilities. The industrial general permit requires the implementation of Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to achieve performance standards. The permit also requires development of a SWPPP that identifies the site-specific sources of pollutants and describes the measures at the facility applied to reduce stormwater pollution. A monitoring plan is also required.

Stormwater

In November 1990, the EPA published regulations establishing NPDES permit requirements for municipal and industrial stormwater discharges. Phase I of the permitting program applied to municipal discharges of stormwater in urban areas where the population exceeded 100,000 persons. Phase II of the NPDES stormwater permit regulations, which became effective in March 2003, required that NPDES permits be issued for construction activity for projects disturbing 1–5 acres. Phase II of the municipal permit system (known as the NPDES General Permit for Small MS4s, Order No. 2003-0005-DWQ as amended by 2013-0001-DWQ) required small municipalities of fewer than 100,000 persons to develop stormwater management programs. This permit authorizes discharges of stormwater and some categories of non-stormwater that are not "significant contributors of pollutants."

Provision C.3 in the Municipal Regional Permit requires site designs for new developments and redevelopments to minimize the area of new roofs and paving and treat runoff, and in some cases, control the rates and durations of site runoff. Where feasible, pervious surfaces should be used

instead of paving so that runoff can infiltrate to the underlying soil. Runoff should be dispersed to landscaping where possible. Remaining runoff from impervious areas must be treated using bioretention. In some developments, the rates and durations of site runoff must also be controlled.

The C.3 requirements are separate from, and in addition to, requirements for erosion and sediment control and for pollution prevention measures during construction. In addition, project applicants must execute agreements to allow municipalities to verify that stormwater treatment and flow-control facilities that are approved as part of new development are maintained in perpetuity.

California Toxics Rule and State Implementation Policy

The CTR, presented in 2000 in response to requirements of EPA's NTR, establishes numeric water quality criteria for approximately 130 priority pollutant trace metals and organic compounds. The CTR criteria are regulatory criteria adopted for inland surface waters, enclosed bays, and estuaries in California that are on the CWA Section 303(c) list for contaminants. The CTR includes criteria for the protection of aquatic life and human health. Human health criteria (water- and organism-based) apply to all waters with a municipal and domestic water supply beneficial use designation as indicated in the basin plans. The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, also known as the State Implementation Policy, was adopted by the State Water Board in 2000. It establishes provisions for translating CTR criteria, NTR criteria, and basin plan water quality objectives for toxic pollutants into:

- NPDES permit effluent limits,
- Effluent compliance determinations,
- Monitoring for 2,3,7,8-tcdd (dioxin) and its toxic equivalents,
- Chronic (long-term) toxicity control provisions,
- Site-specific water quality objectives, and
- Granting of effluent compliance exceptions.

The goal of the State Implementation Plan is to establish a standardized approach for permitting discharges of toxic effluent to inland surface waters, enclosed bays, and estuaries throughout the State.

Sustainable Groundwater Management Act

On August 29, 2014, the California Legislature passed comprehensive groundwater legislation contained in Senate Bill (SB) 1168 and SB 1319, and Assembly Bill (AB) 1739, which are collectively referred to as the Sustainable Groundwater Management Act (SGMA). This legislation was signed by Governor Brown on September 16, 2014, and it became effective on January 1, 2015. The legislative intent of SGMA is to provide sustainable management of groundwater basins, enhance local management of groundwater, establish minimum standards for sustainable groundwater management, and provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater.

The Tracy Subbasin is designated by the State as a medium priority basin. As such, the Tracy Subbasin is subject to the requirements of SGMA, which include the formation of a one or more Groundwater Sustainability Agencies (GSAs) and the development and implementation of one or

more Groundwater Sustainability Plans (GSPs) by January 31, 2022.If the statutory deadline is not met for GSP development and/or implementation, the State has the authority to intervene and manage groundwater within non-compliant subbasins. SGMA requires that adopted GSPs result in sustainable groundwater management which avoids undesirable results.

Originally, the Tracy Subbasin contained areas of San Joaquin, Contra Costa, and Alameda Counties. The Banta-Carbona Irrigation District (BCID), Byron-Bethany Irrigation District (BBID), City of Tracy, City of Lathrop, Stewart Tract, West Side Irrigation District, and San Joaquin County are GSAs within the new Tracy Subbasin. The GSAs recognize that developing and adopting a single GSP for the subbasin would be the most efficient way of achieving sustainability and preventing State intervention into local groundwater management.

Working with San Joaquin County and the Tracy Subbasin GSAs, a Memorandum of Agreement (MOA) has been developed for the development of the San Joaquin County GSP for the Tracy Subbasin. Under the terms of the MOA, San Joaquin County is designated as the lead entity to enter into an agreement with the City of Brentwood to coordinate the allocation of grant funds.

The City, BCID, BBID,[19] City of Lathrop, San Joaquin County, and Stewart Tract are the six GSAs formed in the Tracy Subbasin and are working cooperatively to develop a single GSP. The Tracy Subbasin GSAs were awarded a California Department of Water Resources (DWR) grant to develop the GSP. Pursuant to the Grant Agreement, each GSA designated an appointee to form the GSP Coordination Committee, and San Joaquin County was appointed as the Grant Administrator. The Grant Administrator or any two appointees may call meetings of the GSP Coordination Committee as needed in the GSP development process.

The GSP for the Tracy Subbasin has been completed and is currently in the process of being adopted by each of the GSAs. The Tracy City Council adopted the Final GSP on November 16, 2021. As one of the six GSAs that are managing the Tracy Subbasin, the City has been actively involved in GSP development activities and will continue to be involved throughout SGMA implementation. The City has one appointee (and an alternate) on the Tracy Subbasin GSP Coordination Committee, which meets quarterly, and the Technical Committee, which meets monthly.

Regional

Central Valley Regional Water Quality Control Plan

The Central Valley RWQCB implements the San Joaquin/Sacramento Rivers Basin Plan, a master policy document for managing water quality in the region. The Basin Plan establishes beneficial water uses for waterways and water bodies within the region. The San Joaquin River Basin Plan has jurisdiction over the City.[20]

[19] West Side Irrigation District officially merged with Byron-Bethany Irrigation District in September 2020, which occurred after the release of the draft GSP chapters.

[20] Central Valley Regional Water Quality Control Board (Central Valley RWQCB). 2018. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region. Fifth Edition. Website: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf. Accessed January 29, 2021

Groundwater Management Plan for the Northern Agencies in the Delta-Mendota Canal Service Area and a Portion of San Joaquin County

In 1996, the City adopted the Northern Delta-Mendota Canal Groundwater Management Plan (GMP) pursuant to Water Code sections 10750 *et seq*., also known as AB 3030. The plan was developed in coordination with other Delta-Mendota Canal northern agencies, including: BCID, BBID, Del Puerto Water District, Patterson Irrigation District, West Stanislaus Irrigation District, West Side Irrigation District, San Joaquin County, and the City of Tracy. The 1996 GMP included information on groundwater levels and quality, conjunctive management of groundwater and surface water resources, and measures to protect groundwater resources within the plan area.

In 2011, the GMP was revised to include additional information to comply with new provisions adopted by the State Legislature which included:

- The DWR to establish a priority schedule for monitoring groundwater basins and elevation reports as well as issuing recommendations to local entities to improve water quality.
- The State to allow local entities to determine best methods of groundwater monitoring to meet local demand.
- The DWR to implement groundwater monitoring if local agencies fail to do so. This will result in loss of eligibility for State grant funds.

Tracy Regional Groundwater Management Plan (Regional Groundwater Management Plan)

In addition to participating in the development of the Tracy Subbasin GMP, in 2005, the City was awarded a DWR grant for approximately $185,000 to prepare a Tracy Regional Groundwater Management Plan (Tracy Regional GMP) for the portion of the Tracy Subbasin that underlies the City. The Tracy Regional GMP was completed in March 2007. A key objective of the Tracy Regional GMP was the development of Basin Management Objectives (BMOs) for groundwater levels, groundwater quality, and land subsidence in the region.

Local

Tracy General Plan

Public Facilities and Services Element

The General Plan Public Services and Facilities Element sets forth the following goals, objectives, and policies that are relevant to hydrology and water quality:

Goal PF-7: Meet all wastewater treatment demands and federal and State regulations.

Objective PF-7.1: Collect, transmit, treat, and dispose of wastewater in ways that are safe, sanitary, and environmentally acceptable.

Policies

Policy P1 The City shall maintain wastewater conveyance, treatment, and disposal infrastructure in good working condition in order to supply municipal sewer service to the City's residents and businesses.

Policy P2 The City shall expand the existing wastewater treatment plant to the extent possible or pursue a single new west side facility instead of building new facilities at multiple locations to meet future needs.

Policy P3 New habitable structures located within the city limits shall connect to the public wastewater collection system.

Objective PF-7.2: Pursue safe, environmentally-responsible and affordable methods of disposing of treated effluent.

Policies

Policy P1 Areas used for the land application of treated effluent may also be used for agriculture.

Objective PF-7.3: Promote coordination between land use planning and wastewater conveyance, treatment, and disposal.

Policies

Policy P1 Wastewater collection and treatment facilities shall be designed to serve expected buildout of the areas served by these facilities but constructed in phases to reduce initial and overall costs.

Policy P2 The City shall construct new wastewater trunk lines as needed. Individual development projects shall be responsible for construction of all collection lines other than trunk lines.

Policy P3 The approval of new development shall be conditioned on the availability of sufficient capacity in the wastewater collection and treatment system to serve the project.

Policy P4 "Package" treatment plants shall not be allowed in the City.

Policy P5 New development shall fully fund the cost of new wastewater treatment and disposal facilities.

Objective PF-7.4: Pursue innovative solutions for wastewater treatment and disposal that are compatible with the environment.

Policies

Policy P1 New wastewater treatment plants should be located to allow for distribution of recycled water to application areas by gravity flow where feasible.

Policy P3 Biosolid disposal shall be managed so as to minimize impacts to the environment and public health.

Policy P4 The City shall establish wastewater treatment demand reduction standards for new development and redevelopment to reduce per capita and total demand for wastewater treatment.

Goal PF-8: Protect property from flooding

Objective PF-8.1: Collect, convey, store, and dispose of stormwater in ways that provide an appropriate level of protection against flooding, account for future development, and address applicable environmental concerns.

Policies

Policy P1 Stormwater infrastructure shall be maintained in good condition.

Policy P2 Stormwater infrastructure shall minimize local flooding by attaining capacity that conforms with the Storm Drainage Master Plan and City Design Standards.

Policy P3 New permanent stormwater infrastructure shall be designed to serve dual purposes to the extent possible. This includes the following:

- Drainage facilities integrated into recreation corridors with bike paths, sidewalks, and landscaping.
- Drainage channels integrated with transportation and environmental corridors.
- Stormwater detention basins shall incorporate active and passive recreation areas where feasible. These areas shall not count toward parks dedication requirements.

Policy P4 When temporary retention or detention facilities are no longer needed after an outfall system is constructed, the sites shall be backfilled and disconnected from the storm drainage system.

Policy P5 The City shall ensure a fair and equitable distribution of costs for stormwater system upgrades, expansion and maintenance.

Policy P6 Design of storm drainage facilities shall be consistent with State and federal requirements, including NPDES requirements.

Policy P7 Planning for stormwater facilities should consider possible future retrofitting needs associated with changing regulations pertaining to stormwater quality, including NPDES requirements.

Objective PF-8.2: Provide effective storm drainage facilities for development projects.

Policies

Policy P1 To the extent feasible, new development projects shall incorporate methods of reducing storm runoff within the project to reduce the requirements for downstream storm drainage infrastructure and improve stormwater quality.

Policy P2 New storm drainage facilities shall meet adopted City standards, including the standards and policies contained in the Storm Water Management Plan, the Storm Drainage Master Plan, and the Parkways Design Manual.

Policy P3 New development projects shall only be approved if necessary, stormwater infrastructure is planned and is in compliance with environmental regulations.

Policy P4 If sufficient downstream stormwater infrastructure has not yet been constructed, new development projects shall be required to implement temporary on-site retention facilities in conformance with City standards.

Safety Element

The General Plan Safety Element contains the following goals, objectives, policies, and actions to reduce impacts related to flood hazards.

Goal SA-2: A reduction of hazards related to flooding or inundation

Objective SA-2.1: Minimize flood risks to development.

Policies

Policy P1 Development shall only be allowed on lands within the 100-year flood zone, if it will not:

- Create danger to life and property due to increased flood heights or velocities caused by excavation, fill, roads and intended use.
- Create difficult emergency vehicle access in times of flood.
- Create a safety hazard due to the unexpected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site.
- Create excessive costs in providing governmental services during and after flood conditions, including maintenance and repair of public facilities.
- Interfere with the existing waterflow capacity of the floodway.
- Substantially increase erosion and/or sedimentation.
- Contribute to the deterioration of any watercourse or the quality of water in any body of water.

Policy P2 Public and private development in the 100-year flood zones shall have the lowest floor elevated at least 1 foot above the base flood level, or be of flood-proof construction.

Policy P3 The City shall prevent the construction of flood barriers within the 100-year flood zone that divert flood water or increase flooding in other areas.

Policy P4 Property owners within the 100-year floodplain are encouraged to purchase National Flood Insurance, which reduces the financial risk from flooding and mudflows.

Objective SA-2.2: Maintain a high level of preparedness in the event of flooding.

Policies

Policy P1 The City shall maintain operational contingency plans for essential public facilities in the event of flooding.

Policy P2 The City shall locate, when feasible, new essential public facilities outside of flood hazard zones, including hospitals and health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities, or identify construction or other methods to minimize damage if these facilities are located in flood hazards zones.

Policy P3 The City shall continue to work with other public agencies responsible for flood protection, including the Central Valley Flood Protection Board, the San Joaquin Office of Emergency Services, and the US Army Corps of Engineers.

Northeast Industrial Specific Plan

Storm Drainage

The distribution, location, and extent of the storm drainage improvements within the NEI Specific Plan area shall be subject to the NEI Phase I Finance and Implementation Plans, dated December 1999 (Resolution Numbers 99- 462 and 99-485), April 1, 2003 (Resolution Number 2003-100), January 4, 2005 (Resolution Number 2005-023), February 21, 2006 (Resolution Number 2006-069), and April 15, 2008 (Resolution Number 2008-065), and the NEI Phase II Finance and Implementation Plans, dated January 2006 (Resolution Number 2006-038) and January 15, 2008 (Resolution Number 2008-010). All future storm drainage improvements will also be subject to any revisions or updates to the NEI Finance and Implementation Plans, and subject to the development impact fee as established in those plans.

Municipal Code

Chapter 9.52 Floodplain Regulations

This chapter addresses floodplain regulations and requirements for new development and construction within Flood Hazard Areas delineated by FIRMs published by FEMA.

Chapter 11.34 Stormwater Management and Discharge

Chapter 11.34 aims to protect water quality by reducing pollutants in urban stormwater discharges to the maximum extent practicable. The Municipal Code requires new development to acquire a permit prior to construction, which includes requirements identifying BMPs for any activity, operation, or facility that may cause or contribute to pollution or contamination of stormwater. In addition, the Municipal Code requires applicants to demonstrate intent to comply with the permit, submit of a SWPPP, and make the SWPPP available for inspection and review by a City inspector.

3.10.4 - Impacts and Mitigation Measures

Significance Criteria

The City is using Appendix G of the State California Environmental Quality Act (CEQA) Guidelines as thresholds of significance for the proposed project. According to CEQA Guidelines Appendix G Environmental Checklist, to determine whether impacts related to hydrology and water quality are significant environmental effects, the following questions are analyzed and evaluated. Would the proposed project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed project may impede sustainable groundwater management of the basin?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
   i) Result in substantial erosion or siltation on- or off-site;
   ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
   iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
   iv) Impede or redirect flood flows?

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Approach to Analysis

Impacts related to hydrology and water quality were determined by reviewing information regarding regional and local hydrology, climate, topography, and geology contained in the Tracy General Plan and General Plan EIR, Central Valley RWQCB Basin Plan, FEMA FIRMs, plan-specific utility plans, and the Flood Protection Technical Memorandum prepared for the project site.

The evaluation of impacts is based on a comparison of existing conditions to anticipated conditions once the proposed project is constructed and operational, such as changes in impervious area, as well as facilities potentially located within flood zones. Specifically, the impact evaluation focuses on the effect of the proposed project on surface and groundwater quality, groundwater supply, and drainage (in terms of erosion, siltation, flooding, stormwater system exceedance, and polluted runoff). Water quality conditions are compared with applicable water quality standards and WDRs by identifying potential contaminants and pollution pathways, amount of impervious area, and runoff treatment requirements.

The Flood Protection Technical Memorandum evaluated impacts to flooding by determining the 200-year flood elevation on the project site and analyzed any criteria (including, among others, finish floor elevations of structures, which would be required to reside above the 100/200 year flood elevation) that would be appropriate for the proposed structures within the Tracy Alliance project and the proposed project's on-site stormwater detention basin. Finally, as part of the analysis, inundation and flooding on the project site are assessed by considering the potential failure of levees along the San Joaquin River and reviewing potential inundation zone elevations relative to the final grade elevations of planned facilities and features for each project.

Impact Evaluation

Surface and Groundwater Quality

Impact HYD-1:	**The proposed project could violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.**

Construction

Construction activity for the proposed project would expose soils on the project site to potential erosion, and to potential pollutants related to the use of construction equipment. Runoff from graded areas could carry eroded soils and pollutants into the storm drainage systems and into the Old River and eventually the San Joaquin River, increasing sedimentation, degrading downstream water quality, and potentially affecting the groundwater table. This would represent a potentially significant construction impact related to surface and groundwater quality.

Because the construction would disturb more than one acre of land, the proposed project would be required to comply with all applicable laws and regulations including the terms of the Construction General Permit, which require the preparation and implementation of a SWPPP that includes BMPs to ensure reduction of pollutants from construction activities that could potentially enter surface waters as required by MM HYD-1a. Additionally, implementation of the SWPPP would also prevent pollutants from entering the Tracy Subbasin by requiring the inclusions of BMPs, such as the use of biofiltration swales and bioretention basins, that would prevent pollutants from moving off-site through the treatment of stormwater on-site. The intention would be to keep all products of erosion from moving off-site into receiving waters by treatment on-site. Furthermore, compliance with Chapter 11.34 of the Municipal Code would ensure that each applicant, in connection with its respective individual development proposal, implements the BMPs contained in the relevant SWPPP which would be verified by a City inspector during the construction period.

Although construction activities have the potential to generate increased sedimentation, compliance with applicable policies, laws and regulations would minimize the potential to degrade water quality in downstream water bodies to the maximum extent feasible. As a result, construction-related project impacts would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, impacts in this regard related to surface and groundwater and respective water quality would be less than significant.

Operation

The project site is in an urbanizing area characterized by agricultural and light industrial uses with a mix of impervious and pervious surfaces. The proposed project would result in new impervious surfaces compared to existing conditions that would in turn generate stormwater runoff, which may carry pollutants such as pesticides, fertilizers, and deposits of fluids and metals from motor vehicles into the Old River or allow seepage of such pollutants into the associated groundwater table. This would represent a potentially significant operational impact related to surface and groundwater quality.

The proposed project would be subject to applicable C.3 requirements, which includes implementation of a Storm Water Management Plan (SWMP) applicable to the proposed project's design and post-project operation and maintenance. Two fundamental components are associated with the SWMP: (1) treatment for pollutants collected in stormwater using Low Impact Development (LID) measures, and (2) no net increase in the erosion potential of the receiving stream over the pre-project (existing) condition. All LID treatment measures would be required to be designed in accordance with applicable engineering criteria in the Multi-Agency Post-Construction Stormwater

Standards Manual. Implementation of the SWMP would require the preparation of a clearly defined Operations and Maintenance (O&M) Plan to ensure that installed stormwater treatment measure(s) and hydromodification management control(s)[21] are inspected and properly operated and maintained for the life of the project. The preparation, approval, and implementation of a SWMP is included as Mitigation Measure (MM) HYD-1b.

The primary treatment control measure would be the proposed project's on-site stormwater detention basin with a pump station that would be owned and managed by the City. The proposed project's on-site stormwater detention basin would be in the northern portion of the project site, along the terminus of California Avenue, and would connect to the City's NEI detention basin west of the project site (see Exhibit 3.10-1).[22] The proposed project's on-site stormwater detention basin would be sized to accommodate the stormwater discharge for the Tracy Alliance parcels prior to the start of operations on the Tracy Alliance parcels. Following Phase 1, each subsequent applicant for its respective individual development proposal within the project site would be required to confirm that the proposed project's on-site stormwater detention basin and bioretention treatment areas could accommodate project flows to the satisfaction of the City and that post-development stormwater flow rates would not substantially exceed predevelopment rates pursuant to the applicable C.3 requirements. The proposed project's on-site stormwater detention basin would be required to comply with applicable provisions of the Multi-Agency Post-Construction Stormwater Standards Manual which identifies BMPs to control the potential pollutant load of stormwater runoff. Additionally, Chapter 11.32 of the Municipal Code requires each applicant for its respective individual development proposal within the project site to pay applicable stormwater impact fees in connection with their respective development proposals, which would ensure the operation, maintenance, and replacement of existing and future stormwater facilities. Each applicant for its respective individual development proposal within the project site would be required to prepare a clearly defined O&M Plan in connection with its respective individual development proposal to ensure that installed stormwater treatment measures and hydromodification management controls are inspected and properly operated and maintained for the life of the relevant individual development proposal. Therefore, pursuant to the foregoing and with each applicants' compliance with all other applicable laws and regulations, operation-related project impacts related to surface and groundwater and respective water quality would be less than significant.

Level of Significance

Potentially Significant

MM HYD-1a Prepare Stormwater Pollution Prevention Plan

Prior to the issuance of a grading permit, the relevant applicant for each individual development proposal within the project site shall submit a draft of the Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) in connection with its individual development proposal pursuant to the then-applicable Multi-Agency Post-Construction Stormwater Standards Manual at the time the relevant grading

[21] Hydromodification controls are required for projects that replace on acre or more of impervious surface.

[22] As of the publication of this Draft EIR, the NEI detention basin is currently operational, and modifications are being completed. It would be available to accept stormwater from the project site once the proposed project is operational.

permit is submitted. After City approval of the relevant grading permit, the relevant NOI and SWPPP shall be sent to the California State Water Resources Control Board (State Water Board) for approval. Approval by the State Water Board is a prerequisite for issuance of the relevant grading permit by the City. The SWPPP shall address stormwater management during each phase of construction of the relevant individual development proposal. Best Management Practices (BMPs) shall be integrated into the relevant SWPPP as identified by the City of Tracy, which will result in the reduction or elimination of pollutants in stormwater discharges and the stabilization of BMPs to reduce or eliminate pollutants after construction of the relevant individual development proposal is completed. The relevant SWPPP shall be consistent with the applicable Regional Water Quality Control Board (RWQCB) standards and National Pollutant Discharge Elimination System (NPDES) permit requirements to protect water quality over the period of construction of the relevant individual development proposal.

MM HYD-1b Prepare Stormwater Management Plan

Prior to the issuance of a grading permit, the relevant applicant for each individual development proposal within the project site shall prepare a Stormwater Management Plan in connection with its individual development proposal for review and approval by the City of Tracy. The relevant Storm Water Management Plan (SWMP) shall include two fundamental components: (1) treatment for pollutants collected in stormwater using Low Impact Development (LID) measures, and (2) no net increase in the erosion potential of the receiving stream over the pre-project (existing) condition. All LID treatment measures would be required to be designed in accordance with applicable engineering criteria in the then-applicable Multi-Agency Post-Construction Stormwater Standards Manual. Implementation of the relevant SWMP would require the preparation of a clearly defined Operations and Maintenance (O&M) Plan by the relevant applicant in connection with its development proposal to ensure that installed stormwater treatment measure(s) and hydromodification management control(s) are inspected and properly operated and maintained for the life of the relevant individual development proposal.

Level of Significance with Mitigation

Less Than Significant

Groundwater Supply/Recharge

Impact HYD-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed project may impede sustainable groundwater management of the basin.

Construction

Impacts related to depletion of groundwater supplies or interference with groundwater recharge are limited to operational impacts. No respective construction impacts related to groundwater would

occur in the project site because construction activities would not involve or affect groundwater or the use of groundwater.

Operation

Implementation of the proposed project would result in a significant amount of new impervious surfaces, which could interfere with groundwater recharge rates. The Geotechnical Engineering Report prepared for the proposed project (Appendix F) conducted a percolation test to determine the existing rate of stormwater percolation into the soil. As shown in Table 3.10-1, stormwater would percolate at a rate of 0.36 inch per hour or 167 minutes per inch.

Table 3.10-1: Percolation Test Results

Test ID	Depth of Test (feet)	Percolation Rate (inches per hour)	Percolation Rate (minutes per inch)
P1	5	0.36	167
Source: Terracon. 2019. Geotechnical Engineering Report: Tracy Ridge Warehouses.			

This percolation test determined that project site soils contain finely layered, fine-grained alluvial soils (silt) that impede vertical percolation of stormwater. As such, groundwater recharge on the project site is currently limited. Percolation rates could be further reduced if stormwater pollutants are present in the runoff, such as sediment, organic materials, and/or oil residue. However, the design of the proposed project's on-site stormwater detention basin includes filters to remove sediments and organic materials that might otherwise reduce groundwater percolation rates and thus would help facilitate groundwater recharge. Therefore, despite the significant increase in impervious surfaces that would occur with the proposed project, implementation of the proposed project would not significantly impact groundwater recharge rates for the foregoing reasons.

Historical Groundwater Use

The City currently operates nine groundwater extraction wells:

- Well 1 (at JJWTP)
- Well 2 (at JJTWP)
- Well 3 (at JJTWP)
- Well 4 (at JJWTP
- Lincoln Well
- Well 5 (Lewis Manor Well)
- Well 6 (Ball Park Well)
- Well 7 (Park and Ride Well)
- Well 8 (for ASR)

The City's newest well, Well 8, was constructed in January 2004 and was permitted by the California Department of Public Health[23] for use as a municipal production well in September 2010. The well

[23] As of July 1, 2014, the State's administration of the Drinking Water Program transferred from the State Department of Public Health to the SWRCB Division of Drinking Water.

was used as an ASR demonstration well during 2011, 2012, and 2013. In November 2013, the City received authorization from the Central Valley RWQCB to operate Well 8 as an ASR well.

Historically, groundwater accounted for up to 50 percent of the City's water supply. Prior to 2001, groundwater extraction in the City totaled less than 6,000 AFY. Between 2001 and 2004, to meet increased demands for water, the City extracted additional groundwater, ranging from 7,321 to 7,176 AFY. In 2005, the rate of groundwater extraction decreased back to the historic 6,000 AFY, reflecting two key factors: (1) the South County Water Supply Project (SCWSP) was completed and the City began receiving Stanislaus River water, and (2) rainfall was above normal, meaning that the City received a higher percentage of its Delta-Mendota Canal/Central Valley Project contractual entitlements. From 2006 to 2010, groundwater extraction ranged from 2,034 AFY to 498 AFY, declining as more water was used from the South San Joaquin Irrigation District.

The City’s groundwater production over the last several years is provided in Table 3.10-2.

Table 3.10-2: City of Tracy Historical Groundwater Production

Condition	AFY																			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Groundwater Production	7,321	7,802	6,847	7,176	5,826	3,034	3,672	2,598	1,327	498	292	420	515	680	519	648	996	817	645	1,181

Notes:
AFY = acre-feet per year
Source: West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy), Figure 6-1. December.

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Other groundwater users in the Tracy area include the West Side Irrigation District, Naglee-Burk Irrigation District, Plain View Water District (now the BBID), and BCID. The 2001 Estimated Groundwater Yield Study prepared by Bookman-Edmonston,[24] which established the City's estimated groundwater yield of 9,000 AFY, considered the cumulative groundwater usage in the City and other users in the Tracy area.

Projected Future Groundwater Use

An assessment of the aquifer beneath the City indicates that there is an average annual operational potential yield of 9,000 AFY.[25] Since the City's groundwater is hard and consists of high TDS levels, the City has scaled back its groundwater extraction in most years, as shown in Table 3.10-2, in favor of higher-quality surface water sources. However, it is anticipated that the City will continue to rely on groundwater for peaking and drought and emergency water supply. Table 3.10-3 shows the anticipated future groundwater production during a normal year and during dry years.

Table 3.10-3: City of Tracy Projected Future Groundwater Production in Normal and Dry Years

	AFY				
Condition	2020	2025	2030	2035	2040
Total Groundwater Production During a Normal Year	2,500	2,500	2,500	2,500	2,500
Total Groundwater Production During Dry Years[(a)]	4,500	4,500	4,500	4,500	4,500

Notes:
AFY = acre-feet per year
(a) During multiple dry years, the City anticipates increasing its normal year groundwater production of 2,500 AFY by 6,500 AFY (i.e., the City's dry year supply), providing a total groundwater supply of 9,000 AFY.
Source: West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy), Table 6-3. December.

As can be seen in Table 3.10-3, the City anticipates that total extraction during a normal year would be 2,500 AFY through the planning horizon By reducing groundwater extraction on an average annual basis during normal years, the City would: (1) increase the overall quality of its drinking water, thus increasing customer satisfaction and reducing system maintenance and repair caused by the lower-quality groundwater; and (2) recharge the underlying aquifer, effectively increasing the availability of groundwater during a drought or emergency condition (i.e., effectively "banking" groundwater). At the production volumes shown in Table 3.10-3, the City's groundwater supplies are considered to be 100 percent reliable.

The projected uses of groundwater during droughts shown in Table 3.10-3 are consistent with the City's Groundwater Management Policy.[26] If the City is unable to secure additional high-quality surface water supplies in the future, the City could expand groundwater production up to 9,000 AFY.

[24] Bookman-Edmonston. 2001. Estimated Groundwater Yield Study.
[25] Ibid.
[26] Pacific Municipal Consultants (PMC). 2011. Groundwater Management Policy Mitigated Negative Declaration, prepared for City of Tracy. December 7.

In the event of a severe water supply shortage or emergency, the City could increase production dramatically, up to 22,000 AFY.[27]

Groundwater Sufficiency

The 2020 UWMP addressed the sufficiency of the City's groundwater supplies, in conjunction with the City's other existing and additional water supplies, to meet the City's existing and planned future uses.[28] Based on the information provided above and included in the 2020 UWMP, the City's groundwater supply, together with the City's other existing and additional planned future water supplies, is sufficient to meet the water demands of the proposed project, in addition to the City's existing and other planned uses.

As discussed above, the City's use of groundwater over the last few years has significantly declined, primarily due to the availability of higher-quality surface water supplies from the SCWSP. In the future, although the City can sustainably extract up to 9,000 AFY of groundwater on a continuous basis, the City's use of groundwater under normal hydrologic conditions is anticipated to be lower, as available higher-quality surface water supplies would be utilized first. As shown in Table 3.10-3, in the future, assuming normal year hydrologic conditions, annual groundwater use is anticipated to be 2,500 AFY. This anticipated future groundwater pumpage is significantly below the City's maximum historical groundwater pumpage and the average annual operational yield of 9,000 AFY. The proposed project would not significantly decrease groundwater supplies because, among other things, the design of the proposed project's on-site stormwater detention basin includes filters to remove sediments and organic materials that might further reduce groundwater percolation rates.

Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed project may impede sustainable groundwater management of the basin.

Level of Significance

Less Than Significant

Drainage Leading to Erosion/Siltation, Flooding, Additional Sources of Polluted Runoff, or Impedance of Flood Flows

Impact HYD-3: **The proposed project could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**

- **i) Result in substantial erosion or siltation on- or off-site;**
- **ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;**
- **iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**
- **iv) Impede or redirect flood flows?**

[27] GEI Consultants. 2015. Groundwater Assessment for Drought Emergency Conditions Requiring Groundwater to be Used as the Sole Source of Potable Water Supply (prepared for City of Tracy). August 10.

[28] EKI Environment & Water, Inc. 2021. 2020 Urban Water Management Plan for City of Tracy, Chapter 6. June.

i) Construction-related Erosion and Siltation

The proposed project would have a significant impact if it were to substantially alter the existing drainage pattern of the site in a manner that would result in substantial erosion or siltation on- or off-site. In general, such drainage effects could occur from grade changes at the site, exposure of soils for periods of time during precipitation events, or alterations to creek beds. These types of changes could have a potentially significant impact on project site drainage patterns.

The project site is not located adjacent or near any creek beds and the proposed project does not propose any alteration to a stream, creek bed, or river. Construction activity could result in substantial erosion or siltation due to a drainage pattern alteration and could therefore result in polluted runoff entering the City's stormwater drainage system and the Old River. This would represent a potentially significant impact. However, the proposed project would be required to implement a SWPPP as part of its Construction General Permit, pursuant to MM HYD-1a. The SWPPP is designed to ensure that erosion and siltation are prevented or minimized to the maximum extent feasible during construction through the implementation of standard BMPs. Consistent with Chapter 11.34 of the Municipal Code, each applicant for an individual development proposal within the project site would be required to implement the BMPs contained in the relevant SWPPP in connection with the relevant individual development proposal, which would be verified by a City inspector during the construction period. Pursuant to the relevant SDMP in effect at the time building permits are requested, the SWPPP would include a construction site monitoring program that demonstrates the site is in compliance with the Construction General Permit; therefore, the proposed project would also be required to adhere to this monitoring program mandate.

Therefore, although construction activities have the potential to generate increased sedimentation, compliance with applicable policies, laws and regulations would minimize the potential to increase sedimentation or siltation to the maximum extent practicable. With the implementation of these uniformly applied standards and procedures, construction impacts related to alteration of drainage pattern and resulting in erosion or siltation would be less than significant with mitigation.

Operation-related Erosion and Siltation

Development of the project site would increase impervious surfaces compared to existing conditions. Thus, project operation could result in increased amounts of stormwater runoff that could carry pollutants into Old River and ultimately San Joaquin River.

The proposed project would include an on-site stormwater detention basin with pump station that would be designed pursuant to all applicable standards and requirements to treat stormwater on-site and prevent erosion and siltation from increasing pollutant loads in the stormwater system and Old River. With respect to the Tracy Alliance parcels, bioretention treatment areas would be constructed around the proposed buildings and would also be interspersed throughout the parking lots (see Exhibit 2-10b in Chapter 2, Project Description). Stormwater that would be collected in the bioretention treatment areas would either evaporate or infiltrate through a bioretention filter into surrounding soils.

In addition, the proposed project would be required to comply with the City of Tracy NPDES program, SWMP (pursuant to MM HYD-1b), and all relevant provisions of the Municipal Code related to stormwater pollution, including the provision of appropriately sized bioretention areas for pretreatment of stormwaters in accordance with applicable C.3 guidelines.

Furthermore, the proposed project would be required to implement MM HYD-3 that would require each applicant for an individual development proposal within the project site to prepare a Final Drainage Plan in connection with the relevant individual development proposal prior to site grading, for review and approval by the City. Each Final Drainage Plan would be required to abide by the Multi-Agency Post-Construction Stormwater Standards Manual and require the incorporation of BMPs like such as those described above, prior to discharging stormwater off-site. Through adherence to applicable policies, standards, and requirements and implementation of MM HYD-3, the proposed project's operation would not substantially increase erosion or siltation. Therefore, impacts would be less than significant with mitigation incorporated.

ii) Construction-related Surface Runoff

Impacts related to the potential for the project to increase the rate or amount of surface runoff resulting in flooding are limited to operational impacts.[29] As such, no construction impacts would occur.

Operation-related Surface Runoff

The proposed project would increase the amount of impervious surfaces on the project site, which could increase the rate or amount of surface runoff in a manner which would result in flooding and represents a potentially significant impact. However, the proposed project's increase in impervious surfaces is accounted for in the design of the proposed project's on-site stormwater detention basin with pump station, which would ensure that post-project flows do not exceed pre-project flows in accordance with applicable C.3 requirements. Therefore, operation of the proposed project would not result in any increase in flooding on or off-site. The proposed project includes an on-site stormwater detention basin designed to reduce runoff volume and pollutants from the project site from entering the City stormwater drainage system or waterways, in accordance with Provision C.3 in the Municipal Regional Permit as implemented by the Central Valley RWQCB. Therefore, impacts related to surface runoff resulting in flooding on or off-site would be less than significant.

iii) Construction-related Exceedance of Storm Drain Capacity

The existing stormwater sheet flows from the site to the northeast toward I-205 and into Pescadero Irrigation District facilities; this stormwater does not currently enter into a City-maintained facility.

During construction, the proposed project could increase stormwater runoff generation, which could potentially lead to flooding on or off-site. However, each applicant for an individual development proposal would be required to implement a SWPPP as part of its Construction General Permit, as

[29] The proposed project would not increase storm flow from the project site during construction because of the proposed stormwater basin would be installed first to generate the dirt onsite, which would ensure that existing flows would be detained before leaving the project site

required by MM HYD-1a. The SWPPP is designed to ensure that stormwater generation and pollutants are prevented or minimized to the maximum extent feasible during construction through the implementation of standard BMPs. Consistent with Chapter 11.34 of the Municipal Code, each individual development proposal within the project site would be required to implement the BMPs contained in the relevant SWPPP in connection with the relevant individual development proposal, which would be verified by a City inspector during the construction period. Therefore, the construction impact related to exceedance of storm drain capacity and stormwater pollution would be less than significant with mitigation incorporated.

Operation-related Exceedance of Storm Drain Capacity

As noted above, the existing stormwater sheet flows from the site to the northeast toward I-205 and into Pescadero Irrigation District facilities; this stormwater does not currently enter into a City-maintained facility.

The proposed project would result in increased impervious surface area and increased runoff, which could potentially exceed existing storm drainage capacity and increase pollutant loads. However, the proposed project, as part of the individual development proposal to occur on the Tracy Alliance parcels, would install an on-site stormwater detention basin with a pump station along the northeast site boundary that would be owned and managed by the City. Bioretention treatment areas would be located around the buildings on the Tracy Alliance parcels and would also be interspersed throughout the parking lots (see Exhibit 2-10b in Chapter 2, Project Description). Stormwater that would be collected in the bioretention treatment areas would either evaporate or infiltrate through a bioretention filter into surrounding soils. Though the bioretention treatment areas for Suvik Farms and Zuriakat parcels are not currently known, each applicant for an individual development proposal on the foregoing parcel(s) would also have to prepare a Final Drainage Plan (similar to the applicant for the Tracy Alliance parcels) upon submittal of a development application that would be required to abide by the Multi-Agency Post-Construction Stormwater Standards Manual and require the incorporation of BMPs such as those described above, prior to discharging stormwater off-site.

Proposed bioretention treatment areas would be designed to reduce runoff volume entering the City stormwater drainage system or waterways, in accordance with Provision C.3 in the Municipal Regional Permit as implemented by the Central Valley RWQCB, and all other applicable standards and requirements. In addition, the proposed project would be required to comply with the City of Tracy NPDES program, Storm Water Management Program, and all relevant provisions of the Municipal Code related to stormwater pollution, including the provision of appropriately sized bioretention areas for pretreatment of stormwaters in accordance with C.3 guidelines. Furthermore, implementation of MM HYD-3 would ensure that stormwaters are collected and conveyed in accordance with Chapter 11.34 of the Municipal Code. MM HYD-3 would also ensure that the project complies with applicable regulations of the NPDES permit, and that each applicant for an individual development proposal within the project site prepares and submits a Final Storm Water Control Plan and Stormwater Control Operation and Maintenance Plan in connection with the relevant individual development proposal to the City's Public Works and Community Development Department for approval. These plans would prevent pollutants from moving off-site through the treatment of stormwater on-site (consistent with BMPs required in the Multi-Agency Post-

Construction Stormwater Standards Manual). Thus, operation of the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, the operational impact related to additional sources of polluted runoff would be less than significant with mitigation.

iv) Construction-related Impacts to Flood Flows

Impacts related to impedance of flood flows would only occur during the operational phase of the project. As such, no construction impedance of flood flow impacts would occur.

Operation-related Impacts to Flood Flows

The project site could be subject to flooding in the event of a levee failure along the San Joaquin River or Paradise Cut, which is a distributary of the San Joaquin River. The levees along the San Joaquin River and Paradise Cut near the City do not currently meet FEMA criteria for Urban Level of Flood Protection (ULOP). Therefore, the analysis to determine the flood levels must consider failure of the levees along the river.[30] According to the Flood Protection Technical Memorandum, the volume of the breach flow would need to be sufficient to inundate over 10 square miles prior to flows reaching the project site. The downstream inundation area is illustrated in Exhibit 3.10-3.

The Flood Protection Technical Memorandum concluded that the 200-year flood levels at the project site would be virtually the same as the FEMA 100-year flood levels, which is estimated to be 24 feet. Maximum flood depths at the project site would be controlled by existing ground elevations of tributaries of the San Joaquin River, including Old River and Sugar Cut Channel, which would influence potential flows to the project site. Because the ground elevations around the southern end of the Sugar Cut Channel (21.2 feet) are greater than the projected 200-year flood elevation in the Old River (estimated at 17 feet), flood flows would be limited to existing drainage channels. The Flood Protection Technical Memorandum concluded that a levee breach at the Paradise Cut would result in 200-year flood elevations of at most 24 feet on the project site, which is similar to the 100-year flood elevation.

Consequently, the Flood Protection Technical Memorandum determined it would be reasonable to plan for a 200-year flood elevation of 25 feet and all new structures within the project site would need to have a lowest finished floor elevation at least one foot, 26 feet, above the 200-year flood level associated with levee failure. In addition, although the FEMA SFHA only covers a portion of the project site, the same minimum finished floor elevation would apply to all portions of the proposed project. Implementation of MM HYD-3 would require each applicant for individual development proposals within the project site to prepare a Final Drainage Plan in connection with the relevant individual development proposal prior to site grading to ensure that all relevant project buildings are built at a minimum finished floor elevation of 26 feet (i.e., 8.5 feet higher than the existing lowest ground elevation of 17.5 feet) and all measures and recommendations included in the Flood Protection Technical Memorandum are included in the project design. MM HYD-3 would ensure the project is consistent with applicable provisions of the City's Municipal Code (Title 9 Building

[30] Wood Rodgers. 2021. Technical Memorandum: Flood Protection at the Tracy Alliance Project Site. January 13.

Regulations, Chapter 9.52 Floodplain Regulations), which requires all new construction and substantial construction pertaining to buildings have the lowest floor, including basement, elevated to or above the base flood elevation.

Runoff from the project site would be diverted from its current release point to the northeast into the proposed project's on-site stormwater detention basin that would be pumped to the west (into DET NEI) and eventually the San Joaquin River. The low point of the project site is at an approximate elevation of 17.5 feet, 6.5 feet below the FEMA 100-year floodplain elevation. As a result, the proposed project's on-site stormwater detention basin would be located within a known flood hazard zone. The City of Tracy Design Standards (City's Design Standards)[31] requires basins to be emptied within 10 days. The proposed project's on-site stormwater detention basin would need to drain at 3 cubic feet per second (cfs) to fulfill this requirement.[32]

The 100-year floodplain impacts on the project site would only result from the unlikely event of a levee failure along the San Joaquin River or Paradise Cut. Furthermore, the volume of the breach flow would need to be sufficient to inundate over 10 square miles prior to flows reaching the project site, which is an extreme and unlikely event. If flood flows reached the project site, they would fill available storage in the proposed project's on-site stormwater detention basin below the flood level and any additional flood flow volumes would be pumped into the Eastside Channel. The Flood Protection Technical Memorandum determined that it would not matter if the proposed project's on-site stormwater detention basin contained sufficient capacity in the event of regional flooding because runoff upstream from the project site would not make flooding worse and the impact of additional stormwater volumes being pumped into the Eastside Channel would be less than significant.

The City's Design Standards require a pumping capacity of 3 cfs for the proposed project's on-site stormwater detention basin to have capacity for a longer duration 100-year event. MM HYD-3 would require the proposed project's on-site stormwater detention basin to be designed in accordance with, and meet the applicable objectives, standards and requirements set forth in the Citywide Storm Drainage Master Plan in effect at the time building permits are requested for the relevant individual development proposal.

The Flood Protection Technical Memorandum notes that unlike most other areas of the City, the location of the proposed project's on-site stormwater detention basin has a defined existing conveyance downstream from it. Although it may be reasonable to pump all of the increased runoff from the area tributary to the proposed project's on-site stormwater detention basin into the City's Eastside Channel drainage system, it may be feasible to discharge some runoff (possibly up to the pre-project runoff volume) into the existing downstream system. Any allowable discharge into the Tom Paine Slough system could reduce the capacity required for the proposed project's on-site stormwater detention basin. This design-level review would be completed as part of the Final Drainage Plan for each individual development proposal as required in MM HYD-3. Pursuant to the foregoing and with the applicants' compliance with all other applicable laws and regulations

[31] City of Tracy. 2008. City of Tracy Design Standards, Section 5: Storm Drainage Design Standards.
[32] Wood Rodgers. 2021. Technical Memorandum: Flood Protection at the Tracy Alliance Project Site. January 13.

including designing the proposed project's on-site stormwater detention basin and all structures on-site consistent with City's Design Standards, recommendations provided in the Flood Protection Technical Memorandum, performance standards included in the Citywide Storm Drainage Master Plan in effect at the time building permits are requested, and implementation of MM HYD-3, impacts related to impedance of flood flows would be less than significant with mitigation incorporated.

Level of Significance before Mitigation

Potentially Significant

Mitigation Measures

Implement MM HYD-1a and MM HYD-1b

MM HYD-3 Prepare Final Drainage Plan Prior to Grading

Each applicant for an individual development proposal within the project site shall, in connection with the relevant individual development proposal:

- Comply with all applicable rules, regulations, and procedures of the National Pollutant Discharge Elimination System (NPDES) for municipal, construction and industrial activities as promulgated by the California State Water Resources Control Board (State Water Board), or any of its Regional Water Quality Control Boards (RWQCBs).
- Submit a Final Stormwater Control Plan and a Stormwater Control Operation and Maintenance Plan (O&M Plan) to the City of Tracy Public Works and Community Development Department, which shall be reviewed for compliance with the County's National Pollutant Discharge Elimination System (NPDES) Permit and shall be determined consistent with the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.34 of the Municipal Code, Ordinance 1072) prior to issuance of a grading permit for the relevant individual development proposal. Improvement Plans shall be reviewed to verify consistency with the relevant Final Stormwater Control Plan and compliance with Provision C.3 of the City's NPDES Permit and the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.34 of the Municipal Code, Ordinance 1072).
- Prior to issuance of grading permits for each relevant individual development proposal, the relevant applicant shall submit a Final Drainage Plan in connection with the relevant individual development proposal that incorporates the measures included in the Flood Protection Technical Memorandum. The City of Tracy Public Works and Community Development Department shall review the relevant Final Drainage Plan to ensure it is in compliance with all applicable requirements and standards, including the recommendations provided in the Flood Protection Technical Memorandum and in the Citywide Storm Drainage Master Plan in effect at the time building permits are issued, to reduce risk related to flooding within a designated floodplain. The relevant Final Drainage Plan shall

be reviewed by City of Tracy Public Works and Community Development Department staff to ensure that all building minimum floor elevations for the relevant development proposal are at 26 feet or 1 foot above the maximum flood elevation and shall accommodate the 200-year storm event as detailed in the Flood Protection Technical Memorandum. In addition, the on-site stormwater detention basin shall be designed in accordance with the recommendations provided in the Flood Protection Technical Memorandum and in accordance with the Citywide Storm Drainage Master Plan in effect at the time building permits are issued. Additionally, the relevant Final Drainage Plan shall determine if discharge of pre-project runoff rates and/or volumes into the Tom Paine Slough drainage area can continue after project construction pursuant to applicable standards and requirements. Should the relevant Final Drainage Plan determine it is feasible to discharge some runoff (possibly up to the pre-project runoff volume) into the existing downstream system, this design shall be submitted to the City of Tracy as part of the relevant Final Drainage Plan for review and approval.

Level of Significant after Mitigation

Less Than Significant

Risk of Pollutant Release Due to Inundation

Impact HYD-4: The proposed project would be located in a flood hazard zone, tsunami, or seiche zone, or risk release of pollutants due to project inundation.

Construction and Operation

As described in Impact HYD-3, in the event of a levee failure along the San Joaquin River or Paradise Cut, which is a distributary of the San Joaquin River, sufficient to inundate over 10 square miles prior to flows reaching the project site, the project site could be inundated; it is located within a flood hazard zone as determined by FEMA. To address potential inundation, compliance with MM HYD-3 and applicable provisions of the City's Municipal Code (Title 9 Building Regulations, Chapter 9.52 Floodplain Regulations) would require each applicant for individual development proposals within the project site to submit a Final Drainage Plan in connection with the relevant individual development proposal that incorporates the recommendations included in the Flood Protection Technical Memorandum and project-specific Hydrology Study. Additionally, the relevant Final Drainage Plan shall determine if discharge of pre-project runoff rates and/or volumes into the Tom Paine Slough drainage area can continue after project construction pursuant to applicable standards and requirements. Should the relevant Final Drainage Plan determine it is feasible to discharge some runoff (possibly up to the pre-project runoff volume) into the existing downstream system, this design shall be submitted to the City as part of the relevant Final Drainage Plan for review and approval. These improvements would ensure that the proposed project would not be subject to a substantial risk of inundation and drainage would be improved such that the proposed project would not be at significant risk of pollutant release.

The project site is not located near the ocean and would not be susceptible to inundation from a tsunami. The project site is not located near a large, enclosed body of water and is not susceptible to inundation from a seiche.

With implementation of MM HYD-3, the proposed project would not be a risk for inundation from flooding, tsunami, or seiche. Therefore, impacts related to risk of pollutant release due to inundation would be less than significant with mitigation.

Level of Significance before Mitigation

Potentially Significant

Mitigation Measures

Implement MM HYD-3

Level of Significance after Mitigation

Less Than Significant

Water Quality Control or Sustainable Groundwater Management Plans Consistency

Impact HYD-5:	**The proposed project could conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.**

Construction

For the reasons described above, the proposed project would not conflict with the City's NPDES program. Given that construction for the proposed project would disturb more than one acre of land, the proposed project would be required to comply with the terms of the Construction General Permit, which would require the preparation and implementation of SWPPPs in connection with each individual development proposal within the project site, which would include BMPs to ensure reduction of pollutants from construction activities potentially entering surface waters in accordance with MM HYD-1a. Therefore, construction impacts related to a water quality control plan or GMP consistency would be less than significant with mitigation.

Operation

The project site is located within the San Joaquin Hydrologic Basin Planning Area under the jurisdiction of the Central Valley RWQCB. The proposed project would be required to comply with applicable goals and policies as set forth by the Central Valley RWQCB. The Tracy Regional GMP is the sustainable GMP that would govern development that occurs on the project site. As described in Impact HYD-2, the project site is located within the boundaries of the Tracy Subbasin and has limited potential to adversely impact groundwater recharge rates due to existing poorly drained soils and shallow groundwater levels. Although the City utilizes groundwater from the Tracy Subbasin as part of its water supply, the City's use of groundwater over the last few years has significantly declined, primarily due to the availability of higher-quality surface water supplies from the SCWSP. In the future, although the City can sustainably extract up to 9,000 AFY of groundwater on a continuous basis, the City's use of groundwater under normal hydrologic conditions is anticipated to be lower, as available higher-quality surface water supplies would be utilized first. Assuming normal year

hydrologic conditions, annual groundwater use is anticipated to be 2,500 AFY. This anticipated future groundwater pumpage is significantly below the City's maximum historical groundwater pumpage and the average annual operational yield of 9,000 AFY, and the proposed project would not significantly decrease groundwater supplies because the design of the proposed project's on-site stormwater detention basin includes filters to remove sediments and organic materials that might further reduce groundwater percolation rates.

Given that the City has determined it would have adequate groundwater supplies to serve the project site, the proposed project would not conflict with or obstruct implementation of the relevant water quality control plan or the relevant sustainable GMP. Therefore, operational impacts related to water quality control plan or GMP consistency would be less than significant.

Level of Significance before Mitigation

Potentially Significant

Mitigation Measures

Implement MM HYD-1a

Level of Significance after Mitigation

Less Than Significant

3.10.5 - Cumulative Impacts

Hydrology

Cumulative impacts related to hydrology and water quality typically occur within a defined watershed or basin. Therefore, all cumulative developments within the San Joaquin River Basin including those cumulative projects listed in Chapter 3, Environmental Impact Analysis, Table 3-1, Cumulative Projects, have been considered in this analysis since they are located within the San Joaquin River Basin which eventually drains into the San Joaquin River and ultimately into the Pacific Ocean. All cumulative projects would be required to comply with applicable laws and regulations implemented by the relevant public agencies including the Central Valley RWQCB, as well as relevant policies in the General Plan and other applicable codes, ordinances, and policies, which prevent a project from increasing off-site surface water flow from existing conditions and further ensures that projects adhere to BMPs during construction to prevent pollutants from being carried off-site. Additionally, regional development would be required to comply with applicable regional, State and federal laws and regulations regarding flooding to ensure impacts are less than significant in this regard. These regulations, in combination with implementation of applicable provisions in the General Plan (including, but not limited to, Objective PF-7.3: Policies P1, P2, P3, P4, and P5, Objective PF-7.4: Policy P3, and Objective PF-8.2: Policies, P1, P2, P3, P4), would result in a less than significant cumulative impact related to hydrology.

As discussed in detail above, the proposed project would also be required to comply with applicable laws and regulations implemented by the relevant public agencies including the Central Valley RWQCB, as well as relevant policies in the General Plan, required to demonstrate consistency with the General Plan and other applicable codes, ordinances, and policies related to preventing

pollutants from being conveyed off-site. The combination of the requirement to adhere to these laws, regulations and policies as well as identified BMPs would ensure that the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable. Thus, there would be a less than significant cumulative impact related to hydrology.

Water Quality

The geographic context for consideration of cumulative impacts related to surface water quality is the San Joaquin River Basin. All cumulative projects would involve short-term construction and long-term operational activities that would have the potential to degrade water quality in downstream water bodies, including the San Joaquin River. All cumulative project construction would be required to obtain a Construction General Permit from the State Water Board, which would require preparation of a SWPPP that would control potential discharges of contaminants into the San Joaquin River. These cumulative projects would also be required to prepare a SWMP and comply with the applicable General Plan policies and relevant provisions of the Municipal Code during operation. For these reasons, there would be a less than significant cumulative impact with respect to surface water quality.

The proposed project would also be required to obtain a Construction General Permit from the State Water Board and prepare a SWPPP as well as a SWMP. Similarly, the proposed project would also be mandated to comply with applicable General Plan Policies (including, but not limited to, Objective PF-7.3: Policies P1, P2, P3, P4, and P5, Objective PF-7.4: Policy P3, and Objective PF-8.2: Policies, P1, P2, P3, P4), and applicable provisions of the Municipal Code during operation. For these reasons and as further discussed above, there would be a less than significant cumulative impact related to surface water quality and the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable.

The geographic context for consideration of cumulative impacts related to groundwater quality and management is the Tracy Groundwater Subbasin. All cumulative projects would involve short-term construction and long-term operational activities that would have the potential to impact groundwater quality and management. Construction related to cumulative projects would be required to obtain a Construction General Permit from the State Water Board, which would require preparation of a SWPPP that would control pollutants that could seep into groundwater. Operations of these cumulative projects would be required to comply with all applicable laws and regulations imposed by the relevant public agencies including the Central Valley RWQCB, thereby ensuring that stormwater is pre-treated via bioretention and is otherwise handled pursuant to all applicable standards and requirements to ensure that percolation to the groundwater table would not result in degradation of groundwater quality. In addition, the cumulative projects would include bioretention areas to remove sediments and organic materials that might reduce groundwater percolation rates and other project features that would help facilitate groundwater recharge. For these reasons, there would be a less than significant cumulative impact to groundwater quality.

Similarly, as discussed in detail above, the proposed project would be mandated to comply with applicable General Plan policies and applicable provisions of the Municipal Code, as well as other governing laws and regulations, during operation. For these reasons and as further discussed above,

there would be a less than significant cumulative impact related to groundwater quality and the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable.

Flooding

The geographic context for consideration of cumulative impacts related to flooding is the NEI Specific Plan area. A small portion of the northern part of the NEI Specific Plan area is within the 100-year flood zone and flooding impacts would affect other parcels in the NEI Specific Plan area. According to the General Plan, the City anticipates urban growth in this portion of the City.

As discussed in the General Plan, portions of the City are in a floodplain. Flooding occurs mainly near the northern areas of the City closer to I-205. Cumulative development projects in the floodplain would be required to install stormwater facilities pursuant to applicable standards to ensure projects would not be susceptible to flooding. The City would review cumulative development proposals to ensure they are in accordance with applicable guidelines, ordinances, permitting requirements, including General Plan Policies (including, but not limited to, Objective PF-8.1: Policies P1, P2, P3, P4, P5, P6, P7, Objective PF-8.2: Policies P1, P2, P3, and P4, Objective SA-2.1: Policies P1, P2, P3, and P4). Thus, there would be a less than significant cumulative impact related to flooding.

The proposed project would also be required to install stormwater facilities and prepare a Final Drainage Plan in connection with each individual development proposal, which would be required to adhere to the stringent criteria set forth in the City's Design Standards. For example, the proposed project is incorporating an on-site stormwater detention basin into its design that would adhere to all applicable performance standards to ensure no flooding impacts. For these reasons and as further discussed above, the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable.

Thus, there would be a less than significant cumulative impact related to flooding and the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable.

Level of Cumulative Significance

Less Than Significant

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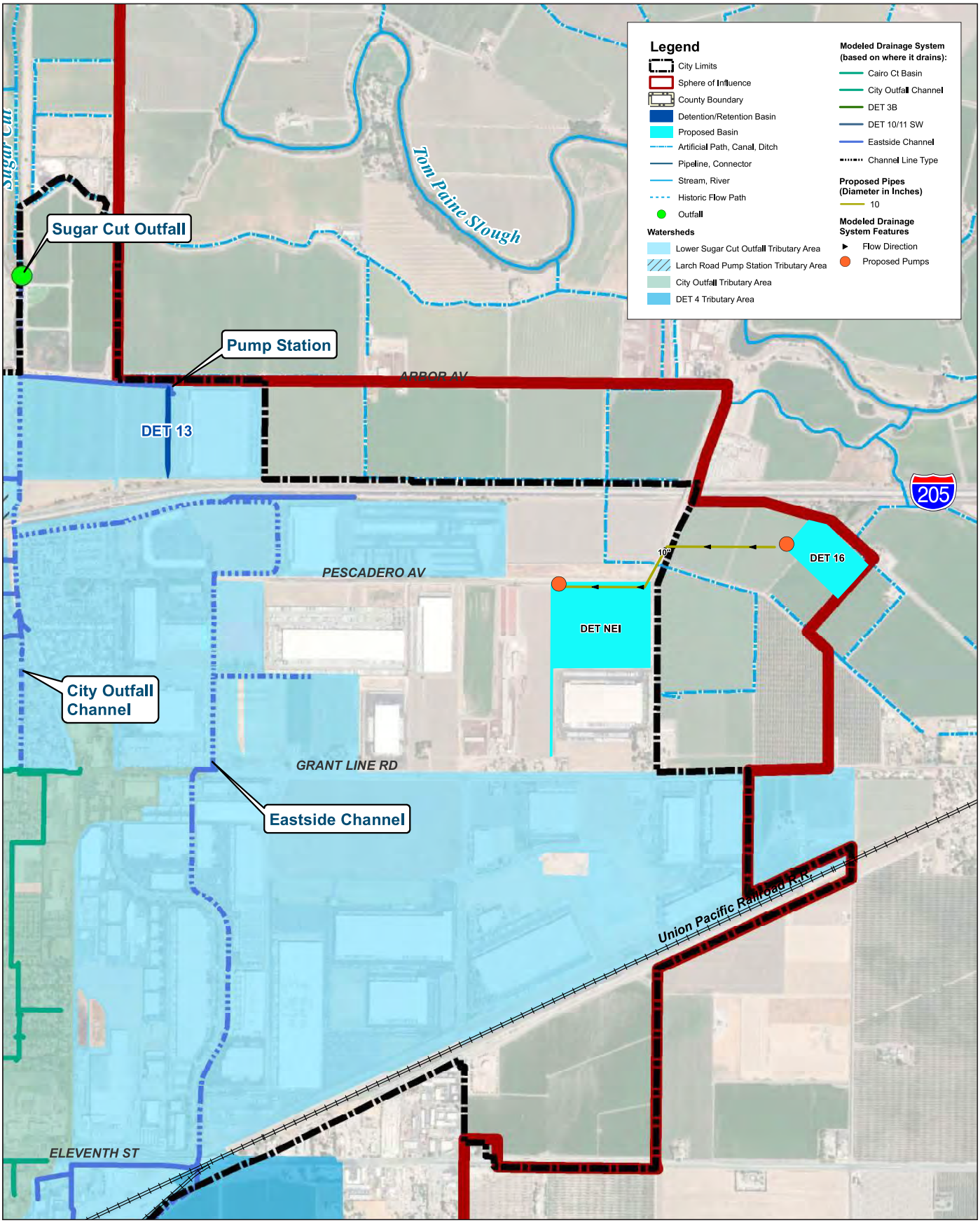

Source: Wood Rodgers, March 2020.

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Exhibit 3.10-1

Drainage Downstream from the Project Site and Location of On-Site Stormwater Detention Basin and NEI Detention Basin

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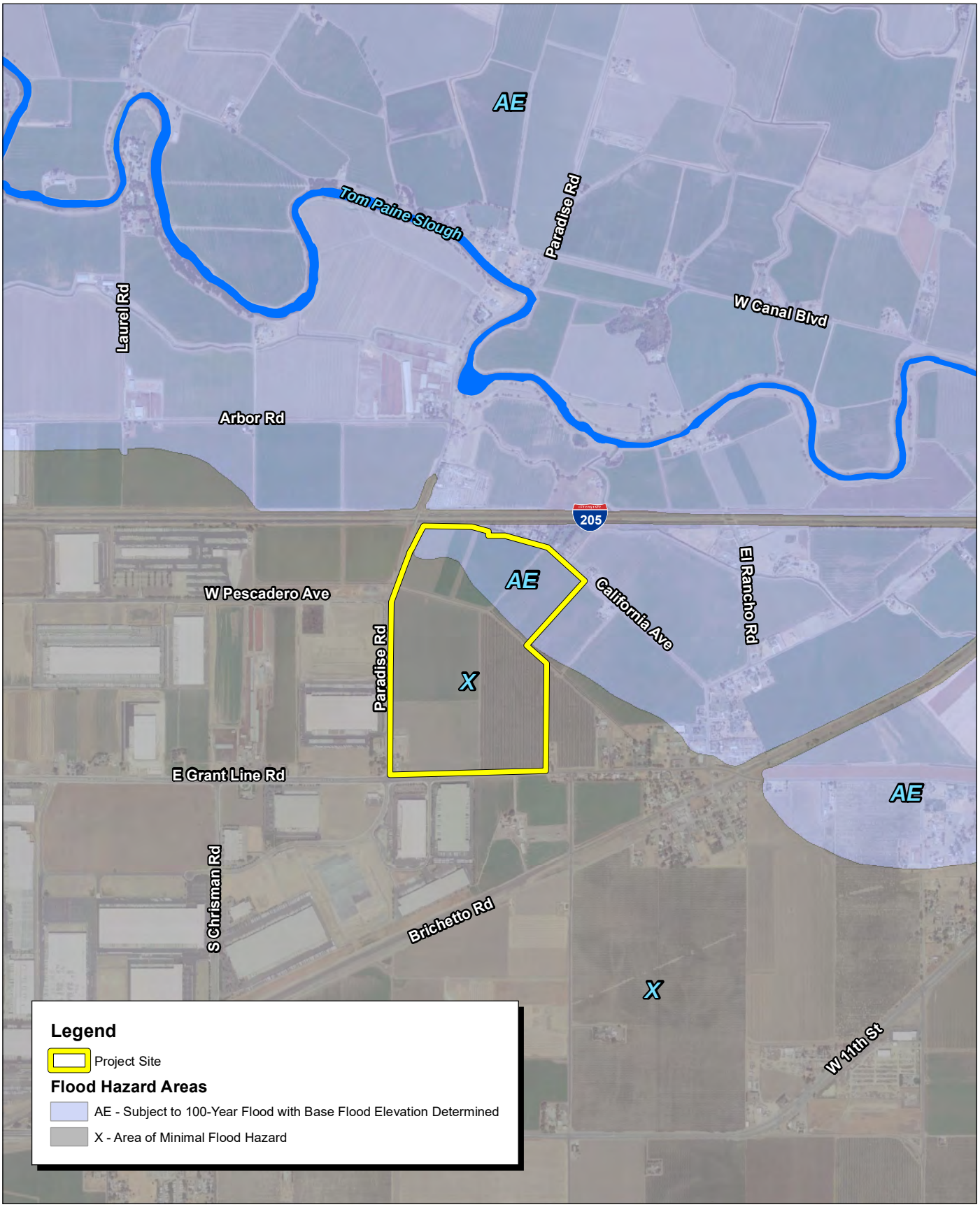

Source: Google Earth Aerial Imagery, August 2018. FEMA NFHL Map Image Data.

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2,000 1,000 0 2,000 Feet

Exhibit 3.10-2
FEMA Flood Map

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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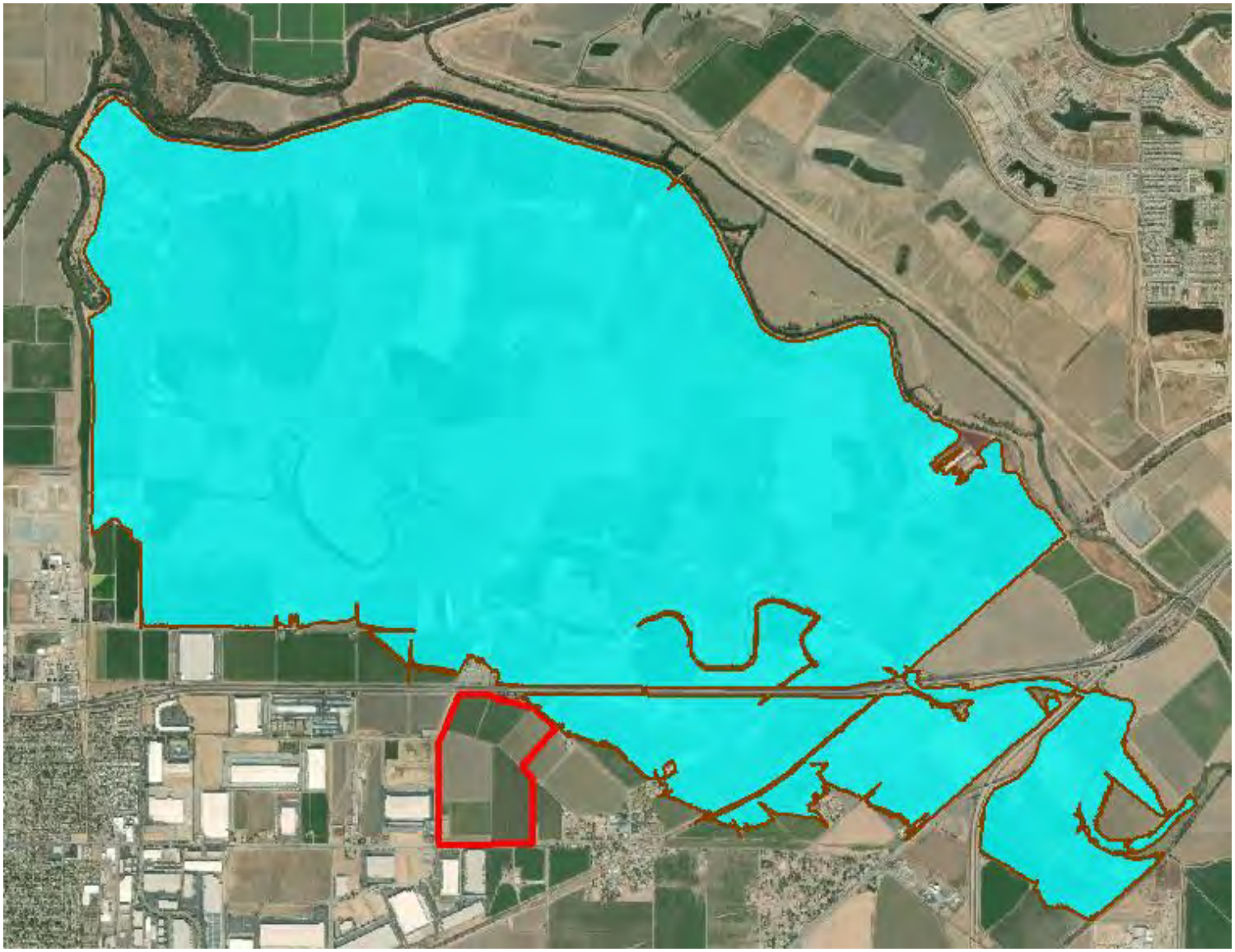

Source: Wood Rodgers, January 13, 2021.

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Exhibit 3.10-3
Regional Flooding below Project Site

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3.11 - Land Use and Planning

3.11.1 - Introduction

This section describes existing conditions related to land use and planning as well as the relevant regulatory framework. This section also evaluates potential impacts related to land use and planning that could result from project implementation. Information included in this section is based, in part, on review of applicable land use policies and regulations, including those within the City of Tracy General Plan (General Plan), Northeast Industrial (NEI) Specific Plan and NEI EIR, San Joaquin County Airport Land Use Compatibility Plan, and San Joaquin County Local Agency Formation Commission (LAFCo) policies. During the Notice of Preparation (NOP) scoping period, the following comments were received related to land use and planning:

- The City should consult with the San Joaquin Council of Governments (SJCOG) to determine whether the proposed project is consistent with the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Projects within the secondary zone of the legal Delta that are consistent with the RTP/SCS are not considered to be a covered action under the Delta Plan.

3.11.2 - Environmental Setting

Physical Land Use

Surrounding Area

To the North

Single-family homes and a cell tower are located north of the project site across California Avenue. A vehicle dealership and agricultural lands are located farther to the north, across Interstate 205 (I-205). Further to the north are additional agricultural lands, some with single-family homes and associated agricultural structures, a dairy operation, and the Tom Paine Slough.

To the East

Agricultural lands with associated single-family homes and agricultural structures are located to the east. Further to the east is the unincorporated community of Banta and additional agricultural lands.

To the South

Light industrial warehouses and agricultural lands with associated single-family homes and agricultural structures are located to the south, across Grant Line Road. Further south are additional agricultural lands and similar associated structures. The Tracy Animal Services Unit lies directly southwest of the site.

To the West

Single-family homes and associated structures and vehicles, a light industrial warehouse, vacant lots, and agricultural lands are located to the west, across Paradise Road. Further west are single-family homes, additional light industrial uses, and a dairy operation.

Project Site

The project site consists of five parcels, as shown in Exhibit 2-3; the five parcels are also listed in Table 2-1. The site is bound by I-205 to the north, California Avenue to the northeast, Grant Line Road to the south, and Paradise Road to the west.

The project site is relatively flat and is currently occupied by two existing residences and agricultural structures as shown in Table 3.11-1. Several private dirt farm roads provide access within the project site between crop fields. In addition, there are streetlights and power and telecommunication lines in various locations immediately surrounding the project site. The project site is designated under the City's General Plan as Industrial, and is designated under the County's General Plan as A/UR.

Table 3.11-1: Age and Square Footage of Existing Structures

Building Identification	Building Use	Approximate Construction Date	Number of Stories	Approximate Square Footage (square feet)
Cattle Storm Shed	Equipment Storage	1960s	1	5,700
Hay Barn	Hay Storage	1960s	1	10,500
Restroom with Floor Drain	Restroom	1950s	1	50
Plywood Shed	Storage	2000s	1	100
Calf Barn	Storage/Debris	1950s	1	1,700
Wooden Shed	Storage/Debris	1950s	1	150
Shop/Garage	Shop/Storage/Debris	1950s	1	1,400
Residence (Vacant)	Vacant	1950s	1	900
Residence Garage	Storage/Automotive Maintenance	1950s	1	650
Residence (Occupied)	Occupied	1930s	1	1,700
Milk Barn	Storage/Debris	1950s	1	2,900

Notes:
Source: Terracon. 2018. Phase I Environmental Site Assessment: Tracy Ridge. December 21.

Land Use Designations and Zoning

Surrounding Area

Exhibits 2-5 and 2-6 in Chapter 2, Project Description, depict land use designations and zoning for surrounding properties, as described below.

To the North

The San Joaquin County General Plan designates the area north of the project site as General Agriculture (A/G). The San Joaquin County Zoning Map zones the area as AG-40.

To the East

The San Joaquin County General Plan designates the area east of the project site as General Agriculture (A/G). The San Joaquin County Zoning Map zones the area as AG-40.

To the South

The San Joaquin County General Plan designates the area south of the project site and outside City limits as General Agriculture (A/G). The San Joaquin County Zoning Map zones the area as AG-40.

The City of Tracy General Plan designates the area south of the project site and inside City limits as Industrial (I). The City of Tracy Zoning Map zones the area as NEI Specific Plan, which designates the area as Light Industrial Land Uses (LI) and General Commercial (GC).

To the West

The City of Tracy designates the area west of the project site as Industrial. The City of Tracy Zoning Map zones the area as NEI Specific Plan, which designates the area as LI and GC.

Project Site

The San Joaquin County General Plan designates the project site as General Agriculture (A/G). The San Joaquin County Zoning Map zones the project site as AG-40. Because the project site is within the City of Tracy's Sphere of Influence (SOI), the Tracy General Plan designates the project site as Industrial (I). However, because it is not within the City's municipal boundaries, there is no City zoning on the project site.

3.11.3 - Regulatory Framework

Regional

Regional Transportation Plan/Sustainable Communities Strategy

The 2018 RTP/SCS (The Plan), published by the SJCOG, is a long-range integrated transportation planning document for San Joaquin County through 2042. The Plan functions as the Sustainable Communities Strategy, mandated by Senate Bill 375, which aims to reduce greenhouse gas (GHG) emissions through investment in roadway operations and maintenance and transit, and the promotion of housing near transit areas. The Plan is a focused update that builds upon the sustainability goals and transportation investment strategies developed in the original 2014 Plan. The Plan focuses on implementation activities that incorporate new technologies and innovations and key socioeconomic, demographic, and development trends from the previous 4 years.

Local

San Joaquin County General Plan

The San Joaquin County General Plan 2035 applies to all unincorporated lands within the County, and includes objectives, policies, and implementation programs that pertain to the following: type of development to be encouraged; where new development should occur; how new and existing residences should be provided with services and utilities; and when development should take place. The County General Plan identifies property in the SOI of each city and identifies that most of the anticipated

growth in the SOI will occur as a result of city annexations and expansions. It can be expected that by 2035 much of the land currently within each city SOI will be annexed into each respective city.

San Joaquin Local Agency Formation Commission

Established by State law in 1963, LAFCo is responsible for coordinating changes in local governmental boundaries, including annexations and detachments of territory; incorporations of cities; formations of special districts; and consolidations, mergers, and dissolutions of districts. LAFCo also reviews ways to reorganize, simplify, and streamline governmental structures. LAFCo also has the authority to initiate proposals involving district consolidation, mergers, and reorganizations. In addition, LAFCo is responsible for reviewing out-of-agency service agreements between property owners and service providers.

LAFCo also develops and updates SOIs for each city and special district within the county. Spheres are planning tools used to provide guidance for individual proposals involving jurisdictional changes, and are intended to encourage efficient provision of community services and prevent duplication of service delivery. Territory must be within a city or district's SOI in order to be annexed.

LAFCo is an independent public agency with countywide jurisdiction, established by State law. LAFCo has approval authority regarding boundary changes in organization to cities and special districts including annexations, detachments, formations, and incorporations. As noted above, LAFCo approval is necessary for changes to a city's municipal limits or a City's SOI. Under the California Environmental Quality Act (CEQA), for purposes of the proposed project, LAFCo is a responsible agency that will consider the information in this Draft EIR in its review of the proposed reorganization.[1]

As detailed in Government Code Section 56668, LAFCo must consider the 17 factors in Government Code Section 56668 when reviewing a proposal for reorganization, as noted further below.

Government Code Section 56668

When reviewing annexation proposal, factors that LAFCo must consider include, but are not limited to the following:

- Population and population density; land area and land use; per capita assessed valuation; topography, natural boundaries, and drainage basins; proximity to other populated areas; the likelihood of significant growth in the area, and in adjacent incorporated and unincorporated areas, during the next 10 years.
- The need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; probable effect of the proposed incorporation, formation, annexation, or exclusion and of alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas.
- The effect of the proposed action and of alternative actions, on adjacent areas, on mutual social and economic interests, and on the local governmental structure of the county.

[1] A reorganization involves two or more proposed boundary changes.

- The conformity of both the proposal and its anticipated effects with both the adopted LAFCo policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities in Government Code Section 56377.
- The effect of the proposal on maintaining the physical and economic integrity of agricultural lands, as defined by Government Code Section 56016 to mean land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program.
- The definiteness and certainty of the boundaries of the territory, the nonconformance of proposed boundaries with lines of assessment or ownership, the creation of islands or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries.
- A regional transportation plan adopted pursuant to Government Code Section 65080, and its consistency with city or county general and specific plans.
- The SOI of any local agency which may be applicable to the proposal being reviewed.
- The comments of any affected local agency or other public agency.
- The ability of the newly formed or receiving entity to provide the services that are the subject of the application to the area, including the sufficiency of revenues for those services following the proposed boundary change.
- Timely availability of water supplies adequate for projected needs as specified in Government Code Section 65352.5.
- The extent to which the proposal will affect a city or cities and the county in achieving their respective fair shares of the regional housing needs.
- Any information or comments from the landowner or landowners, voters, or residents of the affected territory.
- Any information relating to existing land use designations.
- The extent to which the proposal will promote environmental justice.
- Information contained in a local hazard mitigation plan, information contained in a safety element of a general plan, and any maps that identify land as a very high fire hazard zone or maps that identify land determined to be in a State Responsibility Area (SRA).

Additionally, the Commission must measure a proposal's consistency with its adopted policies when reviewing an application for a change of organization or reorganization. The following San Joaquin LAFCo General Standards for Annexation and Detachment are relevant to this analysis:[2]

1. *Spheres and Municipal Service Reviews*

The annexation or detachment must be consistent with the internal planning horizon of the SOI. The land subject to annexation shall normally lie within the first planning increment (5–10 year) boundary. The annexation must also consider the applicable Municipal Service Review. An

[2] San Joaquin County Local Agency Formation Commission (LAFCo). 2012. Change of Organization Policies and Procedures. December 14.

annexation shall be approved only if the Municipal Services Review and the SOI Plan demonstrates that adequate services can be provided with the timeframe needed by the inhabitants of the annexed area. If detachment occurs, the sphere will be modified.

LAFCo generally will not allow spheres of influence to be amended concurrently with annexation proposals. Proposed annexations of land that lie outside of the first planning horizon (5–10 year) are presumed to be inconsistent with the SOI Plan. In such a case, the agency must first request LAFCo to consider a sphere amendment pursuant to the above policies. If the amendment is approved, the agency may then proceed with the annexation proposal. A change of organization or reorganization will not be approved solely because an area falls within the SOI of any agency.

As an exception to the presumed inconsistency mentioned above, Master Plan and Specific Plan developments may span several planning horizons of the SOI. Annexation of the entire project area may be desirable in order to comprehensively plan and finance infrastructure and provide for amenity-based improvements. In these cases, no amendment of the planning horizon is necessary, provided project phasing is recognized in the SOI Plan.

2. Plan for Services

Every proposal must include a Plan for Services that addresses the items identified in Section 56653 of the Government Code. The Plan for Services must be consistent with the Municipal Service Review of the Agency. Proponents must demonstrate that the city or special district is capable of meeting the need for services.

3. Contiguity

Territory proposed to be annexed to a city must be contiguous to the annexing city or district unless specifically allowed by statute. Territory is not contiguous if the only connection is a strip of land more than 300 feet long and less than 200 wide, that width to be exclusive of highways. The boundaries of a proposed annexation or reorganization must not create or result in areas that are difficult to serve.

5. Progressive Urban Pattern

Annexations to agencies providing urban services shall be progressive steps toward filling in the territory designated by the affected agency's adopted SOI. Proposed growth shall be from inner toward outer areas.

6. Piecemeal Annexation Prohibited

LAFCo requires annexations and detachments to be consistent with the schedule for annexation that is contained in the agency's SOI Plan. LAFCo will modify small piecemeal or irregular annexations, to include additional territory in order to promote orderly annexation and logical boundaries, while maintaining a viable proposal. In such cases, detailed development plans may not be required for those additional areas but compliance with CEQA is required.

10. Definite and Certain Boundaries

All boundaries shall be definite and certain and conform to lines of assessment or ownership. The Commission's approval of boundary change proposals containing split parcels will typically be subject to a condition requiring the recordation of a parcel map, lot line adjustment or other instrument to avoid creating remnants of legal lots.

11. Service Requirements

An annexation shall not be approved merely to facilitate the delivery of one or a few services to the detriment of the delivery of a larger number of services or service more basic to public health and welfare.

12. Adverse Impact of Annexation on the Other Agencies

LAFCo will consider any significant adverse effects upon other service recipients or other agencies serving the area and may condition any approval to mitigate such impacts. Significant adverse effects shall include the effect of proposals that negatively impact special districts' budgets or services or require the continuation of services without the provision of adequate funding. LAFCo will not approve detachments from special districts or annexations that fail to provide adequate mitigation of the adverse impact on the district. LAFCo may determine an appropriate temporary mitigation, if any, and impose that temporary mitigation to the extent it is within its powers. If the needed mitigation is not within LAFCo's authority and approval would, in the opinion of the Commission, seriously impair the District's operation, the Commission may choose to deny the application.

13. District's Proposal to Provide New, Different, or Divestiture of a Particular Function or Class of Services

In addition to the Plan for Services specified in Section 2 of these Policies and Procedures any application for a new, different, or divestiture of a service shall also include the requirements outlined in Section 56824.12 of the Government Code. Applications for such request will be considered a change of organization and shall follow the requirements of such an application as outlined in the Cortese-Knox-Hertzberg Act and within these policies and procedures. The factors enumerated in Sections 56668 and 56824.14 of the Government Code shall be considered by the Commission at the time of consideration of the application for such functions.

The following LAFCo General Standards for City Annexations are relevant to this analysis:[3]

1. Annexation of Streets

Annexations shall reflect the logical allocation of streets and right-of-way as follows:

- Territory should be included within the annexation to assure that the city reasonably assumes the burden of providing adequate roads to the property to be annexed. LAFCo will require cities to annex streets where adjacent lands that are in the city will generate additional traffic or where the annexation will isolate sections of county road. Cities shall include all contiguous public roads that

[3] San Joaquin County Local Agency Formation Commission (LAFCo). 2012. Change of Organization Policies and Procedures. December 14.

can be included without fragmenting governmental responsibility by alternating city and county road jurisdiction over short section of the same roadway.

- When a street is a boundary line between two cities the centerline of the street may be used as the boundary or may follow a boundary reached by agreement of the affected cities.

2. Pre-zoning Required

The Cortese-Knox-Hertzberg Act requires the City to pre-zone territory to be annexed, and prohibits subsequent changes to the General Plan and/or pre-zoning designations for a period of two years after completion of the annexation, unless the city council makes a finding at a public hearing consistent with the provisions of Government Code Section 56375. In instances where LAFCo amends a proposal to include additional territory, the Commission's approval of the annexation will be conditioned upon the pre-zoning of the new territory.

The City of Tracy prepared a Municipal Services Review (MSR) for the San Joaquin LAFCo in 2019. The MSR provides the required information for project annexation. As a responsible agency, LAFCo will utilize this Draft EIR to make the CEQA findings required to approve the reorganization proposal for the project, and will utilize the MSR as well as the proposed Plan for Services and other application materials in considering the merits of the reorganization request. A copy of the NOP was sent to LAFCo during the NOP scoping period, and LAFCo did not comment on the proposed project.

San Joaquin County Airport Land Use Compatibility Plan

The SJCOG, which serves as the Airport Land Use Commission (ALUC) for San Joaquin County, amended its Countywide Airport Land Use Compatibility Plan (ALUCP) in 2018. The intention of the Countywide ALUCP is to protect and promote the safety and welfare of residents and airport users near public use airports in the County, while promoting continued operation of those airports. Specifically, the Countywide ALUCP seeks to protect the public from adverse effects of airport noise, ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and ensure that no structures or activities encroach upon or adversely affect use of navigable airspace. A copy of the NOP was sent to SJCOG during the NOP scoping period, and SJCOG did not have comments related the ALUCP.

Regardless of location within the County, ALUC review is required in addition to Federal Aviation Administration (FAA) notification in accordance with Code of Federal Regulations, Part 77, for any proposal for construction or alteration under the following conditions, none of which apply to the proposed project:

a) If requested by the FAA.

b) Any construction or alteration that is more than 200 feet above ground level at its site.

c) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:
   - 100 to 1 for a horizontal distance of 20,000 feet of a public use or military airport from any point on the runway of each airport with its longest runway more than 3,200 feet.
   - 50 to 1 for a horizontal distance of 10,000 feet of a public use or military airport from any point on the runway of each airport with its longest runway no more than 3,200 feet.

- 25 to 1 for a horizontal distance of 5,000 feet of the nearest takeoff and landing area of a public use heliport.

d) Any highway, railroad or other traverse way whose prescribed adjusted height would exceed the above noted standards.

e) Any construction or alteration located on a public use airport or heliport regardless of height or location.

City of Tracy General Plan

The project site is designated under the City's General Plan as Industrial. Primary land uses allowed under this designation consist of flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs (e.g., restaurants, parks, consumers services, etc.).

The General Plan establishes the following guiding goals, objectives and implementing policies associated with land use planning that are relevant to this analysis:

Goal LU-2—Expanded economic opportunities in Tracy

Objective LU-2.1 Balance residential development with jobs, retail growth and the ability to provide services.

Policy

Policy P1 The City's priorities for future growth, in order of priority, are job-generating development to match the skills of Tracy residents; diversification of housing types suitable for Tracy's workforce, including those types suitable for Tracy's workforce; and continued growth of the retail base.

Objective LU-2.3 Expand the City's industrial base.

Policy

Policy P1 The Northeast Industrial Area should contain a mix of heavy industrial, light industrial, warehouse, and distribution users to maximize rail and highway access on large parcels of land. The Northeast Industrial Area should also contain commercial uses and services to meet the daily needs of workers.

Goal LU-6—Land development that mitigates its environmental, design and infrastructure impacts

Objective LU-6.1 Minimize the impact of industrial development or aggregate mining on adjacent uses.

Policies

Policy P1 New industrial or mining uses shall be designed to not adversely impact adjacent uses, particularly residential neighborhoods, with respect to, but not limited to, noise, dust and vibration, water quality, air quality, agricultural resources and biological resources.

Policy P1 Uses that are compatible with the noise, air quality and traffic impacts associated with freeways, such as auto-oriented commercial and industrial uses, should be located near and along freeway corridors whenever possible.

Goal LU-8—No urbanization in unincorporated County areas as defined by this General Plan or the San Joaquin County General Plan, whichever is more restrictive, without annexation to the city, a pre-annexation agreement, or a letter of support from the City.

Northeast Industrial Specific Plan

The NEI Specific Plan describes specific land uses that are Permitted (P) and Conditionally Permitted (C) under each land use designation. All LI uses within the NEI Specific Plan area are subject to compliance with the NEI Specific Plan Environmental Performance Standards. The following table from the NEI Specific Plan shows permitted and conditionally permitted land uses for the LI designation as provided in Table 3.11-2.[4]

Table 3.11-2: Permitted and Conditionally Permitted Land Uses for the Light Industrial Land Uses Designation

Land Uses	Permitted and Conditionally Permitted Land Uses
Agricultural, including dairies	P
Accessory uses and structures; not including warehouses located on the same site as a permitted use	P
Administrative, executive, research, medical offices	P
Call centers	P
Accessory uses and structures located on the same site as a conditional use	C
Warehousing and distribution facilities	P
Manufacturing, repair, assembly, or packaging of products from previously prepared materials, such as cloth, plastic, leather, or semi-precious metals or stones, but not including such operations such as saw or planning mills, any manufacturing involving primary production of wood, metal, or chemical products from raw materials	P
Manufacture of food products, pharmaceuticals, biotechnology products and the like, but not including fish or meat products, sauerkraut, vinegar, or the like, or rendering or refining of fats and oils.	P
Laboratories, including chemical, physical materials testing, electronic, agricultural, photographic film processing, and general research	P
Electrical industrial apparatus manufacturing, service, and repairs, including motors, generators, welding equipment, electrical transmission and distribution equipment, and turbines and pumps.	P
Manufacture, repair of optical electronic, timing, and measuring instruments	P
Dairy products plants	P

[4] City of Tracy. 2012. Northeast Specific Plan. July 17.

Land Uses	Permitted and Conditionally Permitted Land Uses
Machine shops	P
Heating, plumbing, and ventilating equipment manufacturing, servicing, repairs	P
Refrigerator, furnace, water heater, and other household appliance manufacturing, service and repairs, not incidental to retail sales	P
Furniture and cabinet assembling whose activities are carried on entirely within an enclosed building and which have no construction yards on the lot	P
Parcel delivery service and vehicle storage inside and outside the building	P
Truck terminals	P
Mini storage	P
Equipment storage	P
Janitorial services and supplies	P
Printing, including lithographing, engraving, and other such similar reproduction services	P
Automotive supply stores	C
Rental yards, including the rental of hand tools, garden tools, power tools, trucks, trailers, and other similar equipment	C
Building materials sales, lumberyards (outside storage)	C
Repair, painting, and body work for automotive, motorcycle, and farm machinery	C
Boat sales, service, repair	C
Service stations provided all operations except sales of gas and oil are conducted within an enclosed building. Sales shall be limited to petroleum products and automotive accessories, and retail products typically found in a convenience store.	C
Wholesale trade business	C
Intermediate manufacturing uses involving the processing of raw materials, including food and paper processing, wineries, and concrete mixers	C
Mineral and hydrocarbon extraction	C
Recycling (collection and sorting)	C
Note: P = Permitted Use C = Conditional Use that is permitted upon approval of conditional use permit	

There are also use restrictions in the NEI Specific Plan area as outlined below:

No use shall be permitted to exist or operate on any lot which:

1. Emits dust, sweepings, dirt, cinders, fumes, odors, radiation, gases and vapors, or discharges liquid or solid wastes or other harmful matter into the atmosphere or any body of water which

may, according to the appropriate agency, adversely affect the health and safety persons within the area or the health and safety of persons in adjacent areas or the use of adjacent properties.

2. Discharges waste or any harmful substance, as defined by the Municipal Code, into any public sewer or storm drainage system.
3. Produces intense glare or heat, unless such use is performed only within an enclosed or screened area, and then only in such manner that glare, or heat emitted will not be discernible from any exterior lot line.
4. Creates a sound pressure level in violation of any regulation of any public body having jurisdiction. This requirement shall also be applicable to the disposal of trash and waste materials.
5. Allows the visible emissions of smoke (outside any building) other than the exhausts emitted by motor vehicles or other transportation facilities or any emissions in violation of any regulation of any public body having jurisdiction. This requirement shall also be applicable to the disposal of trash and waste materials.
6. Creates a ground vibration that is perceptible, without instruments, at any point along any of the exterior lot lines.

The NEI Specific Plan establishes development standards and design guidelines for projects within its boundaries. For LI uses, this includes a maximum floor area ratio (FAR) of 0.5 and building height of 60 feet. Other relevant standards and guidelines are included below.

Streetscapes

1. The design of the streetscape should integrate, in a consistent and creative manner, plant materials, paths, berming, lighting, and signage to produce an attractive and functional environment.
2. All landscaping should employ a mix of trees, shrubs, groundcovers and turf, where appropriate. The plant palette should be relatively limited and applied in groupings of similar species rather than a few plants of many different species planted together. The use of water conserving plantings, such as California natives and drought tolerant trees, shrubs, and turf is encouraged, and compliance with the State's water efficient landscape guidelines is required.
3. The use of lawn substitutes is encouraged in all medians and for parkways. The use of turf should be minimized and reserved for areas of high use or visibility and temporary median planting in anticipation of future street widths.
4. Automatic irrigation is required for all landscape areas. Plants should be watered and maintained on a regular basis. Irrigation systems should be designed so as not to overspray walks, buildings, and parking areas, etc. The use of water conserving systems, such as drip irrigation for shrub and tree planting, is encouraged.
5. Tree plantings should reflect street hierarchy with larger trees along arterial streets and smaller trees on industrial streets. Tree plantings shall be symmetrical and of the same species in the parkways on both sides of the streets. One tree species or mixture of species shall be planted

consistently at regular intervals along the entire length of a street. Spacing interval shall be no greater than 40 feet on center. Where trees are planted in medians, the plantings shall be continuous and at regular intervals. Spacing of median trees shall be no greater than 30 feet on center. Different tree species shall be planted at intersections to highlight these areas.

6. Adequate sight lines shall be maintained at all times.

Building Setbacks

7. Building setback from any property line adjacent to a street or Caltrans right-of-way shall be 25 feet minimum. Rear and side yard building setbacks from property lines not adjacent to a street or Caltrans right-of-way shall be 15 feet minimum.
8. A 5 foot wide landscape setback is required along property lines not adjacent to a right-of-way. On the property lines perpendicular to the street frontage on industrial streets, the landscaped setback is only required to a point 150 feet onto the parcel from the street right-of-way or 50 feet back of building face, whichever is greater.
4. Parking shall not be permitted within 15 feet of the office face or portion of a building. On industrial buildings, a 15 foot setback to the parking area shall be provided at building entries.

Parking and On-Site Vehicular Circulation

9. Parking, on-site circulation, and loading area standards shall be as required by the provisions of Title 10, Article 26, Off-Street Parking Requirements of the Tracy Municipal Code unless modified below or as part of the Development Review approval.
10. Parking lots containing 10-20 spaces may include a maximum of 20 percent of the total number of spaces for compact cars. These spaces shall be designed and marked in accordance with City standards and distributed throughout the lot. Parking areas containing 20 or more spaces may include a maximum of 30 percent of the total number of spaces for compact cars.

Loading and Unloading Spaces

11. Sufficient off-street loading and unloading spaces shall be provided on each site, and adequate provisions and space shall be made for maneuvering freight vehicles and handling all freight. All loading activity, including turnaround and maneuvering, shall be made on-site.
3. In industrial areas, truck loading areas and docks shall not be permitted between building(s) and the street unless the building(s) are set back from the curb a minimum of 125 feet and doors are screened by landscaping, berms, and/or fences.
4. Buildings, structures, and loading facilities shall be designed and placed upon the site so that vehicles, whether rear loading or side loading, may be loaded or unloaded at any loading dock, door, or area without extending beyond the property line.

Landscaping

Minimum on-site landscaping requirements shall be established by Off-Street Parking Requirements (Title 10, Article 26 of the Tracy Municipal Code), except as modified below.

Summary of Requirements	*Industrial*
Landscaped frontage setback	15 feet
Minimum number of trees in parking area	1 tree per 10 spaces
Percentage of landscaping in parking areas with over 60 cars	10 percent

5. While commercial uses benefit from a well-landscaped parking area and visibility from the street, views of industrial uses benefit from a more generously landscaped streetscape. Thus, parking lot landscaping requirements for industrial uses may be reduced as specified in the Off-Street Parking Requirements in order to create a large landscape setback along the street. These provisions allow the reduction of 50 percent of the required landscaping based on the provision of a 15 foot landscape setback along the street frontage. The 15 foot strip may be included in the calculation of the total parking lot landscaping requirement. The remainder of the landscaping requirement must be distributed over the lot(s) to provide shade and landscape building frontage. Canopy trees shall be evenly distributed throughout the parking area to provide shade.
6. On-site landscaping along right-of-way between property lines and buildings, parking lots, or vehicular circulation improvements shall be installed by the property owner. This landscaping shall be designed as an extension of the adjacent public right-of-way landscaping. Completion of landscaping on the site shall be simultaneous with completion of the building and other improvements on the site.
7. Landscaping shall not obstruct sight lines at street or driveway intersections.
8. In place of the wheel stops at parking lots, landscape areas and pedestrian walkways may be extended not more than 2 feet into required parking spaces, to include a 6-inch concrete curb. In such cases, no credit toward parking lot landscape requirements shall be given for the resulting additional landscaping.
9. Screening of the parking area from public right-of-way in industrial areas shall be provided with a 2.5 to 3-foot-high element, measuring from the top of the parking area pavement. Screening may consist of one or a combination of the following:

   a. Berms landscaped with ground cover, trees, and shrubs;
   b. Solid, low profile, decorative masonry walls;
   c. Evergreen shrubbery which, when solely used as screening, shall be continuously maintained to provide solid screening.
10. Generous landscaping screening is required adjacent on all street frontages for industrial areas. These areas should be landscaped with a combination of trees, shrubs, and ground cover to soften views of parking areas.
11. Tree planting and selection and massing should be compatible with streetscape plantings. Provide minimum one tree per 400 square feet of landscape setback. The plant palette should be relatively limited and applied in groupings of similar species rather than a few plants of many different species planted together.

12. The use of water conserving plantings, such as California natives and drought tolerant trees, shrubs, and turf is encouraged. The use of turf in the narrow planting islands is discouraged.
13. Live plant materials shall be used in all landscaped areas. The use of gravel, colored rock, bark, and other similar materials are not acceptable as a sole groundcover material.
14. All trees shall be of 24 inch box size minimum at planting with a minimum branching height 5 years after installation of 10 feet above road or parking surfaces and 6 feet at pedestrian areas. Shrubs shall be of 5 gallon size minimum with a maximum on-center spacing of 24 inches. Likewise, groundcover may be planted at 1 gallon size minimum with a maximum spacing of 12 inches on center.
15. Automatic irrigation is required for all landscaped areas. Irrigation systems shall be designed so as not to overspray walks, buildings, and parking areas.

Screening and Storage

16. All exterior trash areas, storage structures, and service areas shall be screened from public view with a wall or fence of a minimum height of 8 feet above the street curb level. Storage areas shall be set back a minimum of 50 feet from streets, unless fully enclosed in an architecturally compatible enclosure.
17. No storage areas are allowed within the landscape easements, front setbacks, or side or rear yard landscaped buffers.
18. Roof-mounted equipment shall be screened from street view. Pad-mounted transformers, utility connections, and meter boxes shall be screened and integrated into the site plan.
19. The design of masonry walls, fencing, trash enclosures, and similar accessory site elements should be compatible with the architecture of the building and should use similar materials. Where masonry walls are along property frontage, they should enhance the entrance to the property and should not impair traffic safety by obscuring views. Long expanses of wall surfaces should be architecturally designed to prevent monotony.
20. The use of chain link fences shall be discouraged, and no chain link fences shall be visible from any public right-of-way.

City of Tracy Municipal Code

The Municipal Code regulates land use and development activities within City limits. Title 10 contains the Zoning Ordinance, which establishes zoning districts, allowable land use activities, and development standards. The NEI Specific Plan serves as both a planning and regulatory document (by serving as the zoning) for lands within the NEI Specific Plan area. However, as set forth more fully in the NEI Specific Plan, the City of Tracy Municipal Code supplements the NEI Specific Plan with respect to certain provisions that are not expressly addressed in the NEI Specific Plan.

Northeast Industrial Specific Plan Zoning

The project site would be pre-zoned "Northeast Industrial Specific Plan."[5] The Municipal Code defines this zoning district as such:

> The zoning within the Northeast Industrial Specific Plan Zone is governed by the Northeast Industrial Area Specific Plan. In addition, the I-205 overlay zone applies to portions of this Northeast Industrial Specific Plan zone.

The project site would be pre-zoned LI under the NEI Specific Plan. This land use category/zoning and what it allows are described below:[6]

> Light industrial land uses would be compatible with existing industrial land uses…as well as with freeway noise, and rail noise and vibration.
>
> Several types of light industrial land uses are appropriate in the Northeast Industrial Area. It is anticipated that warehousing and distribution businesses with low employee densities will be the predominant development type. This development pattern is similar to those that have located in Tracy in recent years.
>
> The City of Tracy is also interested in attracting higher employee density businesses to the area. It is anticipated that there may be a future demand for a "Flex-Tech" development that would accommodate research & development businesses and call centers.

The proposed project would be located within the I-205 overlay zone, which was established to maximize the aesthetic appearance of development and the economic development potential of lands along the I-205 corridor. The proposed project would be subject to the development review and conformance to the applicable Citywide Design Standards, including the I-205 overlay zone standards.

Off-Street Parking Requirements

The NEI Specific Plan states that parking standards shall be as required by Chapter 10.08 Article 26 of the Municipal Code, which sets forth required amounts of vehicular and bicycle parking. The Municipal Code requires an industrial warehouse to provide one space per 1,000 square feet of the first 20,000 square feet of gross floor area, plus one space per 2,000 square feet of the second 20,000 square feet of gross floor area, plus one space per 4,000 square feet of the remaining square feet of gross floor area.[7] Additionally, parking lots with over 40 automobile spaces are required to provide bicycle parking at 5 percent of the number of automobile spaces.[8]

[5] As noted in Section 2.0, Project Description, in connection with this pre-zoning, the NEI Specific Plan would be amended to include the project site within the NEI Specific Plan area boundaries (along with other conforming amendments to ensure consistency).
[6] City of Tracy. 2012. Northeast Industrial Specific Plan. July 17.
[7] City of Tracy. 2018. Municipal Code Section 10.08.3480—Parking spaces required.
[8] City of Tracy. Municipal Code Section 10.08.3510—Bicycle parking.

3.11.4 - Impacts and Mitigation Measures

Significance Criteria

The City is utilizing State CEQA Guidelines Appendix G as thresholds of significance for evaluating impacts for the proposed project. According to CEQA Guidelines Appendix G Environmental Checklist, to determine whether impacts related to land use and planning are significant environmental effects, the following questions are analyzed and evaluated. Would the proposed project:

a) Physically divide an established community?
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Approach to Analysis

Analysis in this section focuses on whether project implementation would physically divide an established community and whether the proposed project would conflict with land use plans, policies, or regulations adopted to avoid or mitigate an environmental effect. Conflicts and inconsistencies with a policy, in and of themselves, do not constitute significant environmental impacts for purposes of CEQA. Rather, it is only where (1) there is a conflict or inconsistency that (2) involves a policy that was adopted for the purpose of avoiding or mitigating an environmental effect, and (3) therefore a conflict with such a policy results in a significant environmental impact. Environmental impacts that would result from the proposed project in other environmental topic areas are discussed throughout Chapter 3 of this Draft EIR. The potential for land use impacts was assessed through review of applicable land use policy documents.

Impact Evaluation

Divide an Established Community

Impact LAND-1: The proposed project would not physically divide an established community.

Construction

Impacts related to physical division of an established community are limited to operational impacts. No respective construction impacts would occur.

Operation

The physical division of an already established community typically refers to construction of a linear feature, such as an interstate highway, railroad tracks, or the removal of a means of access that would impact mobility within an existing community and an outlying area. The proposed project consists of multiple industrial warehouse and distribution facilities and related improvements along with other light industrial uses on parcels just outside City limits, but within the City's SOI. The project site is currently developed with agricultural uses, including a few residential structures and multiple accessory agricultural structures. The development of the proposed project would not involve construction of any type of linear feature that would impair mobility with an existing community, nor would it remove a means of access in a manner that would impede travel or otherwise constitute division of an established community. Rather, the proposed project would be designed in accordance with relevant NEI Specific

Plan policies, which would help ensure a cohesive, integrated site and circulation plan, taking into account ready access to nearby transportation corridors. Therefore, impacts would be less than significant.

Level of Significance

Less Than Significant

Conflict with Applicable Plans, Policies, or Regulations

Impact LAND-2:	**The proposed project would not cause a significant environmental impact due to conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**

Construction

Impacts related to consistency with applicable land use plans and policies are limited to operational impacts. No respective construction impacts would occur.

Operation

Local Agency Formation Commission General Standards for Annexation Consistency

Spheres and Municipal Service Reviews

As noted above, the SOI is the plan for the probable physical boundaries and service area of a local agency, as determined by LAFCo. The project site is within the City's existing SOI, and therefore has already been contemplated for future inclusion within the City's municipal boundaries. The City's inclusion of the project site via its designation under the City's General Plan as Industrial is consistent with the land use vision for the proposed project and the SOI.

In addition, this Draft EIR analyzes the proposed project with respect to the 2019 City MSR and demonstrates that adequate services can be provided (see Sections 3.13, Public Services, and 3.16, Utilities and Service Systems). The 2019 MSR analyzed all land within the City's SOI and the project site is identified as being within the City's existing SOI, located in planning subarea 16. The City's MSR update determined that the City would have adequate capacity and funds to support expanded services as part of the anticipated development of the SOI. This included a capital improvement program that identified and planned funds for specific infrastructure improvements and master plans that identified necessary infrastructure upgrades. As noted above, the City has planned for this type of light industrial development on the project site as indicated by its urban General Plan designation of Industrial.

Accordingly, the proposed project would be consistent with the LAFCo policy requiring a Municipal Service Review and Sphere of Influence Plan to demonstrate that adequate services can be provided with the timeframe needed by the inhabitants of the annexed area. As discussed in Section 3.16, Utilities and Service Systems, the City can accommodate wastewater, water, and storm drainage demands of the proposed project, and the proposed project has incorporated as design features the necessary infrastructure and improvements to ensure the proposed project is adequately served by the various City services and utilities and constructed in accordance with all applicable City Master Plans and other requirements and specifications.

Contiguity

The project site is contiguous to the existing City of Tracy limits and the NEI Specific Plan area because it abuts and shares a common boundary with the City. Moreover, the boundaries of the proposed reorganization, which would involve the annexation of the project site into the City's municipal boundaries (along with the related detachment from the Fire District) would not create or result in areas that are difficult to serve, as explained more fully in the 2019 MSR.

Progressive Urban Pattern

The project site is within the City's existing SOI (within the 10-year planning horizon), and would represent a progressive step toward filling in the SOI in this area of the City, consistent with the longtime planning vision of this City for the area as reflected in the City's General Plan, which has designated the project site for industrial uses. Additionally, the project site is adjacent to existing City limits and is furthering outward growth that is not isolated, and would not constitute "leapfrog" development or otherwise facilitate urban sprawl. Rather, the proposed reorganization would reflect a logical and orderly extension of the City's boundaries.

Piecemeal Annexation Prohibited

While the proposed reorganization only involves the project site, it does not reflect a piecemeal annexation approach. The project site has been included within the City's SOI for 29 years, and has been designated for urban development under the City's General Plan for 29 years. The proposed project would be consistent with the General Plan, which provides guidance for development based on anticipated growth in both jobs and the resident population. And as noted above, the proposed reorganization reflects a logical and orderly extension of urban growth and the City's boundaries, which would ensure the project site is developed in a comprehensive and thoughtful manner consistent with other nearby lands in the NEI Specific Plan area.

Definite and Certain Boundaries

It is anticipated that project boundaries that would be presented in the reorganization application would be definite and conform to Assessor's Parcel Number (APN) lines and/or ownership of legal lots and would not contain any split parcels.

Service Requirements

As discussed in detail in the 2019 MSR, the City has the capacity to adequately serve the areas within its municipal boundaries as well its existing SOI. Moreover, the project site is contiguous to the City's municipal boundaries and other existing urban development, which facilitates the efficient extension of existing utilities. As described more fully herein, the proposed project would connect to and/or otherwise utilize existing utility lines for service to the proposed project, and would also construct and/or pay applicable development impact fees toward the construction of identified infrastructure and improvements, consistent with the City's Master Plans. Please refer to Section 3.16, Utilities and Service Systems, for an in-depth discussion on service delivery.

Adverse Impact of Annexation on the Other Agencies

As discussed in detail in the 2019 MSR, the City has the capacity to adequately serve the areas within its municipal boundaries as well its existing SOI without impairing the City's ability to serve existing and

other proposed uses, and the proposed reorganization reflects a logical and orderly extension of service boundaries and would result in the efficient delivery of services. All applicable impact fees would be paid by each co-applicant for individual development proposals within the project site, which would further ensure that new development "pays its own way."

Annexation of Streets

The reorganization proposal reflects a logical and orderly extension of the City's boundaries and would include the annexation of territory such that the circulation plan and street network would not fragment governmental responsibility between the City and the County. For example, Paradise Road, which runs along the project site boundary (from Grant Line Road to I-205) would be annexed into the City as part of the proposed project as shown in Chapter 2, Project Description, Exhibit 2-8a.

Pre-zoning Required

The project site would be pre-zoned NEI Specific Plan and this zoning designation would not be permitted to be changed within two years of the completion of the reorganization.

Airport Land Use Compatibility Plan Consistency

The proposed project is not within the Airport Land Use Compatibility Zone. The proposed project does not reach the standard height and distance from an airport that would require ALUC review and FAA notification.

General Plan Consistency

The County General Plan land use designation for the project site is A/UR. However, with project approval and completion of the related reorganization proposal, the County General Plan would no longer apply to the proposed project, as the project site would be annexed into the City of Tracy. For these reasons, the City is serving as the lead agency and is processing the land use entitlement applications for the proposed project.

That said, the County's A/UR land use designation is designed to identify existing agricultural land intended for future urban development, and therefore the proposed project is consistent in this regard. This is consistent with the existing City of Tracy General Plan land use designation of Industrial for the project site; this reflects the planned urban development vision for the project site, which contemplates a variety of light industrial uses including warehousing and distribution. Therefore, the proposed project is consistent with the City's existing urban land use designation.

One of the factors LAFCo must consider when reviewing a proposal for reorganization is the effect of the proposal on maintaining the physical and economic integrity of agricultural lands, as defined by Government Code Section 56016. Similar to the discussion above, although the proposed project would result in a reduction of agricultural land, the proposed project is consistent with the City of Tracy General Plan land use designation of Industrial for the project site and reflects the planned urban development vision for the project site.

Table 3.11-3 summarizes the proposed project's consistency with relevant goals, objectives, and policies of the City General Plan.

Table 3.11-3: General Plan Consistency Analysis

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
2—Land Use	Objective LU-1.1	Establish a clearly defined urban form and city structure.	**Consistent:** The proposed project contains provisions that address land use, design, infrastructure, and phasing to ensure that development occurs in a logical, orderly, and planned manner. The proposed project represents a logical continuation of the existing and planned development pattern envisioned in the General Plan and the NEI Specific Plan (as amended).
	LU-1.1 P2	The City shall maintain a Sphere of Influence that is consistent with the long-term land use vision in this General Plan.	**Consistent:** The proposed project is contained within the City of Tracy's existing SOI and is consistent with all applicable development regulations, including the NEI Specific Plan (as amended). The proposed project does not propose any amendment of the City's SOI.
	Goal LU-2	Expanded economic opportunities in Tracy.	**Consistent:** The proposed project would generate both temporary and permanent local jobs and thus expand economic opportunities in the City, and is consistent with the planned growth anticipated under the General Plan. In addition, buildout of the proposed project would generate significant tax revenue for the City's benefit.
	Objective LU-2.1	Balance residential development with jobs, retail growth and the ability to provide services.	**Consistent:** The proposed project involves only nonresidential, employment-generating uses that would create significant temporary and permanent local jobs and would therefore contribute to the jobs/housing balance.
	LU-2.1 P1	The City's priorities for future growth, in order of priority, are job-generating development to match the skills of Tracy residents; diversification of housing types suitable for Tracy's workforce, including those types suitable for Tracy's workforce; and continued growth of the retail base.	**Consistent:** As a significant employment-generating use, the proposed project would create a substantial number of temporary and permanent jobs consistent with the skills and availability of the local workforce and assist in fulfilling the City's first priority for growth anticipated by the General Plan. Given the nature of the proposed project, it is anticipated that the employees would

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			likely come primarily from the local job market. Moreover, the proposed project would help to support the City's jobs-to-housing ratio (goal ratio of 1:5) as established by the California Department of Housing and Community Development (HCD); current ratio: 1.3[1,2,3]
	Objective LU-2.3	Expand the City's industrial base.	**Consistent:** The proposed project consists of a significant industrial development, and therefore would expand the City's industrial base consistent with the planned growth anticipated in the General Plan.
	LU-2.3 P1	The Northeast Industrial Area should contain a mix of heavy industrial, light industrial, warehouse, and distribution users to maximize rail and highway access on large parcels of land. The Northeast Industrial Area should also contain commercial uses and services to meet the daily needs of workers.	**Consistent:** The City has already designated the project site as Industrial under its General Plan, and the proposed project would be annexed into the City. In addition, the proposed project involves the amendment of the NEI Specific Plan to incorporate the project site; the proposed project would then be governed by the relevant provisions of this plan and would contribute additional light industrial and warehouse and distribution uses consistent with the land use vision.
	Goal LU-6	Land development that mitigates its environmental, design and infrastructure impacts.	**Consistent:** As detailed herein, development of the proposed project would mitigate, to the extent feasible, its significant environmental and infrastructure impacts. Moreover, project development would meet all of the then-applicable requirements and standards for energy conservation and sustainability to enhance sustainable uses and reduce GHG emissions, decrease water consumption, and energy consumption.
	Objective LU-6.1	Minimize the impact of industrial development or aggregate mining on adjacent uses.	**Consistent:** This Draft EIR analyzes impacts to surrounding areas where applicable and utilizes feasible mitigation measures to minimize or avoid significant or potentially significant environmental impacts to the extent required. Moreover, the proposed project would be developed within the NEI Specific Plan area (as

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			amended) in accordance with the planned industrial vision for these lands.
	LU-6.1 P1	New industrial or mining uses shall be designed to not adversely impact adjacent uses, particularly residential neighborhoods, with respect to, but not limited to, noise, dust and vibration, water quality, air quality, agricultural resources and biological resources.	**Consistent:** Please see Sections 3.12, Noise; Section 3.10, Hydrology and Water Quality; Section 3.3, Air Quality; Section 3.2, Agriculture and Forestry Resources; and Section 3.4, Biological Resources. As discussed in each topical section, the proposed project includes design features and feasible mitigation measures that ensure the proposed project is compatible with adjacent uses. Moreover, the proposed project would be developed within the NEI Specific Plan area (as amended) in accordance with the planned industrial vision for this area.
	LU-6.1 P2	All proposed development shall comply with existing applicable County and State waste management plans and standards.	**Consistent:** The proposed project would participate in commercial solid waste collection provided by the City and be required to comply with all applicable standards and plans. See Section 3.16, Utilities and Service Systems for further discussion.
	LU-6.1 P3	Use of berms, landscaped buffer zones, sound walls, and other similar measures between quarrying operations and noise-sensitive adjacent uses is encouraged to ensure consistency with standards established in City's Noise Element of the General Plan.	**Consistent:** The proposed project does not involve quarrying uses. Furthermore, it would be located at a distance from the nearest sensitive receptor such that noise impacts associated with daily operations would be less than significant and consistent with standards established in the City's Noise Element and Municipal Code. See Section 3.12, Noise, for further discussion.
	LU-6.2 P1	Uses that are compatible with the noise, air quality and traffic impacts associated with freeways, such as auto-oriented commercial and industrial uses, should be located near and along freeway corridors whenever possible.	**Consistent:** The proposed project would house industrial uses and be located adjacent to I-205. The proposed project would include feasible mitigation measures to reduce impacts related to noise, air quality and traffic, as detailed more fully herein.
	LU-6.4 P1	The City shall ensure that development permitting occurs in a manner to provide public safety in flood-prone areas.	**Consistent:** The proposed project would provide a stormwater detention basin that would be designed in accordance with applicable standards and

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			requirements to accommodate 100-year flood flows and convey stormwater off-site via the Eastside Channel to prevent flooding. Please refer to Section 3.10, Hydrology and Water Quality, for additional information.
	Goal LU-8	No urbanization in unincorporated County areas as defined by this General Plan or the San Joaquin County General Plan, whichever is more restrictive, without annexation to the city, a pre-annexation agreement, or a letter of support from the City.	**Consistent:** The project site is currently unincorporated County land but would be annexed into the City of Tracy upon LAFCo approval, consistent with the City's current General Plan land use designation of Industrial for the project site.
	LU-8.1 P1	The City shall strongly oppose all development in the area defined by Goal LU-8 unless the property is annexed, unless there is a pre-annexation agreement, or unless San Joaquin County receives a letter of support from the City of Tracy.	**Consistent:** The project site would be annexed into the City of Tracy upon approval by LAFCo.
	LU-8.1 P3	The City shall support existing San Joaquin County agricultural land use designations in the Planning Area and strongly oppose changes that result in increased urbanization.	**Consistent:** The project site would be annexed into the City of Tracy upon approval by LAFCo, and is designated in the City General Plan for industrial uses. Further, the County land use designation for the site of A/UR identifies and reserves this agricultural land for future urban development.
3—Community Character	Goal CC-1	Superior design quality throughout Tracy.	**Consistent:** The NEI Specific Plan, which would apply to the proposed project, contains development standards and design guidelines that ensure high-quality design and development that would not conflict with applicable regulations governing scenic quality. Refer to Section 3.1, Aesthetics for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
7—Open Space and Conservation	OSC-4.4 P.1	The City of Tracy shall oppose urbanization in lands outside of the Sphere of Influence, with particular emphasis on the preservation of undeveloped lands between the City of Tracy and the adjacent communities of Mountain House and Lathrop.	**Consistent:** The proposed project is located within the City's SOI (10-year planning horizon).
	OSC-5.3 P.6	Future development projects shall consider the following design features, during the Specific Plan, PUD, subdivision, and design/development review: solar access and orientation, natural ventilation, energy efficient landscaping and energy efficient and conserving building design and technologies.	**Consistent:** The proposed project's buildings would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Building Energy Efficiency Standards. These are widely regarded as the most advanced and stringent building energy efficiency standards and compliance would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary.
	PF-1.2 P2	The City shall build and require roadways that are adequate in terms of width, radius and grade to facilitate access by City fire-fighting apparatus, while also maintaining and improving Tracy's neighborhood character and hometown feel.	**Consistent:** The proposed project would be developed within the NEI Specific Plan and would therefore reflect a cohesive circulation plan that adheres to all requirements and standards, including those imposed by the City's Fire Department and the Public Works Improvement Standards for roadway design. All public roads within the project site, including all emergency access roads and any associated gates, would be maintained by the City.
7—Public Facilities and Services	PF-1.2 P5	New developments shall satisfy fire flow and hydrant requirements and other design requirements as established by the Fire Department.	**Consistent:** As part of operation, the proposed project would be required to comply with applicable provisions of the Tracy Municipal Code, the California Building Standards Code (CBC), and the California Fire Code (CFC). Specifically, the proposed project would be required to satisfy the applicable standards for fire safety such as fire flow requirements for buildings, fire hydrant location and distribution criteria, automated sprinkler systems, and fire-resistant building materials. Refer to Section 3.16, Utilities and Service Systems, for additional information.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	PF-2.2 P2	Physical site planning should be used as an effective means of preventing crime. This can be achieved by locating walkways, open spaces, landscaping, parking lots, parks, play areas and other public spaces in areas that are visible from buildings and streets.	**Consistent:** All parking lots and landscaping would be located adjacent to the street with buildings centered in the project site, which would enhance visibility. Project lighting would be provided throughout the site to further provide effective site planning, taking into due consideration appropriate safety concerns.
	Objective PF-8.1	Collect, convey, store and dispose of stormwater in ways that provide an appropriate level of protection against flooding, account for future development and address applicable environmental concerns.	**Consistent:** The proposed project would provide a stormwater detention basin that would be designed to meet all applicable standards and requirements and thus accommodate 100-year flood flows and convey stormwater off-site via the Eastside Channel to prevent flooding. Please refer to Section 3.10, Hydrology and Water Quality, for additional information.
	PF-8.1 P3	New permanent stormwater infrastructure shall be designed to serve dual purposes to the extent possible. This includes the following: • Drainage facilities integrated into recreation corridors with bike paths, sidewalks and landscaping. • Drainage channels integrated with transportation and environmental corridors. Stormwater detention basins shall incorporate active and passive recreation areas where feasible. These areas shall not count toward parks dedication requirements.	**Consistent:** Given the industrial nature of the project vicinity and broader NEI Specific Plan area, there are no recreation or environmental corridors on the project site. The proposed project would provide a stormwater detention basin that would be designed to accommodate 100-year flood flows and convey stormwater off-site via the Eastside Channel. Please refer to Section 3.10, Hydrology and Water Quality, for additional information.
	PF-8.1 P6	Design of storm drainage facilities shall be consistent with State and federal requirements, including National Pollutant Discharge Elimination System (NPDES) requirements.	**Consistent:** The proposed project would develop the stormwater detention basin according to all applicable local, State and federal requirements, including, without limitation, City Municipal Code and General Plan standards as well as NPDES requirements. Refer to Section 3.10 Hydrology and Water Quality and Section 3.16, Utilities and Service Systems for further discussion.
	PF-8.1 P7	Planning for stormwater facilities should consider possible future retrofitting needs associated with	**Consistent:** The proposed project would develop the stormwater detention basin according to all applicable local, State and

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		changing regulations pertaining to stormwater quality, including NPDES requirements.	federal requirements, including, without limitation, City Municipal Code and General Plan standards as well as NPDES requirements. Should these regulations change, the proposed project would be required to retrofit the stormwater detention basin so that it complies with these requirements. Refer to Section 3.10 Hydrology and Water Quality and Section 3.16, Utilities and Service Systems for further discussion.
	PF-8.2 P2	New storm drainage facilities shall meet adopted City standards, including the standards and policies contained in the Storm Water Management Plan, the Storm Drainage Master Plan, and the Parkways Design Manual.	**Consistent:** The proposed project would develop the stormwater detention basin in accordance with the 2012 Storm Drainage Master Plan, and according to all applicable local, State and federal requirements, including City Municipal Code and General Plan standards. Refer to Section 3.10 Hydrology and Water Quality and Section 3.16, Utilities and Service Systems for further discussion.
9—Noise Element	N-1.1 P2	Land uses shall require appropriate interior noise environments when located in areas adjacent to major noise generators.	**Consistent:** The proposed project would be developed in the NEI Specific Plan area, which is planned for industrial uses; in so doing, this type of comprehensive planning helps to alleviate compatibility and adjacency concerns**.** Project land uses would be consistent with surrounding normal noise levels, including other industrial use and interstate noise. Refer to Section 3.12, Noise, for further discussion.
10—Air Quality	Goal AQ-1	Improved air quality and reduced greenhouse gas emissions.	**Consistent:** The proposed project would be subject to various regulatory measures adopted to ensure ambient air quality standards are met to the extent feasible. The proposed project would not be a source of significant toxic or hazardous air pollutants and odors, and was not found to have a significant impact with respect to GHG. Refer to Section 3.3, Air Quality and Section 3.8, Greenhouse Gas, for further discussion.
	AQ-1.2 P1	The City shall assess air quality impacts using the latest version of the CEQA Guidelines and guidelines prepared by	**Consistent:** The proposed project would be subject to various regulatory measures adopted to ensure ambient

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		the San Joaquin Valley Air Pollution Control District.	air quality standards are met. This Draft EIR evaluated the proposed project's potential air quality impacts pursuant to CEQA and San Joaquin Valley Air Pollution Control District (Valley Air District) Guidelines. Refer to Section 3.3, Air Quality, for further discussion.
	AQ-1.2 P4	New development projects should incorporate energy efficient design features for HVAC, lighting systems and insulation that exceed Title 24.	**Consistent:** The proposed project's buildings, including the HVAC, lighting systems, and insulation, would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Building Energy Efficiency Standards. These are widely regarded as the most advanced and stringent building energy efficiency standards and compliance would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary.
	AQ-1.2 P7	Trees should be planted on the south- and west-facing sides of new buildings or building undergoing substantial renovation in order to reduce energy usage.	**Consistent.** Project landscaping trees are included in the project design and would be consistent with the NEI Specific Plan requirements for placing one tree per five parking spaces, and otherwise would comply with all applicable landscaping requirements.

Notes:
[1] California Department of Finance. 2021. City/County Population and Housing Estimates, January 1, 2021.
[2] United States Census. "OnTheMap" Tool. Website: https://onthemap.ces.census.gov/. Accessed August 9,2021.
[3] There were 34,710 jobs and 26,964 dwelling units within the City limits in 2018. This represents a jobs-housing ratio of approximately 1.3, which indicated that there are more jobs than homes in the City.

Northeast Industrial Specific Plan Consistency

Implementation of the proposed project would require an amendment to the NEI Specific Plan to include the project site within its boundaries (and other conforming amendments to ensure consistency). When a project seeks a plan amendment as a component of the project itself, to rectify inconsistency with the existing designation or zoning, the amendment necessitates a legislative policy decision by the City and does not signify a potential environmental effect. As such, the proposed Specific Plan Amendment and pre-zoning, if approved, constitute a self-mitigating aspect of the proposed project that would serve to correct what would otherwise be a conflict.

The proposed project would be designed to incorporate applicable development standards and design guidelines that comply with relevant provisions in the NEI Specific Plan. For example, the individual

development proposal for the Tracy Alliance parcels includes a maximum FAR of 0.5; a maximum height of 60 feet; a minimum setback of 10 feet, all of which comply with the applicable development standards for the LI designation. Land use on the project site would be warehousing or distributing with incorporated office use as permitted for LI (see Table 3.11-1) and/or other light industrial uses that are permitted in the NEI Specific Plan. Accordingly, the proposed project would be consistent with the urban, industrial character of the surrounding NEI Specific Plan area.

Tracy Municipal Code Consistency

Planning and Zoning Code

The project site would be pre-zoned "Northeast Industrial Specific Plan." In connection therewith, the proposed project includes an amendment to the NEI Specific Plan boundaries to incorporate the project site (and other conforming amendments to ensure consistency). With these actions, the provisions of the NEI Specific Plan would serve as zoning for the lands within its boundaries, including the project site. The proposed light industrial, warehouse and distribution uses would be consistent with this zoning.

Development of the proposed project would be required to adhere to all applicable development standards and design guidelines set forth in the NEI Specific Plan and the Municipal Code.

Off-Street Parking Code

Pursuant to Municipal Code Chapter 10.08, Article 26, the proposed project would be required to provide 1,153 automobile spaces and 59 bicycle stalls. The project proposes to meet or exceed these requirements by providing a total of approximately 1,551 automobile parking spaces, 572 trailer parking spaces, and 59 bicycle stalls.

Street Tree Ordinance

Pursuant to Municipal Code Chapter 7.08 Trees and Shrubbery, the applicant of each individual development proposal must submit an application to the Parks and Community Services Department. The Director of Parks and Community Services can authorize or prohibit the tree from being removed and can provide conditions of approval.

Level of Significance

Less Than Significant

3.11.5 - Cumulative Impacts

The geographic scope of this cumulative analysis is the City and its SOI, with a focus on the area surrounding the project site; land use decisions for the proposed project and most other cumulative projects listed in Table 3-1 are made at the City level. Some of the projects listed in Table 3-1 are within County or Caltrans jurisdiction, and land use decisions for those projects are made at the County and State level, respectively. The cumulative setting includes past, present and reasonably foreseeable probable future developments within the City and its SOI.

Development within the City is governed primarily by the City's General Plan and Municipal Code. These guiding regulations and planning documents set forth the land use vision for the community, facilitate logical and orderly development, and ensure consistency with the General Plan as required under State

Planning and Zoning laws. All cumulative developments would be required to be consistent with and conform to these planning documents and governing regulations. For cumulative projects, the lead agency is required to issue findings demonstrating consistency with applicable General Plan and Municipal Code requirements to be approved. Projects listed in Table 3-1 that are within the boundaries of the Tracy Municipal Airport Land Use Compatibility Zone would be required to demonstrate consistency with the applicable airport land use compatibility criteria. For cumulative projects that are within the City's SOI and would be annexed into the City, these would be required to demonstrate consistency with applicable provisions of LAFCo regulations and local LAFCo policies.

For the foregoing reasons, there would not be a significant cumulative impact related to division of an established community to a level of less than significant or conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Moreover, as discussed above, the proposed project would have less than significant land use impacts on an individual level, and would not make a cumulatively considerable contribution to this less than significant cumulative land use impact.

Therefore, the proposed project in conjunction with other past, present, and reasonably foreseeable probable future projects would not result in a cumulatively significant impact related to land use.

Level of Cumulative Significance

Less Than Significant

3.12 - Noise

3.12.1 - Introduction

This section describes the existing noise setting and potential effects from proposed project implementation on the site and its surrounding area. Descriptions and analysis in this section are based, in part, on noise modeling performed by FirstCarbon Solutions. The noise modeling output is included in this Draft Environmental Impact Report (Draft EIR) as Appendix I. No comments were received during the Notice of Preparation (NOP) comment period related to project-generated Noise impacts.

3.12.2 - Environmental Setting

Characteristics of Noise

Noise is generally defined as unwanted or objectionable sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in the extreme, hearing impairment. Noise effects can be caused by pitch or loudness. *Pitch* is the number of complete vibrations or cycles per second of a wave that result in the range of tone from high to low; higher-pitched sounds are louder to humans than lower-pitched sounds. *Loudness* is the intensity or amplitude of sound.

Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit, which expresses the ratio of the sound pressure level being measured to a standard reference level. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of less than 3 dB are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Only audible changes in existing ambient or background noise levels may be considered potentially significant, as explained further below.

The human ear is not equally sensitive to all frequencies within the audible sound spectrum, so sound pressure level measurements can be weighted to better represent frequency-based sensitivity of average healthy human hearing. One such specific “filtering” of sound is called “A-weighting.” A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear. Because decibels are logarithmic units, they cannot be added or subtracted by ordinary arithmetic means. For example, if one noise source produces a noise level of 70 dB, the addition of another noise source with the same noise level would not produce 140 dB; rather, they would combine to produce a noise level of 73 dB.

Noise Descriptors

There are many ways to rate noise for various intervals, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant

rating scales for human communities in the State of California are the L_{eq} and community noise equivalent level (CNEL) or the day-night average level (L_{dn}) based on dBA. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within one dBA of each other and are normally treated as interchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source, as well as ground absorption, atmospheric conditions (wind, temperature gradients, and humidity) and refraction, and shielding by natural and manmade features. Sound from point sources, such as an air conditioning condenser, a piece of construction equipment, or an idling truck, radiates uniformly outward as it travels away from the source in a spherical pattern.

The attenuation or sound drop-off rate is dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in noise models: soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA per each doubling of the distance (dBA/DD) is typically observed over soft ground with landscaping, as compared with a 6 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone, and very hard packed earth. For line sources, such as traffic noise on a roadway, a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3 dBA/DD drop-off rate for hard-site conditions. Table 3.12-1 briefly defines these measurement descriptors and other sound terminology used in this section.

Table 3.12-1: Sound Terminology

Term	Definition
Sound	A vibratory disturbance created by a vibrating object which, when transmitted by pressure waves through a medium such as air, can be detected by a receiving mechanism such as the human ear or a microphone.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

Term	Definition
Ambient Noise	The composite of noise from all sources near and far in a given environment.
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which represents the squared ratio of sound pressure amplitude to a reference sound pressure. The reference pressure is 20 micropascals, representing the threshold of human hearing (0 dB).
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level that approximates the frequency response of the human ear.
Equivalent Noise Level (L_{eq})	The average sound energy occurring over a specified time period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period.
Maximum and Minimum Noise Levels (L_{max} and L_{min})	The maximum or minimum instantaneous sound level measured during a measurement period.
Day-Night Level (DNL or L_{dn})	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m. (nighttime).
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m.
Source: Data compiled by FirstCarbon Solutions (FCS) 2021.	

Traffic Noise

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the Federal Highway Administration (FHWA) community noise assessment criteria, this change is “barely perceptible.” For reference, a doubling of perceived noise levels would require an increase of approximately 10 dBA. The truck mix on a given roadway also has an effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

Stationary Noise

A stationary noise producer is any entity in a fixed location that emits noise. Examples of stationary noise sources include machinery, engines, energy production, and other mechanical or powered equipment

and activities such as loading and unloading or public assembly that may occur at commercial, industrial, manufacturing, or institutional facilities. Furthermore, while noise generated by the use of motor vehicles over public roads is preempted from local regulation, although the use of these vehicles is considered a stationary noise source when operated on private property such as at a construction site, a truck terminal, or warehousing facility. The emitted noise from the producer can be mitigated to acceptable levels either at the source or on the adjacent property through, for example, the use of proper circulation and site planning, setbacks, block walls, acoustic-rated windows, dense landscaping, or by changing the location of the noise producer.

The effects of stationary noise depend on factors such as characteristics of the equipment and operations, distance and pathway between the generator and receptor, and weather. Stationary noise sources may be regulated, for example, at the point of manufacture (e.g., equipment or engines), with limitations on the hours of operation, or with provision of intervening structures, barriers or topography.

Construction activities are a common source of temporary stationary noise. Construction-period noise levels are higher than background ambient noise levels but ultimately cease once construction is complete. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential or concurrent phases would change the character of the noise generated on each construction site and, therefore, would change the noise levels as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.12-2 shows typical noise levels of construction equipment as measured at a distance of 50 feet from the operating equipment.

Table 3.12-2: Typical Construction Equipment Maximum Noise Levels, L_{max}

Type of Equipment	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Impact Pile Driver	95
Auger Drill Rig	85
Vibratory Pile Driver	95
Jackhammers	85
Pneumatic Tools	85
Pumps	77
Scrapers	85
Cranes	85
Portable Generators	82
Rollers	85
Dozers	85
Tractors	84
Front-End Loaders	80
Backhoe	80

Type of Equipment	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Excavators	85
Graders	85
Air Compressors	80
Dump Truck	84
Concrete Mixer Truck	85
Pickup Truck	55
Notes: dBA = A-weighted decibel Source: Federal Highway Administration (FHWA) 2006. Highway Construction Noise Handbook, August.	

Noise from Multiple Sources

Because sound pressure levels in decibels are based on a logarithmic scale, they cannot be added or subtracted in the usual arithmetical way. Therefore, sound pressure levels in decibels are logarithmically added on an energy summation basis. In other words, adding a new noise source to an existing noise source, both producing noise at the same level, will not double the noise level. Instead, if the difference between two noise sources is 10 dBA or more, the louder noise source will dominate, and the resultant noise level will be equal to the noise level of the louder source. In general, if the difference between two noise sources is 0–1 dBA, the resultant noise level will be 3 dBA higher than the louder noise source, or both sources if they are equal. If the difference between two noise sources is 2–3 dBA, the resultant noise level will be 2 dBA above the louder noise source. If the difference between two noise sources is 4–10 dBA, the resultant noise level will be 1 dBA higher than the louder noise source.

Characteristics of Vibration

Groundborne vibration consists of rapidly fluctuating motion through a solid medium, specifically the ground, that has an average motion of zero and in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The effects of groundborne vibration typically only causes a nuisance to people, but in extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room, and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Because of the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels—denoted as LV—and is based on the reference quantity of 1 micro inch per second. To distinguish these vibration levels referenced in decibels from noise levels referenced in decibels, the unit is written as "VdB."

As noted above, although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. When assessing annoyance from groundborne vibration, vibration is typically expressed as rms velocity in units of decibels of 1 micro inch per second, with the unit written in VdB. Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. Human perception to vibration starts at levels as low as 67 VdB. Annoyance due to vibration in residential settings starts at approximately 70 VdB.

Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration. Construction activities, such as blasting, pile driving and operating heavy earthmoving equipment, are common sources of groundborne vibration. Construction vibration impacts on building structures are generally assessed in terms of PPV. Typical vibration source levels from construction equipment are shown in Table 3.12-3.[1]

Table 3.12-3: Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Water Trucks	0.001	57
Scraper	0.002	58
Bulldozer—small	0.003	58
Jackhammer	0.035	79
Concrete Mixer	0.046	81
Concrete Pump	0.046	81
Paver	0.046	81
Pickup Truck	0.046	81
Auger Drill Rig	0.051	82
Backhoe	0.051	82
Crane (Mobile)	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer—Large	0.089	87
Caisson drilling	0.089	87
Vibratory Roller (small)	0.101	88
Compactor	0.138	90
Clam shovel drop	0.202	94

[1] Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Vibratory Roller (large)	0.210	94
Pile Driver (impact-typical)	0.644	104
Pile Driver (impact-upper range)	1.518	112

Notes:
PPV = peak particle velocity
rms = root mean square
VdB = velocity in decibels
Source: Compilation of scientific and academic literature, generated by Federal Transit Administration (FTA) and Federal Highway Administration (FHWA).

The propagation of groundborne vibration is not as simple to model as airborne noise. This is because noise in the air travels through a relatively uniform medium, while groundborne vibrations travel through the earth, which may contain significant geological differences. Factors that influence groundborne vibration include:

- **Vibration source:** Type of activity or equipment, such as impact or mobile, and depth of vibration source;
- **Vibration path:** Soil type, rock layers, soil layering, depth to water table, and frost depth; and
- **Vibration receiver:** Foundation type, building construction, and acoustical absorption.

Among these factors that influence groundborne vibration, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In addition, soil conditions are known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock. Vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and shallow rock seems to concentrate the vibration energy close to the surface, and can result in groundborne vibration problems at large distances from the source. Factors such as layering of the soil and depth to the water table can have significant effects on the propagation of groundborne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As

stated above, this drop-off rate can vary greatly depending on the soil type, but it has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests. The vibration level (calculated below as "PPV") at a distance from a point source can generally be calculated using the vibration reference equation:

$$PPV = PPV_{ref} * (25/D)^n \text{ (in/sec)}$$

Where:

PPV_{ref} = reference measurement at 25 feet from vibration source
D = distance from equipment to the receptor
n = vibration attenuation rate through ground

According to Section 7 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual, an "n" value of 1.5 is recommended to calculate vibration propagation through typical soil conditions.[2]

Existing Noise Levels

Traffic Noise

Background traffic noise levels on local roadways in the vicinity of the project site were calculated based on the background intersection turning volume data provided in the traffic study prepared by Kimley-Horn.[3] Traffic noise levels were modeled using the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108), with the addition of site-specific information such as roadway traffic volumes, roadway active width, source-to-receiver distances, travel speed, noise source and receiver heights, and the percentages of automobiles, medium trucks, and heavy trucks that the traffic is made up of throughout the day, among other variables. The modeled average daily traffic (ADT) volumes were obtained by multiplying the PM peak-hour intersection traffic volumes from the traffic study prepared for the proposed project by a factor of 10. The model inputs and outputs, including the 60 dBA, 65 dBA, and 70 dBA L_{dn} traffic noise contour distances, are provided in Appendix I. A summary of the modeling results is shown in Table 3.12-4.

Table 3.12-4: Background Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 L_{dn} (feet)	Centerline to 65 L_{dn} (feet)	Centerline to 60 L_{dn} (feet)	L_{dn} (dBA) 50 feet from Centerline of Outermost Lane
MacArthur Drive–EB I-580 off-ramps to Pescadero Avenue	20,900	137	291	625	74.3
MacArthur Drive–Pescadero Avenue to Grant Line Road	20,300	134	286	613	74.1
MacArthur Drive–Grant Line Road to Eleventh Street	9,400	85	177	378	71.0

[2] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.
[3] Kimley-Horn, 2020. Tracy Alliance and North East Annexation Area TIA. August.

Roadway Segment	ADT	Centerline to 70 L_{dn} (feet)	Centerline to 65 L_{dn} (feet)	Centerline to 60 L_{dn} (feet)	L_{dn} (dBA) 50 feet from Centerline of Outermost Lane
Grant Line Road–MacArthur Drive to Chrisman Road	19,800	152	322	692	74.5
Grant Line Road–Chrisman Road to Paradise Avenue	11,900	110	230	493	72.3
Grant Line Road–Paradise Road to Chabot Circle	19,400	149	318	683	74.8
Grant Line Road–Chabot Circle to Best Buy Driveway	19,500	149	319	685	74.9
Grant Line Road–Best Buy Driveway to Banta Road	19,300	148	317	680	74.8
Paradise Avenue–Grant Line Road to Project Driveway 3	2,600	< 50	73	156	66.1
Paradise Avenue–Project Driveway 3 to Project Driveway 4	2,000	< 50	62	131	65.0
Paradise Avenue–Project Driveway 4 to Project Driveway 5	1,400	< 50	< 50	104	63.4
Paradise Avenue–north of Project Driveway 5	1,400	< 50	< 50	104	63.4
Chrisman Road–Eleventh Street to Grant Line Road	3,100	< 50	82	176	66.9

Note:
ADT = Average Daily Traffic
dBA = A-weighted decibel
L_{dn} = day/night average sound level
Modeling results do not take into account mitigating features such as topography, vegetative screening, fencing, building design, or structure screening. Rather it assumes a worst-case of having a direct line of site on flat terrain.
Source: FirstCarbon Solutions (FCS) 2021.

Existing Stationary Noise Levels On-site and in Surrounding Area

The project site is currently used for row crop production and there is also one single-family residence that is occupied; therefore existing stationary noise levels on-site are the typical levels of noise generated by agricultural operations and the existing residence.

The project site is roughly bordered to the north by Interstate 205 (I-205) and agricultural lands, including dairy operations; to the east by the unincorporated community of Banta and other residential and industrial uses; to the south by open space; and to the west by open space and agricultural lands . The various land uses in the project vicinity are all point sources of noise that affect the existing noise environment through the generation of noise from, among other things, agricultural operations, truck loading and unloading operations, and landscaping and maintenance equipment activities.

Noise-Sensitive Land Uses

Noise-sensitive land uses generally consist of those uses for which quiet is an essential element of their intended purpose, as well as uses where exposure to noise would result in adverse effects. Residential dwellings are of primary concern, because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Other typical noise-sensitive land uses include hospitals, convalescent facilities, hotels, religious institutions, libraries, and other uses where low noise levels are essential.

On the project site, there is one occupied single-family residence, located in the southwest corner of the project site, which would be demolished with implementation of the project. The closest noise-sensitive land uses adjacent to the project site are a single-family residence located approximately 45 feet east of the project site's southeast boundary, a single-family residence located approximately 80 feet north of the project site's northern boundary, and a single-family residence located approximately 100 feet west of the project site's southwest boundary.

3.12.3 - Regulatory Framework

Federal

Noise Control Act

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce
- Assisting state and local abatement efforts
- Promoting noise education and research

The Federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees.

Among the agencies now regulating noise are the Occupational Safety and Health Administration (OSHA), which limits noise exposure of workers to 90 dB L_{eq} or less for 8 continuous hours or 105 dB L_{eq} or less for 1 continuous hour; the United States Department of Transportation (USDOT), which assumed a significant role in noise control through its various operating agencies; and the Federal Aviation Administration (FAA), which regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the FTA. Transit noise is regulated by the federal Urban Mass Transit Administration, while freeways that are part of the interstate highway system are regulated by the FHWA.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by transportation sources, local jurisdictions are limited to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

Federal Transit Administration Standards and Guidelines

FTA has established industry accepted standards and guidelines for vibration impact criteria and impact assessment. These standards and guidelines are published in its Transit Noise and Vibration Impact

Assessment document.[4] The FTA guidance includes recommended thresholds for construction vibration impacts for various structural categories as shown in Table 3.12-5.

Table 3.12-5: Federal Transit Administration Construction Vibration Impact Criteria

Building Category	PPV (in/sec)	Approximate VdB
I. Reinforced-Concrete, Steel or Timber (no plaster)	0.5	102
II. Engineered Concrete and Masonry (no plaster)	0.3	98
III. Non-engineered Timber and Masonry Buildings	0.2	94
IV. Buildings Extremely Susceptible to Vibration Damage	0.12	90

Notes:
PPV = peak particle velocity
VdB = velocity in decibels
Source: Federal Transit Administration (FTA) 2018. Transit Noise and Vibration Impact Assessment Manual. September.

State

California General Plan Guidelines

Established in 1973, the California Department of Health Services Office of Noise Control was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the "Land Use Compatibility for Community Noise Environments Matrix," which allows the local jurisdiction to delineate compatibility of sensitive uses with various incremental levels of noise.[5]

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. These guidelines rank noise/land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. Consistent with the foregoing, the City of Tracy has established land use compatibility guidelines for determining acceptable noise levels for specified land uses, as described below.

California Environmental Quality Act

The proposed project is also subject to review under the State of California Environmental Quality Act (CEQA). Appendix G of the CEQA Guidelines provides impact thresholds for potential noise and vibration impacts, which are discussed in more detail below.

California Building Standards Code

The State of California has established regulations that help prevent adverse impacts to occupants of buildings located near noise sources. Referred to as the "State Noise Insulation Standard," it requires

[4] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.
[5] California Department of Health Services Office of Noise Control. 1976. "Land Use Compatibility for Community Noise Environments Matrix."

buildings to meet performance standards through design and/or building materials that would offset any noise source in the vicinity of the receptor. State regulations include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings that are intended to limit the extent of noise transmitted into habitable spaces. These requirements are found in the California Code of Regulations, Title 24 (known as the Building Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A.

The proposed project does not include any residential development. Therefore, these standards are not applicable to the proposed project; however, the City of Tracy has established land use compatibility guidelines for determining acceptable noise levels for specified land uses, as described below.

Local

The project site is located within unincorporated area of San Joaquin County, within the City's existing Sphere of Influence (SOI), and requires annexation into the City of Tracy. The City of Tracy addresses noise in the Noise Element of the General Plan[6] and in the Municipal Code.[7]

City of Tracy General Plan

The Noise Element establishes standards to help address noise land use compatibility issues for new development or redevelopment projects and to help limit excessive noise exposure of existing developments. Relevant goals, policies, actions, and standards provided in the Noise Element are considered to provide the basis for decision-makers in determining land use compatibility issues with noise sources associated with proposed developments and redevelopments (including the proposed project) from a planning perspective, and also are considered in connection with CEQA review in determining whether there is a significant impact as well as any necessary mitigation requirements.

Exhibit 3.12-1 shows a summary of different land uses in the City and their associated acceptable and unacceptable noise levels for new developments and redevelopments, as originally presented in Figure 9-3 of the Noise Element. The land use category from this exhibit that would be the most applicable to the proposed project is that of "office buildings, business commercial, and professional" land use because some of the proposed land uses would include office uses. The land use category from this exhibit does not include industrial use, and also, analyzing for compatibility of offices use would provide a more conservative analysis since office is a more sensitive use than industrial use. Accordingly, for purposes of this analysis, the "office buildings, business commercial, and professional" category is utilized. The land use compatibility standards state that environments with ambient noise levels ranging up to 70 dBA L_{dn} are considered "normally acceptable" for new office buildings, business commercial, and professional land use development; environments with ambient noise levels ranging up to 80 dBA L_{dn} are considered "conditionally acceptable" for new office buildings, business commercial, and professional land use development, and new construction should only be undertaken after a detailed

[6] City of Tracy. 2011. City of Tracy General Plan. February 1. Website: https://www.ci.tracy.ca.us/documents/2011_General_Plan.pdf. Accessed April 9, 2020.

[7] City of Tracy. 2019. City of Tracy Municipal Code. December 16. Website: https://library.municode.com/ca/tracy/codes/code_of_ordinances?nodeId=TIT4PUWEMOCO_CH4.12MIRE_ART9NOCO. Accessed April 9, 2020.

analysis of noise reduction requirements are made and needed noise insulation features are included in the design.

The City of Tracy General Plan includes the following goals and policies that address noise and are relevant to this analysis to the proposed project:

Chapter 9, Noise Element

Objective N-1.1: Ensure appropriate exterior and interior noise levels for new land uses.

Policies

Policy P8 Measures to attenuate exterior and/or interior noise levels to acceptable levels shall be incorporated into all development projects. Acceptable, conditionally acceptable and unacceptable noise levels are presented in Figure 9-3 of the Noise Element.

Objective N-1.2: Control sources of excessive noise.

Policies

Policy P1 The City's Noise Ordinance, as revised from time to time, shall prohibit the generation of excessive noise.

Policy P2 Mitigation measures shall be required for new development projects that exceed the following criteria:

- Cause the L_{dn} at noise-sensitive uses to increase by 3 dB or more and exceed the "normally acceptable" level.
- Cause the L_{dn} at noise-sensitive uses to increase 5 dB or more and remain "normally acceptable."
- Cause new noise levels to exceed the City of Tracy Noise Ordinance limits.

Policy P4 All construction in the vicinity of noise-sensitive land uses, such as residences, hospitals, or convalescent homes, shall be limited to daylight hours or 7:00 a.m. to 7:00 p.m. In addition, the following construction noise control measures shall be included as requirements at construction sites to minimize construction noise impacts:

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise-generating construction equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction area.
- Utilize "quiet" air compressors and other construction-related stationary noise sources where such technology exists.

Objective N-1.3: Consider noise issues in the Development Review process.

Policies

Policy P1 Development projects shall be evaluated for potential noise impacts and conflicts as part of the Development Review process.

Policy P2 Significant noise impacts shall be mitigated as a condition of project approval.

Policy P3 New development projects shall have an acoustical specialist prepare a noise analysis with recommendations for design mitigation if a noise-producing project is proposed near existing or planned noise-sensitive uses.

Tracy Municipal Code

Title 4, Chapter 12, Article 9 of the Tracy Municipal Code also contains guidance with the intent to control noise and vibration to promote and maintain the health, safety, and welfare of its residents. The Municipal Code generally prohibits certain activities that have the potential to result in loud, excessive, or unreasonable noise levels. According to section 4.12.750, the general sound level limits for industrial districts during operation are as follows: no person shall cause or allow the creation of any noise to the extent that the one-hour average sound level, at any point on or beyond the boundaries of the property on which the sound is produced to exceed 75 dBA $L_{eq(h)}$.

The noise ordinance section 4.12.820 prohibits the operation of any pneumatic or air hammer, pile driver, steam shovel, derrick, steam, or electric hoist, parking lot cleaning equipment or other appliance, the use of which is attended by loud our unusual noise between the hours of 10:00 p.m. and 7 :00 a.m. Section 4.12.830 requires that all equipment and machinery powered by internal combustion engines shall be equipped with a proper muffler and air intake silencer in good working order.

3.12.4 - Impacts and Mitigation Measures

Significance Criteria

The City has decided, in its discretion, to utilize Appendix G of the State CEQA Guidelines as thresholds of significance for this project. According to Appendix G, Environmental Checklist, of the CEQA Guidelines, noise impacts resulting from the implementation of the proposed project would be considered significant if the project would:

a) Cause a significant environmental impact relating to noise due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?[8]

b) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

c) Generate excessive groundborne vibration or groundborne noise levels?

[8] This significance criteria question is from the Land Use and Planning section of the CEQA Guidelines Appendix G checklist questions. However, since the question addresses impacts related to conflicts with land use plans, which would include project-related conflicts related to noise land use compatibility standards of the General Plan Noise Element, it is also included here.

d) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?

Approach to Analysis

Traffic Noise Modeling Methodology

As noted above, the level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of traffic noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the FHWA community noise assessment criteria, this change is "barely perceptible." Changes of less than 3 dB or less are only perceptible in laboratory environments. Noise level increases of 5 dB or more are considered to be "readily perceptible" to the human ear in outdoor environments. For reference, a doubling of perceived noise levels would require an increase of approximately 10 dBA. The truck mix on a given roadway also has an effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

The FHWA highway traffic noise prediction model (FHWA-RD-77-108) was used to evaluate traffic-related noise conditions in the project vicinity. Traffic data used in the model were obtained from the Transportation Impact Analysis (TIA) prepared for the proposed project by Kimley-Horn. The resulting noise levels were weighed and summed over a 24-hour period in order to determine the CNEL values. The FHWA-RD-77-108 Model arrived at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level. Adjustments were then made to this level to account for the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway); the total ADT; the percentage of ADT that flows during the day, evening, and night; the travel speed; the vehicle mix on the roadway; a percentage of the volume of automobiles, medium trucks, and heavy trucks; the roadway grade; the angle of view of the observer exposed to the roadway; and the site conditions ("hard" or "soft") as they relate to the absorption of the ground, pavement, or landscaping.

The model analyzed the mobile source noise impacts from the nearby roadways on the project vicinity, which consists of the area that has the potential to be impacted by the on-site noise sources, as well as project-generated traffic on the nearby roadways. Analyses of the roadways were based on a single-lane-equivalent noise source combining both directions of travel. A single-lane-equivalent noise source occurs when the vehicular traffic from all lanes is combined into a theoretical single-lane that has a width equal to the distance between the two outside lanes of a roadway, which provides almost identical results to analyzing each lane separately where elevation changes are minimal.

Vibration Methodology

The City of Tracy does not have adopted criteria for construction groundborne vibration impacts. Therefore, the FTA's vibration impact criteria is utilized to evaluate potential vibration impacts resulting

from construction activities. The FTA has established standards for vibration impact criteria and impact assessment. These guidelines are published in FTA's Transit Noise and Vibration Impact Assessment document,[9] and are summarized in Table 3.12-3, in the regulatory discussion above.

Thresholds Utilized for Analysis

Thresholds Utilized for Noise Land Use Compatibility

For purposes of this analysis, the following criteria are used to evaluate the potential impacts of the proposed project as it relates to noise land use compatibility.

- A significant impact would occur if the proposed project would conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The land use compatibility standards state that environments with ambient noise levels ranging up to 70 dBA L_{dn} are considered "normally acceptable" for new office buildings, business commercial, and professional land use development; and environments with ambient noise levels ranging up to 80 dBA L_{dn} are considered "conditionally acceptable" for these types of land use developments.

Thresholds Utilized for Temporary and Permanent Noise Increase Impacts

For purposes of this analysis, the following criteria are used to evaluate the significance of noise and vibration resulting from implementation of the proposed project.

- A significant impact would occur if the proposed project would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, as follows:
  - For temporary construction noise, a significant impact would occur if construction activities would result in a substantial temporary increase in ambient noise levels outside of the City's standard permissible hours for construction (daylight hours or 7:00 a.m. to 7:00 p.m.) that would result in annoyance or sleep disturbance of nearby sensitive receptors.[10]
  - For project-related traffic noise, a significant impact would occur if the proposed project would cause the L_{dn} to increase by 5 dBA or more and remain below "normally acceptable" levels for a receiving land use (as defined in the land use compatibility standards); or by 3 dBA or more, thereby causing the L_{dn} in the project vicinity to exceed normally acceptable levels and result in noise levels that would be considered "conditionally acceptable" (as defined in the land use compatibility standards) for a receiving land use.
  - For project-related stationary operational noise sources, a significant impact would occur if the proposed project would cause the L_{dn} at noise-sensitive uses to increase by 3 dB or more and exceed the "normally acceptable" level, or cause the L_{dn} at noise-sensitive uses to increase 5 dB or more and remain "normally acceptable," or

[9] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

[10] While this threshold is broader than the construction noise restrictions set forth in the City's Municipal Code, the City, in its discretion, utilizes this threshold with respect to temporary noise increases to ensure a conservative analysis.

- For project-related stationary operational noise sources, a significant impact would also occur if the proposed project would cause new noise levels to exceed the City of Tracy Noise Ordinance limits of 75 dBA for any 1-hour average period at any point on or beyond the project boundary.

Thresholds Utilized for Construction and Operational Vibrational Impacts

For purposes of this analysis, the following criteria are used to evaluate the significance of groundborne vibration resulting from implementation of the proposed project. It should be noted that, if groundborne vibration levels do not exceed levels considered to be perceptible, then groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

- A significant impact would occur if the proposed project would generate groundborne vibration levels in excess of applicable standards. The City of Tracy has not adopted criteria for construction groundborne vibration impacts or for operational groundborne vibration impacts that would be applicable to this project.
  - Therefore, for purposes of this analysis, the FTA's construction vibration impact criteria are utilized. The FTA threshold of 0.2 in/sec PPV is the potential damage criteria threshold for buildings of non-engineered timber and masonry construction.
  - For operational impacts, a significant impact will occur if project ongoing activities would produce groundborne vibrations that are perceptible without instruments by a reasonable person at the property lines of the site.

Thresholds Utilized for Airport Noise Impacts

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, a significant impact would occur if the proposed project would expose people working in the project area to excessive noise levels.

3.12.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides feasible mitigation measures where appropriate.

Impact Evaluation

Noise Levels That Would Conflict with Any Land Use Plan, Policy, or Regulation

Impact NOI-1:	**The proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**

A significant impact would occur if the proposed project would conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. As explained in more detail above, the City has determined, in its discretion, that the most appropriate land use category for this project is that of "office buildings, business commercial, and professional" land use, which results in

a conservative analysis. For new office buildings, business commercial, and professional land use development, environments with ambient noise levels ranging up to 70 dBA L_{dn} are considered "normally acceptable"; environments with ambient noise levels ranging up to 80 dBA L_{dn} are considered "conditionally acceptable" for these types of land use developments.

For purposes of determining the existing ambient noise levels, traffic noise is the primary noise source affecting the project site.

As shown in the Existing Noise Levels discussion above, background traffic noise levels on local roadways in the project vicinity were calculated based on the intersection turning volume data provided in the traffic study prepare by Kimley-Horn for the project.[11] Traffic noise levels were modeled using the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). The traffic noise modeling input and output files are included in Appendix I.

As is shown in Table 3.12-4 above, background traffic noise levels in the project vicinity range from approximately 63 dBA to 75 dBA L_{dn} along modeled roadway segments adjacent to the project site as measured at 50 feet from the centerline of the outermost lane. The nearest proposed façade to Grant Line Road would be set back a minimum of 150 feet from the centerline of the outermost travel lane. At this distance, traffic noise levels would attenuate to below 69 dBA L_{dn}

These noise levels are within the City's "normally acceptable" noise land use compatibility range for the relevant type of new industrial land use development. Therefore, implementation of the proposed project would not expose proposed land uses to background traffic noise levels that would conflict with the City's noise land use compatibility standards, and this impact would be less than significant.

Level of Significance

Less than significant impact.

Substantial Noise Increase in Excess of Standards

Impact NOI-2:	**The proposed project could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**

Construction

For purposes of this analysis, a significant impact would occur if construction activities would result in a substantial temporary increase in ambient noise levels outside of the permissible hours for construction (7:00 a.m. to 7:00 p.m.) that would result in annoyance or sleep disturbance of nearby sensitive receptors.

In general, noise impacts from construction activities associated with development of the proposed project would be a function of the noise generated by construction traffic, construction equipment,

[11] Kimley-Horn, 2020. Tracy Alliance and North East Annexation Area TIA. August.

equipment location, sensitivity and location of nearby land uses, and the timing and duration of the construction activities.

Here, as noted above, a significant impact would occur if construction activities would result in a substantial temporary increase in ambient noise levels outside of the permissible hours. Pursuant to applicable City Code requirements as reflected in standard conditions of approval, all project construction would be required to take place within the permissible hours. Accordingly, no significant impact related to construction noise would occur. A discussion of the potential impacts associated with each of these types of activities is provided below for informational purposes.

Construction-related Traffic Noise

During project construction (in which each of the three construction phases are conservatively assumed could occur simultaneously over the same 12-month period), the proposed project would be required to adhere to the above-referenced construction hours and therefore no significant impact would occur.

For informational purposes, the following is noted. Construction noise could result from the increase in traffic flow on local streets, associated with the transport of workers, equipment, and materials to and from the project site. The transport of workers and construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Because project construction workers and construction equipment would use existing routes, noise from passing trucks would be similar to existing vehicle-generated noise on these local roadways. In addition, these trips would not result in a doubling of daily traffic volumes on any of the local roadways in the project vicinity and would thus, as explained more fully above, not result in a perceptible change in existing traffic noise levels. For this reason, intermittent noise from construction trips would be comparatively minor when averaged over a longer time period and would not be expected to result in a perceptible increase in hourly- or daily-average traffic noise levels in the project vicinity.

Construction Equipment Operational Noise

During project construction (in which each of the three construction phases are conservatively assumed could occur simultaneously over the same 12-month period), the proposed project would be required to adhere to the above-referenced construction hours and therefore no significant impact would occur.

For informational purposes, the following is noted. Construction is performed in discrete steps, each of which entails its own mix of equipment, and consequently, its own noise characteristics. These various sequential steps within each phase would change the character of the noise generated on-site. Thus, the noise levels vary as construction progresses. Despite the variety in the types and sizes of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction noise ranges to be categorized by work phase. Table 3.12-2 lists the maximum noise levels recommended for noise impact assessments for typical construction equipment based on a distance of 50 feet between the equipment and a noise receptor.

The site preparation phase, which includes excavation and grading activities, tend to generate the highest noise levels, because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery and compacting equipment, such as bulldozers,

draglines, backhoes, front loaders, roller compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

Construction of the project is expected to require the use of scrapers, bulldozers, water trucks, haul trucks, and pickup trucks. The proposed foundations are expected to involve spread footings, so impact equipment such as pile drivers is not expected to be used during construction of the project. Based on the information provide in Table 3.12-2, the maximum noise level generated by each scraper is assumed to be 85 dBA L_{max} at 50 feet from this equipment. Each bulldozer would generate 85 dBA L_{max} at 50 feet. The maximum noise level generated by graders is approximately 85 dBA L_{max} at 50 feet. Each doubling of sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this step in the construction process would be 90 dBA L_{max} at a distance of 50 feet from the acoustic center of a construction area. This would result in a reasonable worst-case hourly average of 86 dBA L_{eq}. The acoustic center reference is used, because construction equipment must operate at some distance from one another on a project site, and the combined noise level as measured at a point equidistant from the sources would (acoustic center) be the reasonable worst-case maximum noise level. The effect on sensitive receptors is evaluated below.

The nearest off-site noise-sensitive receptor to the proposed construction footprint is the single-family residence located west of the proposed building in the southwest corner of the project site, which would be located approximately 150 feet from the acoustic center of construction activity where multiple pieces of heavy machinery would operate. Again, the acoustic center refers to a point equidistant from multiple pieces of equipment operating simultaneously which would produce the reasonable worst-case maximum noise level. At this distance, construction noise levels at the exterior façade of this nearest residential home would be expected to range up to approximately 80 dBA L_{max}, with a reasonable worst-case hourly average of approximately 76 dBA L_{eq}, intermittently, when multiple pieces of heavy construction equipment operate simultaneously at the nearest construction footprint.

The closest receptor to the eastern portions of the project site where anticipated project development would occur is the single-family residence located southeast of the project site. This receptor would be located approximately 95 feet from the nearest potential construction footprint where multiple pieces of heavy machinery would operate simultaneously. At this distance, construction noise levels at the exterior façade of this residential home would be expected to range up to approximately 84 dBA L_{max}, with a reasonable worst-case hourly average of approximately 80 dBA L_{eq}, intermittently, when multiple pieces of heavy construction equipment operate simultaneously at the nearest construction footprint.

The closest receptor to the northern portions of the project site where future project development would occur is the single-family residence located north of the project site. This receptor would be located approximately 130 feet from the nearest potential construction footprint where multiple pieces of heavy machinery would operate simultaneously. At this distance, construction noise levels at the exterior façade of this nearest residential home would be expected to range up to approximately 82 dBA L_{max}, with a reasonable worst-case hourly average of approximately 78 dBA L_{eq}, intermittently, when

multiple pieces of heavy construction equipment operate simultaneously at the nearest construction footprint.

All of these reasonable worst-case construction noise levels would be required to occur only during permissible work hours, would be intermittent, and would be reduced as equipment moves over the project site further from sensitive receptors. For example, these reasonable worst-case construction noise levels would attenuate to below 65 dBA L_{eq} at a distance of 550 feet. Thus, although there would be single event noise exposure potential causing intermittent noise nuisance from project construction activity, the effect on longer-term (hourly or daily) ambient noise levels, as measured at nearby sensitive receptors, would be small, but could result in annoyance or sleep disturbances at nearby sensitive receptors if construction activities are not limited to daylight hours.

However, implementation of Improvement Mitigation Measure (IMM) NOI-2, requiring compliance with the City's permissible construction hours and implementation of best management noise reduction measures would further ensure that construction noise levels would not result in a substantial temporary increase in ambient noise levels that would result in a violation of the City's applicable construction hours requirements or sleep disturbance of nearby sensitive receptors.

Therefore, with implementation of IMM NOI-2, temporary construction noise impacts would be less than significant.

Operations

The proposed project would result in an increase in traffic on local roadway segments in the project vicinity. In addition, implementation of the proposed project would introduce new stationary operational noise sources to the ambient noise environment in the project vicinity, including parking lot and loading/unloading activity, and new mechanical ventilation equipment operation. The potential for a substantial increase in ambient noise levels resulting from these noise sources is analyzed below.

Traffic (Mobile Source) Noise

For project-related traffic noise, a significant impact would occur if the proposed project would cause the L_{dn} to increase by 5 dBA or more and remain below normally acceptable levels for a receiving land use (as defined in the land use compatibility standards); or by 3 dBA or more, thereby causing the L_{dn} in the project vicinity to exceed normally acceptable levels and result in noise levels that would be considered conditionally acceptable (as defined in the land use compatibility standards, above) for a receiving land use.

Table 3.12-6: shows a summary of the traffic noise levels for Background, Background Plus Project, Cumulative, and Cumulative Plus Project conditions as measured at 50 feet from the centerline of the outermost travel lane.

Table 3.12-6: Traffic Noise Increase Summary

Roadway Segment	Background (dBA) L_{dn}	Background Plus Project (dBA) L_{dn}	Increase Over Background (dBA)	Cumulative (dBA) L_{dn}	Cumulative Plus Project (dBA) L_{dn}	Increase Over Cumulative (dBA)
MacArthur Drive–EB I-580 off-ramps to Pescadero Avenue	74.3	74.6	0.3	74.1	74.1	0.0
MacArthur Drive–Pescadero Avenue to Grant Line Road	74.1	74.4	0.3	74.1	74.1	0.0
MacArthur Drive–Grant Line Road to Eleventh Street	71.0	71.5	0.5	73.2	73.2	0.0
Grant Line Road–MacArthur Drive to Chrisman Road	74.5	75.3	0.8	75.2	75.2	0.0
Grant Line Road–Chrisman Road to Paradise Avenue	72.3	73.5	1.2	73.3	73.9	0.6
Grant Line Road–Paradise Road to Chabot Circle	74.8	75.4	0.6	74.2	74.9	0.7
Grant Line Road–Chabot Circle to Best Buy Driveway	74.9	75.4	0.5	74.3	74.9	0.6
Grant Line Road–Best Buy Driveway to Banta Road	74.8	75.2	0.4	74.2	74.6	0.4
Paradise Avenue–Grant Line Road to Project Driveway 3	66.1	67.6	1.5	70.1	71.5	1.4
Paradise Avenue–Project Driveway 3 to Project Driveway 4	65.0	66.6	1.6	69.8	71.2	1.4
Paradise Avenue–Project Driveway 4 to Project Driveway 5	63.4	64.8	1.4	69.2	70.9	1.7
Paradise Avenue–north of Project Driveway 5	63.4	64.8	1.4	69.2	70.9	1.7
Chrisman Road–Eleventh Street to Grant Line Road	66.9	66.9	0.0	75.4	75.7	0.3

Notes:
dBA = A-weighted decibel
Ldn = day/night average sound level
Source: FirstCarbon Solutions (FCS) 2019.

As shown in Table 3.12-6, the highest traffic noise level increase with implementation of the proposed project would occur along Paradise Avenue, under Cumulative Plus Project conditions. Along this roadway segment, the proposed project would result in an increase in traffic noise levels of 1.7 dBA over cumulative conditions without the project. The resulting noise levels for this roadway segment would be 70.9 dBA L_{dn} as measured at 50-feet from the centerline of the outermost travel lane under cumulative plus project conditions. These noise levels would be considered “conditionally acceptable” under the

relevant land use category. Thus, the applicable significance criteria would be a 3 dBA increase. This greatest increase in traffic noise levels is well below the 3 dBA increase that would be considered a substantial permanent increase in noise levels compared with noise levels that would exist without the proposed project. Therefore, project-related traffic noise levels would not result in a substantial permanent increase in traffic noise levels in excess of applicable standards, and would represent a less than significant impact.

Stationary Operational Noise

For project-related stationary operational noise sources, a significant impact would occur if the proposed project would cause the L_{dn} at noise-sensitive uses to increase by 3 dB or more and exceed the "normally acceptable" level, or cause the L_{dn} at noise-sensitive uses to increase 5 dB or more and remain "normally acceptable," or cause new noise levels to exceed the City of Tracy Noise Ordinance limits of 75 dBA for any one-hour average period at any point on or beyond the project boundary.

Parking Lot Activities

Typical parking lot activities include people conversing, doors shutting, and vehicles idling which generate noise levels ranging from approximately 60 dBA to 70 dBA L_{max} at 50 feet. These activities are expected to occur periodically throughout the day,[12] as visitors and staff arrive and leave parking lot areas at the project site.

Assuming compliance with applicable minimum setback requirements for all parcels within the project site (which would serve as buffers from nearby sensitive receptors), the acoustic center of proposed parking areas would be more than 50-feet from project property lines that adjoin other properties. Assuming a reasonable worst-case scenario of one parking movement for every parking stall within a single hour would result in an hourly average noise level of 59 dBA L_{eq} as measured at the project boundary adjoining other properties. These noise levels are well below the City's hourly average noise level threshold of 75 dBA $L_{eq(h)}$. Therefore, proposed parking lot activity noise levels would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of the City's established noise performance threshold.

The nearest noise-sensitive receptor to the proposed parking areas of the western parcels is the single-family residence located west of the project site near the intersection of Grant Line Road and Paradise Avenue, which would be located approximately 180 feet from the acoustic center of the nearest parking area. At this distance, assuming a reasonable worst-case scenario of one parking movement for every parking stall ever hour of the day would result in day-night average noise level of 50 dBA L_{dn} as measured at the nearest residential façade. This is well below the City's "normally acceptable" threshold of 60 dBA L_{dn} for residential land uses. This is also below the existing traffic noise levels along roadway segments adjacent to this receptor, based on the traffic noise modeling results shown in Table 3.12-4. Therefore, parking lot noise levels would not exceed existing ambient noise levels as measured at the nearest residential receptor and would not result in a substantial permanent increase in ambient noise levels in the project vicinity above the applicable standard. Because the proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in

[12] This analysis conservatively takes into account the 24-hour/day, 7 day/week anticipated operational schedule.

excess of standards established in the local general plan or noise ordinance, the impact of noise produced by project-related parking lot activities to off-site sensitive receptors would be less than significant.

Mechanical Equipment Operations

At the time of preparation of this analysis, details were not available pertaining to the specific rooftop mechanical ventilation systems that would be installed for the project; therefore, a reference noise level for typical rooftop mechanical ventilation systems was used. Based on current market equipment specifications for this type of industrial use, noise levels from typical commercial-grade rooftop mechanical ventilation equipment operations can range up to approximately 60 dBA L_{eq} at a distance of 25 feet.

Assuming compliance with applicable minimum setback requirements for all parcels within the project site (which would serve as buffers from nearby sensitive receptors), proposed rooftop mechanical ventilation systems would be setback by more than 50 feet from project property lines that adjoin other properties. At this distance, hourly average noise levels from operation of these systems would attenuate to below 54 dBA L_{eq} as measured at the nearest project boundary adjoining other properties. These noise levels are well below the City's hourly average noise level threshold of 75 dBA $L_{eq(h)}$. Therefore, proposed rooftop mechanical ventilation system operational noise levels would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of the City's established noise performance threshold.

The nearest noise-sensitive receptor to proposed rooftop mechanical ventilation systems on the western parcels is the single-family residence located west of the project site near the intersection of Grant Line Road and Paradise Avenue, which would be located approximately 320 feet from the nearest location where rooftop mechanical ventilation systems could be installed. At this distance, hourly average noise levels from operation of proposed ventilation systems would attenuate to below 22 dBA L_{eq} as measured at the nearest residential façade. Assuming a reasonable worst-case scenario of the ventilation system operating ever hour of the day would result in day-night average noise level of 35 dBA L_{dn} as measured at the nearest residential façade. This is well below the City's "normally acceptable" threshold of 60 dBA L_{dn} for residential land uses. This is also below the existing traffic noise levels along roadway segments adjacent to this receptor, based on the traffic noise modeling results shown in Table 3.12-4 above. Therefore, noise levels from proposed mechanical ventilation equipment operations would not exceed existing ambient noise levels as measured at the nearest residential receptor and would not result in a substantial permanent increase in ambient noise levels in the project vicinity above the applicable standard. Because the proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the project vicinity in excess of applicable standards established in the local general plan or noise ordinance, the impact of noise produced by proposed mechanical ventilation equipment operations to off-site sensitive receptors would be less than significant.

Truck Loading Activities

Noise would also be generated by truck loading and unloading activities at the loading docks of the proposed industrial buildings.[13] Typical noise levels from truck loading and unloading activity can range from 70 dBA to 80 dBA L_{max} as measured at 50 feet.

Assuming compliance with applicable minimum setback requirements for all parcels within the project site (which would serve as buffers from nearby sensitive receptors), proposed truck loading areas would be setback more than 100 feet from nearest project property line adjoining other properties. Assuming a reasonable worst-case scenario of a truck loading event for every proposed truck loading dock within a single hour would result in an hourly average noise level of 67 dBA L_{eq} as measured at the project boundary adjoining other properties. These noise levels are well below the City's hourly average noise level threshold of 75 dBA $L_{eq(h)}$. Therefore, proposed truck loading activity noise levels would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of the City's established noise performance threshold.

The nearest noise-sensitive receptor to the proposed truck loading areas of the western parcels is the single-family residence located west of the project site near the intersection of Grant Line Road and Paradise Avenue, which would be located approximately 400 feet from the nearest truck loading areas. At this distance, assuming a reasonable worst-case scenario of a truck loading event for every truck loading dock every hour of the day would result in day-night average noise level of 60 dBA L_{dn} as measured at the nearest residential façade. Therefore, truck loading activities would not result in an increase in noise levels at the nearest sensitive receptor in excess of 5 dBA above the City's "normally acceptable" threshold of 60 dBA L_{dn} for residential land uses. This is also below the existing traffic noise levels along roadway segments adjacent to this receptor, based on the traffic noise modeling results shown in Table 3.12-4 above. Therefore, truck loading noise levels would not exceed existing ambient noise levels as measured at the nearest residential receptor and would not result in a substantial permanent increase in ambient noise levels in the project vicinity above the applicable standard. Because the proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, the impact of noise produced by project-related truck loading activities to off-site sensitive receptors would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact

Improvement Mitigation Measures

IMM NOI-2 To reduce potential construction noise impacts, the following multi-part Improvement Mitigation Measure (IMM) shall be implemented for the project:

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

[13] This analysis conservatively takes into account the 24-hour/day, 7 day/week anticipated operational schedule.

- Locate stationary operational noise-generating equipment as far as feasible from sensitive receptors when sensitive receptors adjoin or are near a construction area. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site to the extent feasible.
- Utilize "quiet" air compressors and other stationary operational noise sources where such technology exists and is commercially practicable.
- The construction contractor shall prohibit unnecessary idling (i.e., idling in excess of 5 minutes) of internal combustion engines.
- The construction contractor shall, to the maximum extent practicable, locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- The construction contractor shall ensure that all construction activities that would occur within 550 feet of a residential land use property line shall be limited to daylight hours or to the hours of 7:00 a.m. and 7:00 p.m.

Groundborne Vibration/Noise Levels

Impact NOI-3: The proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.

A significant impact would occur if the proposed project would generate groundborne vibration or groundborne noise levels in excess of applicable standards. The City of Tracy has not adopted criteria for construction groundborne vibration impacts or for operational groundborne vibration impacts that would be applicable to this project. Therefore, for purposes of this analysis, as noted above, the City, in its discretion, elects to utilize the FTA's construction vibration impact criteria are utilized. The FTA threshold of 0.2 in/sec PPV is the potential damage criteria threshold for buildings of non-engineer timber and masonry construction. For operational impacts, a significant impact would occur if project ongoing activities would produce groundborne vibrations that are perceptible without instruments by a reasonable person at the property lines of the site.

Construction

The City of Tracy has not adopted criteria for construction groundborne vibration impacts. Therefore, for purposes of this analysis, as noted above, the City, in its discretion, elects to utilize the FTA's vibration impact criteria are utilized. The FTA has established industry accepted standards and guidelines for vibration impact criteria and impact assessment. This guidance is published in the agency's Transit Noise and Vibration Impact Assessment document.[14] Therefore, for purposes of this analysis, a significant impact would occur if the proposed project would generate groundborne vibration or groundborne noise levels in excess of the FTA impact assessment criteria for construction (0.2 in/sec PPV for non-engineer timber and masonry buildings).

[14] Federal Transit Administration (FTA) 2018. Transit Noise and Vibration Impact Assessment Manual. September.

Groundborne noise is generated when vibrating building components radiate sound, or noise generated by groundborne vibration. In general, if groundborne vibration levels do not exceed levels considered to be perceptible, then groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels. It should be noted that the analysis below demonstrates that groundborne vibration levels would be less than significant, and therefore, it can reasonably be concluded that groundborne noise impacts would therefore be similarly less than significant.

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of a construction site respond to these vibrations with varying results ranging from no perceptible effects at the low levels, to slight damage at the highest levels. As shown in the Setting section above, Table 3.12-3 provides approximate vibration levels for various construction activities.

Impact equipment, such as pile drivers, are not expected to be used during construction of the project given the nature of the project and site conditions. Therefore, of the variety of equipment used during construction of this component of the project, the small vibratory rollers that would be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Small vibratory rollers produce groundborne vibration levels ranging up to 0.101 in/sec PPV at 25 feet from the operating equipment.

The nearest off-site structure to where the heaviest construction equipment would operate during construction of the proposed structures on the western parcels is the barn structure located west of the project site near the intersection of Grant Line Road and Paradise Avenue. This structure would be located approximately 150 feet from the nearest construction footprint where a small vibratory roller would operate. At this distance, operation of a small vibratory roller could result in groundborne vibration levels up to 0.007 in/sec PPV. This is well below the FTA's damage threshold criteria of 0.2 PPV for non-engineer timber and masonry buildings.

The western and northern parcels do not, as of the time of this analysis, have planned construction footprints based on detailed individual development proposals. However, for purposes of a conservative analysis, it assumes that construction activity, such as site preparation, could occur adjacent to the project site boundaries. Therefore, the nearest off-site structure is located over 45 feet from the project site boundary. Therefore, operation of a small vibratory roller at the nearest project boundary could result in groundborne vibration levels up to 0.04 in/sec PPV. This also is well below the FTA's damage threshold criteria of 0.2 PPV for non-engineer timber and masonry buildings.

Therefore, construction activities would not result in generation of excessive groundborne vibration levels at receptors in the project vicinity and construction-related groundborne vibration impacts to off-site receptors would be less than significant.

Operation

The City of Tracy has not adopted criteria for operational groundborne vibration impacts that is applicable to the project. Therefore, for purposes of this analysis, a significant impact would occur if project ongoing activities would produce groundborne vibrations that are perceptible without instruments by a reasonable person at the property lines of a site. Implementation of the proposed project would not include any permanent sources of vibration that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the vicinity of the project site; this is given the nature of the project and the type of proposed on-site operations (parking lot and truck loading/unloading activity) which, due to distance to off-site receptors, would be less-than-perceptible without instruments as measured at sensitive receptors in the project vicinity. Therefore, operational groundborne vibration impacts would be less than significant.

Level of Significance

Less Than Significant Impact

Excessive Noise Levels from Airport Activity

Impact NOI-4:	**The proposed project would not expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.**

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, a significant impact would occur if the proposed project would expose people working in the project area to excessive noise levels.

The project site is not located within the vicinity of a private airstrip. Additionally, there is not a private airstrip located within a 5-mile radius of the project. The closest public airport is the Tracy Municipal Airport located 5.3 miles southwest of the project site. The project site is also not located within the 55 dBA CNEL airport noise contours of any public or public use airport. As such, operation of the proposed project would not expose people working at the project site to excessive noise levels associated with public airport or public use airport noise. Therefore, no impact related to exposure of persons residing or working at the project site to excessive noise levels associated with airport activity would occur.

Level of Significance

Less Than Significant Impact

3.12.6 - Cumulative Impacts

The geographic scope for the cumulative analysis for noise and vibration impacts is limited to areas within 1,000 feet of the project site boundary for on-site noise sources, because of the localized nature of noise and vibration impacts. This analysis first evaluates whether the impacts of cumulative development could result in a cumulatively significant noise or vibration impact. If there is a cumulative significant impact, this analysis then considers whether the incremental contribution of the impacts

associated with the implementation of the proposed project would be cumulatively considerable. Both conditions must apply for the project's cumulative effects to rise to the level of significance.

Noise Land Use Compatibility Consistency

Cumulative development would be required to comply with all applicable design review regulations directing the siting, design, and insulation of new development and redevelopment and all applicable noise policies, standards and requirements in the General Plan and Municipal Code, which would ensure that noise impacts are less than significant. Combined cumulative year traffic noise levels along modeled roadway segments in the project vicinity would result in noise levels that the City of Tracy considers to be "normally acceptable" for the relevant land use category (with projected traffic noise levels attenuating due to distance to below 70 dBA L_{dn} at the nearest existing or proposed façades). This is the only noise land use compatibility category that would apply to existing and planned development for parcels adjacent to the modeled roadway segments. Therefore, cumulative traffic noise impacts would be less than significant because it would not result in traffic noise levels that would conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Because there is not a cumulative significant traffic noise impact to existing or planned land uses in the project vicinity, even under cumulative plus project traffic conditions, the incremental contribution of project traffic would also not be cumulatively considerable.

Construction Noise

As noted above, the geographic scope of the cumulative noise analysis is the project vicinity, including surrounding sensitive receptors. Noise impacts tend to be localized; therefore, the area surrounding the project site (approximately 1,000 feet) would be the area most affected by proposed project activities. Cumulative development would be required to comply with all applicable construction hour requirements and would also be anticipated to incorporate appropriate Best Management Practices (BMPs) to help reduce construction noise. design review regulations directing the siting, design, and insulation of new development and redevelopment and all applicable noise policies, standards and requirements in the General Plan and Municipal Code, which would ensure that noise impacts are less than significant.

Because there is not a cumulative significant construction noise impact to existing or planned land uses in the project vicinity, the incremental contribution of project construction noise would not be cumulatively considerable.

Therefore, the proposed project would result in a less than significant cumulative impact related to construction noise.

Operational Traffic Noise

If there is an identified cumulative traffic noise impact in the project vicinity, and if the proposed project would result in an incremental contribution to an identified cumulative traffic noise impact, then the project's impact would be cumulatively considerable.

However, as shown in the Land Use Compatibility Consistency discussion above, combined cumulative year traffic noise levels along modeled roadway segments in the project vicinity would result in noise levels that the City of Tracy considers to be "normally acceptable" for existing and planned land use development along modeled roadway segments in the project vicinity. Therefore, cumulative traffic noise levels would be a less than significant impact for existing and planned development in the project along modeled roadway segments in the project vicinity.

Because there is not a cumulative significant traffic noise impact to existing or planned land uses in the project vicinity, even under cumulative plus project traffic conditions, the incremental contribution of project traffic would also not be cumulatively considerable.

Operational Stationary Noise

For stationary operational noise sources, a significant impact would occur if the cumulative projects would cause the L_{dn} at noise-sensitive uses to increase by 3 dB or more and exceed the "normally acceptable" level, or cause the L_{dn} at noise-sensitive uses to increase 5 dB or more and remain "normally acceptable," or cause new noise levels to exceed the City of Tracy Noise Ordinance limits of 75 dBA for any one-hour average period at any point on or beyond the project boundary.

The source of operational stationary noise within 1,000 feet of the project site that would produce the highest noise levels would be truck loading activities. Existing truck loading facilities in the project vicinity are setback more than 100 feet from receptors on adjoining properties. Assuming compliance with applicable minimum setback requirements for all parcels within the project site, proposed truck loading areas would also be setback more than 100 feet from receptors on adjoining properties. Assuming a reasonable worst-case scenario of a truck loading event for every proposed truck loading dock within a single hour would result in an hourly average noise level of 67 dBA L_{eq} as measured at a cumulative project's boundary adjoining other properties. These noise levels are well below the City's hourly average noise performance threshold of 75 dBA $L_{eq(h)}$. In addition, these noise levels would not exceed existing background ambient noise levels. Therefore, there is a less than significant cumulative impact related to operational stationary noise sources in the project vicinity.

Because there is not a cumulative significant operational stationary noise impact to existing or planned land uses in the project vicinity, the incremental contribution of project operational stationary source noise would not be cumulatively considerable.

Construction Vibration

The geographic scope of the cumulative construction vibration analysis is the project vicinity, including surrounding sensitive receptors. Construction vibration impacts are very localized; therefore, the area surrounding the project site (approximately 100 feet) would be the area most affected by proposed project construction activities.

While there would be cumulative projects undergoing construction in the general vicinity, none of these are within 100 feet of the site and therefore, do not have to potential to create significant cumulative construction vibration impacts that would exceed potential impact criteria as measured at any sensitive

receptor in the project vicinity. Thus, there would be a less than significant cumulative impact related to construction vibration.

Because there is not a cumulative significant construction noise impact to existing or planned land uses in the project vicinity, the incremental contribution of project construction noise would not be cumulatively considerable.

Operational Vibration

Because operational vibration impacts are very localized, the only potential sources of cumulatively considerable contribution to vibration conditions in the project vicinity would result from introduction of past, present and reasonably foreseeable future permanent sources of groundborne vibration in the project site vicinity. The only major sources of groundborne vibration in the project vicinity is railroad activity along the rail line located approximately 3,670 feet southeast of the project site. Groundborne vibration levels from these cumulative sources would not be perceptible without instruments at any sensitive receptor in the project vicinity, therefore there is no significant cumulative impact.

In addition, the project's incremental contribution to this less than significant cumulative operational vibration levels would not be cumulatively considerable. As discussed above, implementation of the proposed project would not introduce any new permanent sources to the project vicinity that would result in groundborne vibration levels that would be perceptible without instruments as measured at sensitive receptors in the project vicinity and would also not increase railroad activity.

Therefore, implementation of the proposed project would not result in a cumulatively considerable contribution to vibration conditions in the project vicinity. This impact would be less than significant.

Level of Cumulative Significance

Less Than Significant Impact

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Land Use Category	Exterior Noise Exposure (L_{dn})					
	55	60	65	70	75	80
Single-Family Residential						
Multi-Family Residential, Hotels, and Motels		(a)				
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches						
Office Buildings, Business Commercial, and Professional						
Auditoriums, Concert Halls, Amphitheaters						

(a) Residential development sites exposed to noise levels exceeding 60 Ldn shall be analyzed following protocols in Appendix Chapter 12, Section 1208A, Sound Transmission Control, California Building Code.

Normally Acceptable
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special insulation requirements.

Conditionally Acceptable
Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.

Unacceptable
New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Source: City of Tracy

FIRSTCARBON SOLUTIONS™

Exhibit 3.12-1
Land Use Compatibility for Community Noise Environment

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3.13 - Public Services

3.13.1 - Introductions

This section describes the existing conditions related to public services in the City of Tracy (City) and the project site and vicinity, as well as the relevant regulatory framework. This section also evaluates the potential impacts related to public services that could result from project implementation of the proposed project. Information in this section is based, in part, on information obtained from the City of Tracy General Plan (General Plan), the City of Tracy website, the Tracy Police Department, and Fire Marshal Tim Spears with the South San Joaquin County Fire Authority (South County Fire). No comments were received during the Draft Environmental Impact Report (Draft EIR) scoping period related to public services.

3.13.2 - Environmental Setting

Fire Protection and Emergency Medical Services

City of Tracy

South County Fire provides fire protection and emergency medical services to 160 square miles and over 100,000 people, encompassing the City as well as all surrounding rural areas from the Stanislaus County line to the Alameda County line.[1] The City created a new Joint Exercise of Powers Agreement between the Tracy Fire Department and the Tracy Rural Fire Protection District (Tracy Rural) forming South County Fire in 2018. South County Fire maintains six stations and an administrative office. Four stations are located within the City, while two are located within the boundaries of Tracy Rural. A seventh fire station is under construction with an effective operational date of September 2021, which would add to the number of staffed units per day by one, with an additional three persons.

Based on available information, South County Fire staffs six front line Type 1 engines, one front line ladder truck, a Type 2 Hazardous Materials Team, one Type 1 water tender, and a Type 3 light rescue trailer. South County Fire employs a force consisting of 67 professional firefighters, 12 reserve firefighters, a fire chief, three division chiefs, three battalion chiefs, an emergency medical services manager, a fire marshal, three civilian fire inspectors, a plans examiner, and a three-person administrative support staff.[2] A minimum of 22 personnel are maintained for daily operations. Since department firefighters are often the first to arrive to emergency sites, they provide many other valuable services to the community in addition to fire suppression, including Advanced Life Support (ALS) emergency medical treatment, technical rescue services, and response to hazardous material releases.

The goal of South County Fire is to arrive on scene within 6.5 minutes total reflex time (911 call, call processing, firefighter turnout, and travel time) 90 percent of the time for a municipal level of service.[3] The average reflex time for the 2015/2016 year was approximately 9 minutes and 30 seconds. In fiscal year 2019-2020, South County Fire responded to 9,025 calls for emergency services.[4]

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1 South San Joaquin County Fire Authority. History. Website: https://www.sjcfire.org/about-us/overview/history. Accessed July 8, 2021.
2 Ibid.
3 Ibid.
4 South San Joaquin County Fire Authority. History. Website: https://www.sjcfire.org/about-us/overview/history. Accessed August 8, 2021.

South County Fire provides ALS emergency medical services to citizens located within the San Joaquin County Emergency Medical Services Agency (San Joaquin County EMS Agency) Zone C. American Medical Response is the private ambulance service provider under contract with the San Joaquin County EMS Agency. The department currently has 44 paramedics who provide ALS service from six stations where seven units are equipped with a minimum of one paramedic. All other department personnel are trained to the Emergency Medical Technician level. Because of the large geographical area covered by the department, air ambulances (helicopters) are frequently used to deliver medical care in remote areas to avoid unnecessary delays in patient transport.[5]

Project Site

Fire Station 92 at 1035 East Grant Line Road is the nearest fire station to the project site, approximately 1.4 miles to the west. South County Fire responds the closest resources to all emergency and non-emergency calls for service. The next closest station is Fire Station 96 at 1800 West Grant Line Road, approximately 3.6 miles west of the project site. There are currently two residences (one currently occupied) and agricultural uses on the project site, generating associated fire protection and emergency response needs.

Police Protection

City of Tracy

The Tracy Police Department is currently headquartered at 1000 Civic Center Drive. The Police Department contains three bureaus: Bureau of Field Operations, Bureau of Support Services, and the Bureau of Investigations, and currently has 94 sworn law enforcement personnel and 60 professional staff. Tracy Police Department Bureau of Field operations operates three shifts to cover a daily 24-hour time period. Day shift is from 5:30 a.m. to 4:30 p.m., swing shift is from 2:00 p.m. to 1:00 a.m., and grave shift is from 8:00 p.m. to 7:00 a.m. Each team consists of one Sergeant (Supervisor) with a minimum of five officers patrolling and responding to all calls within the City of Tracy ranging from parking complaints to crimes against persons.

The Support Operations Bureau consists of a Records unit, the Communications Unit, the Fiscal Management and Planning Unit and Animal Services Unit. The goal of the Support Operations Bureau is to provide essential support services efficiently and effectively for line operations of the department and to the community members of the City. The Investigations Bureau includes the General Investigations Unit, the Special Investigations Unit, and the Forensic Services Unit.

The ratio of police officers per thousand residents was just under 1 per 1,000 population. The official City of Tracy population estimate in 2020 was 95,931. The Tracy Police Department responded to a total of 137,816 telephone calls, 0.6 percent more that the amount handled in 2018, 76,256 of which were calls for service and 31,523 were 9-1-1 calls. Table 3.13-1 provides a summary of incoming call trends for 2017 and 2018. According to the General Plan, the Police Department's response time for Priority 1 calls within city limits is approximately 6 to 8 minutes.[6] The 2019 average emergency response time for Priority 1 calls was 6 minutes and 52 seconds.[7]

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[5] South San Joaquin County Fire Authority. Emergency Medical Services. Website: http://southcountyfa.org/emergency-medical-services.html. Accessed May 11, 2020.

[6] City of Tracy. 2011. General Plan, Public Facilities and Services Element. Page 7-6.

[7] City of Tracy Police Department. 2020. 2019 Annual Report.

Table 3.13-1: Incoming Calls to the Communications Unit (2017 and 2018)

Category	2017 Calls	2018 Calls	2019 Calls
Total Incoming Calls	133,952	137,003	137,816
Calls for Service	73,394	73,666	76,256
9-1-1 Calls	30,008	31,523	31,253
Wireless Calls	23,167	25,292	26,692
Source: Tracy Police Department. 2020. 2019 Annual Report.			

Project Site

Tracy Police Department headquarters is approximately 2.3 miles southwest of the project site. There are currently two residences (one currently occupied) and agricultural uses on the project site, generating associated fire protection and emergency response needs.

Schools

City of Tracy

The Tracy Unified School District (TUSD) provides K-12 education to the residents of Tracy. The City and its planning area are also served by Jefferson Elementary School District, Lammersville Unified School District, Banta Elementary School District, and New Jerusalem School District.

The TUSD comprises seven elementary schools, four K-8 schools, two middle schools, three high schools, a community day school, two continuation high schools, and an adult school program. The Jefferson Elementary School District includes four elementary schools and provides education for students in southern Tracy and south of Tracy. The Lammersville Unified School District includes six elementary schools and one high school for the areas of western Tracy and western unincorporated areas, including the communities of Lammersville and Mountain House. Banta Elementary School District includes an elementary school and a K-8 charter school serving areas of eastern Tracy and the unincorporated community of Banta and surrounding areas. New Jerusalem School District operates a K-8 public school, two K-8 charter schools, a home charter school program, a charter online school, an online charter high school completion program, and a charter high school. New Jerusalem School District serves the unincorporated community of New Jerusalem and surrounding areas.

Project Site

The project site is within the service areas of Banta Elementary School District and Tracy High School. The one occupied residence on-site may house school-aged children, who would be served by the Banta Elementary School District and Tracy High School. The proposed industrial uses would not generate any new demand for schools.

Parks

City of Tracy

As of 2017, the City had 335.3 acres of open park land at 73 sites.[8] Additionally, the City owns 228.5 acres at the planned Holly Sugar Park.[9] Legacy Fields, located on Tracy Boulevard north of Interstate 205 (I-205), is envisioned as a 166-acre sports park at full buildout.

The City of Tracy Parks Master Plan establishes the standard of four acres of parkland per 1,000 residents. Based on 2017 park acreage and a 2017 City population of 90,566, the City was providing only 3.7 acres of parkland per 1,000 residents at the time.[10]

Project Site

Glover Park, a mini park at 584 Pescadero Avenue, is the nearest park to the project site, approximately 1.7 miles to the west. Nonresidential service areas are not subject to park requirements in the Parks Master Plan since these types of uses do not generate any significant park demand. The project site would be in the future Eastside Industrial service area which does not include any planned residential uses.[11]

Libraries

City of Tracy

The Tracy Branch Library of the Stockton-San Joaquin County Public Library system is located at 20 East Eaton Avenue in central Tracy within Lincoln Park. The library includes 130,000 library volumes, CDs, books on tape, e-books, DVDs, and other items.

Project Site

The Tracy Branch Library is approximately 2.5 miles southwest of the project site. There are currently two residences (one currently occupied) on the project site generating associated library service needs.

3.13.3 - Regulatory Framework

State

California Fire Code and California Building Code

The International Fire Code and the International Building Code, established by the International Code Council (ICC) and amended by the State of California, prescribe performance characteristics and materials to be used to achieve acceptable levels of fire protection.

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8 City of Tracy. 2017. Recreation Activity Guide: Park Facilities.

9 MIG, Incorporated. 2013. City of Tracy Parks Master Plan (New Developments). April 16.

10 State of California, Department of Finance. 2020. E-5 Population and Housing Estimates for Cities, Counties, and the State — January 1, 2011-2020. May.

11 City of Tracy. 2013. Parks Master Plan. Website: https://www.ci.tracy.ca.us/documents/Final_Draft_Parks_Master_Plan.pdf Accessed July 19, 2021.

California Health and Safety Code

California Health and Safety Code, Sections 13100–13135, establish the following policies related to fire protection:

Section 13100.1 The functions of the office of the State Fire Marshall, including the California Department of Forestry and Fire Protection (CAL FIRE), shall be to foster, promote, and develop strategies to protect life and property against fire and panic.

Section 13104.6 The Fire Marshall has the authority to require fire hazards to be removed in accordance with the law relating to removal or public nuisances on tax-deeded property.

California Senate Bill 50

Senate Bill (SB) 50 (funded by Proposition 1A, approved in 1998) limits the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development, and provides instead for a standardized developer fee. SB 50 generally provides for a 50/50 State and local school facilities funding match. SB 50 also provides for three levels of statutory impact fees. The application level depends on whether State funding is available, whether the school district is eligible for State funding, and whether the school district meets certain additional criteria involving bonding capacity, year-round school, and percentage of movable classrooms in use.

California Government Code, Section 65995(b) and Education Code, Section 17620

SB 50 amended Section 65995 of the California Government Code, which contains limitations on Section 17620 of the Education Code, the statute that authorizes school districts to assess development fees within school district boundaries. Section 65995(b)(3) of the Government Code requires the maximum square footage assessment for development to be increased every 2 years, according to inflation adjustments. On January 22, 2020, the State approved increasing the allowable amount of statutory school facilities fees (Level I School Fees) to $4.08 per square foot of assessable space for residential development of 500 square feet or more, and to $0.66 per square foot of chargeable covered and enclosed space for commercial/industrial development.[12] School districts may levy higher fees if they apply to the State and meet certain conditions.

Local

City of Tracy

General Plan

The City of Tracy General Plan sets forth the following goals, objectives, policies, and actions that are relevant to public services:

[12] California Office of Public School Construction. 2021. Annual Adjustment to SFP Grants and Developer Fee History. Website: https://www.dgs.ca.gov/OPSC/Resources/Page-Content/Office-of-Public-School-Construction-Resources-List-Folder/Annual-Adjustment-to-SFP-Grants-and-Developer-Fee-History. Accessed July 8, 2021.

Public Facilities and Services Element

Goal PF 1 Minimal loss of life and property from fires, medical emergencies, and other types of emergencies.

Objective PF-1.1 Strive to continuously improve the performance and efficiency of fire protection services.

Policies

PF-1.1 P1 The City shall provide fire and emergency response facilities and personnel necessary to meet residential and employment growth in the City.

PF-1.1 P2 Ensure that new development pays a fair and equitable amount to offset the costs for fire facilities by collecting a Public Buildings Impact Fee, or by requiring developers to build new facilities.

Objective PF-1.2 Promote coordination between land use planning and fire protection.

Policies

PF-1.2 P1 Fire hazards shall be identified and mitigated during the project review and approval process.

PF-1.2 P2 The City shall build and require roadways that are adequate in terms of width, radius, and grade to facilitate access by City fire-fighting apparatus, while also maintaining and improving Tracy's neighborhood character and hometown feel.

PF-1.2 P5 New developments shall satisfy fire flow and hydrant requirements and other design requirements as established by the Fire Department.

PF-1.2 P6 The City shall use physical site planning as an effective means of preventing wildland fires by requiring the following:

- Drought-resistant native plants incorporated into public works projects.
- More than one ingress/egress road to any neighborhood in areas subject to wildland fires.
- Roadways with grades that accommodate emergency vehicles.
- Structures that are constructed of fire-resistant materials.

Objective PF-2.1 Plan for ongoing management and development of law enforcement services.

Policy

PF-2.1 P2 The City shall ensure that new development pays a fair and equitable amount to offset the capital costs for police service and expansion by collecting a public facilities impact fee.

Objective PF-2.2 Promote coordination between land use planning and law enforcement.

Policies

PF-2.2 P1 Law enforcement hazards shall be identified and mitigated during the project review and approval process.

PF-2.2 P2 Physical site planning should be used as an effective means of preventing crime. This can be achieved by locating walkways, open spaces, landscaping, parking lots, parks, play areas and other public spaces in areas that are visible from buildings and streets.

Goal PF-3 Sufficient educational facilities to meet the demands of existing and new development.

Objective PF-3.3 Ensure that new development is responsible for its impacts on local schools.

Policy

PF-3.3 P1 The City, in cooperation with school districts, shall reserve land for purchase by the districts for the construction of new schools or the collection of school impact fees in accordance with State law.

Goal PF-4 Public buildings that are a source of civic pride for all residents.

Objective PF-4.1 Support the needs of the community through the construction and maintenance of public buildings, such as city hall, community centers, libraries, and the public works facility.

Policies

PF-4.1 P4 The City shall ensure that new development pays its fair share of the costs of public buildings by collecting the Public Buildings Impact Fee.

PF-4.2 P2 The City shall ensure that new residential development pays its fair share of the Public Buildings Impact Fee for the cost of library expansion.

3.13.4 - Impacts and Mitigation Measures

Significance Criteria

According to California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist, to determine whether impacts related to public services are significant environmental effects, the following question is analyzed and evaluated. Would the proposed project:

Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

a) Fire protection
b) Police protection

c) Schools
d) Parks
e) Other public facilities

Approach to Analysis

FirstCarbon Solutions (FCS) evaluated potential impacts on public services, in part, through review of the relevant positions of the City General Plan and consultation with South County Fire and the Tracy Police Department. FCS sent Public Service Questionnaires to the City of Tracy Fire Department, Police Department, TUSD, and Tracy Branch Library on April 21, 2020, to ask for existing information and get their input on the potential impacts from the project on their respective services. Tracy Fire Department and Police Department have reviewed this section's content and their feedback has been incorporated directly into this analysis.

Specific Thresholds of Significance

According to Appendix G of the CEQA Guidelines, public service impacts from project implementation would be considered significant if the project would:

> . . . result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
>
> a) Fire Protection?
> b) Police Protection?
> c) Schools?
> d) Parks?
> e) Other public facilities?

Impact Evaluation

Need for New or Altered Fire Protection Facilities

Impact PUB-1:	**The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection.**

Construction

South County Fire would provide fire protection for the proposed project. The proposed project would require a detachment from Tracy Rural as part of project approval from the San Joaquin Local Agency Formation Commission (LAFCo) of the proposed reorganization. Fire Station 92 is the nearest station approximately 1.4 miles west of the project site. Fire Station 92 is a City-owned fire station; however, South County Fire responds the closest resources to all emergency and non-emergency

calls for service. The next closest station is Fire Station 96, approximately 3.6 miles west of the project site.

As part of project construction, the proposed project would be required to comply with applicable provisions of the California Building Standards Code (CBC), which is adopted by the Tracy Municipal Code Chapter 9.04 Building Code, and the California Fire Code, which is adopted by the Tracy Municipal Code Chapter 9.06 Fire Protection and Prevention. In compliance with the California Fire Code, Part 9 of the CBC, during construction, the proposed project would be required to follow fire safety standards related to provision of fire apparatus access and acquisition of building permits. Specifically, CBC Section 105.7.17 requires plans be submitted and a permit to install, improve, modify, or remove public or private roadways, driveways, and bridges for which Fire Department access is required by the Fire Code; this would ensure adequate driveway/entry turning radius, height clearance, and fire hydrant access for fire trucks and engines at the project site during construction. In addition, CBC Section 105.7.18 requires plans be submitted to the Fire Code official for all land developments or for the construction, alteration, or renovation of a building within the jurisdiction where a building permit is required; this would ensure that construction and alteration would not obstruct Tracy Fire Department from delivering adequate levels of fire protection services and otherwise help to ensure that all applicable standards and requirements are satisfied. Given the foregoing, project construction would not create the need for new or altered fire protection facilities to maintain acceptable service ratios, response times, or other performance objectives for fire protection. Therefore, construction impacts related to fire protection would be less than significant.

Operation

In 2019, the City of Tracy prepared a Municipal Services Review, which evaluated existing and future service conditions, including fire protection services. It was determined that the City has an appropriate process in place to plan and fund fire protection services that would ensure that adequate fire protection staffing, performance levels, and facilities are maintained to serve the City's existing population as well and future growth within the Sphere of Influence (SOI).[13]

Operation of new industrial uses on the project site would result in new employees, which could result in an increase in calls for fire protection and emergency medical services. However, given the nature of the proposed uses, this increase is not expected to be atypical or substantial. While the type of occupancy and associated hazardous use may also increase calls for service or require special equipment, the types of hazardous material used would be limited to fertilizers, herbicides, pesticides, solvents, cleaning agents, and similar materials used for daily site operations and for building and landscape maintenance activities. The use of these materials during project operation would be limited in both quantity and concentration. Given that the City has adequate fire protection staffing, performance levels, and facilities, and the proposed use would not require substantial use of hazardous materials, the proposed project would not cause create a significant impact to fire protection services.

[13] City of Tracy. 2019. Final Tracy Municipal Services Review. July. Website: **Error! Hyperlink reference not valid.**https://www.sjgov.org/uploadedfiles/sjc/departments/lafco/meetings-agenda/2019/finalmsr_tracy_6-22-19.pdf. Accessed August 5, 2021.

As part of operation, the proposed project would be required to comply with applicable provisions of the Tracy Municipal Code, the CBC, and the California Fire Code. Specifically, the proposed project would be required to follow standards for fire safety such as fire flow requirements for buildings, fire hydrant location and distribution criteria, automated sprinkler systems, and fire-resistant building materials. Primary vehicle access to the project site would be from two driveways along Grant Line Road and three driveways along Paradise Road. The proposed project would also include an Emergency Vehicle Access (EVA) driveway from Paradise Road located north of Building A.

As discussed further in Section 3.9, Hazards and Hazardous Materials, Grant Line Road and Paradise Road are public City streets that run east–west and north–south, respectively, along the project frontages, facilitating EVA to the site during project operation. As such, it is not expected that the proposed project would adversely affect response times or increase use of existing fire protection or emergency medical response facilities such that substantial physical deterioration, alteration, or expansion would be required, thereby triggering environmental impacts. Furthermore, the project applicant would be required to pay applicable review and development impact fees toward fire protection facilities and apparatus so that the South County Fire can continue to maintain fire safety standards. Therefore, operational impacts related to need for new or altered fire protection facilities would be less than significant.

Level of Significance

Less Than Significant Impact

Need for New or Altered Police Protection Facilities

Impact PUB-2: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.

Construction

In 2019, the City of Tracy prepared a Municipal Services Review, which evaluated existing and future service conditions, including police protection services. It was determined that the City has an appropriate process in place to plan and fund police protection services that would ensure that adequate police staffing, performance levels, and facilities are maintained to serve the City's existing population as well and future growth within the SOI.[14]

The San Joaquin County Sheriff's Department currently provides law enforcement services to the project site. As part of the project approval from San Joaquin LAFCo of the reorganization proposal, the project site would be annexed into the City. After annexation, the Tracy Police Department would provide law enforcement services to the project site, as it does to other residents and businesses throughout the Tracy community.

[14] City of Tracy. 2019. Final Tracy Municipal Services Review. July. Website: **Error! Hyperlink reference not valid.**https://www.sjgov.org/uploadedfiles/sjc/departments/lafco/meetings-agenda/2019/finalmsr_tracy_6-22-19.pdf. Accessed August 5, 2021.

Tracy Police Department headquarters is approximately 2.3 miles southwest of the project site; however, response is not likely to originate from the station but rather from officers who are consistently patrolling the area. During construction, the proposed project would also implement appropriate security measures such as provision of adequate lighting and a project boundary fence around the subject construction area to prohibit access to unauthorized persons other than construction personnel. With adequate police capacity as noted above and provision of security measures, project construction would not create the need for new or altered police protection facilities, and impacts would be less than significant.

Operation

Operation of new industrial uses on the project site would result in new employees, which would result in an increase in calls for police protection services. However, given the nature of the proposed uses, this increase is not expected to be atypical or substantial. Primary access to the project site during operation would be from Grant Line Road and Paradise Road. Responses to calls for service would likely be from patrolling officers. As the Police Department's area of responsibility is increased through the annexation and development, the need may arise to add sectors or beats, which are assigned to officers to patrol. The increase in this responsibility may trigger the need for additional staffing (sworn and professional staff) in order to maintain the response standards and quality of services currently provided by the Tracy Police Department.

In addition to calls for service related to the new number of employees eventually occupying this site, a significant increase in vehicle traffic, both personal vehicles and delivery trucks, is expected, consistent with Police Department's experience and observations at other similar sites in its jurisdiction. This would likely trigger another need for increase of personnel involved in traffic enforcement, particularly commercial vehicle regulations. However, this proposed project is part of the anticipated growth contemplated by the City in its General Plan. As new specific plans and development projects within the SOI are considered, the City reviews the specific details of each project to (1) identify the associated demand for new police facilities and operations, and (2) to identify whether the City's funding, including fees and assessments generated by the new development through the payment of development impact fees, sales tax revenues, and annual Community Facilities District (CFD) assessments, would be adequate to address the demand for police services. Prior to approving any new development project, the City can ensure that any CFD associated with the proposed project, development agreement provisions for funding police services, and development impact fee schedule is appropriately adjusted to reflect anticipated funding gaps.[15] The project applicant would be required to pay applicable review and development impact fees to the Tracy Police Department to help provide for the costs associated with a police facilities building, equipment, and staffing to serve additional demands for police services, as has been contemplated by the City's relevant planning documents. For the foregoing reasons, impacts would be less than significant.

[15] City of Tracy. 2019. Final Tracy Municipal Services Review. July. Website: **Error! Hyperlink reference not valid.**https://www.sjgov.org/uploadedfiles/sjc/departments/lafco/meetings-agenda/2019/finalmsr_tracy_6-22-19.pdf. Accessed August 5, 2021.

Level of Significance

Less Than Significant Impact

Need for New or Altered School Facilities

Impact PUB-3:	**The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools.**

Construction

Impacts related to provision of or need for construction of new or expanded school facilities are limited to operational impacts. No construction impacts would occur.

Operation

The proposed project would develop various light industrial, warehouse and distribution and related nonresidential uses. As described in Section 4, Effects Found not to be Significant, the proposed project could result in indirect population growth due to the creation of employment opportunities. Once operational, given the nature of the proposed project and its various light industrial, warehouse, and distribution uses, the project site would likely be staffed by employees local to the project area. Based on the light industrial nature of the proposed project, it is expected that approximately 1,871 employees would work on-site.[16] Because the population of the City is currently estimated at 95,931, the total number of employees that may work at the project site represents a relatively nominal increase of approximately 2 percent of the current population of the City.[17] Moreover, as described in Section 4, the proposed project would not include residential units that would directly result in new school-aged children or a substantial unplanned increase in population growth. Therefore, the proposed project would not result in an increase in school enrollment or require expanded or new school facilities, and impacts would be less than significant.

Level of Significance

Less Than Significant Impact

Need for New or Altered Park Facilities

Impact PUB-4:	**The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for parks.**

[16] Conversation with Barbara Harb, Economic Development Analyst, City of Tracy-employment data collected by conversations with business owners for various industrial businesses, including warehousing, manufacturing, and employee-intensive (Amazon) warehousing, and existing building square footage data, averaged.

[17] State of California, Department of Finance. 2020. E-5 Population and Housing Estimates for Cities, Counties, and the State — January 1, 2011-2020. May.

Construction

Impacts related to provision of and need for construction of new or expanded park facilities are limited to operational impacts. No construction impacts would occur.

Operation

The proposed project would develop various light industrial, warehouse, distribution, and related uses. Based on the light industrial nature of the proposed project, it is expected that approximately 1,871 employees would work on-site.[18] Because the population of the City is currently estimated at 95,931, the total number of employees that may work at the project site represents a relatively nominal increase of approximately 2 percent of the current population of the City.[19] While it is reasonable to assume that some employees would utilize park facilities during their work day to a certain degree, this use would be limited given the nature of the industrial use and the location of the project site. As described in Section 4, the proposed project would not include residential units that would directly result in the creation of additional park demand that would result in a significant increase in population or existing park use. Therefore, the proposed project would not require new or altered park facilities and would not result in significant environmental impacts to existing park facilities. Operational impacts related to need for new or altered park facilities would be less than significant.

Level of Significance

Less Than Significant Impact

Need for New or Altered Library or Other Public Facilities

Impact PUB-5:	**The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for libraries or other public facilities.**

Construction

Impacts related to provision of and need for construction of new or expanded library facilities are limited to operational impacts. No construction impacts would occur.

Operation

Because of the nature of the proposed industrial use and the location of the project site, the proposed project is not expected to result in an increase in use of the Tracy Branch Library. The proposed project would not create a need to construct new or expand existing library facilities and impacts would be less than significant.

[18] Conversation with Barbara Harb, Economic Development Analyst, City of Tracy-employment data collected by conversations with business owners for various industrial businesses, including warehousing, manufacturing, and employee-intensive (Amazon) warehousing, and existing building square footage data, averaged.

[19] State of California, Department of Finance. 2020. E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2020. May.

Level of Significance

Less Than Significant Impact

3.13.5 - Cumulative Impacts

The geographic scope of the cumulative public service analysis is the service area of each of the providers serving the proposed project. Because of differences in the nature of the public service topical areas, they are discussed separately. No existing cumulatively significant impacts have been identified for any of these areas, as all service providers are able to achieve the requisite level of service, capacity, or response time.

Cumulative projects including those listed in Table 3-1 in conjunction with the proposed project would result in residential, commercial, industrial, and roadway development. All residential, commercial, and industrial developments are within City jurisdiction, while roadway developments would be implemented by the City, County, and the California Department of Transportation (Caltrans) separately. While most planned future cumulative projects consist of industrial and roadway development, residential projects could increase population within the City by approximately 5,886 persons.[20]

Fire Protection Facilities

The geographic scope of the cumulative fire protection and emergency medical services analysis is the South County Fire service area, which encompasses 160 square miles and over 100,000 people, including the City as well as all surrounding rural areas from the Stanislaus County line to the Alameda County line.

An increase in population of 5,886 due to the buildout of the existing development and planned cumulative projects identified in Table 3-1, along with future development within the South County Fire service area, would result in an increased demand for fire protection facilities. To help offset increased demand, the proposed project and other existing and planned cumulative projects would be required to pay all applicable fees to the Tracy Fire Department and Tracy Rural. All developments would also be required to adhere applicable provisions of the California Fire Code, Part 9 of the CBC, in terms of meeting standards for fire safety such as fire flow requirements for buildings, fire hydrant location and distribution criteria, automated sprinkler systems, and fire-resistant building materials.

With adherence to the CBC and payment of applicable fees, cumulative projects would not result in additional needs for new or altered fire protection or emergency medical facilities not already analyzed within the City and County General Plans, and cumulative impacts would be less than significant. Since the proposed project would have a less than significant impact related to fire protection services, the proposed project would not have a cumulatively considerable contribution to the already less than significant cumulative impact.

[20] Calculation: All cumulative residential units (1,677) x average persons per household (3.51) = 5,886.27 persons.

Police Protection Facilities

The geographic scope of the cumulative police protection analysis is the service area of the Tracy Police Department, which consists of the Tracy city limits and adjoining unincorporated areas.

An increase in population of 5,886 would result in an increased demand for police protection facilities. To help offset increased demand for police protection, the proposed project and other cumulative projects would be required to pay applicable fees to the Tracy Police Department. All developments would also be reviewed for impacts on law enforcement services and required to address any potential impacts with mitigation. Because demand for law enforcement services varies substantially by project (clientele, hours of operation, crime prevention measures, etc.), it is unlikely that there would be substantial overlap in demand that would result in a cumulatively significant impact such that new or expanded police protection facilities are necessary beyond the City's existing capacity and regular review of service levels for future developments.

With payment of applicable fees, cumulative projects would not result in additional need for new or altered police protection facilities not already analyzed within the City General Plan, and impacts would be less than significant. Since the proposed project would have a less than significant impact related to fire protection services, the proposed project would not have a cumulatively considerable contribution to the already less than significant cumulative impact.

School Facilities

The geographic scope of the cumulative school facilities analysis includes the service areas of TUSD, Jefferson Elementary School District, Lammersville Unified School District, Banta Elementary School District, and New Jerusalem School District. Planned projects including those listed in Table 3-1 would result in residential development, though none include any educational facilities. All approved developments, including the projects discussed in Table 3-1 and development within the school service areas, would be required to pay applicable development impact fees toward school district facilities. Pursuant to Government Code Section 65995, payment of adopted development fees is considered "full and complete mitigation" for impacts to school facilities, and local governments are prohibited from assessing additional fees or exactions for school impacts. As part of project entitlement processes, cumulative project applicants would be responsible for paying their fair share of school facility fees. With payment of impact development fees, cumulative projects would not result in additional need for new or altered school facilities not already analyzed within the City General Plan, and impacts would be less than significant.

Because the proposed project would not include the development of any residences, and therefore, would not increase the population in the area, the proposed project would not contribute to cumulative impacts associated with schools.

Park Facilities

The geographic scope of the cumulative park facilities analysis is the city limit. An increase in population of 5,886 would result in an increased demand for park facilities. To help offset this increase, residential cumulative projects would be required to provide parkland or pay applicable development fees. With payment of applicable park impact fees and/or otherwise satisfying park

dedication obligations by cumulative projects, there would be a less than significant cumulative impact related to additional increased use and physical deterioration of existing parks and recreational facilities not already analyzed within the City General Plan.

Because the proposed project would not include the development of any residences, and therefore, would not increase the population in the area, the proposed project would not contribute to cumulative impacts associated with parks.

Library or Other Public Facilities

The geographic scope of the cumulative library and other public facilities analysis is the city limit. An increase in population of 5,886 would result in an increased demand for library facilities. To help offset this increase, cumulative developments would be required to pay development impact fees. With payment of fees by cumulative projects, there would be a less than significant cumulative impact regarding additional need for new or altered library facilities not already analyzed within the City General Plan.

Because the proposed project would not include the development of any residences, and therefore, would not increase the population in the area, the proposed project would not contribute to cumulative impacts associated with libraries.

Level of Cumulative Significance

Less Than Significant Impact

3.14 - Transportation

3.14.1 - Introduction

This section describes existing conditions related to transportation on the project site and vicinity as well as the relevant regulatory framework. This section also evaluates the potential impacts related to transportation that could result from implementation of the proposed project. Information in this section is based, in part, on the project-specific Vehicle Miles Traveled Analysis Memorandum (VMT Memorandum)[1] and Transportation Impact Analysis (TIA)[2] (included as Appendix J). The following comment was received during the Environmental Impact Report (EIR) scoping period related to transportation (Appendix A):

- The additional truck traffic associated with the proposed project could have significant cumulative effects on the residents of Banta in combination with other recent and planned projects in the Northeast Industrial (NEI) Specific Plan area.

3.14.2 - Existing Conditions

The following describes the existing roadways that provide access to the project site and vicinity. The existing roadway network is shown on Exhibit 3.14.1.

Roadway Facilities

State

Interstate 205 (I-205)

Interstate 205 (I-205) is an Interstate Highway that connects Interstate 5 (I-5) with Interstate 580 (I-580) in San Joaquin County and is located in the northern area of the City of Tracy. The highway provides access from the San Francisco Bay Area to northern San Joaquin County. I-205 contains three lanes in each direction, eastbound and westbound. I-205 is adjacent to the north of the project site.

Regional

The following roadways within the vicinity of the Project are in the San Joaquin Council of Governments (SJCOG) Regional Congestion Management Program (RCMP):

Grant Line Road

Grant Line Road is an east–west four-lane divided major arterial with a speed limit of 45 miles per hour (mph) (within the project vicinity). Grant Line Road extends from Byron Road to 11th Street in Banta and provides local and regional access to and from the City of Tracy. Bike and bus facilities are present along Grant Line Road. The RCMP extents of Grant Line Road are from Byron Road to Chrisman Road.

Chrisman Road

Chrisman Road is a north–south two-lane divided major arterial with a speed limit of 40 mph. North Chrisman Road currently extends from Grant Line Road to the railroad and from the railroad to 11th

[1] Kimley-Horn. 2021. Tracy Alliance Vehicle Miles Traveled Analysis Memorandum (prepared for the City of Tracy).
[2] Kimley-Horn. 2021. Tracy Alliance and Northeast Area Annexation Transportation Impact Analysis (prepared for the City of Tracy).

Street, where it becomes South Chrisman Road. No road access is present at the railroad and North Chrisman only provides access to warehousing and distribution centers. The RCMP extents of Chrisman Road are from Vernalis Road to Grant Line Road.

MacArthur Drive

MacArthur Drive is a north–south major arterial that extends from I-205 to the Governor Edmund G. Brown California Aqueduct. Within the project vicinity, North MacArthur Drive is a two-lane divided major arterial from I-205 to Stonebridge Drive and a two-lane undivided major arterial from Stonebridge Drive to 11th Street. The speed limit is 40 mph and bus, and bike facilities are present along MacArthur Drive. The RCMP extents of MacArthur Drive are from Linne Road to I-205.

11th Street

11th Street is an east–west undivided major arterial with left-turn pockets and two-way left-turn lanes and a speed limit of 45 mph (within the project vicinity). 11th Street extends from I-205 (to the east) to I-5 (to the west) and provides regional and local access to/from the City of Tracy. Bus and bike facilities are present along 11th Street. The RCMP extents of 11th Street are from I-205 to I-5.

Local

Paradise Road

Paradise Road is a north–south two-lane undivided minor arterial with left-turn pockets and a speed limit of 40 miles per hour (mph). Paradise Road provides regional access to and from the northeast region of the City of Tracy. No bike or bus facilities are present along Paradise Road.

Pescadero Avenue

Pescadero Avenue is an east–west two-lane undivided minor arterial with left-turn pockets and a two-way left-turn lane. Pescadero Avenue extends from MacArthur Drive to Paradise Road with a speed limit of 35 mph. No bike or bus facilities are present along Pescadero Avenue.

Study Area

The study area includes the main roadways and intersections around the project site that would be most impacted by the proposed project's traffic volumes. Study intersections were selected in consultation with City staff, based on City policy, if the project could add 5 percent or more of the cumulative traffic volume at an intersection and also if changes to the road network in the site vicinity could result in a shift in volumes from one road to another. The study intersections consist of the following 17 intersections within the project site vicinity and are shown below.

- **Intersection No. 1:** Grant Line and Best Buy Driveway/Project Driveway 1
- **Intersection No. 2:** Grant Line Road and Project Driveway 2
- **Intersection No. 3:** Grant Line Road and Paradise Road
- **Intersection No. 4:** Paradise Road and Ryder Distribution Center Driveway/Project Driveway 3
- **Intersection No. 5:** Paradise Road and Ryder Distribution Center Driveway/Project Driveway 4
- **Intersection No. 6:** Paradise Road and Project Driveway 5
- **Intersection No. 7:** Chrisman Road and North Paradise Road (Future Intersection)
- **Intersection No. 8:** Chrisman Road and Pescadero Avenue (Future Intersection)

- **Intersection No. 9:** Grant Line Road and Chrisman Road
- **Intersection No. 10:** I-205 Westbound Ramps and North MacArthur Drive
- **Intersection No. 11:** I-205 Eastbound Ramps and North MacArthur Drive
- **Intersection No. 12:** Pescadero Avenue and North MacArthur Drive
- **Intersection No. 13:** Grant Line Road and North MacArthur Drive
- **Intersection No. 14:** 11th Street and North MacArthur Drive
- **Intersection No. 15:** 11th Street and Chrisman Road
- **Intersection No. 16:** I-205 Westbound Ramps and Chrisman Road (Cumulative)
- **Intersection No. 17:** I-205 Eastbound Ramps and Chrisman Road (Cumulative)
- **Intersection No. 18:** Chrisman Road and South Paradise Road

Vehicle Level of Service (non-CEQA analysis)

Analysis of potential deficiencies caused by a development proposal at roadway intersections is based on the concept of Level of Service (LOS). This analysis is necessary to determine which roadway operational improvements may be required, in accordance with applicable legal requirements related to nexus, to be installed by the subject development or to have the relevant contribution of a proportionate fair share be made by the subject applicant. The LOS of an intersection measures operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity. LOS for this transportation analysis in this Draft EIR were determined using methods defined in the 6th Edition of the Transportation Research Board's Highway Capacity Manual (HCM 6th Edition) and Synchro 10 traffic analysis software.

HCM 6th Edition methodologies include procedures for analyzing side-street stop-controlled (SSSC), all-way stop-controlled (AWSC), and signalized intersections. The SSSC procedure defines LOS as a function of average control delay for each minor street approach movement. Conversely, the AWSC and signalized intersection procedures define LOS as a function of average control delay for the overall intersection. Table 3.14-1 relates the operational characteristics associated with each LOS category for signalized and unsignalized intersections.

Table 3.14-1: Signalized and Unsignalized Intersection LOS Criteria

Level of Service	Description	Signalized (Average control delay per vehicle in seconds/vehicle)	Unsignalized (Average control delay per vehicle in seconds/vehicle)
A	Free flow with no delays; users are virtually unaffected by others in the traffic stream.	Less than 10	L = Less than 10
B	Stable traffic; traffic flows smoothly with few delays.	Less than or equal to 10 to 20	Less than or equal to 10 to 15
C	Stable flow but the operation of individual users becomes affected by other vehicles; modest delays.	Less than or equal to 20 to 35	Less than or equal to 15 to 25
D	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak-hours.	Less than or equal to 35 to 55	Less than or equal to 25 to 35

Level of Service	Description	Signalized (Average control delay per vehicle in seconds/vehicle)	Unsignalized (Average control delay per vehicle in seconds/vehicle)
E	Unstable flow with operating conditions at or near the capacity level; long delays and vehicle queueing.	Less than or equal to 55 to 80	Less than or equal to 35 to 50
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queueing.	Greater than or equal to 80	Greater than or equal to 50

Source: Transportation Research Board. 2016. Highway Capacity Manual 6th Edition: A Guide for Multimodal Mobility Analysis. October.

Project-related deficiencies are determined by comparing conditions without the proposed project to those with the proposed project. Project-related deficiencies at study intersections are created when traffic from the proposed project causes the LOS to fall below the maintaining agency's LOS threshold or causes deficient intersections to deteriorate further based on applicable thresholds.

Roadway facilities evaluated in this transportation analysis are located in and maintained by two agencies: the City of Tracy and the California Department of Transportation (Caltrans) District 10. Each agency has developed unique LOS standards, as described in 3.14.3, Regulatory Framework. It was determined that 11th Street is a Congestion Management Plan (CMP) roadway network; however, the SJCOG 2020 RCMP does not identify any intersections along 11th Street as CMP study intersections. Therefore, no RCMP interactions were analyzed.

Existing Peak-Hour Turning Movement Volumes

Existing traffic counts were used and anticipated growth in development trips added to calculate the future traffic volumes and subsequent traffic conditions. Because of the COVID-19 pandemic, traditional traffic counts count not be collected for all study intersections in a way that would accurately reflect traffic conditions. Therefore, to ensure a conservative analysis, Streetlight Data was utilized to provide turning movement counts at study intersections that did not have counts collected within the past 2 years. The City and Caltrans policy is to utilize traffic counts that are current but cannot be more than 2 years old. In addition, Caltrans will not allow any counts conducted during COVID-19, when travel is/was significantly less than "normal" conditions, i.e., before COVID-19. Streetlight Data uses calibrated, anonymized Bluetooth data to estimate vehicle volumes. Streetlight Data has been collected throughout the City and independently verified with existing, traditional turning movement counts. For purposes of the TIA, data collection represents an average of all Tuesdays, Wednesdays, and Thursdays during October 2019, January 2020, and February 2020, excluding holiday weeks. Limitations to Streetlight Data include the lack of peak-hour factors, heavy vehicle percentages and bicycle and pedestrian counts, and data sampling. Peak-hour factors were estimated based on HCM 6th Edition methodology found in Chapter 19. Heavy vehicle percentages were estimated based on existing counts in the vicinity, and pedestrian crossings were conservatively estimated at five per peak-hour. This number is conservative because very few pedestrians use the crosswalks (none were counted). Workers drive to the industrial sites in the area. Table 3.14-2 provides the type of counts used for the study intersections.

Table 3.14-2: Traffic Count Data References

No.	Intersection	Count Type	Date of Count (if available)
1	Grant Line and Best Buy Driveway/Project Driveway	SL	N/A
2	Grant Line Road and Project Driveway 2	SL	N/A
3	Grant Line Road and North Paradise Road	SL	N/A
4	Paradise Road and Ryder Distribution Center Driveway/Project Driveway 3	SL	N/A
5	Paradise Road and Ryder Distribution Center Driveway/Project Driveway 4	SL	N/A
6	Paradise Road and Project Driveway 5	SL	N/A
7	Chrisman Road and North Paradise Road and (Future Intersection)	TMC	February 2019
8	Chrisman Road and Pescadero Avenue (Future Intersection)	Does Not Exist	
9	Grant Line Road and Chrisman Road	TMC	February 2019
10	I-205 Westbound Ramps and North MacArthur Drive	SL	N/A
11	I-205 Eastbound Ramps and North MacArthur Drive	SL	N/A
12	Pescadero Avenue and North MacArthur Drive	SL	N/A
13	Grant Line Road and North MacArthur Drive	SL	N/A
14	11th Street and North MacArthur Drive	SL	N/A
15	11th Street and Chrisman Road	SL	N/A
16	I-205 Westbound Ramps and Chrisman Road (Cumulative)	Does Not Exist	
17	I-205 Eastbound Ramps and Chrisman Road (Cumulative)	Does Not Exist	
18	Chrisman Road and South Paradise Road	SL	N/A

Notes:
SL = Streetlight Data
TMC = Traditional Turning Movement Counts
Source: Kimley-Horn. 2021. Tracy Alliance and Northeast Area Annexation Transportation Impact Analysis (prepared for the City of Tracy).

Streetlight Data does not have data for the Best Buy and Ryder Distribution Center driveways for Intersections No. 1, No. 4, and No. 5; however, trips produced by these sites are on the existing roadway network. Therefore, trip generation was completed for these sites to estimate driveway trips at these intersections and the existing roadway volumes were then balanced based on the driveway trip estimates.

For Intersections No. 7 and No. 9, weekday intersection turning movement volumes were collected on February 2019.

These counts included multiple modes of transportation, i.e., vehicles, bicycles, and pedestrians. Volumes for intersections were collected during the AM and PM peak periods of 7:00 a.m. to 9:00 a.m. and 4:00 a.m. to 6:00 p.m., respectively. All traffic counts were collected when local schools were in session and the weather was fair.

Peak-hour volumes at each intersection's respective peak were conservatively used in this analysis; therefore, some volume imbalances were observed between study intersections. Where imbalances occurred, volumes were conservatively increased above what was counted.

Field observations were conducted on the count data collection days to observe queues and existing conditions. Data and field visits indicate that peak traffic flow occurs for extended periods of time (typically from 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 7:00 p.m.). The highest 1-hour morning (AM) and 1-hour afternoon/evening (PM) peaks were selected for analysis, consistent with applicable County, City, and State guidelines.

U-turns were analyzed (and illustrated in all figures) as left turns since HCM methodologies do not support analysis of U-turns. Intersection volume data sheets for all traffic counts are provided in in the TIA Appendices (see Appendix J).

Intersection Levels of Service

This transportation analysis does not analyze LOS or transportation deficiencies for Existing Conditions because it is anticipated that Chrisman Road will be constructed and Pescadero Avenue will be realigned as part of the Seefried development to the west of the project site. Existing, approved (but not yet constructed), and project trips will be assigned on the new road network in the vicinity of the project site. Therefore, Background was taken as the base year to reflect the existing and approved roadway improvements and land use developments proposed in NEI.

Queueing

Queueing is analyzed at deficient study intersections where improvements that are already included in the Citywide Transportation Master Plan (TMP) or improvements included as part of Background Conditions would not adequately address an identified significant impact related to queueing.

Existing Public Transit Service and Facilities

Study Area

Existing transit service in the City of Tracy is provided by a local bus service (TRACER) and Altamont Corridor Express (ACE). The bus and rail system provides local and regional connectivity to residents of the City. The San Joaquin Regional Transit District (RTD) County Hopper service serves Tracy destinations.

Bus

TRACER and San Joaquin RTD

TRACER is a bus service the City of Tracy offers to residents. It provides both fixed route and paratransit services to major destinations throughout the City. Its hours of operation are Monday through Friday from 7:00 a.m. to 8:00 p.m. and Saturday from 9:00 a.m. to 7:00 p.m. TRACER does

not operate on Sundays or holidays. In addition, Americans with Disability Act (ADA) Paratransit Service by TRACER is a door-to-door service available to City residents who complete a certification for the service and visitors with ADA documentation. The service is designed to serve ADA/Medicare passengers and those 65 and older.

The San Joaquin RTD County Hopper service travels down Grant Line Road in the project vicinity.

Rail

Altamont Corridor Express

The San Joaquin Regional Rail Commission (SJRRC) provides the ACE commuter rail transit service connecting Stockton to San José. ACE operates on weekdays and weekends, excluding holidays. Under a normal schedule, four westbound trains pass through the City with approximately 1-hour headways at 4:51 a.m., 6:06 a.m., 7:11 a.m., and 7:36 a.m. and between 6:36 a.m. and 9:46 a.m. on Saturdays. Four eastbound trains return through the City with approximately 1-hour headways, at 5:11 p.m., 6:11 p.m., 7:11 p.m., and 8:14 p.m. Monday to Friday and at 5:34 p.m. and 8:54 p.m. on Saturdays.[3] TRACER makes connections with most departures and arrivals, providing transit to the Tracy Transit Station and other stops. However, because of the COVID-19 Pandemic, the 7:11 a.m. and 7:36 a.m. and the 6:11 p.m. and 8:14 p.m. trains have been suspended. In addition, all weekend service has been suspended.

Project Site

Bus

The closest bus stop to the project site is approximately 0.5 mile west at the intersection of Grant Line Road and North Chrisman Road. The stop is served by San Joaquin RTD County Hopper Bus Route 797, connecting to Lathrop, Stockton, and Manteca on weekends.[4] The next nearest bus stop is 1.59 miles to the west at the Shops at Northgate Village. The stop is served by TRACER Route E, connecting to the Tracy Transit Station, and San Joaquin RTD County Hopper bus routes 90 and 97, connecting to Lathrop and Stockton.[5,6,7]

The TRACER Paratransit Service area boundary is adjacent to the southern and western project site boundaries.[8]

Rail

The Tracy Station is located at 4800 South Tracy Boulevard, approximately 4.70 miles southwest of the project site.

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[3] San Joaquin Regional Rail Commission. 2020. Schedules and Fares. Website: https://acerail.com/schedules/. Accessed April 8, 2020.
[4] San Joaquin Regional Transit District. 2018. Route 797 Schedule. March 11. Website: http://sanjoaquinrtd.com/route-797/. Accessed April 20, 2020.
[5] City of Tracy. 2019. TRACER Route Map. October. Website: https://www.ci.tracy.ca.us/documents/Route_Map_October_2019.pdf. Accessed April 6, 2020.
[6] San Joaquin Regional Transit District. 2014. Route 90 Map. August 10. Website: http://www.sanjoaquinrtd.com/maps_and_schedules/GIF/90.gif. Accessed April 6, 2020.
[7] San Joaquin Regional Transit District. 2013. Route 97 Map. August 11. Website: http://www.sanjoaquinrtd.com/maps_and_schedules/GIF/97.gif. Accessed April 6, 2020.
[8] City of Tracy. 2017. TRACER Paratransit System Map. November 1.

Bicycle Facilities

Caltrans Highway Design Manual and National Association of City Transportation Officials Urban Bikeway Design Guide define four major types of bicycle facilities:[9]

- **Class I: Multiuse Path—**These paths provide a completely separate right-of-way and are designated for the exclusive use of bicycles and pedestrians with vehicle cross-flow minimized.
- **Class II: Bicycle Lane—**These bicycle lanes provide a restricted right-of-way and are designated for the use of bicycles for one-way travel with a striped lane on a street or highway. These bicycle lanes are generally a minimum of 5 feet wide, and vehicle/pedestrian cross-flow is permitted.
- **Class III: Bicycle Route with Sharrows—**These bikeways provide right-of-way designated by signs or pavement markings for shared use with motor vehicles. These bikeways include sharrows or "shared-lane markings" to highlight the presence of bicyclists.
- **Class IV: Buffered Bicycle Lanes—**These bicycle lanes consist of a physically separate lane for increased comfort and protection of bicyclists. These bicycle lanes can be physically separated by a barrier, such as planters or on-street parking, grade-separated from the roadway, or a painted buffer area. These can also be called cycle-tracks, and can allow for one-way or two-way bicycle travel.

Study Area

In the study area, there is a Class I paved multiuse bicycle path, which is separated from North MacArthur Drive from the I-205 business loop to I-205, spanning approximately 1.8 miles and extending eastward along the northern side of East Pescadero Avenue for less than 0.5 mile. A Class II bicycle lane runs the same length on North MacArthur Drive and ends at the North MacArthur Drive/East Pescadero Avenue intersection. The Class II bicycle lane extends westward on East Pescadero Avenue for approximately 950 feet. There is also a Class II bicycle lane along Grant Line Road from the Joe Pombo Parkway/Grant Line Road intersection that spans approximately 3.80 miles to the east and terminates at the Chabot Court/Grant Line Road intersection.[10]

Project Site

No Class I facilities exist near the project site. Class II facilities exist along Grant Line Road in eastbound and westbound directions, west of Paradise Road. No Class III facilities exist near the project site.

Pedestrian Facilities

Study Area

There are sidewalks on the southern side of Grant Line Road, extending eastward from the Grant Line Road/East Paradise Road intersection for approximately 0.25 mile. There is also a sidewalk on the west side of Paradise Road, running northward from the Ryder Distribution Center entrance at 2795 Paradise

[9] California Department of Transportation (Caltrans). 2009. Highway Design Manual, Chapter 1000 Bicycle Transportation Design. Website: http://www.dot.ca.gov/hq/oppd/hdm-before-5-7-2012-change/oldhdmtoc.htm. Accessed September 20, 2018.

[10] City of Tracy Parks and Community Services Department. 2005. City of Tracy Bikeways Master Plan. April.

Road to the Paradise Road/West Pescadero Avenue intersection; sidewalks are also located on both sides of East Paradise Road for approximately 0.7 mile from the Grant Line Road/East Paradise Road intersection to just west of the East Paradise Road/North Chrisman Road intersection. Sidewalks along both sides of the entirety of Chabot Court provides a pedestrian connection from East Paradise Road to Grant Line Road. There are no sidewalks along California Avenue.

Project Site

Grant Line Road provides sidewalk facilities on both sides of the road up until the project site's frontage. No sidewalks exist along the project site's frontage along Paradise Road. Sidewalks have not been developed at this location because the land is undeveloped.

Vehicle Miles Traveled

In approving Senate Bill (SB) 743 in 2018, the California State Legislature, directed the Governor's Office of Planning and Research (OPR) to develop guidelines for assessing transportation impacts based on Vehicle Miles Traveled (VMT). In response to SB 743, California Environmental Quality Act (CEQA) and its implementing guidelines (CEQA Guidelines) were significantly amended regarding the methods by which lead agencies are to evaluate a project's transportation impacts for purposes of CEQA review. As described in CEQA Guidelines Section 15064.3(a):

> Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.

This section of the CEQA Guidelines continues to set forth the criteria for analyzing transportation impacts. Currently, the City is studying its own thresholds, but none have been adopted. Accordingly, the City has decided, in its discretion, to utilize OPR guidelines (as described further below) for purposes of conducting this analysis.

The OPR has adopted recommended analysis guidelines for SB 743 in its Technical Advisory on Evaluating Transportation Impacts in CEQA[11] which provides for VMT as the principal measure to replace LOS for determining significant transportation impacts. VMT is a measure of total vehicular travel that accounts for the number of vehicle trips and the length of those trips. The OPR selected VMT, in part, because jurisdictions are already familiar with this metric. VMT is already used in CEQA to study other potential impacts such as greenhouse gas (GHG) emissions, air quality, and energy impacts and is used in planning for regional Sustainable Communities Strategies.

VMT also allows for an analysis of a project's impact throughout the jurisdiction rather than only in the project vicinity, allowing for a better understanding of the full extent of a proposed project's transportation-related impact. It should be noted that SB 743 still recognizes a lead agency's use of

[11] Governor's Office of Planning and Research (OPR). 2018. Technical Advisory On Evaluating Transportation Impacts in CEQA. December. Website: https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed January 7, 2021.

LOS for other planning purposes outside the scope of CEQA. Understanding how the local roadway network functions from an engineering standpoint is still critical to local land use agencies to monitor traffic flow, identify safety issues, establish fees, plan circulation infrastructure, and manage congestion. However, for the purposes of evaluating environmental impacts under CEQA, the new regulations have removed congestion from the range of required subjects analyzed within CEQA documents.

In its discretion, the City has determined to evaluate the proposed project using the Draft City of Tracy VMT Calculator. This methodology follows OPR guidelines for developing VMT thresholds and project VMT calculations. Both the adjusted 2042 City Travel Demand model, which is based on the new SJCOG Travel Demand model, and Big Data were used for this analysis. The data from the Travel Demand model and Big Data was then used to develop a VMT Calculator tool for the City. The VMT tool was developed using outputs from the City's Travel Demand model and Big Data to determine VMT per employee by Traffic Analysis Zone (TAZ). This data was input into the VMT Calculator, and Excel's internal location algorithm is used to locate any address within the City and pull the corresponding VMT information associated with the TAZ that covers that location. As the City's Travel Demand model does not contain as many discrete land use categories as there are types of projects, the VMT Calculator also allows for a drop down of land use types used in the Trip Generation Handbook, 10th Edition, published by the Institute of Transportation Engineers (ITE). These land use types are associated with the model's land use categories to help the user estimate its project's average VMT per employee.

In addition, as discussed on page 4 of the Technical Advisory on Evaluating Transportation Impacts in CEQA, December 20182, CEQA requires analytical techniques be reasonable. The methodologies used in this analysis are consistent with this requirement.

Two data sets, Streetlight Data and Model trips by trip purpose, were combined to determine VMT per employee. The TAZs were first assigned to a census block group based on their respective locations to match the two data sets. The total home-based work attraction trips from the Model were multiplied by the average trip length for work trips to determine total employment VMT. This was then divided by the total employment from the Model for all TAZs within each census block group to determine VMT per capita for each census block group. Thresholds for VMT per capita and VMT per employment were determined by dividing the total VMT within the Tracy Sphere of Influence (SOI) for both trip types and dividing them by the total population and total employment, respectively, within the Tracy SOI. The City's threshold is 9.4 VMT per employee. This is 15 percent below the existing countywide work VMT per employee.

Emergency Access and Routes

Study Area

The main arterial roads into and out of the project vicinity that would be used in case of emergency would be I-205 in the east–west direction and I-5 in the north–south direction. Although not expressly designated as such, given their nature and location, these roads act as the main evacuation routes into and out of the project vicinity.

Project Site

The main points of access to the project site are Paradise Road and Grant Line Road. Emergency access would be provided via these two access points.

3.14.3 - Regulatory Framework

Federal

No federal plans, policies, regulations, or laws related to transportation are applicable to the proposed project.

State

California Department of Transportation Level of Service Goals

Caltrans builds, operates, and maintains the State highway system, including the interstate highway system. Caltrans's mission is to improve mobility statewide. Caltrans operates under strategic goals to provide a safe transportation system, optimize throughput and ensure reliable travel times, improve the delivery of State highway projects, provide transportation choices, and improve and enhance the State's investments and resources. Caltrans controls the planning of the State highway system and accessibility to the system. Caltrans establishes LOS goals for highways and works with local and regional agencies to assess impacts and develop funding sources for improvements to the State highway system. Caltrans requires encroachment permits from agencies or new development before any construction work may be undertaken within the State's right-of-way. For projects that would impact traffic flow and levels of services on State highways, Caltrans would review measures to mitigate the traffic impacts.

SB 743 requires that project VMT be analyzed for CEQA purposes and determination of significant impacts. Caltrans has identified an LOS objective of C/D (i.e., on the "cusp" between levels of service C and D) as the acceptable service level for signalized intersections. For the purposes of this analysis, project-related deficiencies at study intersections are defined to occur when the addition of project traffic:

- Causes operations to deteriorate from an acceptable level (LOS C) to an unacceptable level (LOS D or worse).
- Causes the existing measure of effectiveness (average delay) to deteriorate at a State-operated intersection that is currently operating at worse than LOS C.

The LOS thresholds for Caltrans are taken from the Guide for the Preparation of Traffic Impact Studies.[12] As of May 20, 2020, Caltrans has updated their guidelines (Vehicle Miles Traveled–Focused Transportation Impact Study Guidelines); however, no LOS thresholds are stated. Under some circumstances, Caltrans will work with local agencies to determine an acceptable LOS standard on a case-by-case basis when the study roadway facility is constrained and the LOS C objective is infeasible.

[12] State of California Department of Transportation (Caltrans). 2002. Guide for the Preparation of Traffic Impact Studies. Website: https://nacto.org/docs/usdg/guide_preparation_traffic_impact_studies_caltrans.pdf. Accessed January 7, 2021.

Senate Bill 743

In response to SB 743, as noted above, the OPR updated the CEQA Guidelines to include new transportation-related evaluation metrics. In late 2018, updates to the CEQA Guidelines were finalized and adopted. These changes became effective on December 28, 2018. The updated CEQA Guidelines address SB 743 and require lead agencies to assess VMT impacts when analyzing potential environmental impacts of projects. The updated CEQA Guidelines indicate "a development project that is not exempt and that results in vehicle miles traveled greater than regional average for the land use type may indicate a significant impact." The latest direction from the OPR also lists new exemptions for certain projects with revised screening thresholds (e.g., 100 trips/day, map based, or near transit stations). The City has not yet established specific local VMT thresholds.

The updated guidelines eliminate the use of automobile delay metrics, such as LOS, from determining significant environmental impacts from vehicle travel. VMT has been identified as the most appropriate metric to evaluate a project's transportation impacts, as projects that result in lower-than-average VMT support goals of reducing greenhouse gas emissions, while projects that result in higher-than-average levels of vehicle travel contribute to an increasing rate of greenhouse gas emissions.

Regional

San Joaquin County Regional Congestion Management Program 2021

The purpose of the RCMP is to monitor congestion, identify congestion problems, and establish a programming mechanism aimed at reducing congestion. Designation of a regional transportation system supports RCMP monitoring activities and focuses the implementation of the RCMP on a core network of key transportation facilities that facilitate regional travel within San Joaquin County. Consistent with the implementation of SB 743 CEQA streamlining legislation, the RCMP discontinues the use of LOS for the evaluation of RCMP congestion deficiencies. The RCMP objectives include:

- Improve operational efficiency
- Facilitate goods movement
- Increase use and mode shift to the transit system
- Increase use and mode shift to the bike system
- Support investment in and development of complete streets
- Improve safety
- Support proactive system management
- Support proactive TDM
-

San Joaquin Council of Governments Capital Improvement Program

The SJCOG CMP details the Capital Improvement Program (CIP), the action plan for the CMP that provides a framework for the funding and implementation of regional projects that maintain or improve the transportation performance standards of the CMP. The SJCOG is required to adopt a 7-year CIP every odd-numbered year, which is intended to maintain or mitigate transportation impacts to the region in addition to conforming to transportation-related vehicle emission air quality mitigation measures. All projects in the Regional Transportation Improvement Program must first be listed in the SJCOG's regional CIP. (This applies to most State-funded projects.)

Local

City of Tracy

SB 743 requires that project VMT be analyzed for CEQA purposes and determination of significant impacts. The City of Tracy has established a minimum LOS D traffic operation standard in the General Plan, which is a non-CEQA requirement. For intersections within 0.25 mile of a freeway, the City of Tracy has established a minimum LOS E standard. If an intersection already operates at a LOS E or F in existing conditions, either a Deficiency Plan is required or roadways are allowed to be "grandfathered" at their existing LOS.

Table 3.14-1 relates the operational characteristics associated with each LOS category for unsignalized intersections.

General Plan

Circulation Element

The Circulation Element specifies the general location and extent of existing major streets, LOS, transit facilities, and bicycle and pedestrian networks. As required by law, all facilities in the Circulation Element are correlated with the land uses foreseen in the Land Use Element.[13] The General Plan sets for the following goals and policies that are relevant to transportation in the Circulation Element:

Goal CIR-1—A roadway system that provides access and mobility for all of Tracy's residents and businesses while maintaining the quality of life in the community.

Objective CIR-1.1 Implement a hierarchical street system in which each street serves a specific, primary function and is sensitive to the context of the land uses served

Policies

Policy P1 The City should develop context-based street designs that allow for variations based on the expected function and location of the facility, and the surrounding land use context. These context-sensitive designs should have the following aims:

- Create aesthetically attractive streetscapes.
- Enhance multimodal transportation by increasing mobility and improving safety for autos, trucks, transit, pedestrians, and bicyclists.

Policy P2 The City shall preserve rights-of-way needed for future roadway and freeway interchange improvements through dedication or acquisition as adjacent properties develop or redevelop.

Policy P3 The City shall continue to apply traffic mitigation fee programs to fund transportation infrastructure, based on a fair share of facility use.

Policy P4 The Roadway Master Plan update shall identify necessary improvements to various intersections on I-205 and I-580 based on land use designations and with particular

[13] Design, Community, and Environment. 2011. City of Tracy General Plan (prepared for the City of Tracy).

attention to Terminal Access Routes in accordance with Surface Transportation Assistance Act of 1982 (STAA).

Objective CIR-1.2: Provide a high level of street connectivity.

Policies

Policy P3 New development shall be designed to provide vehicular, bicycle, and pedestrian connections with adjacent developments.

Policy P5 New development shall be designed with a grid or modified grid pattern to facilitate traffic flows and to provide multiple connections to arterial streets.

Objective CIR-1.3: Adopt and enforce LOS standards that provide a high level of mobility and accessibility, for all modes, for residents and workers.

Policies

Policy P1 To the extent feasible, the City shall strive for LOS D on all streets and intersections, with the LOS standard for each facility to be defined in the Transportation Master Plan in accordance with the opportunities and constraints identified through the traffic projections and analysis performed for that Plan. The following exceptions to the LOS D standard may be allowed:

- LOS E or lower shall be allowed on streets and at intersections within one-quarter (1/4) mile of any freeway. This lower standard is intended to discourage interregional traffic from using Tracy streets.

Policy P2 The City may allow individual locations to fall below the City's LOS standards in instances where the construction of physical improvements would be infeasible, prohibitively expensive, significantly impact adjacent properties or the environment, or have a significant adverse effect on the character of the community, including pedestrian mobility, crossing times, and comfort/convenience.

Policy P3 Intersections may be permitted to fall below their adopted LOS standard on a temporary basis when the improvements necessary to preserve the LOS standard are in the process of construction or have been designed and funded but not yet constructed.

Policy P4 Roadways and freeways that are subject to State and regional agency oversight and/or are candidates for State-funded or federally funded improvements should conform to the operational service requirements of the applicable agency.

Policy P5 For long-range planning purposes, the LOS of major streets shall be determined based on an estimation of peak-hour conditions using future average daily traffic forecasts and standard Tracy relationships between daily traffic and peak PM hour traffic.

Policy P6 For project-specific development approvals, the LOS at major street intersections shall be determined based on the direct estimation of peak-hour conditions and

should reflect the average condition prevailing throughout the peak-hour of a typical weekday for all traffic using the intersection.

Policy P7 Traffic studies for new developments within the City may be prepared if necessary and appropriate to determine the impacts of the project's traffic on the transportation system.

Policy P10 Exclusive right turn lanes in and out of major residential, commercial, industrial and office developments shall not reduce the width of public or private landscaping requirements.

Objective CIR-1.4: Protect residential areas from commercial truck traffic.

Policies

Policy P1 Significant new truck traffic generating uses shall be limited to locations along designated truck routes, in industrial areas or within 0.25 mile of freeways.

Policy P2 The City shall enforce designated truck routes based on the existing City ordinance.

Objective CIR-1.6: Maximize traffic safety for automobile, transit, bicycle users, and pedestrians.

Policies

Policy P1 The City shall design streets using context-sensitive design principles that enhance safety for all modes of travel.

Policy P2 New development shall implement traffic calming measures where necessary so long as connectivity is not diminished.

Objective CIR-1.7: Minimize traffic-related impacts such as noise and emissions on adjacent land uses.

Policies

Policy P1 Appropriate buffering and screening mechanisms shall be incorporated in development projects to limit the impacts associated with traffic. These buffering and screening mechanisms may include setbacks, landscaping, berms, sound walls, or other methods as appropriate.

Goal CIR-2: Adequate interregional access.

Objective CIR-2.1: Support regional planning and implementation efforts to improve interregional highways and interregional travel efficiency.

Policies

Policy P4 The City shall work with the City of Lathrop and San Joaquin County to preserve a right-of-way along the existing alignment of Middle Road/Arbor Avenue north of I-205 (a.k.a., Golden Valley Parkway) for the future construction of a regional roadway parallel to I-205. This process should determine appropriate funding mechanisms and the design of an interchange with I-205 at Chrisman Road.

Goal CIR-3: Safe and convenient bicycle and pedestrian travel as alternative modes of transportation in and around the City.

Objective CIR-3.1: Achieve a comprehensive system of citywide bikeways and pedestrian facilities.

Policies

Policy P6 New development shall include pedestrian and bicycle facilities internal to the development and that connect to citywide facilities, such as parks, schools, and recreational corridors, as well as adjacent development and other services.

Policy P7 New development sites for commercial, employment, educational, recreational, and park-and-ride land uses shall provide bicycle parking and/or storage facilities.

Goal CIR-4: A balanced transportation system that encourages the use of public transit and high occupancy vehicles.

Objective CIR-4.1: Promote public transit as an alternative to the automobile.

Policy

Policy P5 The City shall require development to provide for transit and transit-related increased modal opportunities, such as adequate street widths and curb radii, bus turnouts, bus shelters, park-and-ride lots, and multimodal transit centers through the development and environmental review processes, if appropriate.

Safety Element

The Safety Element sets forth policies to protect the community from risks associated with the effects of flooding, seismic and other geologic hazards, and wildland fires.[14] The General Plan sets forth the following goals and policies that are relevant to emergency access routes in the Safety Element:

Goal SA-6: Preparation for emergencies.

Objective SA-6.1: Prepare and update City emergency procedures in the event of natural or man-made disasters.

Policy

Policy P1 Emergency access routes shall be kept free of traffic impediments.

City of Tracy Bikeways Master Plan

The City of Tracy Bikeways Master Plan,[15] adopted in April 2005, is intended to serve as a long-range planning tool that enables the City to develop a unified network of bikeway routes that serves both recreational and commuter needs. The City of Tracy Bikeways Master Plan provides guidance that allows the City to not only meet the needs of the residents of Tracy as they travel within the city limits but also provides access to schools, parks, and employment centers and provides options for

[14] Design, Community, and Environment. 2011. City of Tracy General Plan (prepared for the City of Tracy).
[15] City of Tracy. 2005. City of Tracy Bikeways Master Plan. April. Website: https://www.ci.tracy.ca.us/documents/Bikeways_Master_Plan.pdf. Accessed January 8, 2021.

connectivity to adjacent City and County bike routes. There are four main goals that drive the City of Tracy Bikeways Master Plan:

- Safety
- Access
- Quality of life
- Implementation

Northeast Industrial Specific Plan

The Northeast Industrial Specific Plan (NEI Specific Plan) provides for efficient circulation by automobiles and trucks within the NEI Specific Plan area. The proposed land use mix, street geometry, and proximity to the interstate freeway system help to minimize development-related impacts to Tracy's transportation network.

The distribution, location, and extent of the roadway improvements within the NEI Specific Plan area shall be subject to the NEI Phase I Finance and Implementation Plans, dated December 1999 (Resolution Numbers 99-462 and 99-485); April 1, 2003 (Resolution Number 2003-100); January 4, 2005 (Resolution Number 2005-023); February 21, 2006 (Resolution Number 2006-069); and April 15, 2008 (Resolution Number 2008-065), and the NEI Phase II Finance and Implementation Plans, dated January 2006 (Resolution Number 2006-038) and January 15, 2008 (Resolution Number 2008 010). All future roadway improvements will also be subject to any revisions or updates to the NEI Finance and Implementation Plans and would also be subject to the development impact fees established in those plans. Figures 6, 7A, and 7B in the NEI Specific Plan show the original roadway network and street sections for the NEI Specific Plan, which will be modified by the Finance and Implementation Plan process.[16]

Parking and On-Site Vehicular Circulation

1. Parking, on-site circulation, and loading area standards shall be as required by the provisions of Title 10, Article 26, Off-Street Parking Requirements of the Tracy Municipal Code unless modified below or as part of the Development Review approval. Portions of off-street parking requirements are summarized below.
2. Parking lots containing 10-20 spaces may include a maximum of 20 percent of the total number of spaces for compact cars. These spaces shall be designed and marked in accordance with City standards and distributed throughout the lot. Parking areas containing 20 or more spaces may include a maximum of 30 percent of the total number of spaces for compact cars.
3. Minimum off-street parking standards are provided in Table 3.14-3.

[16] City of Tracy. 2012. Northeast Industrial Specific Plan.

Table 3.14-3: Minimum Off-Street Parking Requirements

Use	Minimum Parking Spaces Required
Warehouse	One space per 1,000 square feet of the first 20,000 square feet of gross floor area, plus one space per 2,000 square feet of the second 20,000 square feet of gross floor area, plus one space per 4,000 square feet of the remaining square feet of gross floor area.
Source: City of Tracy. 2012. Northeast Industrial Specific Plan.	

Loading and Unloading Spaces

1. Sufficient off-street loading and unloading spaces shall be provided on each site, and adequate provisions and space shall be made for maneuvering freight vehicles and handling all freight. All loading activity, including turnaround and maneuvering, shall be made on-site.
2. In commercial areas, truck loading areas and docks shall not be permitted between building(s) and the public street unless enclosed with architectural screen of material similar to building.
3. In industrial areas, truck loading areas and docks shall not be permitted between building(s) and the street unless the building(s) are set back from the curb a minimum of 125 feet and doors are screened by landscaping, berms, and/or fences.
4. Buildings, structures, and loading facilities shall be designed and placed upon the site so that vehicles, whether rear loading or side loading, may be loaded or unloaded at any loading dock, door, or area without extending beyond the property line.

Driveway Standards

Driveways should be carefully located so as not to impede the primary function of the streets, which is to carry through traffic. It should be noted that these spacing guidelines are minimum values. The goal should be to exceed them where possible.

1. Individual industrial parcels on major arterial streets may have driveways, but they should be carefully located so as not to impede the traffic efficiency. In general, parcels with frontage on the major arterials should have their entryway on side streets if possible. If a parcel's only frontage is on the major arterial, every effort should be made to consolidate access at a single driveway. Spacing standards for driveways on major arterials shall be as follows:

   a) Full access driveways: 500 feet minimum
   b) Partial access driveways (right in/out, left-turn in): 500 feet minimum
   c) Right turn in and out: 350 feet minimum upstream from an intersection
   d) Right turn in and out: 200 feet minimum downstream from an intersection

2. On industrial streets, spacing for full access driveways is 450 feet, minimum. "T" intersections are encouraged over four-way intersections. Every effort should be made to consolidate driveways.

3. No driveway shall be located closer than 200 feet to the radius return point at intersections.
4. Driveways shall be a minimum of 25 feet wide. Subsequent development shall demonstrate that driveway width and placement can accommodate truck turning movement and clearing without blocking roadways.
5. Driveway width modifications may be approved with shared (ganged) driveways. Ganged driveways which serve two adjacent sites will be required to install landscaped islands along parking adjacent to the gang driveway and a landscape zone at the end of the common drive will act as a terminus to the view line down the ganged driveway.

a) Full curb returns (as opposed to a standard driveway) shall be utilized for entries to all sites of over 10 acres in size or for common driveways that serve two adjacent sites that together total more than 10 acres.

6. Access driveways shall provide adequate length to accommodate off-street vehicle stacking needs during times of peak use.
7. Parcel entry should be clear, attractive, and inviting; circulation should direct employee and visitor traffic clearly through the site to main building entries and drop-off points and service trucks to loading.
8. In commercial areas, vehicular entries to the site shall be well defined and recognizable to motorists. Improvements should include accent paving, signs, special plantings, and lighting. Such improvements shall not block motorists' sight lines to oncoming traffic.

City of Tracy Municipal Code

Chapter 10.08 Article 26 of the Tracy Municipal Code sets forth the amounts of long-term and short-term bicycle parking that a project must provide. Projects are required to provide bicycle parking based on the required automobile parking. For projects with over 40 required spaces, bicycle parking is required at 5 percent of the automobile spaces.[17]

3.14.4 - Impacts and Mitigation Measures

Significance Criteria

According to CEQA Guidelines Appendix G Environmental Checklist, to determine whether transportation impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the proposed project:

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

d) Result in inadequate emergency access?

[17] City of Tracy Municipal Code. 2020. Chapter 10.08.3510—Bicycle Parking. Website: https://library.municode.com/ca/tracy/codes/code_of_ordinances?nodeId=TIT10PLZO_CH10.08ZORE_ART26OREPARE. Accessed January 8, 2021.

e) Conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

To analyze the proposed project's potential environmental impacts under CEQA under the foregoing significance thresholds, the City has established standards in the General Plan related to traffic circulation, bicycle and pedestrian circulation, and transit service. Currently, as explained more fully above, the City is studying potential VMT thresholds but has not yet formally adopted one that would apply locally. Accordingly, for purposes of this analysis, the City has determined, in its discretion, to utilize the following criteria to evaluate the significance of transportation impacts under CEQA resulting from implementation of the proposed project.

Vehicle Miles Traveled

According to the Updated CEQA Thresholds of Significance and the Technical Advisory on Evaluating Transportation Impacts in CEQA, VMT impacts could have a significant effect on the environment if the proposed project would:

- Cause additional VMT per capita, per service population, or other appropriate efficiency measure.
- Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network.
- Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile LOS or other measures of vehicle delay).

Alternative Transportation, Bicycle Facilities, Pedestrian Facilities, and Transit Facilities

Transit Facilities

Generally, a project causes a significant impact to transit facilities and services if an element of it conflicts with existing or planned transit services. The evaluation of transit facilities shall consider if:

- A project creates demand for public transit services above the capacity which is provided or planned.
- A project or project-related mitigation disrupts existing transit services or facilities.
- A project or project-related mitigation conflicts with an existing or planned transit facility.
- A project or project-related mitigation conflicts with transit policies adopted by the City, TRACER, and ACE for their respective facilities in the study area.

Bicycle and Pedestrian Facilities

The City of Tracy Bikeways Master Plan describes objectives necessary to ensure that bicycle facilities are safe and effective for City residents but does not provide specific significance thresholds. The City does not have significance thresholds with respect to pedestrian facilities. Though the City does not provide specific significance thresholds with respect to bicycle or pedestrian facilities, using the

Citywide Tracy Bikeways Master Plan and City input as a guide, the following approach is used to determine significant impacts to these facilities.

A significant impact would occur when a proposed project:

- Creates a hazardous condition that currently does not exist for pedestrians and bicyclists or otherwise interferes with pedestrian accessibility to the site and adjoining areas.
- Conflicts with an existing or planned pedestrian or bicycle facility.
- Conflicts with policies related to bicycle and pedestrian activity adopted by the City.

Design Feature Hazards

A significant impact would occur if the proposed project violates roadway design policies set forth in the General Plan or the Tracy Municipal Code.

Emergency Access

The General Plan Circulation and Safety Elements do not provide significance thresholds for emergency access. Ordinance of the City of Tracy number 1247 adopts the 2019 California Fire Code and amends the code to address local conditions. Therefore, this Draft EIR will evaluate the proposed project using the significance threshold provided by the 2019 California Fire Code as follows:

- Emergency apparatus access must be provided with a driving surface of not less than 20 feet unobstructed with within 150 feet of travel distance to all portion of all exterior walls of the proposed building.
- Buildings exceeding 30 feet require approved aerial apparatus access. An aerial apparatus roadway with a minimum unobstructed width of 26 feet shall be provided. This unobstructed 26-foot-wide roadway shall parallel one entire side of the building and must be no closer than 15 feet and no further than 30 feet from the building.

Roadway Facilities

LOS analysis is provided for informational purposes only, to inform the proposed project's conditions of approval (outside of the CEQA context) and to provide relevant data to the decision-makers regarding the proposed project's transportation-related operations. The following criteria were used to determine the proposed project's consistency with applicable General Plan policies and the potential need for related improvements:

Level of Service

City of Tracy

- Minimum LOS D traffic operation standard. For intersections within 0.25 mile of a freeway, the City has established a minimum LOS E standard. If an intersection already operates at a LOS E or F in existing conditions, either a Deficiency Plan is required or roadways are allowed to be "grandfathered" at their existing LOS.

Caltrans

Caltrans has identified an LOS objective of C/D (i.e., on the "cusp" between levels of service C and D) as the acceptable service level for signalized intersections. For the purposes of this analysis, for purposes of determining non-CEQA related operational issues, project-related deficiencies at study intersections are defined to occur when the addition of project traffic:

- Causes operations to deteriorate from an acceptable level (LOS C) to an unacceptable level (LOS D or worse).
- Causes the existing measure of effectiveness (average delay) to deteriorate at a State-operated intersection operating at worse than LOS C.

The LOS thresholds for Caltrans are taken from the December 2002 Guide for the Preparation of Traffic Impact Studies. As of May 20, 2020, Caltrans has updated their guidelines (Vehicle Miles Traveled–Focused Transportation Impact Study Guidelines); however, no LOS thresholds are stated. Under some circumstances, Caltrans will work with local agencies to determine an acceptable LOS standard on a case-by-case basis when the study roadway facility is constrained and the LOS C objective is infeasible.

Approach to Analysis

Kimley-Horn prepared a VMT Memorandum and TIA that evaluated impacts on transportation. The complete analysis is provided in Appendix J. The analysis considers conditions occurring during weekday AM and PM peak-hours.

Vehicle Miles Traveled

The proposed project was evaluated using the City of Tracy VMT Calculator. For the surrounding industrial land use area, the City's threshold is 9.4 VMT per employee. The evaluation tool estimates that the proposed project would generate 16.9 VMT per employee. Therefore, the proposed project exceeds the VMT threshold by 7.5 VMT. Typically workers at warehouses travel from Modesto/Lathrop/Stockton to come and work in Tracy, which yields the higher VMT for the proposed project.

San Joaquin Council of Governments Regional Congestion Management Program

The City's 2012 and Draft 2022 TMPs closely follow the goals and objectives of the RCMP. The improvement of RCMP roadways within the City of Tracy will include multimodal facilities for pedestrians, bicyclists, and transit. The RCMP roadways will also maintain travel time reliability, i.e., the City's General Plan policy maintains LOS D or better at intersection along RCMP roadways unless there are no feasible improvements identified for operational deficiencies. The City Draft 2022 TMP has identified extensive Transportation Demand Management measures and Mobility Hubs to promote a reduction in single-occupancy vehicle trips, consistent with the goals of the RCMP. The proposed project would pay traffic impact fees that will incrementally fund the RCMP network.

Intersection Level of Service Analysis Scenarios

LOS analysis is provided for informational purposes only, to inform the identification of project-related (non-CEQA) conditions of approval that would ensure consistency with applicable General

Plan policies from an operational standpoint but subject to applicable laws related to nexus requirements.

Operation of the transportation network was evaluated under the following scenarios:

- **Background Conditions**–The Background Conditions scenario is based on current traffic conditions with the addition of approved, but not yet constructed, project traffic volumes to the existing roadway geometry and traffic control. Projects included in Background Conditions are provided in Table 3.14-4.

Table 3.14-4: Projects Included in Background Conditions

Project	Characteristics	Square Footage	Location
Seefried Project	High-Cube Warehouse	1,028,000	7351 East Grant Line Road
California Highway Patrol (CHP) Facility	CHP Headquarters	28,162	1175 East Pescadero Avenue
Home Depot Distribution Truck Parking Lot	Northeast Industrial–Light Industrial	804,118	Pescadero Avenue east of MacArthur Drive
Interstate Truck Center	Truck Center	52,516	1310 East Pescadero Avenue
Central Plastics Industrial Building	Northeast Industrial–Light Industrial	60,456	1480 Pescadero Avenue
NEI Phase 3 (Big Bird)	Warehouse	3,485,401	1500 East Grant Line Road
Source: Kimley-Horn. 2021. Tracy Alliance and Northeast Area Annexation Transportation Impact Analysis (prepared for the City of Tracy).			

- **Background Plus Project Conditions**–The Background Plus Project Conditions scenario is based on current traffic conditions with the addition of approved project traffic volumes to the existing roadway geometry and traffic control plus traffic generated by the proposed project.
- **Cumulative Conditions**–The Cumulative Conditions scenario is based on an evaluation of the City's Travel Demand model forecasts. Year 2035 turning movement volumes were extrapolated from the TMP[18] 2035 Horizon Year turning movement figures. For intersections without 2035 data, volumes were estimated using the intersection turning movement volumes provided in the TMP. Adjustments to the 2035 Horizon Year turning movement figures were made for the new NEI Phase 3 project proposed along Grant Line Road.
- **Cumulative Plus Project Conditions**–The Cumulative Plus Project Conditions scenario is based on cumulative traffic conditions plus traffic generated by the proposed project.

The TIA does not analyze LOS or transportation deficiencies for Existing Conditions because it is anticipated that a new extended Chrisman Road alignment will be constructed between Grant Line

[18] RBF Consulting. 2012. Citywide Roadway and Transportation Master Plan (prepared for the City of Tracy). November.

Road and Paradise Avenue, Pescadero Avenue will be realigned where it intersects with the new Chrisman Road, and the Paradise Road intersection with Chrisman Road is realigned. Therefore, Background Conditions were taken as the base year for purposes of this analysis. Exhibits 3.14-1 and 3.14-2 illustrate the study area for the Background and Cumulative Conditions scenarios. Exhibit 3.14-3 shows Background Conditions traffic control and lane geometry, and Exhibit 3.14-4 shows Background Conditions peak-hour volumes.

Trip Generation

For purposes of determining the reasonable worst-case effects of traffic on the surrounding street network, project trips are typically estimated between the hours of 7:00 a.m. and 9:00 a.m. and 4:00 p.m. and 6:00 p.m. on a weekday. While the proposed project itself may generate more traffic during other times of the day, the peak of "adjacent street traffic" represents the time period when the uses contribute to the greatest amount of congestion and, consequently, project-related operational deficiencies. A trip is defined in Trip Generation Manual as a single or one-directional vehicle movement with either the origin or destination at the project site. In other words, a trip can be either "to" or "from" the site. In addition, a single customer visit to a site is counted as two trips (i.e., one to and one from the site).

The City of Tracy Model rates were utilized to determine AM and PM peak-hour trip rates. Since the model does not provide daily average rates and AM and PM distributions, ITE rates were supplemented using the following ITE Trip Generation Manual, 10th Edition,[19], Land Use Code: Land Use 150-High-Cube Transload and Short-Term Storage Warehouse and Land Use 154–Warehousing. These facilities are the most accurate land use assumptions because they incorporate trips for both the office space and the warehouse space consistent with the project description set forth in this Draft EIR. For example, Building B was assumed to be a warehousing facility and not a high-cube warehouse based on information provided by the Tracy Alliance parcels applicant. ITE states that a high-cube warehouse is a building that typically has at least 200,000 gross square feet of floor area, and Building B does not meet this requirement.

The buildings to be developed on the Tracy Alliance parcels are expected to generate a gross of approximately 2,611 daily trips, 225 trips (156 in/69 out) during the AM peak-hour, and 271 trips (83 in/188 out) during the PM peak-hour. Utilizing the above assumptions, the uses to be developed on the Suvik Farms and Zuriakat parcels, collectively, are expected to generate a gross of approximately 2,104 daily trips, 181 trips (125 in/56 out) during the AM peak-hour, and 210 trips (65 in/145 out) during the PM peak-hour. It was conservatively assumed that no trip credits can be applied to the proposed land uses.

Therefore, the proposed project at full buildout is anticipated to generate a total of approximately 4,715 daily trips, 406 trips (281 in/125 out) during the AM peak-hour, and 481 trips (148 in/333 out) during the PM peak-hour. Table 3.14-5 summarizes the proposed project's expected trip generation.

[19] Institute of Transportation Engineers. 2017. Trip Generation Manual, 10th Edition.

Table 3.14-5: Trip Generation

Land Uses	Project Size	Daily	AM Peak-hour		PM Peak-hour	
		Total[1]	Total Peak-hour[1]	In/Out	Total Peak-hour[1]	In/Out
Trip Generation Rates						
Project Use						
High-Cube Warehouse[1]	– ksf	1.40	0.12	69%/31%	0.14	31%/69%
Warehousing[2]	– ksf	1.74	0.17	77%/23%	0.33	27%/73%
Trips Generated						
Tracy Alliance Parcels						
Building A	**978.5 ksf**	**1,370**	**117**	**81/36**	**137**	**42/95**
	Passenger Cars[3]	*932*	*81*	*56/25*	*107*	*33/74*
	Trucks[3]	*438*	*36*	*25/11*	*30*	*9/21*
Building B	**64.0 ksf**	**111**	**11**	**8/3**	**21**	**6/15**
	Passenger Cars[3]	*75*	*8*	*6/2*	*16*	*5/11*
	Trucks[3]	*36*	*3*	*2/1*	*5*	*1/4*
Building C	**807.0 ksf**	**1,130**	**97**	**67/30**	**113**	**35/78**
	Passenger Cars[3]	*768*	*67*	*46/21*	*88*	*27/61*
	Trucks[3]	*362*	*30*	*21/9*	*25*	*8/17*
Tracy Alliance Parcels Buildings Total Trips	***1,849.5 ksf***	***2,611***	***225***	***156/69***	***271***	***83/188***
	Passenger Cars	***1,775***	***156***	***108/48***	***211***	***65/146***
	Trucks	***836***	***69***	***48/21***	***60***	***18/42***
Suvik Farms and Zuriakat Parcels						
Suvik Farms Parcels	**1,023.7 ksf**	**1,433**	**123**	**85/38**	**143**	**44/99**
	Passenger Cars[3]	*974*	*85*	*59/26*	*112*	*34/78*
	Trucks[3]	*459*	*38*	*26/12*	*31*	*10/21*
Zuriakat Parcel	**479.2 ksf**	**671**	**58**	**40/18**	**67**	**21/46**
	Passenger Cars[3]	*456*	*40*	*28/12*	*52*	*16/36*
	Trucks[3]	*215*	*18*	*12/6*	*15*	*5/10*
Suvik Farms and Zuriakat Parcels Total Trips	***1,502.9 ksf***	***2,104***	***181***	***125/56***	***210***	***65/145***
	Passenger Cars	***1,430***	***125***	***87/38***	***164***	***50/114***
	Trucks	***674***	***56***	***38/18***	***46***	***15/31***
	TOTAL TRIPS	***4,715***	***406***	***281/125***	***481***	***148/333***

Land Uses	Project Size	Daily	AM Peak-hour		PM Peak-hour	
		Total[1]	Total Peak-hour[1]	In/Out	Total Peak-hour[1]	In/Out
TOTAL PASSENGER CARS		***3,205***	***281***	***195/86***	***375***	***115/260***
TOTAL TRUCKS		***1,510***	***125***	***86/39***	***106***	***33/73***

Notes:
ksf = thousand square feet
[1] City of Tracy rates used for High-Cube Warehouse AM and PM peak-hour rates.
[2] City of Tracy model rates were utilized for the AM and PM peak-hour rates in addition to trip generation LU 154 average daily rate and AM and PM distribution. Institute of Transportation Engineers (ITE). Trip Generation, 10th Edition. 2017.
[3] ITE guidance for high-cube and warehousing facilities used, 2016.
Source: Kimley-Horn. 2021. Tracy Alliance and Northeast Area Annexation Transportation Impact Analysis (prepared for the City of Tracy).

Trip Distribution and Assignment

Two trip distributions were created for the following scenarios:

- Background Plus Project
- Cumulative Plus Project

Both trip distributions were developed based on, in part, knowledge of the study area and existing traffic counts and the City of Tracy Travel Demand model assignment. The Cumulative Plus Project trip distribution reflects the proposed changes to the road network where the Chrisman Road I-205 interchange is assumed to be implemented, consistent with the TMP.

Background Conditions Trip Distribution and Assignment

The Background Conditions distribution assumes network improvements according to background projects within the NEI Specific Plan. Road network improvements assumed for Background Conditions are provided above and in Appendix J.

The following provides the Background trip distribution assumptions used for **passenger car** project trips:

- 11 percent to/from the east along I-205
- 15 percent to/from the west along I-205
- 2 percent to/from the north along Paradise Road
- 32 percent to/from the west along Grant Line Road
- 20 percent to/from the east along Grant Line Road
- 20 percent to/from the west along 11th Street

The following provides the Background trip distribution assumptions used for **truck project** trips:

- 34 percent to/from the east along I-205
- 33 percent to/from the west along I-205

- 15 percent to/from the east along 11th Street
- 18 percent to/from the south along Chrisman Road

It should be noted that truck traffic is not permitted along Grant Line Road into the County. The distribution and assignment assume that trucks would need to travel along either 11th Street or Chrisman Road to access southbound I-5.

Exhibit 3.14-5 illustrates the distribution for passenger cars and Exhibit 3.14-6 illustrates the distribution for trucks in relation to the project site and study intersections for Background Plus Project Conditions.

Exhibit 3.14-7 shows the net project trip assignment for passenger cars and Exhibit 3.14-8 shows the project trip assignments for trucks that would occur at study intersections during the AM and PM peak-hour during Background Plus Project Conditions.

Cumulative Conditions Trip Distribution and Assignment

The Cumulative Conditions distribution assumes network improvements according to the TMP 2035 Horizon Year. Road network improvements assumed for Cumulative Conditions are indicated in Appendix J.

The following provides the Cumulative Conditions trip distribution assumptions for **passenger car** project trips:

- 11 percent to/from the east along I-205
- 35 percent to/from the west along I-205
- 2 percent to/from the north along Paradise Road
- 10 percent to/from the west along Grant Line Road
- 10 percent to/from the east along Grant Line Road
- 20 percent to/from the west along 11th Street
- 1 percent to/from the south along the MacArthur Extension
- 11 percent to/from the south along Chrisman Road

The following provides the Cumulative Conditions trip distribution assumptions used for **truck** project trips:

- 34 percent to/from the east along I-205
- 33 percent to/from the west along I-205
- 15 percent to/from the east along 11th Street
- 18 percent to/from the south along Chrisman Road

It should be noted that truck traffic is not permitted along Grant Line Road into the County. The distribution and assignment assume that trucks would need to travel along either 11th Street or Chrisman Road to access southbound I-5.

Exhibit 3.14-9 illustrates the assumed distribution for passenger cars and Exhibit 3.14-10 illustrates the assumed distribution for trucks in relation to the project site and study intersections during the Cumulative Plus Project Conditions.

Exhibit 3.14-11 provides the net project trip assignment for passenger cars and Exhibit 3.14-12 provides the net project trip assignment for trucks that would occur at study intersections during the AM and PM peak-hour Cumulative Plus Project Conditions.

Impact Evaluation

Vehicle Miles Traveled

Impact TRANS-1: The proposed project would result in a substantial increase in vehicle miles traveled.

This analysis, as detailed more fully in the VMT Memorandum, evaluated the proposed project's VMT impacts using the City of Tracy VMT Calculator. For the surrounding industrial land use area, the City's draft threshold is 9.4 VMT per employee. The evaluation tool estimated that the proposed project would generate 16.9 VMT per employee. Per OPR guidance, the VMT analysis excludes truck trips. As a result, the proposed project would exceed the threshold.

Per the City's draft VMT threshold and SB 743 guidelines, the proposed project's potential increase in VMT would result in a significant transportation impact. For projects that would cause a VMT impact, VMT reduction strategies, such as introducing Transportation Demand Management (TDM), or additional multimodal infrastructure can, according to research literature and case studies, be used to potentially mitigate the VMT impact.

Table 3.14-6 lists the potential TDM measures that could partially mitigate the proposed project's VMT impact and also shows the estimated maximum TDM reduction that each strategy could achieve. As shown in Table 3.14-6, potential strategies include offering telecommuting work schedules, transit subsidies, an employer-sponsored shuttle program, and marketing of TDM strategies. Implementation of Mitigation Measure (MM) TRANS-1(a), (b) would require the relevant applicant for each individual development proposal within the project site to implement the identified site-specific TDM measures to feasibly reduce project-generated VMT. In addition to the opportunity to mitigate, to the extent feasible, the proposed project's VMT impacts via implementation of a TDM program, the City also is currently working to establish a VMT banking program through which, once adopted, would provide another way to mitigate, to the extent feasible, project impacts. The VMT Mitigation Banking Fee Program is a programmatic approach to respond to the need for feasible VMT mitigation programs. Programmatic approaches that rely on collectively funding larger projects allow a project to provide an amount of mitigation commensurate with its respective impact, include only a single payment without the complexity of ongoing management issues that often occur in connection with TDM programs, and do not require ongoing mitigation monitoring. Programmatic approaches can also provide a public benefit in terms of funding transportation improvements that would not otherwise be constructed, resulting in improvements to congestion, a reduction in greenhouse gas (GHG) emissions, increased transportation choices, and additional opportunities for active transportation. For the foregoing

reasons, this Draft EIR proposes mitigation that enables the relevant applicant of each individual development proposal within the project site mitigate its respective VMT impact, to the extent feasible, by implementing an approved TDM program and paying the applicable banking fee. The California Air Pollution Control Officers Association (CAPCOA) states that for suburban communities such as Tracy, a feasible reduction of 15 percent could be achieved. The City, in its discretion, has elected to utilize this 15 percent threshold as the amount by which the proposed project would need to mitigate. In other words, each relevant applicant would need to reduce its VMT that would otherwise occur in connection with implementation of the relevant individual development proposal by 15 percent (as compared to what would occur without mitigation).

Following is a list of TDM measures (along with the assumed reduction) that would be incorporated into a project-specific TDM program in connection with each individual development proposal:

1. Utilize communication and information strategies–4 percent reduction
2. Support telecommuting for administrative staff (5 percent of staff population)–1 percent reduction
3. Provide designated parking spaces for carpool vehicles–1 percent reduction
4. Provide a transit stop along the project frontage on Grant Line Road, if agreed to by the City–2 percent reduction
5. Provide bike lanes and sidewalks along the project frontage–1 percent reduction
6. Provide on-site bike racks and showers–1 percent reduction

If the relevant applicant for an individual development proposal (1) incorporates the foregoing six TDM measures into a project-specific TDM program, and (2) pays the applicable banking fee (as discussed further below), this would satisfy MM TRANS-1(a) and MM TRANS-1(b) (described below) for purposes of the relevant individual development proposal. If an applicant determines that one of more of the foregoing six TDM measures is not feasible for the individual development proposal at issue, then the relevant applicant may obtain approval from the City of acceptable substitute TDM measure(s) pursuant to Table 3.14-6, and the applicable banking fee would be adjusted accordingly to ensure that payment of this fee, in combination with selected TDM measures, would equate to the required 15 percent reduction.

As noted above, the City is currently pursuing a VMT Mitigation Banking Fee Program; the draft program currently calculates the cost per one (1) VMT reduction as $633.11. However, the VMT Mitigation Banking Fee Program has not yet been finalized and adopted; accordingly, the applicable fee would be the amount provided for under the Mitigation Banking Fee Program adopted by the City Council and effective at the time the relevant applicant for an individual development proposal within the project site obtained building permits. Provided, however, that if the Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, then payment of $633.11 (cost per one (1) VMT reduction) shall constitute compliance for the payment component of MM TRANS-1(b).

For purposes of clarifying how this mitigation would be implemented, following is an example that utilizes, for illustrative purposes only, $633.11 (cost per one (1) VMT reduction). In this example, the applicant for development of the Tracy Alliance parcels proposes to implement a TDM program that would include TDM Nos. 1-6, above, and therefore, this applicant needs to achieve another 5 percent VMT reduction to satisfy MM TRANS-1(a) and MM TRANS-1(b). This is calculated as 5 percent being equivalent to a 0.845 VMT per employee reduction.

Table 3.14-6: Transportation Demand Management Measures

Transportation Demand Management Measure	Description	VMT Reduction
Transit Strategies		
Parking Cash-Out	Provide employees a choice of foregoing current parking for a cash payment to be determined by the employer. The higher the cash payment, the higher the reduction.	2%
Transit Stops	Coordinate with local transit agency to provide bus stop near the site. Real time transportation information displays support on-the-go decision-making to support sustainable trip making.	2%
Implement Neighborhood Shuttle	Implement project-operated or project-sponsored neighborhood shuttle serving residents, employees, and visitors of the project site.	5%
Transit Subsidies	Involves the subsidization of transit fare for residents and employees of the project site. This strategy assumes transit service is already present in the project vicinity.	5%
	Pays for employees to use local transit. This could either be a discounted ticket or a full-reimbursed transit ticket.	
Communication and Information Strategies		
Travel Behavior Change Program	Involves the development of a travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. Provide a website that allows employees to research other modes of transportation for commuting. Employee-focused travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits.	4%
Promotions and Marketing	Involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices with passive educational and promotional materials. Marketing and public information campaign to promote awareness of TDM program with an on-site coordinator to monitor program.	
Commuting Strategies		
Employer-sponsored Vanpool or Shuttle	Implementation of employer-sponsored employee vanpool or shuttle providing new opportunities for access to connect employees to the project site.	5%

Transportation Demand Management Measure	Description	VMT Reduction
Preferential Carpool/Vanpool Parking Spaces	Reserved carpool/vanpool spaces closer to the building entrance.	1%
Emergency Ride Home (ERH) Program	Provides an occasional subsidized ride to commuters who use alternative modes. Guaranteed ride home for people if they need to go home in the middle of the day due to an emergency or stay late and need a ride at a time when transit service is not available.	4%
On-site Childcare	Provides on-site childcare to remove the need to drive a child to daycare at a separate location.	2%
Telecommuting Alternative Work Schedule	Four-Ten work schedule results in 20 percent weekly VMT reduction, 10 percent trip reduction equals 15 percent VMT reduction.	20%
Shared Mobility Strategies		
Ride Share Program	Increases vehicle occupancy by providing ride share matching services, designating preferred parking for ride share participants, designing adequate passenger loading/unloading and waiting areas for ride share vehicles, and providing a website or message board to connect riders and coordinate rides. Need a point person from the business on-site.	5%
Employee/Employer Car Share	Implement car sharing to allow people to have on-demand access to a vehicle as needed. This may include providing membership to an existing program located within 0.25 mile, contracting with a third-party vendor to extend membership-based service to an area, or implementing a project-specific fleet that supports the residents and employees on-site.	1%
	Provide an on-site car vehicle for employees to use for short trips. This allows for employees to run errands or travel for lunch.	1%
Designated Parking Spaces for Car Share Vehicles	Reserved car share spaces closer to the building entrance.	1%
Bicycle Infrastructure Strategies		
Bike Share Program	Participate in a bike share program/on-site bike share program.	1%
Implement/Improve On-street Bicycle Facility	Implements or provides funding for improvements to corridors and crossings for bike networks identified within a 0.5-mile buffer area of the project boundary to support safe and comfortable bicycle travel.	1%
Include Bike Parking Per City Code	Implements short- and long-term bicycle parking to support safe and comfortable bicycle travel by providing parking facilities at destinations.	
Include Secure Bike Parking and Showers	Implements additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel.	
Bicycle Repair Station/Services	On-site bicycle repair tools and space to use them supports ongoing use of bicycles for transportation.	

Transportation Demand Management Measure	Description	VMT Reduction
Neighborhood Enhancement Strategies		
Pedestrian Network	Implements pedestrian network improvements throughout and around the project site that encourages people to walk.	2%

Notes:
VMT = Vehicle Miles Traveled
- DIBS is a transportation program designed by the San Joaquin Council of Governments to incentivize carpooling or alternative modes of transportation. The website is located here: https://www.dibsmyway.com/.

Source: Kimley-Horn. 2021. Tracy Alliance Vehicle Miles Traveled Analysis Memorandum (prepared for the City of Tracy).

However, even with implementation of the above-referenced TDM strategies (listed as 1-6, above) and payment of the applicable banking fee, as discussed above, the proposed project would still be above the City's VMT threshold of 9.4 VMT per employee and this impact would be significant and unavoidable.

Level of Significance Before Mitigation

Potentially Significant

Mitigation Measures

MM TRANS-1(a) Transportation Demand Management Measures

Prior to issuance of the first building permit for the relevant individual development proposal, the relevant applicant for the individual development proposal at issue shall submit to the City of Tracy Planning Department a Transportation Demand Management (TDM) program that incorporates all of the following six measures (as explained further in Table 3.14-6 of the Draft EIR):

1. Utilize communication and information strategies–4 percent reduction;
2. Offer telecommuting for administrative staff (5 percent of staff population)–1 percent reduction;
3. Designate parking spaces for carpool vehicles–1 percent reduction;
4. Provide a transit stop along the project frontage on Grant Line Road, if agreed to by the City–2 percent reduction;
5. Provide bike lanes and sidewalks along the project frontage–1 percent reduction; and
6. Provide on-site bike racks and showers–1 percent reduction.

Provided, however, that if the relevant applicant determines that one of more of the foregoing six TDM measures is not feasible in connection with the individual development proposal at issue, then the relevant applicant may obtain approval from the City of Tracy Planning Department of acceptable substitute TDM measure(s) pursuant to Table 3.14-6 of the Draft EIR.

The relevant applicant's TDM program, as described above, shall reflect a 10 percent reduction in VMT for the relevant individual development proposal.

MM TRANS-1(b) Payment of Applicable Banking Fee

In addition to the Transportation Demand Management (TDM) program required in MM TRANS-1(a), each applicant for an individual development proposal shall pay the applicable fee as set forth in the adopted Vehicle Miles Traveled (VMT) Mitigation Banking Fee in place and effective at the time the relevant applicant seeks to obtain building permits for its individual development proposal. Provided, however, that if the City Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, then payment of $633.11 (cost per VMT reduction for the relevant individual development proposal) shall constitute compliance with this MM TRANS-1(b).

Level of Significance After Mitigation

Significant and Unavoidable

Roadway Safety Hazards

Impact TRANS-2:	**The proposed project could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

Construction

Construction of the proposed project would require regular deliveries of equipment and materials to the project site as well as daily trips by construction workers. Given the location of the project site, nearly all construction traffic would be expected to access the project site from Grant Line Road and Paradise Road via I-205. This routing would generally avoid residential streets. Project construction activities, including the extension of utility infrastructure, may result in some temporary lane closures in the area. However, the resulting daily and peak-hour traffic volumes during the construction period are anticipated to be less than during project operation as analyzed in the TIA. It should be noted, however, that while the construction schedule assumed for the proposed project assumes that none of the three project phases may overlap, the potential remains for project phases to be constructed concurrently. Therefore, for purposes of a conservative analysis, this Draft EIR considers both scenarios (i.e., sequential and concurrent phasing). In a reasonable worst-case scenario where all three project phases overlap, it is estimated that during the highest trip generation stage of construction the total passenger car and trucks trips would be 56 percent and 47 percent, respectively, of the proposed project trip generation analyzed in the TIA. Therefore, a reasonable worse-case concurrent construction of all phases would not worsen the LOS more than the project LOS operational analyses analyzed in the TIA.

Furthermore, standard construction traffic control measures would be implemented consistent with applicable Caltrans and City policies, such as MM TRANS-2, which would require the preparation and implementation of a construction traffic control plan that would reduce the potential for

construction vehicle conflicts with other roadway users. Therefore, construction impacts related to roadway safety hazards would be less than significant with mitigation.

Operation

Primary vehicle access to the project site would be provided from four access points on Grant Line Road and four access points on Paradise Road; the northerly access point along Paradise Road would be for Emergency Vehicle Access (EVA) only. A new signalized intersection on Grant Line Road would provide access to a New Private Drive that would facilitate on-site circulation for the warehouses and distribution and related uses on the Tracy Alliance parcels as well as access to the Suvik Farms and Zuriakat parcels, as shown in Exhibit 2-7a in the Project Description. The New Private Drive, located along the Tracy Alliance parcels' eastern boundary, would also provide access to the detention basin area. Since no individual development proposal(s) for either the Suvik Farms and Zuriakat parcels have been submitted to the City as of this writing, the exact location(s) of access points from the New Private Drive to the Suvik and Zuriakat parcels have not been identified at this time. Therefore, for purposes of this analysis, this evaluation assumes that a driveway would be placed at the Banta Road intersection and opposite other existing driveways to the south.

Based on the existing traffic volumes on Grant Line Road and Paradise Road, these roadways are projected to operate with minimal delay for vehicles. Given that the entrances and roadways providing access to the proposed project would be required to be in compliance with applicable provisions of the City's Fire Code and other applicable laws and regulations as well as relevant conditions of approval, and would thus operate at acceptable service levels, and furthermore that proposed roadway improvements would further increase roadway safety by being designed according the applicable City of Tracy, Caltrans, and industry standards, impacts associated with roadway design safety hazards would be less than significant.

Truck Trips

The proposed project would result in new truck trips both to and from the project site. Section 3.08.290 of the Tracy Municipal Code establishes truck routes throughout the City, restricting vehicle routes within the City for vehicles with a gross vehicle weight of 5 tons or more or that are licensed commercially as a truck in the state of origin and used for carrying goods for pickup and delivery. Vehicles meeting this requirement would be restricted to specific truck routes and designated streets, except when necessary for egress and ingress by direct route to and from restricted streets for the purpose of loading or unloading.

The 1982 federal Surface Transportation Assistance Act (STAA) allowed larger trucks on the National Network. These larger trucks are called STAA vehicles.[20]

Of relevance here, a STAA truck route study was conducted for the NEI Specific Plan area as part of the Seefried Project (see Table 3.14-4 for additional information about the Seefried project). This Seefried project is a development with warehouse and distribution uses similar to those of the

[20] California Department of Transportation (Caltrans). Service Routes. Website: https://dot.ca.gov/programs/traffic-operations/legal-truck-access/service-access#:~:text=STAA%20Trucks%3A%20The%201982%20federal,see%20Truck%20Lengths%20%26%20Routes.). Accessed December 30, 2020.

proposed project, is located in the NEI Specific Plan area, and has already been approved for construction. For these reasons, this analysis incorporates the findings from that study for STAA truck routing in the area, which also covers the SOI.

An NEI Truck Route Map, which defines STAA truck routing, indicates the existing and interim truck routes. Truck routes from the TMP and the interim routes and proposed signage are shown in Exhibit 3.14-13; the ultimate truck routes and proposed signage are shown in Exhibit 3.14-14. The interim truck routes (excluding the Chrisman Road interchange) would provide access to the existing truck routes and the Chrisman Road extension to Paradise Road, and the ultimate truck routes would provide access to the future interchange. STAA truck turning templates are provided in Appendix J. As shown in Exhibit 3.14-13 and Exhibit 3.14-14, the NEI Specific Plan includes the construction of new truck route signage to direct trucks toward truck routes, the conversion of Grant Line Road to a STAA route, and the construction of new STAA routes in the project vicinity. These improvements would further improve roadway safety by providing appropriate and adequate roadway infrastructure for the trucks that would access the project site. As a result, existing and planned roadways would be able to support proposed STAA trucks that would access the project site consistent with applicable provisions of the Municipal Code. Therefore, trucks accessing the project site would not substantially increase hazards due to a geometric design or incompatible use and impacts would be less than significant.

Level of Significance Before Mitigation

Potentially Significant for Construction-related Impacts

Less Than Significant for Operation-related Impacts

Mitigation Measures

MM TRANS-2 Prepare and Implement Construction Traffic Control Plan

Prior to the start of construction for an individual development proposal, the relevant applicant shall prepare and submit a Construction Traffic Control Plan for the individual development proposal at issue. Each plan shall include the following items. Each approved plan shall be implemented during construction of the individual development proposal at issue.

- Project staging plan to maximize on-site storage of materials and equipment.
- Permitted construction hours.
- Location of construction staging.
- Provisions for street sweeping to remove construction-related debris on public streets.
- A set of comprehensive traffic control measures including preparation of traffic control plans, as needed; scheduling of major truck trips and deliveries to avoid peak-hours; lane closure proceedings; signs, cones, and other warning devices for drivers; and designation of construction haul routes.
- Survey of the pavement condition on roadways within the relevant individual development to be used as part of the haul route prior to the commencement of

any work on-site. The survey shall include a video tape of the roadways. Each relevant applicant shall complete any remedial work prior to initiation of use and provide a bond assuring completion of the remediation work triggered by the individual development proposal, the amount which shall be deemed sufficient by the Public Works Department.

- The relevant applicant shall provide a pavement analysis for those roads along the proposed haul routes or any alternate route(s) that are proposed to be utilized by hauling operation for the individual development proposal at issue. This study shall analyze the existing pavement conditions and determine what impact the hauling operation will have over the construction period of the relevant individual development. The study shall provide recommendations to mitigate identified impacts, which shall be implemented by the relevant applicant for the individual development proposal at issue.

Level of Significance After Mitigation

Less Than Significant

Emergency Access

Impact TRANS-3: The proposed project would not result in inadequate emergency access.

Construction

During the construction period for each individual development proposal within the project site, it is anticipated that two-way travel would be maintained on Paradise Road and Grant Line Road. Should Paradise Road or Grant Line Road experience temporary one-way travel restrictions or be closed to travel, there are multiple access routes to I-205 and I-5 which act as the main evacuation routes into and out of the project vicinity. Construction detour signage would be provided. For the foregoing reasons, and as further discussed in Section 3.9, Hazards and Hazardous Materials), impacts associated with inadequate emergency access during construction would be less than significant.

Operation

Several factors determine whether a project has sufficient access for emergency vehicles, including:

- Location of closest fire stations.
- Number of access points (both public and emergency access only).
- Width, height, and turning radius of access points.
- Width, height, and turning radius of internal roadways.

Each of these factors is discussed in further detail below.

Fire Station 92 at 1035 East Grant Line Road is the nearest fire station to the project site, approximately 1.4 miles to the west. Fire Station 92 is a City-owned fire station; however, South County Fire responds the closest resources to all emergency and non-emergency calls for service. The nearest Tracy Fire Station is Station 96, located at 1800 West Grant Line Road, approximately 3.6

miles west of the project site. Primary fire protection access to the project site would occur from existing roadways that would not be changed as part of the proposed project.

The proposed project would be served by eight points of vehicular access (the northerly access point along Paradise Road would be for EVA only):

- Grant Line Road: four access points to the project site.
- Paradise Road: four access points to the project site (the northerly access point along Paradise Road would be for EVA only).

Since no application for individual development proposal(s) for either the Suvik Farms or Zuriakat parcels has been submitted to the City as of this writing, it is too speculative and uncertain to identify the exact location(s) of access points from the New Private Drive to the Suvik and Zuriakat parcels. Therefore, for purposes of this analysis, this evaluation reasonably assumes that a driveway would be placed at the Banta Road intersection and opposite other existing driveways to the south.

Thus, the proposed project would provide a total of eight vehicular access points to the project site from surrounding roadways. The provision of these access points would satisfy the applicable California Fire Code's emergency access requirements. Moreover, as the width of these access points and internal roadways would need to adhere to all other applicable requirements and standards, including the following. All access points and internal roadways for the project site would be required to be compliant with Section 503, Fire Apparatus Access Roads, of the California Fire Code,[21] as well as Chapter 9.06 of the Tracy Municipal Code, which would ensure that access roadways can accommodate fire apparatus vehicles via a minimum width of 20 feet and an unobstructed vertical clearance of not less than 13 feet 6 inches, along with adequate turning radius as determined by the fire code official. For the foregoing reasons, and as further discussed in Section 3.9, Hazards and Hazardous Materials), impacts related to adequate emergency access would be less than significant.

Level of Significance

Less Than Significant

Alternative Transportation Policies

Impact TRANS-4:	**The proposed project would not conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.**

Construction

Transit Facilities

Grant Line Road provides sidewalk facilities on both sides of the road up until the project site's frontage. No sidewalks currently exist along the project site's frontage along Paradise Road as the land is undeveloped. The closest bus stop to the project site is approximately 0.5 mile west at the intersection of Grant Line Road and North Chrisman Road. The next nearest bus stop is

[21] International Code Council, Digital Codes. 2020. 2019 California Fire Code, Title 24, Part 9 with Jan 2020 Errata. Website: https://codes.iccsafe.org/content/CFC2019P2. Accessed January 14, 2021.

approximately 1.59 miles to the west at the Shops at Northgate Village. The Tracy Station is the closest ACE station to the project site, located at 4800 South Tracy Boulevard approximately 4.70 miles southwest of the project site, and would provide ACE service to the project site.

Because there are no sidewalks currently provided along the proposed project frontage or along California Avenue, construction of the proposed project would not adversely affect or otherwise conflict with existing pedestrian access to TRACER or ACE or the service for these transit agencies. Should Paradise Road or Grant Line Road be temporarily shut down during construction, there are alternative roadway connections to these transit facilities and access to these facilities would remain available throughout construction. Therefore, construction impacts related to circulation system performance in terms of transit facilities would be less than significant.

Bicycle Facilities

No Class I facilities exist near the project site. Class II facilities exist along Grant Line Road in eastbound and westbound directions, west of Paradise Road. No Class III facilities exist near the project site. Because there are no existing bicycle facilities along the frontage of Paradise Road or Grant Line or California Avenue, road construction of the proposed project would not result in the temporary closure of bicycle facilities during construction. Therefore, construction impacts related to circulation system performance in terms of bicycle facilities would be less than significant.

Pedestrian Facilities

As described above, there are no sidewalks currently provided along Grant Line Road or Paradise Road along the proposed project frontage or along California Avenue. Because there are no sidewalks along Grant Line Road or Paradise Road along the proposed project frontage or along California Avenue, construction of the proposed project would not result in temporary closures of sidewalk facilities. Therefore, construction impacts related to circulation system performance in terms of pedestrian facilities would be less than significant.

Operation

Transit Facilities

The closest bus stop to the project site is approximately 0.5 mile west at the intersection of Grant Line Road and North Chrisman Road. As part of the proposed project's frontage improvements, it is anticipated that the proposed project would construct a Class I path (that would accommodate both pedestrians and bicycles) per the TMP for both Grant Line Road and Paradise Road. Therefore, the proposed project would provide a bicycle and pedestrian connection to the Class II bicycle facilities and sidewalks that exist along Grant Line Road in eastbound and westbound directions west of Paradise Road that would ultimately provide access to the nearest transit facility.

Paradise Road and Grant Line Road would still provide roadway access to these transit facilities. Given the nature of the proposed project and its location, it is anticipated that many employees would drive to the site and the proposed project would add a minimal number of additional transit riders and would not exceed existing transit capacity. Therefore, operation of the proposed project would not interfere with or otherwise adversely and significantly impact service for these transit agencies. Therefore, operational impacts related to circulation system performance in terms of transit facilities would be less than significant.

Bicycle Facilities

No Class I facilities exist near the project site. Class II facilities exist along Grant Line Road in eastbound and westbound directions west of Paradise Road. No Class III facilities exist near the project site. As part of the proposed project's frontage improvements, it is anticipated that the proposed project would construct a Class I path per the TMP for both Grant Line Road and Paradise Road. Therefore, the proposed project would provide a bicycle connection to the Class II facilities that exist along Grant Line Road in eastbound and westbound directions west of Paradise Road, which would improve the existing bicycle network. In addition, pursuant to the parking requirements of Tracy Municipal Code Chapter 10.08 Article 26, the proposed project would provide approximately 59 number of bicycle parking spaces. Bicycle racks (single-sided or double-sided racks or equivalent) would be located near the office entrances of each building to provide for the secured parking of bicycles. The required spaces for bicycle parking would be evenly distributed among the office locations within each building pursuant to applicable standards and requirements. Overall, the proposed project would not conflict with adopted policies, plans, or programs regarding bicycle facilities or otherwise decrease the performance or safety of such facilities. Therefore, operational impacts related to circulation system performance in terms of bicycle facilities would be less than significant.

Pedestrian Facilities

As described above, there are no sidewalks currently provided along Grant Line Road or Paradise Road along the proposed project frontage or along California Avenue. As part of the proposed project's frontage improvements, it is anticipated that the proposed project would construct a Class I path (that would accommodate both pedestrians and bicycles) per the TMP for both Grant Line Road and Paradise Road that would provide access to the existing sidewalk network. Therefore, the proposed project would improve the existing pedestrian network. The proposed project would not impede the use of existing sidewalks, and it is not anticipated that the proposed project would substantially increase pedestrian activity in the project vicinity. Therefore, operational impacts to pedestrian facilities associated with the proposed project would be less than significant.

Level of Significance

Less Than Significant

3.14.5 - Non-CEQA Level of Service Analysis (provided for information purposes only)

For the reasons explained above, the following non-CEQA analysis of intersection LOS under various project conditions is provided for informational purposes only. The analysis will inform the creation of conditions of approval for the proposed project, subject to applicable laws related to nexus requirements, to ensure consistency with applicable provisions of the General Plan.

Construction

The assessment of construction activity considers construction vehicles (including vehicles removing or delivering fill material, bulldozers, and other heavy machinery, as well as building materials delivery) and construction worker activity.

The proposed project would require a total of approximately 500,000 cubic yards of grading, which would be balanced on-site; therefore, no export or import of materials would be required. It is expected that equipment would be staged on the site prior to beginning work and would be removed at completion of the relevant construction phase**.** Trucks would be needed to bring building materials to the site prior to beginning work, and truck traffic would follow designated truck routes. Since a construction traffic control plan was not available at the time this Draft EIR was prepared, MM TRANS-2, as provided in Impact TRANS-2, is recommended.

MM TRANS-2 would require the preparation and implementation of a construction traffic control plan for each individual development proposal, which would reduce the potential for construction vehicle conflicts with other roadway users.

Operation

Background Plus Project Conditions

Traffic operations were evaluated at the study intersections under Background Plus Project Conditions. Exhibit 3.14-15 illustrates the Background Plus Project Conditions traffic control and geometry and Exhibit 3.14-16 shows the Background Plus Project Conditions peak-hour traffic volumes. Table 3.14-7 shows the LOS at study intersections during Background Plus Project Conditions. Table 3.14-8 shows the LOS at the study intersections during Background Plus Project Conditions without the Suivak Farms and Zuriakat parcels.

Because the proposed project would be constructed in phases, a phased approach was used for this analysis to ensure a fair share apportionment of improvement costs. In the limited purpose of this phased approach, it was assumed that the Tracy Alliance parcels would be developed first (i.e., in the short-term) while the Suvik Farms and Zuriakat parcels would be developed in the Cumulative Conditions.

It should be noted, however, that while the construction schedule for the proposed project assumed that none of the three project phases may overlap, the potential remains for project phases to be constructed concurrently. In a reasonable worst-case scenario where all three project phases overlap, it is estimated that during the highest trip generation stage of construction the total passenger car and trucks trips would be 56 percent and 47 percent, respectively, of the proposed project trip generation analyzed in the TIA. Therefore, a reasonable worse-case, concurrent construction of all phases would not worsen the LOS more than the project LOS operational analyses analyzed in the TIA as described below.

For the reasons set forth above, failing intersections from the analysis that included all parcels within the project site were analyzed without the Suvik Farms and Zuriakat parcels to determine whether the operation of the proposed uses on the Tracy Alliance parcels by themselves would degrade the intersections to below an acceptable LOS.

Table 3.14-7: Background Plus Project Conditions Intersection Level of Service (Project at Full Buildout)

No.	Intersection	Maintaining Agency[1]	Control Type	Background Conditions						Background Plus Project Conditions (Project at Full Buildout)					
				AM Peak-hour			PM Peak-hour			AM Peak-hour			PM Peak-hour		
				MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS
1	Grant Line Road and Best Buy Driveway/Project Driveway 1	Tracy	Signal	–	16.4	B	–	24.8	C	–	27.5	C	–	28.0	C
2	Grant Line Road and Chabot Court/Project Driveway 2	Tracy	SSSC	–	0.1	A	–	0.1	A	–	0.1	A	–	0.2	A
	Worst Approach			*NB*	*9.4*	*A*	*NB*	*14.1*	*B*	*SB*	*13.6*	*B*	*NB*	*14.9*	*B*
3	Grant Line Road and North Paradise Road	Tracy	Signal	–	33.4	C	–	34.6	C	–	26.2	C	–	33.0	C
4	Paradise Road and Ryder Driveway/Project Driveway 3	Tracy	SSSC	–	2.1	A	–	3.2	A	–	1.9	A	–	2.8	A
	Worst Approach			*EB*	*9.5*	*A*	*EB*	*9.7*	*A*	*WB*	*11.1*	*B*	*WB*	*10.1*	*B*
5	Paradise Road and Ryder Driveway/Project Driveway 4	Tracy	SSSC/ Signal	–	2.6	A	–	4.0	A	–	12.0	B	–	13.3	B
	Worst Approach			*EB*	*9.4*	*A*	*EB*	*9.3*	*A*						
6	Paradise Road and Project Driveway 5	Tracy	SSSC	Intersection Does Not Exist						–	0.4	A	–	0.5	A
	Worst Approach									*WB*	*10.4*	*B*	*WB*	*9.7*	*A*
7	Chrisman Road and North Paradise Road	Tracy	AWSC	–	7.9	A	–	7.7	A	–	8.0	A	–	7.9	A
8	Chrisman Road and Pescadero Avenue	Tracy	Signal	–	15.8	B	–	15.4	B	–	15.7	B	–	16.0	B
9	Grant Line Road and Chrisman Road	Tracy	Signal	–	18.8	B	–	24.2	C	–	19.8	B	–	25.6	C
10	I-205 WB Ramps and North MacArthur Drive	Caltrans	Signal	–	28.2	C	–	31.7	C	–	48.6	D	–	50.7	D
11	I-205 EB Ramps and North MacArthur Drive	Caltrans	Signal	–	23.5	C	–	52.6	D	–	35.7	D	**–**	**65.5**	**E**

No.	Intersection	Maintaining Agency[1]	Control Type	Background Conditions						Background Plus Project Conditions (Project at Full Buildout)					
				AM Peak-hour			PM Peak-hour			AM Peak-hour			PM Peak-hour		
				MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS
12	Pescadero Avenue and North MacArthur Drive	Tracy	Signal	–	20.6	C	–	26.7	C	–	21.8	C	–	31.9	C
13	Grant Line Road and North MacArthur Drive	Tracy	Signal	–	**66.7**	**E**	**–**	**86.5**	**F**	**–**	**96.4**	**F**	**–**	**99.4**	**F**
14	11th Street and North MacArthur Drive	Tracy	Signal	–	11.6	B	–	19.6	B	–	12.4	B	–	23.0	C
15	11th Street and Chrisman Road	Tracy	Signal	–	38.6	D	–	29.0	C	–	40.8	D	–	29.5	C
16	I-205 WB Ramps and Chrisman Road	Caltrans	Signal	Intersection Does Not Exist											
17	I-205 EB Ramps and Chrisman Road	Caltrans	Signal	Intersection Does Not Exist											
18	Chrisman Road and South Paradise Road[7]	Tracy	AWSC	–	14.8	B	**–**	**57.0**	**F**	–	14.8	B	–	**57.0**	**F**

Notes:
AWSC = All-Way Stop Control
EB = eastbound
LOS = Level of Service
MVMT = movement
NB = northbound
Signal = Signal Control
SSSC = Side-Street Stop Control

[1] LOS thresholds for Caltrans are taken from the December 2002 Guide for the Preparation of Traffic Impact Studies. As of May 20, 2020, Caltrans has updated their guidelines (Vehicle Miles Traveled–Focused Transportation Impact Study Guidelines); however, no LOS thresholds are stated.
- Analysis performed using HCM 6th Edition methodologies.
- Delay indicated in seconds/vehicle.
- Tracy LOS standard is D unless the intersection is within 0.25 mile of the freeway.
- Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold.**
- Because of limitations of HCM, Intersection No. 18 cannot be analyzed with more than three approach as an All Way Stop. Therefore, only three lanes were assumed for the northbound and southbound approach. The proposed geometry is provided in Exhibit 3.14-15.

Source: Kimley-Horn. 2021. Tracy Alliance and Northeast Area Annexation Transportation Impact Analysis (prepared for the City of Tracy).

As shown in Tables 3.14-7, with the addition of project (full buildout) traffic, **Intersection 11 (I-205 EB Ramps and North MacArthur Drive)** would decrease from LOS C to D in the AM peak-hour but would not exceed LOS E, which is the threshold for the City. However, in the PM peak-hour project-generated traffic would cause a decrease in LOS from LOS D (52.6 second delay) to LOS E (65.5 second delay).

As shown in Table 3.14-7, the addition of project (full buildout) traffic at **Intersection 13 (Grant Line Road and North MacArthur Drive)** would cause LOS levels to decrease from LOS E to LOS F in in the AM peak-hour period (from 66.7 to 96.4 second delay) and from LOS F (86.5 second delay) to a greater LOS F delay (99.4 second delay) in the PM peak-hour.

As shown in Table 3.14-7, the addition of project (full buildout) traffic at **Intersection 18 (Chrisman Road and South Paradise Road)** would not cause a decrease in LOS in the AM peak period (14.8 second delay [LOS B] with and without the proposed project) and would not cause a decrease in LOS in the PM peak period (57.0 second delay [LOS F] with and without the proposed project). This is because no project trips are expected to travel through this intersection during Background Plus Project Conditions, and the proposed project would not deteriorate the existing deficiency further.

Improvement Measure (IM)-1 is recommended at Intersection No. 11 and would include the following, which are part of City's Traffic Impact Fee (TIF) program:

- Each applicant for its individual development proposal within the project site shall implement the TMP improvements at this intersection to accommodate City traffic. It is not recommended to make improvements to accommodate cut-through traffic (i.e., an additional northbound right turn lane) because this will induce more cut-through traffic. The improvements are triggered by any of the first buildings on the site. The proposed project is responsible for implementation of these improvements, but the relevant applicant(s) shall be entitled to obtain fee credits/reimbursements pursuant to applicable laws and regulations consistent with the City's TIF program.
- The TMP improvements include lane additions at both ramp terminals and the addition of a second I-205 Westbound on-ramp. The two ramp terminals cannot be improved independently. The westbound ramp terminal would improve with the addition of these lanes.

IM-2 is recommended at Intersection No. 13 and would include the following:

- Westbound right-turn lane with right turn overlaps signal phase. This improvement is anticipated to be constructed by NEI Phase 3 and the applicants for the development of any of the proposed project parcels shall pay a fair share as described below.

As shown in Table 3.14-9 (showing delay with implementation of IM-1 and IM-2), Background Plus Project Conditions at Intersection 11 and Intersection 13, the deficient intersections would operate at either an acceptable LOS or better than base conditions with the installation of the identified improvements. Each applicant's pro rata fair share contribution via payment of the applicable TIF fee will contribute toward the City's ability to ultimately install these improvements (as contemplated in the City TMP) and shall constitute compliance with IM-1 and IM-2 for the relevant individual development proposal.

Table 3.14-8: Background Plus Project Conditions Intersection Level of Service (without Suivak Farms and Zuriakat Parcels)

#	Intersection	Maintaining Agency[1]	Control Type	Background Plus Project Conditions (Full Project)						Background Plus Project Conditions (Tracy Alliance Parcels Buildings Only)					
				AM Peak-hour			PM Peak-hour			AM Peak-hour			PM Peak-hour		
				MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS
11	I-205 EB Ramps and North MacArthur Drive	Caltrans	Signal	–	35.7	D	–	**65.5**	**E**				–	**59.8**	**E**
13	Grant Line Road and North MacArthur Drive	Tracy	Signal	–	**96.4**	**F**	–	**99.4**	**F**	–	**77.1**	**E**	–	**91.8**	**F**

Notes:
AWSC = All-Way Stop Control
EB = eastbound
LOS = Level of Service
MVMT = movement
Signal = Signal Control
SSSC = Side-Street Stop Control

[1] LOS thresholds for Caltrans are taken from the December 2002 Guide for the Preparation of Traffic Impact Studies. As of May 20, 2020, Caltrans has updated their guidelines (Vehicle Miles Traveled–Focused Transportation Impact Study Guidelines); however, no LOS thresholds are stated.
- Analysis performed using HCM 6th Edition methodologies.
- Delay indicated in seconds/vehicle.
- Tracy LOS standard is D unless the intersection is within 0.25 mile of the freeway.
- Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold.**
- Intersection 18 is failing in Table 3.14-7. The proposed project does not send any traffic to this intersection in Background Plus Project Conditions and does not have to make any improvements.
Source: Kimley-Horn. 2021. Tracy Alliance and Northeast Area Annexation Transportation Impact Analysis (prepared for the City of Tracy).

Table 3.14-9: Recommended Improvements for Background Plus Project Conditions Intersection Level of Service

#	Intersection	Maintaining Agency[1]	Control Type	Background Plus Project Conditions				Improved Background Plus Project Conditions				Proposed Improvement
				AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour		
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
11	I-205 EB Ramps and North MacArthur Drive	Caltrans	Signal			**59.8**	**E**			**58.9**	**E**	Implement TMP geometry
13	Grant Line Road and North MacArthur Drive	Tracy	Signal	**77.1**	**E**	**91.8**	**F**	37.4	D	**58.7**	**E**	WB right turn lane with overlap signal phase

Notes:
AWSC = All-Way Stop Control
EB = eastbound
LOS = Level of Service
Signal = Signal Control

[1] LOS thresholds for Caltrans are taken from the December 2002 Guide for the Preparation of Traffic Impact Studies. As of May 20, 2020, Caltrans has updated their guidelines (Vehicle Miles Traveled–Focused Transportation Impact Study Guidelines); however, no LOS thresholds are stated.
- Analysis performed using HCM 6th Edition methodologies.
- Delay indicated in seconds/vehicle.
- Tracy LOS standard is D unless the intersection is within 0.25 mile of the freeway.
- Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold.**
- Intersection 13 is still deficient; however, this deficiency is no longer a deficiency associated with the proposed project.
- Intersection 18 is failing in Table 3.14-7. The proposed project does not send any traffic to this intersection in Background Plus Project Conditions and therefore shall not be required to make any improvements.

Source: Kimley-Horn. 2021. Tracy Alliance and Northeast Area Annexation Transportation Impact Analysis (prepared for the City of Tracy).

Identified Improvement Measures

IM-1 I-205 EB Ramps and North MacArthur Drive (Intersection 11) Improvements

Prior to issuance of the building permits for each individual development proposal, the City of Tracy Planning Department shall verify that the relevant applicant has paid the applicable TIF fee for the relevant individual development proposal. In so doing, this payment will constitute a pro rata fair share contribution toward the City's ability to implement its TMP, which includes the following improvements:

- Lane additions at both ramp terminals and the addition of a second I-205 Westbound on-ramp. The two ramp terminals cannot be improved independently. The westbound ramp terminal would improve with the addition of these lanes.

IM-2 Grant Line Road and North MacArthur Drive (Intersection 13) Improvements

- Prior to issuance of the building permits for each individual development proposal, the City of Tracy Planning Department shall verify that the relevant applicant has paid its pro rata fair share of the proposed project's fair share of 5.93 percent of the following improvement: the construction of a westbound right turn lane for Intersection 13 (which will include a right-turn overlap signal phase).

Cumulative Plus Project Conditions

As documented in the TMP and the NEI Specific Plan, there are significant vehicular capacity improvements planned in the study area by the year 2035. The following list provides the improvements that are anticipated to occur within the study area by 2035:

- Chrisman Road Extension
  - North of Grand Line Road
  - Between Grant Line and 11th Street
- Signalization at the intersection of Future Chrisman Road and Paradise Road
- Future interchange at I-205 and Paradise Road/Chrisman Road
- Widening improvements at the I-205 and MacArthur Drive interchange
- Construction of the Golden Valley Parkway (Exhibit 3.14-2)

The interchange geometry was determined using the Final Traffic Operations Analysis Report (TOAR) published by Fehr and Peers. Volumes were developed using the TMP 2035 model.

Cumulative volume growth in the study area was determined based on an evaluation of the City's Travel Demand model forecasts. Year 2035 turning movements were extrapolated from the TMP 2035 Horizon Year turning movements figures. For intersections without 2035 data, volumes were estimated using the intersection turning movements volumes provided in the TMP. Adjustments to the 2035 Horizon Year turning movement figures were made for the new NEI Phase 3 project proposed along Grant Line Road. Cumulative Conditions intersection geometry and traffic control is shown in Exhibit 3.14-17, and Cumulative Conditions peak-hour traffic volumes are shown in Exhibit

3.14-18. It is assumed that signal timing changes will be implemented prior to 2035 to service traffic pattern changes and increases.

Cumulative Plus Project Conditions intersection geometry and traffic control is shown in Exhibit 3.14-19, and Cumulative Plus Project Conditions peak-hour traffic volumes are shown in Exhibit 3.14-20. Table 3.14-10 shows Cumulative Conditions and Cumulative Plus Project Conditions intersection LOS. Cumulative Plus Project and Cumulative Plus Project Synchro output sheets are provided in Appendix J.

Table 3.14-10: Cumulative Plus Project Conditions Intersection Level of Service

No.	Intersection	Maintaining Agency[1]	Control Type	Cumulative Conditions						Cumulative Plus Project Conditions					
				AM Peak-hour			PM Peak-hour			AM Peak-hour			PM Peak-hour		
				MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS
1	Grant Line Road and Best Buy Driveway/Project Driveway 1	Tracy	Signal	–	4.0	A	–	7.8	A	–	15.9	B	–	21.8	C
2	Grant Line Road and Chabot Court/Project Driveway 2	Tracy	SSSC	–	0.2	A	–	0.2	A	–	0.2	A	–	0.2	A
	Worst Approach			*NB*	*9.6*	*A*	*NB*	*13.1*	*B*	*SB*	*10.7*	*B*	*NB*	*13.7*	*B*
3	Grant Line Road and North Paradise Road	Tracy	Signal	–	23.5	C	–	27.0	C	–	27.0	C	–	30.9	C
4	Paradise Road and Ryder Driveway/Project Driveway 3	Tracy	SSSC	–	1.0	A	–	1.5	A	–	0.9	A	–	1.4	A
	Worst Approach			*EB*	*11.4*	*B*	*EB*	*10.7*	*B*	*EB*	*14.3*	*B*	*WB*	*13.6*	*B*
5	Paradise Road and Ryder Driveway/Project Driveway 4	Tracy	SSSC/ Signal	–	0.9	A	–	1.5	A	–	10.1	B	–	11.4	B
	Worst Approach			*EB*	*11.4*	*B*	*EB*	*10.1*	*B*						
6	Paradise Road and Project Driveway 5	Tracy	SSSC	Intersection Does Not Exist						–	0.2	A	–	0.2	A
	Worst Approach									*WB*	*13.6*	*B*	*WB*	*13.4*	*B*
7	Chrisman Road and North Paradise Road	Tracy	AWSC	–	8.4	A	–	10.9	B	–	10.6	B	–	15.2	B
8	Chrisman Road and Pescadero Avenue	Tracy	Signal	–	15.4	B	–	45.3	D	–	15.4	B	–	45.3	D
9	Grant Line Road and Chrisman Road	Tracy	Signal	–	22.9	C	–	46.7	D	–	23.3	C	**–**	**57.1**	**E**
10	I-205 WB Ramps and North MacArthur Drive	Caltrans	Signal	–	12.2	B	–	20.3	C	–	12.2	B	–	20.3	C
11	I-205 EB Ramps and North MacArthur Drive	Caltrans	Signal	–	22.2	C	–	23.2	C	–	22.2	C	–	23.2	C

No.	Intersection	Maintaining Agency[1]	Control Type	Cumulative Conditions						Cumulative Plus Project Conditions					
				AM Peak-hour			PM Peak-hour			AM Peak-hour			PM Peak-hour		
				MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS
12	Pescadero Avenue and North MacArthur Drive	Tracy	Signal	–	18.6	C	–	27.2	C	–	18.6	B	–	27.2	C
13	Grant Line Road and North MacArthur Drive	Tracy	Signal	–	**55.5**	**E**	**–**	**57.2**	**E**	**–**	**55.6**	**E**	**–**	**57.5**	**E**
14	11th Street and North MacArthur Drive	Tracy	Signal	–	29.8	C	–	46.1	D	–	31.3	C	–	49.2	D
15	11th Street and Chrisman Road	Tracy	Signal	–	52.8	D	–	**59.3**	**E**	**–**	**56.5**	**E**	**–**	**60.9**	**E**
16	I-205 WB Ramps and Chrisman Road	Tracy	Signal	–	5.9	A	–	3.8	A	–	6.2	A	–	4.0	A
17	I-205 EB Ramps and Chrisman Road	Tracy	Signal	–	10.3	B	–	28.6	C	–	19.4	B	–	29.8	C
18	Chrisman Road and South Paradise Road	Tracy	Signal	-	14.2	B	-	15.0	B	-	13.9	B	-	14.5	B

Notes:
AWSC = All-Way Stop Control
EB = eastbound
LOS = Level of Service
MVMT = movement
Signal = Signal Control
WB = westbound

[1] LOS thresholds for Caltrans are taken from the December 2002 Guide for the Preparation of Traffic Impact Studies. As of May 20, 2020, Caltrans has updated their guidelines (Vehicle Miles Traveled–Focused Transportation Impact Study Guidelines); however, no LOS thresholds are stated.
- Analysis performed using HCM 6th Edition methodologies.
- Delay indicated in seconds/vehicle.
- Tracy LOS standard is D.
- Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold.**
Source: Kimley-Horn. 2021. Tracy Alliance and Northeast Area Annexation Transportation Impact Analysis (prepared for the City of Tracy).

As shown in Table 3.14-10, the addition of project (at full buildout) traffic would worsen intersection delay at the following intersections under Cumulative Plus Project Conditions:

- Intersection 9 (Grant Line Road and Chrisman Road)
- Intersection 13 (Grant Line Road and North MacArthur Drive)
- Intersection 15 (11th Street and Chrisman Road)

At **Intersection 9**, the proposed project would increase traffic delay in the AM peak-hour but LOS would still be at acceptable levels. However, in the PM peak-hour project-generated traffic would increase delay from LOS D (46.7 second delay) to LOS E (57.1 second delay). It is recommended that the proposed project optimize the signal cycle length at this intersection, which is reflected in IM-3.

As shown in Table 3.14-10, **Intersection 13** would operate at LOS E in both the AM and PM peak-hour without project traffic under Cumulative Conditions. The addition of project (at full buildout) traffic would increase traffic delay from a 55.5 second delay, LOS E, to a 55.6 second delay, LOS E; and 57.2 second delay, LOS E, to 57.5, LOS E, in the AM and PM peak-hours, respectively. It is recommended that the proposed project optimize the signal cycle length at this intersection, which is reflected in IM-3.

At **Intersection 15**, the proposed project would increase traffic delay in both the AM and PM peak-hours under Cumulative Plus Project Conditions. In the AM peak-hour, the proposed project would increase traffic delay from a 52.8 second delay, LOS D, to a 56.5 second delay, LOS E. In the PM peak-hour, the proposed project would increase delay from 59.3, LOS E, to 60.9, LOS E. It is recommended that the proposed project provide an additional second westbound left-turn lane and the signal timing to be modified to allow lagging phase for the eastbound left turn and northbound left turn, which is reflected in IM-4.

Intersection 18 is planned to have signal control once signal warrants are met, and the proposed project would pay its fair share costs toward installation of the signal, consistent with other project standard conditions of approval in the vicinity of the intersection. Project traffic is anticipated to travel through the intersection once Chrisman Road is a through route south to 11th Street. The analysis shows that reported delay at Intersection 18 would be slightly improved with the addition of project trips on non-critical movements. This is because the trips were added to the through lane movements, which had a lower movement delay than the average intersection delay, which thereby decreases the overall average delay.

As shown in Table 3.14-11 (showing delay with implementation of IM-3 and IM-4), Cumulative Project Conditions at intersection 9, Intersection 13, and Intersection 15, the deficient intersections, would operate at either an acceptable LOS or better than base conditions.

Table 3.14-11: Improved Cumulative Plus Project Conditions Intersection Level of Service

No.	Intersection	Maintaining Agency[1]	Control Type	Cumulative Plus Project Conditions				Improved Cumulative Plus Project Conditions				Proposed Improvement
				AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour		
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
9	Grant Line Road and Chrisman Road	Tracy	Signal			**57.1**	**E**			49.0	D	Optimize Cycle Length
13	Grant Line Road and North MacArthur Drive	Tracy	Signal	**55.6**	**E**	**57.5**	**E**	30.7	C	48.0	D	Optimize Cycle Length
15	11th Street and Chrisman Road	Tracy	Signal	**56.5**	**E**	**60.9**	**E**	41.1	D	50.7	D	Provide an additional westbound left-turn lane

Notes:LOS = Level of Service
Signal = Signal Control

[1] LOS thresholds for Caltrans are taken from the December 2002 Guide for the Preparation of Traffic Impact Studies. As of May 20, 2020, Caltrans has updated their guidelines (Vehicle Miles Traveled–Focused Transportation Impact Study Guidelines); however, no LOS thresholds are stated.
- Analysis performed using HCM 6th Edition methodologies.
- Delay indicated in seconds/vehicle.
- Tracy LOS standard is D; Caltrans LOS standard is C/D.
Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold.**
Source: Kimley-Horn. 2021. Tracy Alliance and Northeast Area Annexation Transportation Impact Analysis (prepared for the City of Tracy).

Identified Improvement Measures

IM-3 Optimize Signal Cycle Length at Grant Line Road and Chrisman Road (Intersection 9) and Grant Line Road and North MacArthur Drive (Intersection 13)

Prior to issuance of the building permits for the first individual development proposal, the City of Tracy Planning Department shall verify that the signal cycle length has been optimized at the intersections of:

- Grant Line and Chrisman Road
- Grant Line Road and North MacArthur Drive

IM-4 Chrisman Road and 11th Street (Intersection 15) Improvements

- Prior to issuance of the building permits for each individual development proposal, the City of Tracy Planning Department shall verify that the relevant applicant has paid its pro rata fair share of the proposed project's fair share of 5.35 percent for the following improvement: an additional second westbound left-turn lane for Intersection 15 (which will involve the signal at this Intersection being modified to allow lagging phase for the eastbound left turn and northbound left turn).

Fair Share Analysis

According to Appendix B of the Caltrans Guide for the Preparation of Traffic Impact Studies,[22] fair share is calculated when:

- A project has impacts that do not immediately warrant mitigation, but their cumulative effects are significant and will require mitigating in the future.
- A project has an immediate impact, and the lead agency has assumed responsibility for addressing operational improvements.

The proposed project shall also pay a total fair share of 17.02 percent toward the installation of a signal at Chrisman Road/Paradise Road; to that end, each applicant for its individual development proposal shall pay its pro rata fair share contribution of the proposed project's total fair share due (17.02 percent) in connection with the relevant individual development proposal.

3.14.6 - Cumulative Impacts

Vehicle Miles Traveled

Transportation impact analysis is inherently cumulative because it is important to analyze a project's impact within the context of existing and future traffic conditions to which all projects contribute and, where appropriate, provide mitigation measures to reduce a project's contribution to any cumulative significant impacts identified to the degree feasible. Cumulative impacts associated transportation are analyzed throughout this section. Cumulative projects would be required to

[22] California Department of Transportation (Caltrans). 2002. Guide for the Preparation of Traffic Studies. December. Website: https://nacto.org/docs/usdg/guide_preparation_traffic_impact_studies_caltrans.pdf. Accessed February 9, 2021.

comply with applicable State and local laws and regulations. If found to result in significant VMT impacts, the cumulative projects would be required to implement feasible TDM measures that would reduce VMT and encourage alternative modes of transportation, such as transit, bicycle use, and walking. The provision of transit, bicycle, and pedestrian facilities would depend on the nature of the cumulative project at issue and its location. Cumulative projects would also be required to include facilities based on future transportation studies prepared for that project and to pay into the City's VMT banking program once established. However, even with implementation of all available feasible mitigation, the cumulative VMT would still exceed City standards and would be significant and unavoidable.

In addition, as described in Impact TRANS-1, the proposed project's contribution to this significant cumulative impact would be cumulatively considerable even with the implmentation of the mitigation required by MM TRANS-1(a) and MM TRANS-1(b). As such, the proposed project, in conjunction with other cumulative projects, would have a significant and unavoidable impact with respect to VMT, and, as described above, the proposed project's contribution would be cumulatively considerable.

Roadway Safety and Emergency Access

Trucks used during the construction of cumulative projects, including those listed in Table 3-1, Chapter 3, Environmental Impact Analysis, would be required to utilize truck routes designated by the City and therefore would not conflict with the automobile traffic and bicycle and pedestrian activity along public streets. In addition, the relevant local jurisdictions' engineering and planning departments would review project plans prior to construction permits in order to determine whether any construction traffic control plans would be required and would require the implementation of same, as necessary.

If any cumulative projects, including those listed in Table 3-1, Chapter 3, Environmental Impact Analysis, would redesign City streets in such a way that would significantly impact roadway safety, they would be required by the City to mitigate such impacts as feasible. Roadways constructed as part of the cumulative projects would be constructed to meet then-current applicable City and California Fire Code design standards. Cumulative project driveways and access points would be constructed in compliance with applicable provisions of the California Fire Code and other applicable regulations related to roadway safety and emergency access. As such, cumulative roadway safety and emergency access impacts in the City and the unincorporated community of Banta would be less than significant. Further, as described more fully above, the proposed project, in conjunction with other cumulative projects listed in Table 3-1, Chapter 3, Environmental Impact Analysis, would not make a cumulatively considerable contribution to this less than significant cumulative impact associated with roadway safety or emergency access.

Transit, Bicycle, and Pedestrian Circulation and Facilities

With respect to transit facilities, should construction or operation of the cumulative projects temporarily or permanently conflict with existing transit connections, each project sponsor for the relevant cumulative project(s) would be required to coordinate with the City and the transit providers to provide alternative transit access.

With respect to pedestrian and bicycle facilities, Cumulative Project 35, I-205 and Chrisman Road Interchange, is the only reasonably foreseeable future project that shares a street with the proposed project. Paradise Road would be realigned with the construction of the I-205 and Chrisman Road Interchange. There are no bicycle or pedestrian facilities provided on Paradise Road along the proposed project frontage or I-205. Therefore, cumulative impacts would be less than significant.

As part of the proposed project's frontage improvements, it is anticipated that the proposed project would construct a Class I path (that would accommodate both pedestrians and bicycles) per the TMP for both Grant Line Road and Paradise Road that would improve pedestrian and bicycle infrastructure. Neither the proposed project nor the I-205 and Chrisman Road Interchange project would remove existing bicycle or pedestrian infrastructure, nor would either make a cumulatively considerable contribution to this less than significant cumulative impact. Therefore, cumulative impacts related to the circulation system in terms of transit, bicycle, and pedestrian facilities would be less than significant.

Level of Cumulative Significance Before Mitigation

Significant and Unavoidable (Vehicle Miles Traveled)

Less Than Significant (Roadway Safety and Emergency Access)

Less Than Significant (Transit, Bicycle, and Pedestrian Circulation and Facilities)

Mitigation Measures

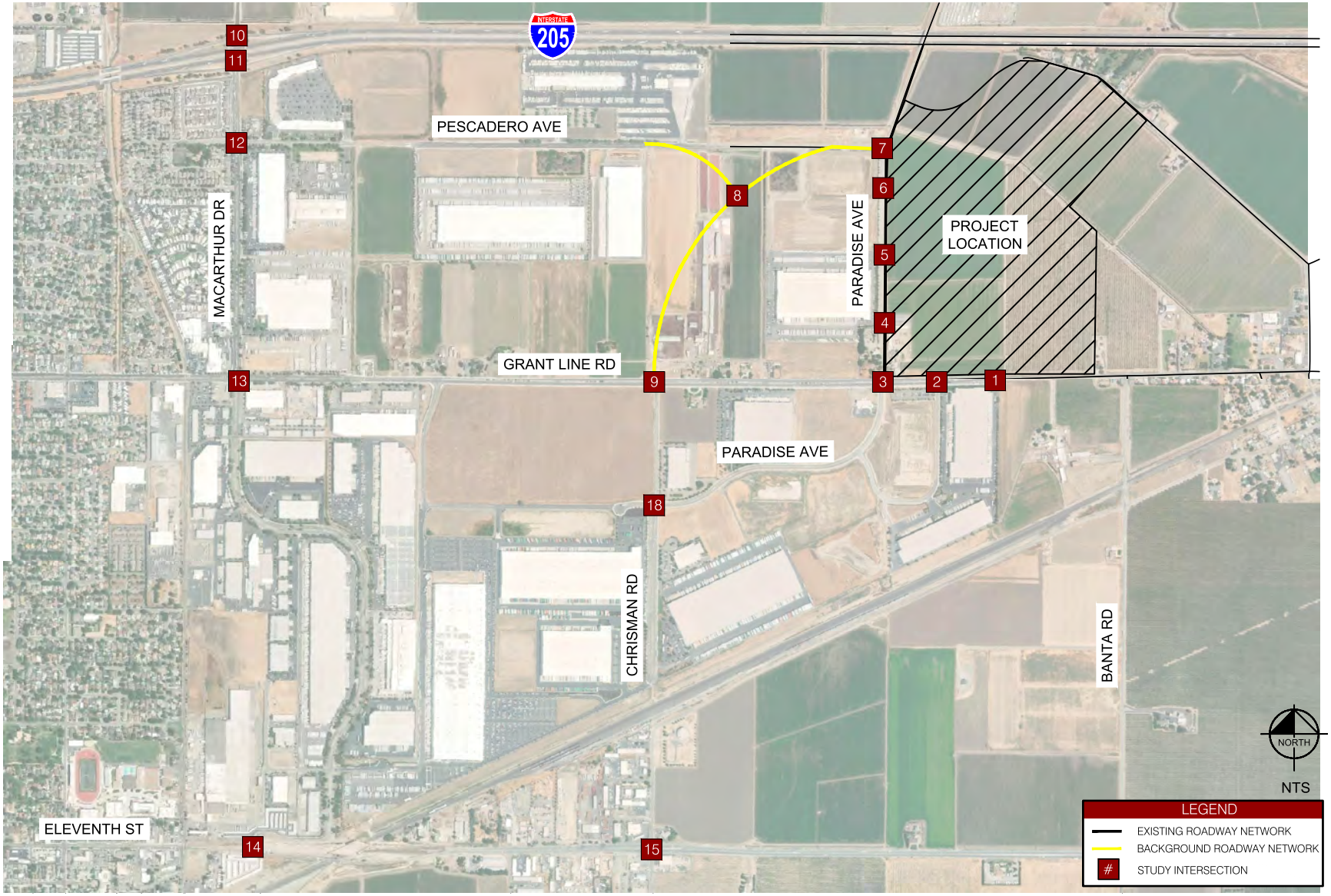
Implement MM TRANS-1(a) and MM TRANS-1(b)

Level of Cumulative Significance After Mitigation

Significant and Unavoidable (Vehicle Miles Traveled)

Less Than Significant (Roadway Safety and Emergency Access)

Less Than Significant (Transit, Bicycle, and Pedestrian Circulation and Facilities)



Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-1
Background Conditions Study Area and Intersections

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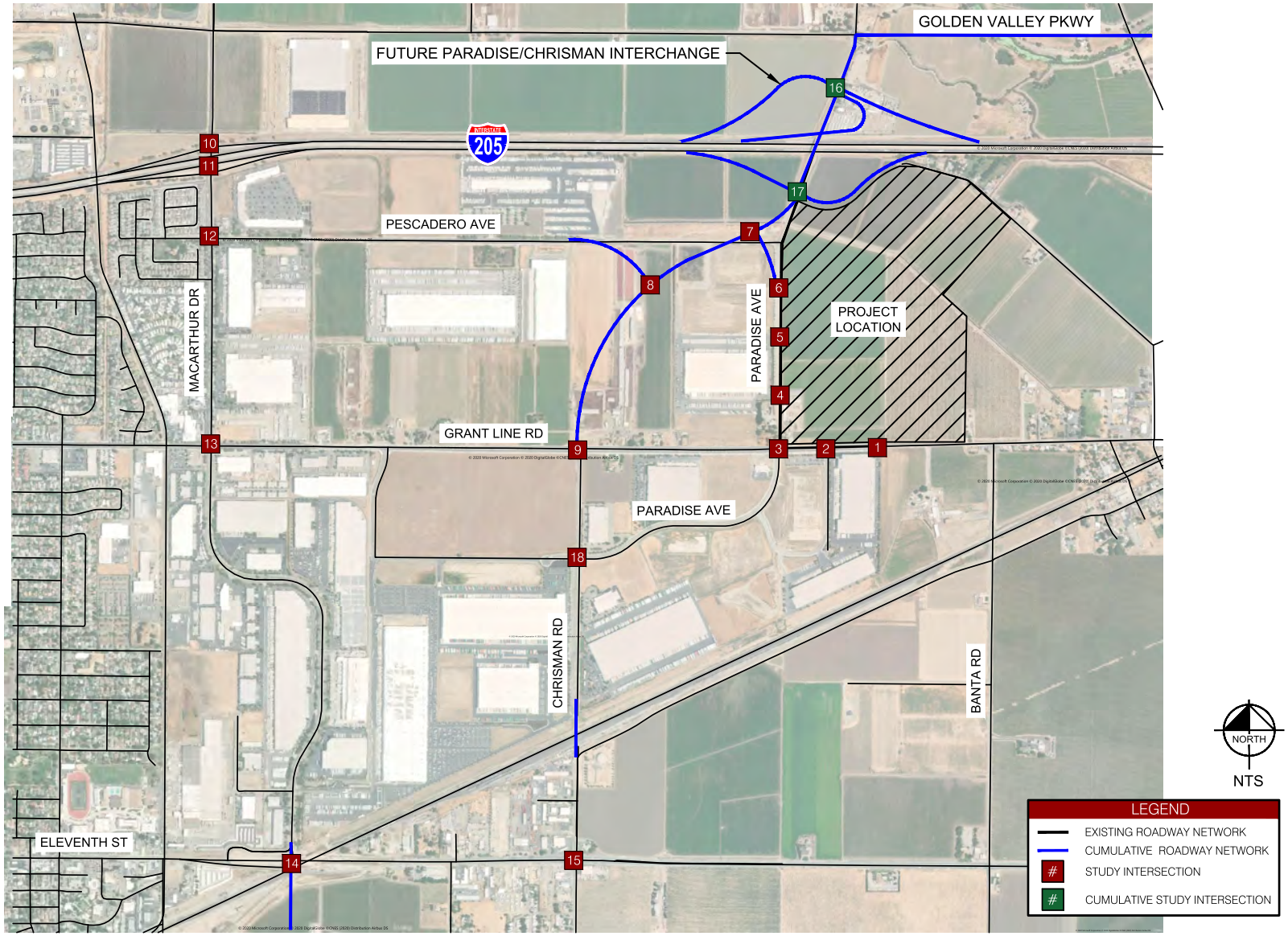

Source: Kimley-Horn and Associates, Inc., February 2021.

FIRSTCARBON SOLUTIONS™

Exhibit 3.14-2
Cumulative Conditions Study Area and Intersections

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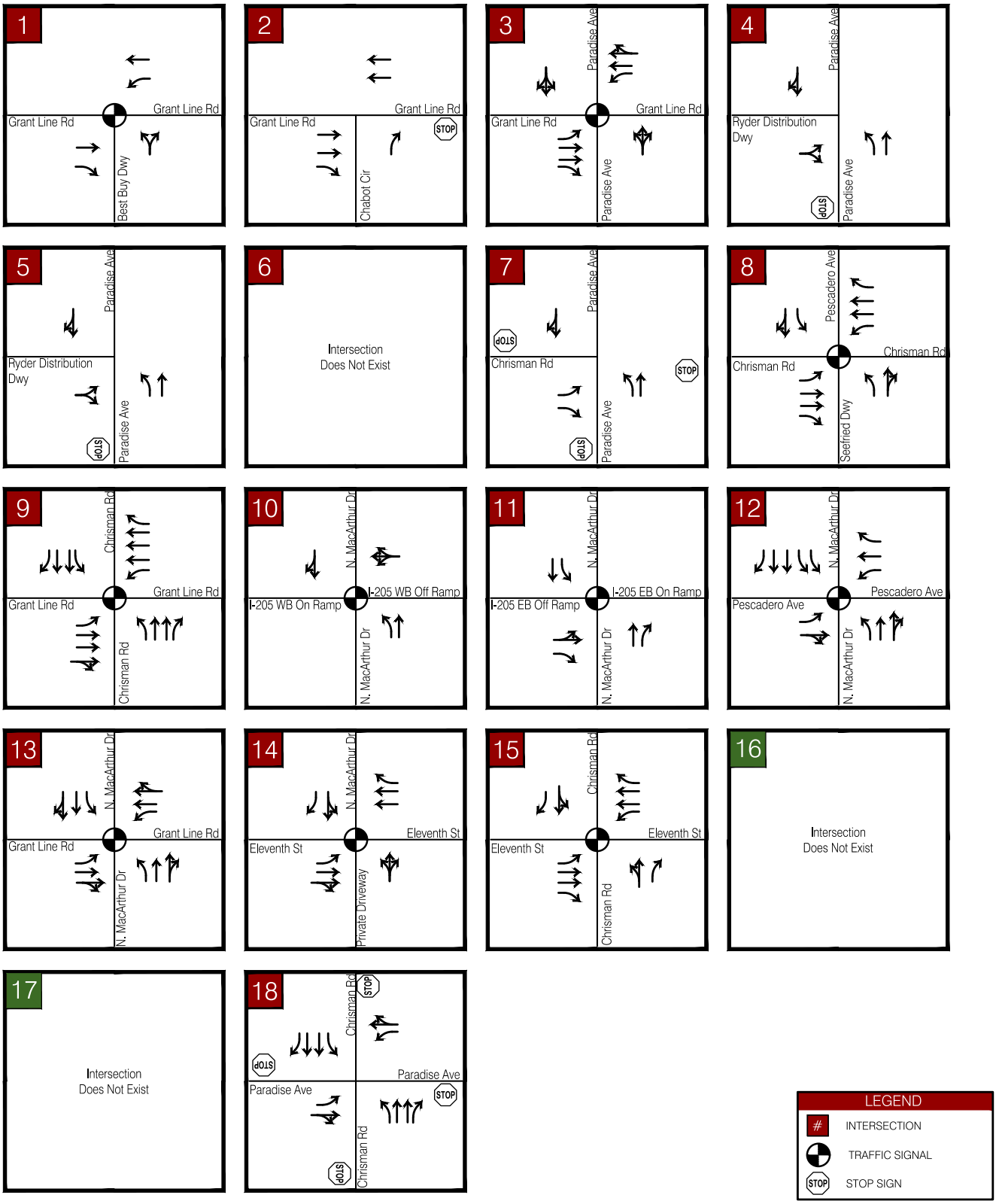

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-3
Background Conditions
Traffic Control and Geometry

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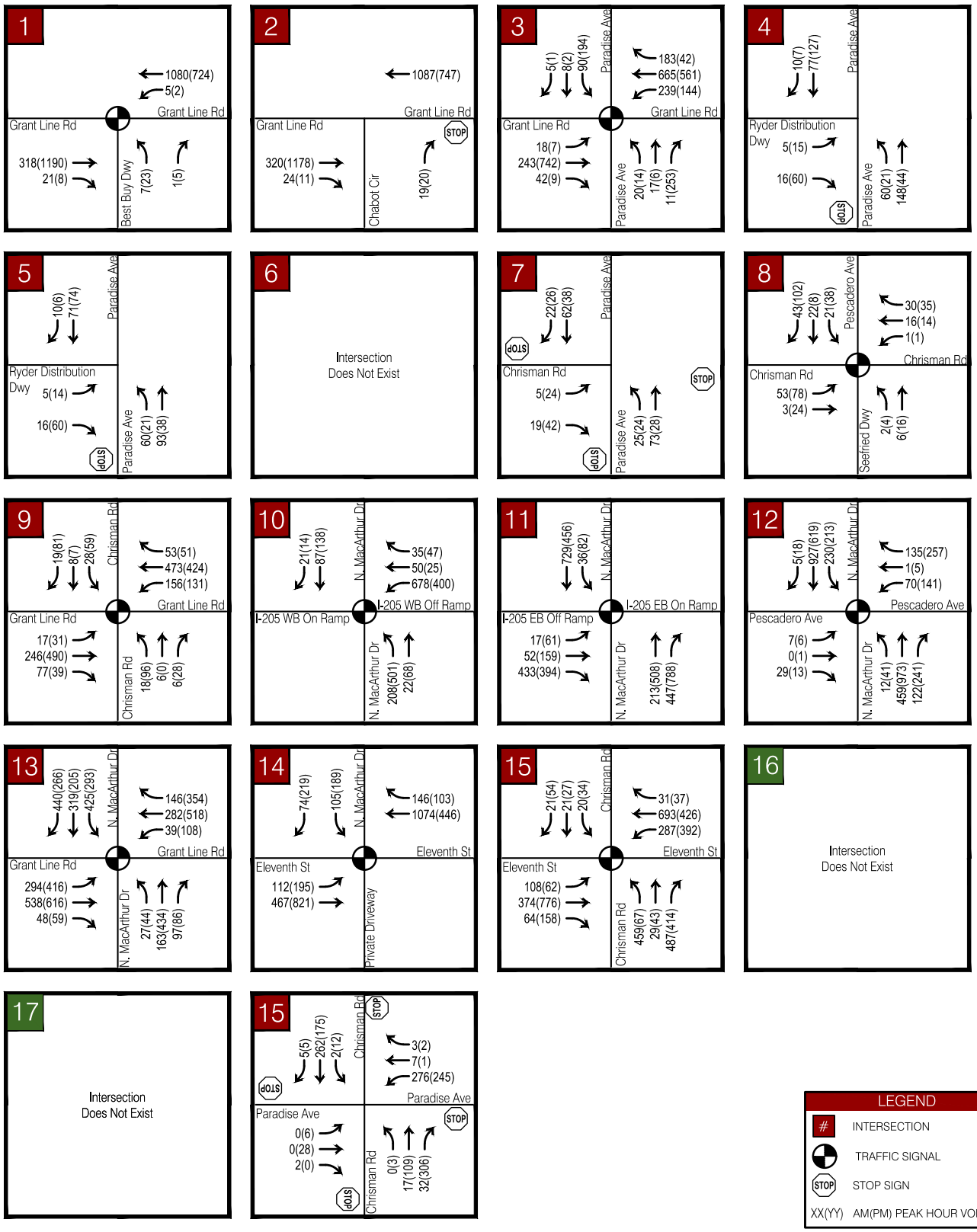

Source: Kimley-Horn and Associates, Inc., February 2021.

FIRSTCARBON SOLUTIONS™

Exhibit 3.14-4
Background Conditions
Peak Hour Traffic Volumes

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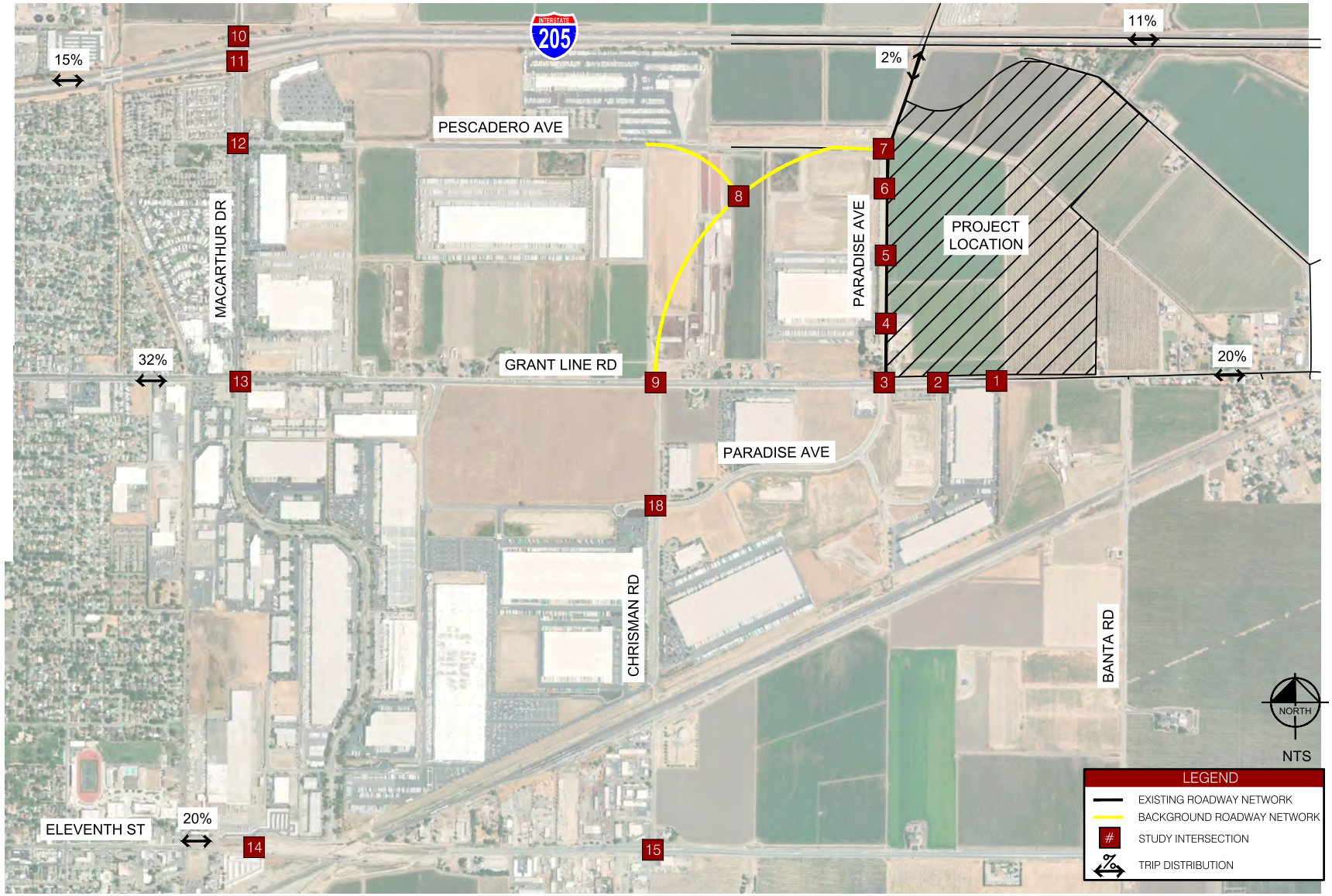

Source: Kimley-Horn and Associates, Inc., February 2021.

FIRSTCARBON SOLUTIONS™

Exhibit 3.14-5
Background Plus Project Conditions
Passenger Car Trip Distribution

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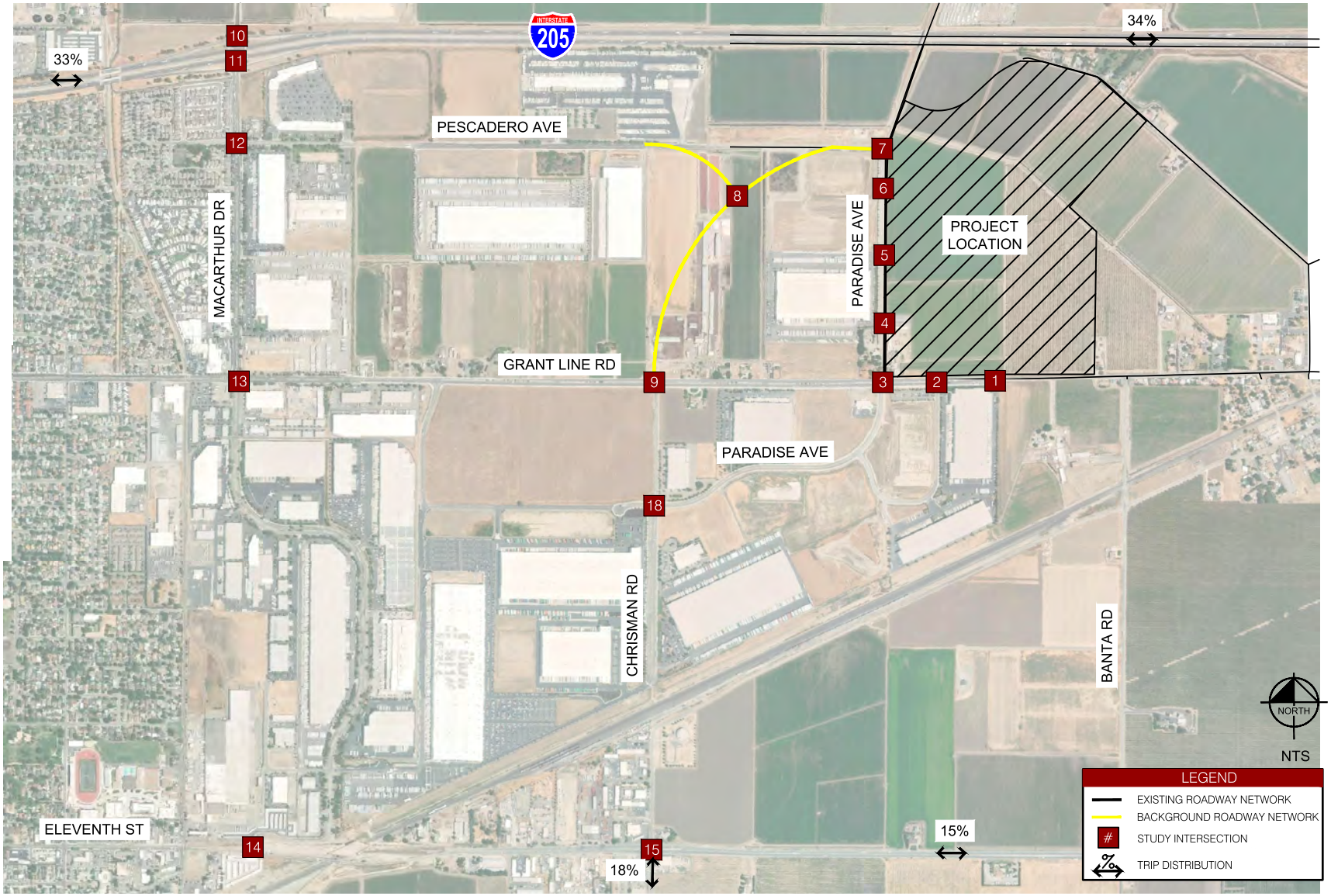

Source: Kimley-Horn and Associates, Inc., February 2021.

FIRSTCARBON SOLUTIONS™

Exhibit 3.14-6
Background Plus Project Conditions
Truck Trip Distribution

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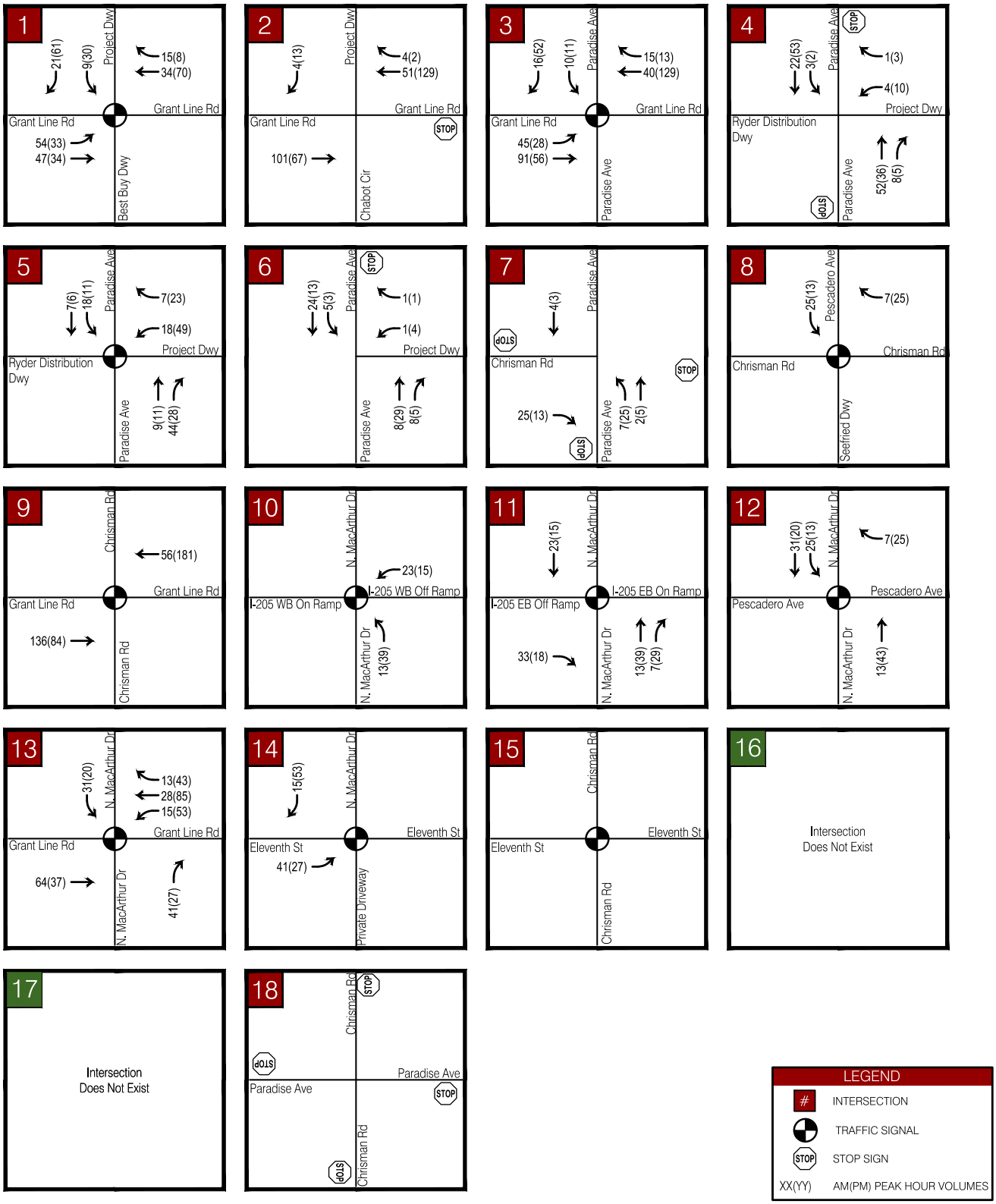

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-7
Background Plus Project Conditions
Passenger Car Trip Assignment

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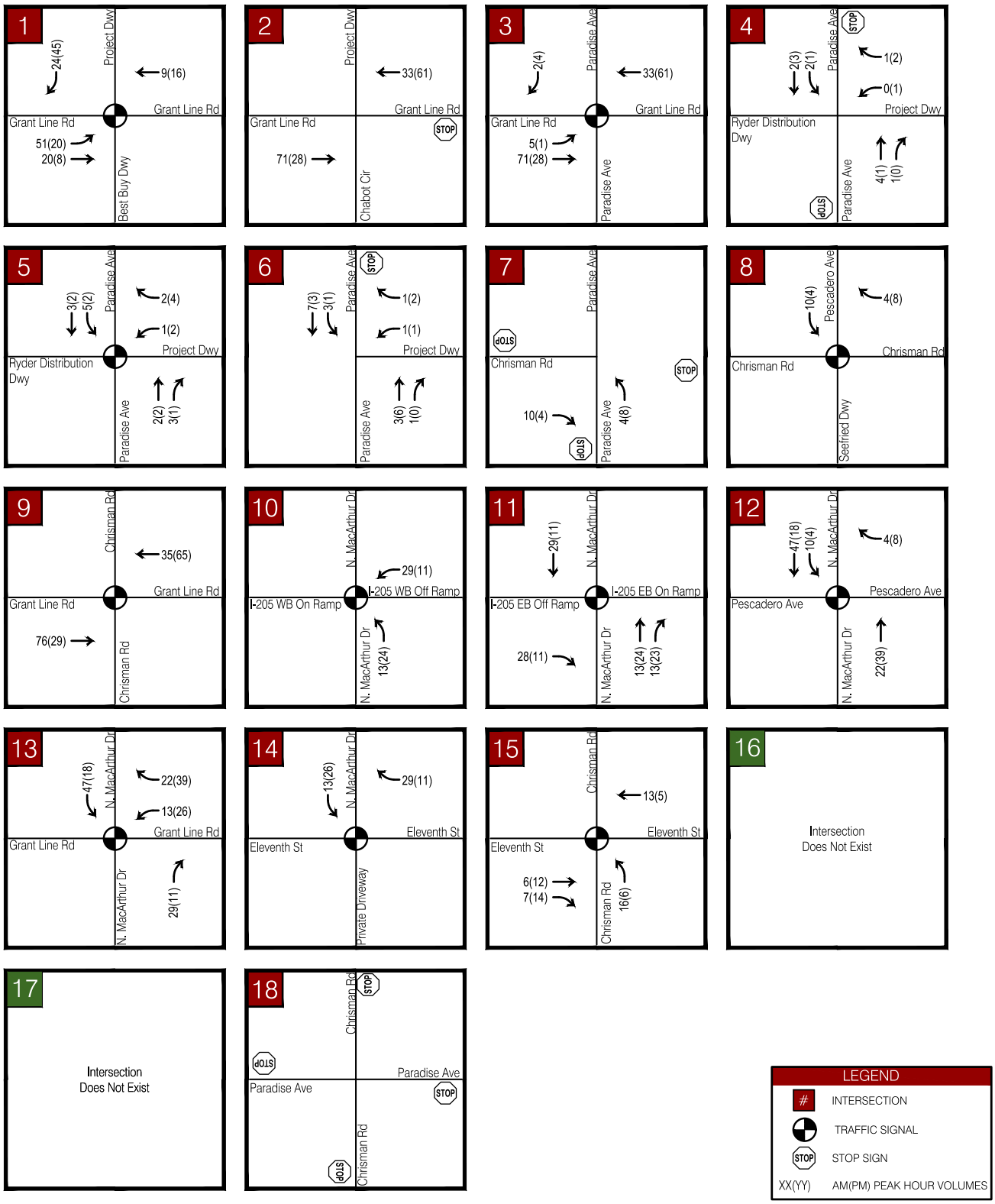

Source: Kimley-Horn and Associates, Inc., February 2021.

FIRSTCARBON SOLUTIONS™

Exhibit 3.14-8
Background Plus Project Conditions
Truck Trip Assignment

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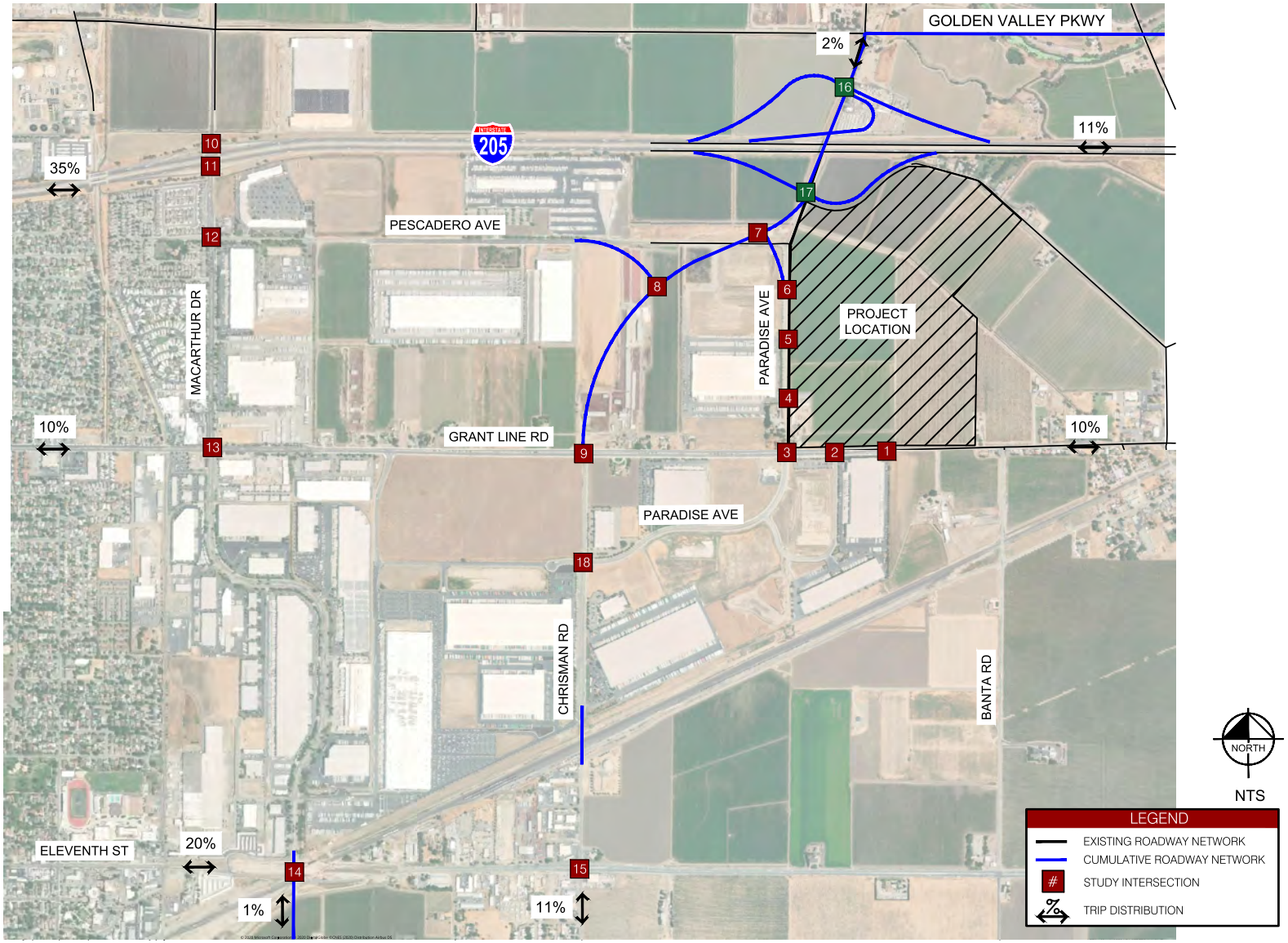

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-9
Cumulative Plus Project Conditions Passenger Car Trip Distribution

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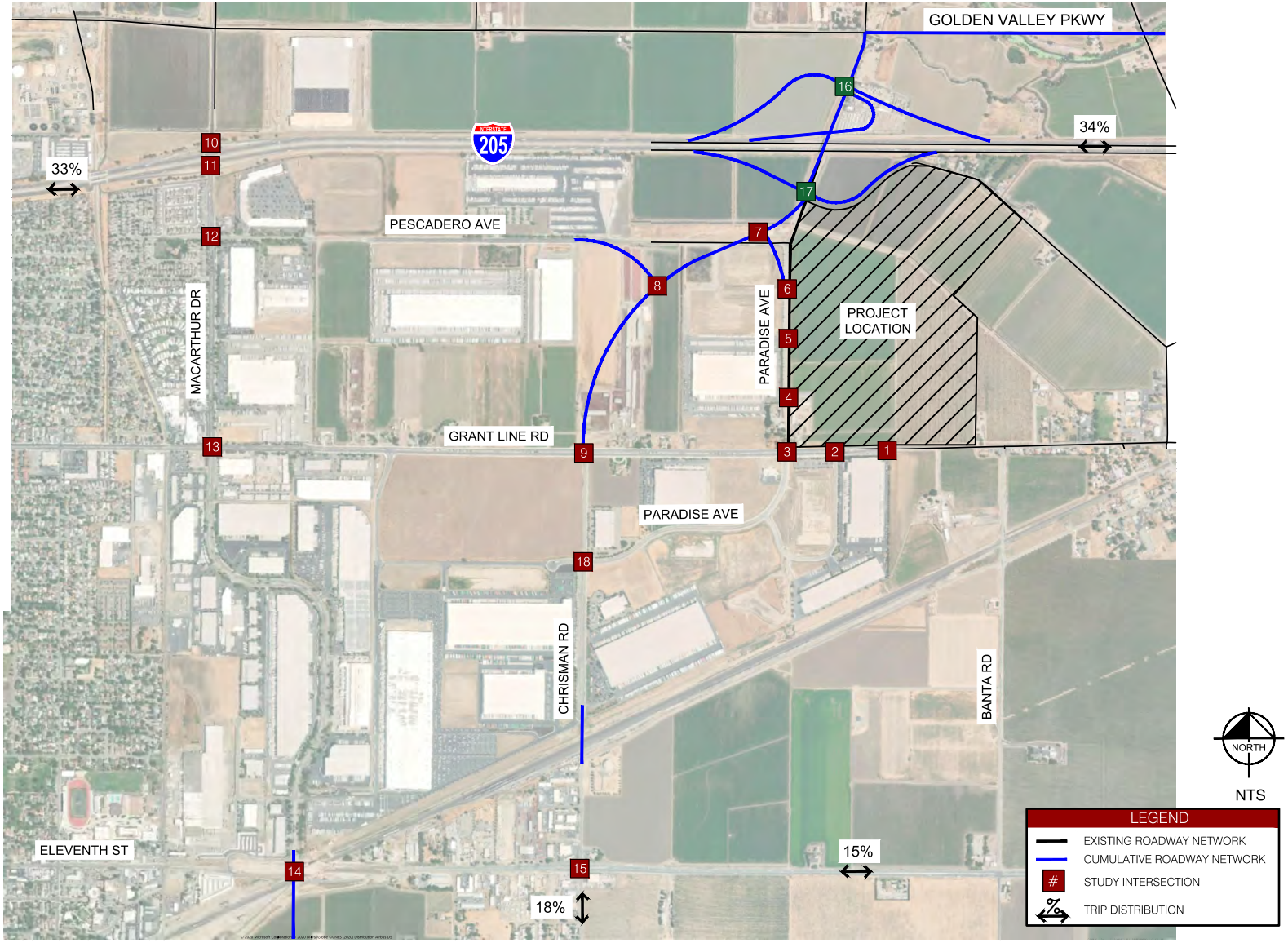

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-10
Cumulative Plus Project Conditions Truck Trip Distribution

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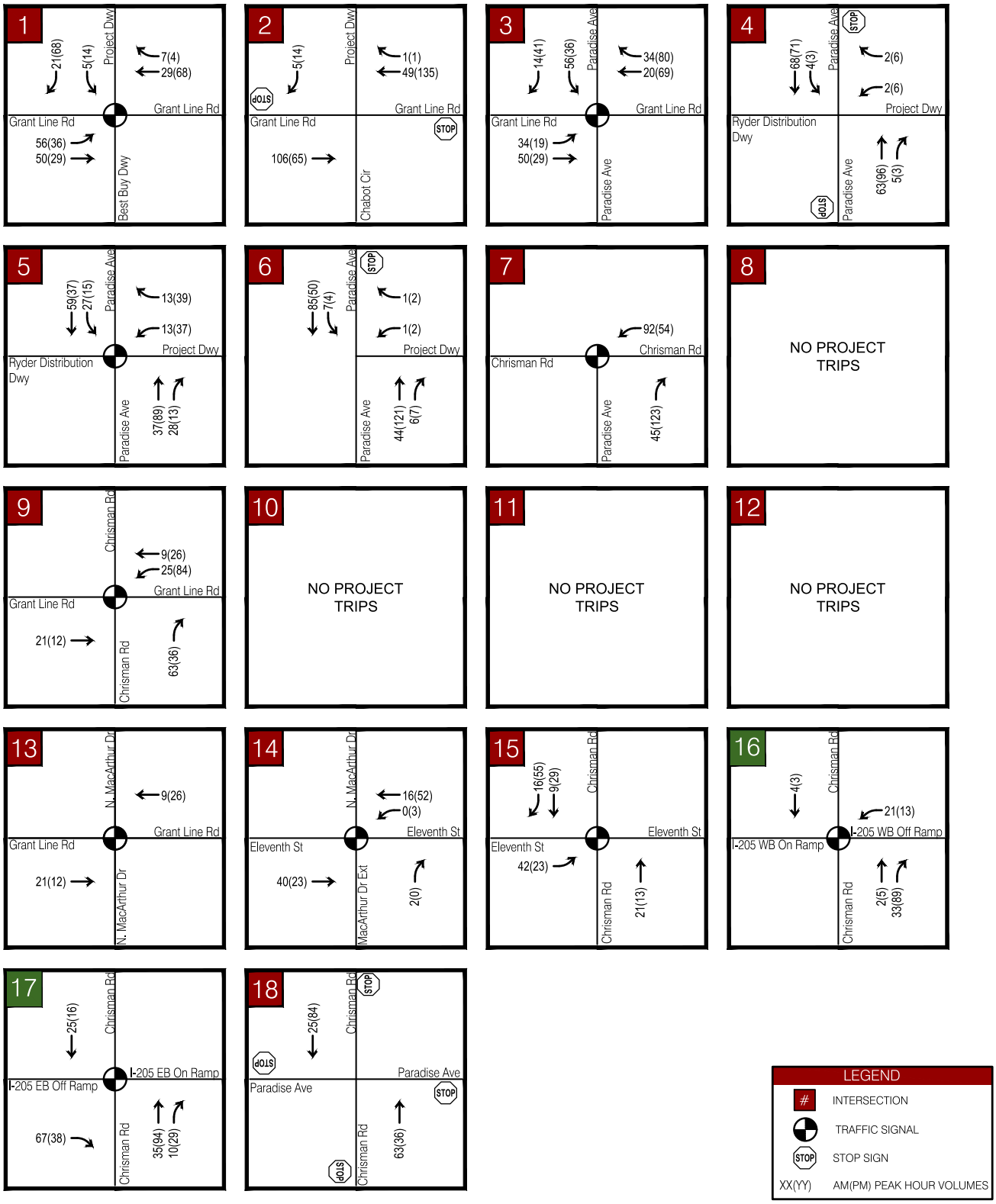

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-11
Cumulative Plus Project Conditions
Passenger Car Trip Assignment

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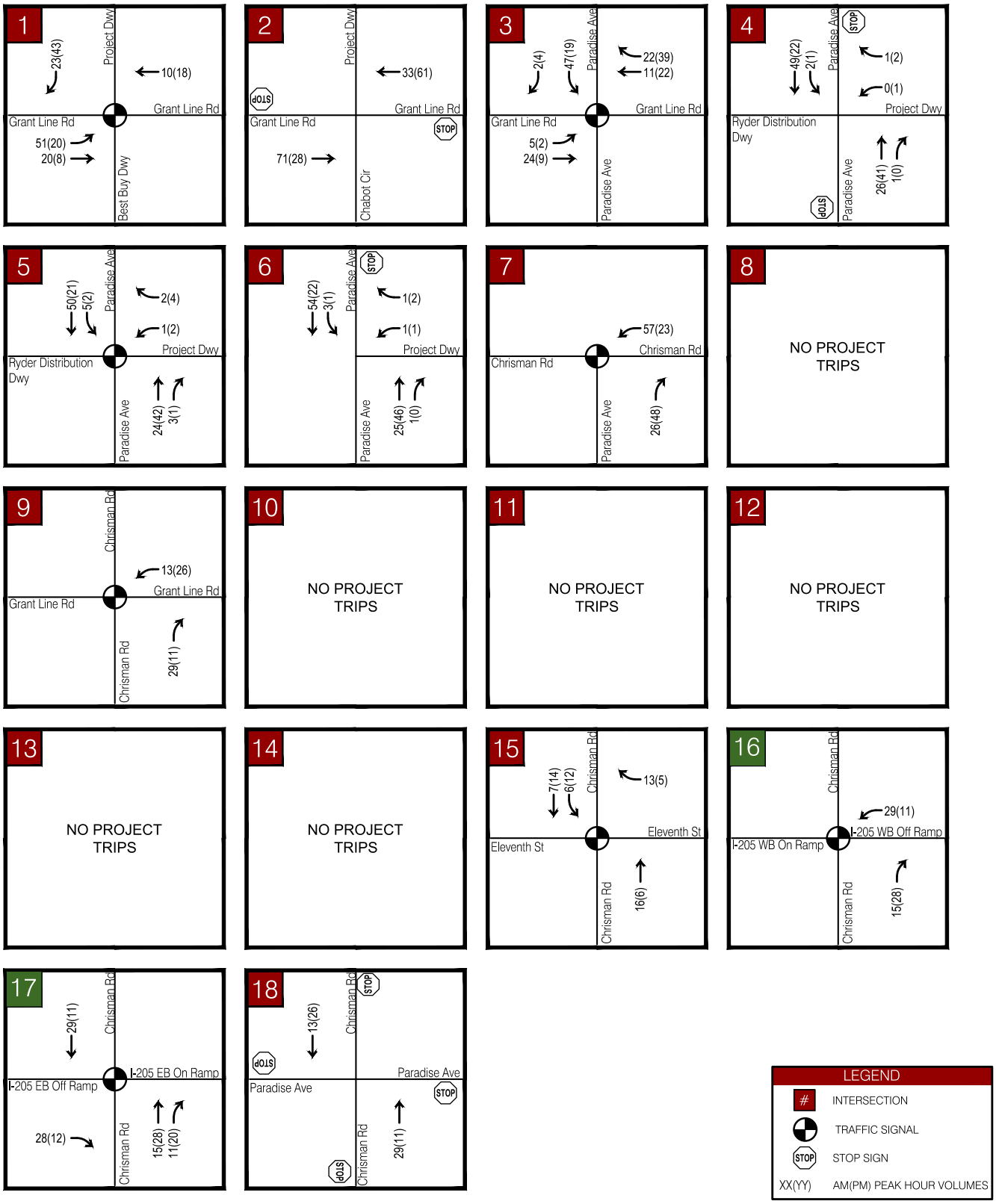

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-12
Cumulative Plus Project Conditions Truck Trip Assignment

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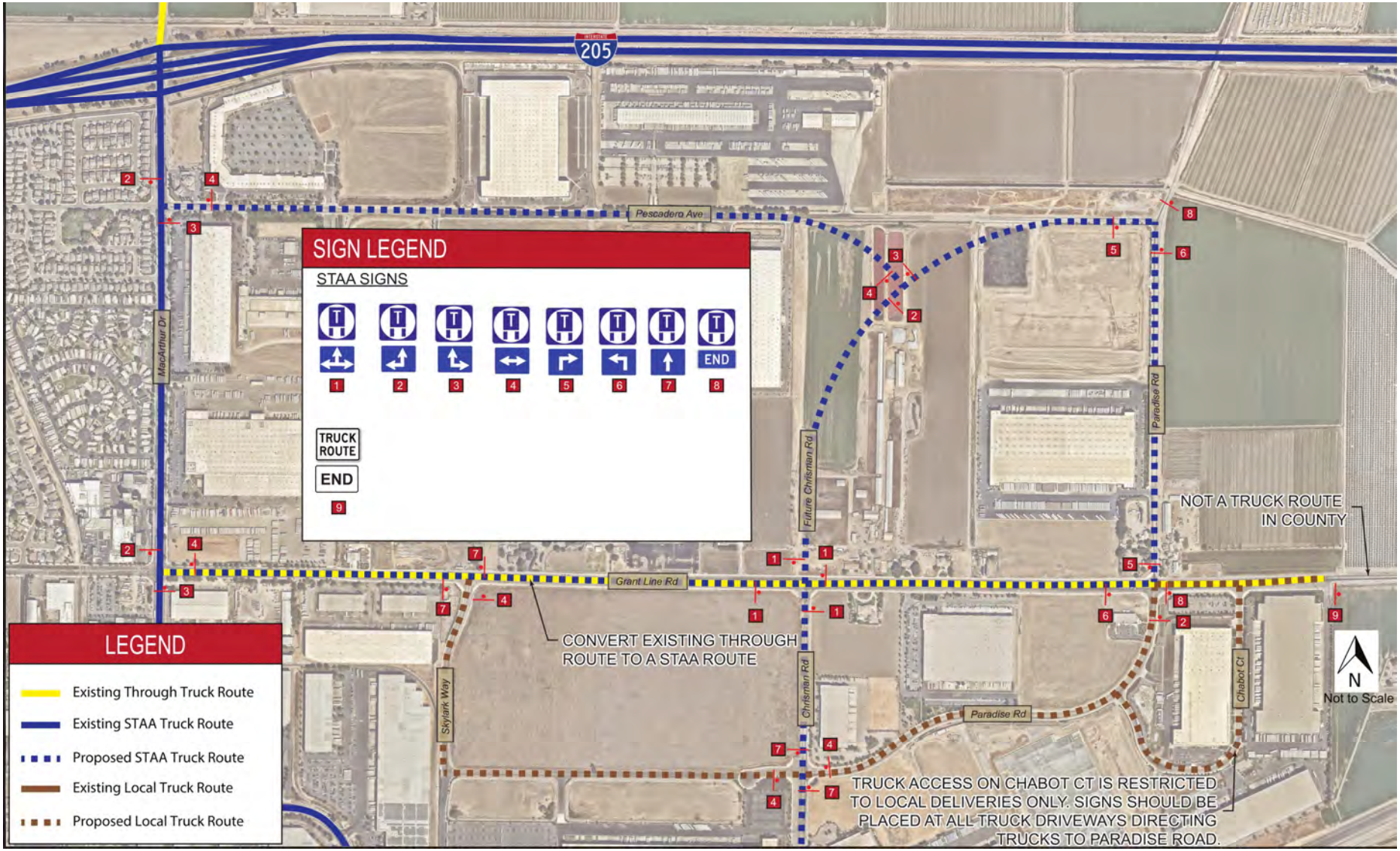

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-13
Interim NEI Truck Route Map

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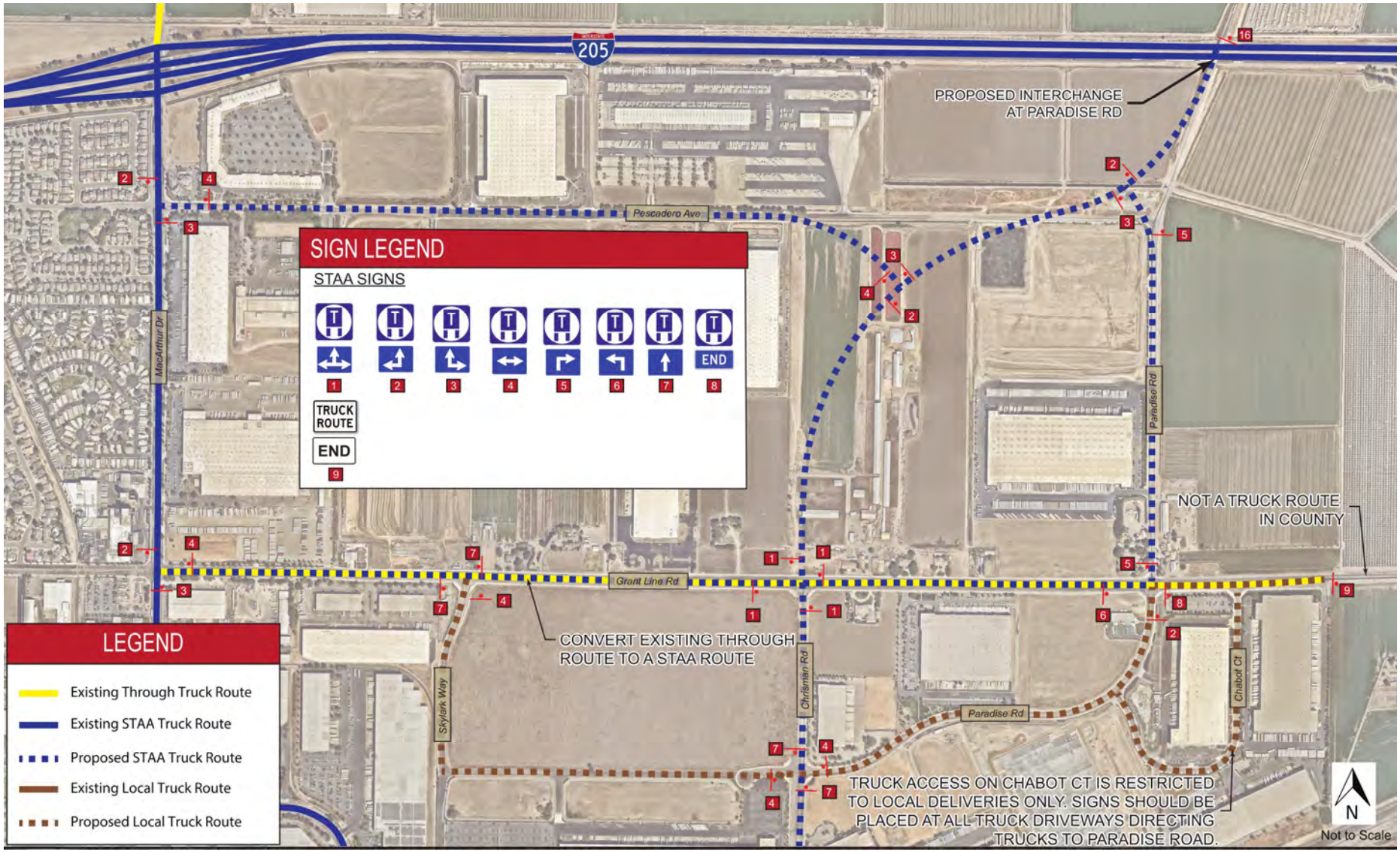

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-14
Ultimate NEI Truck Route Map

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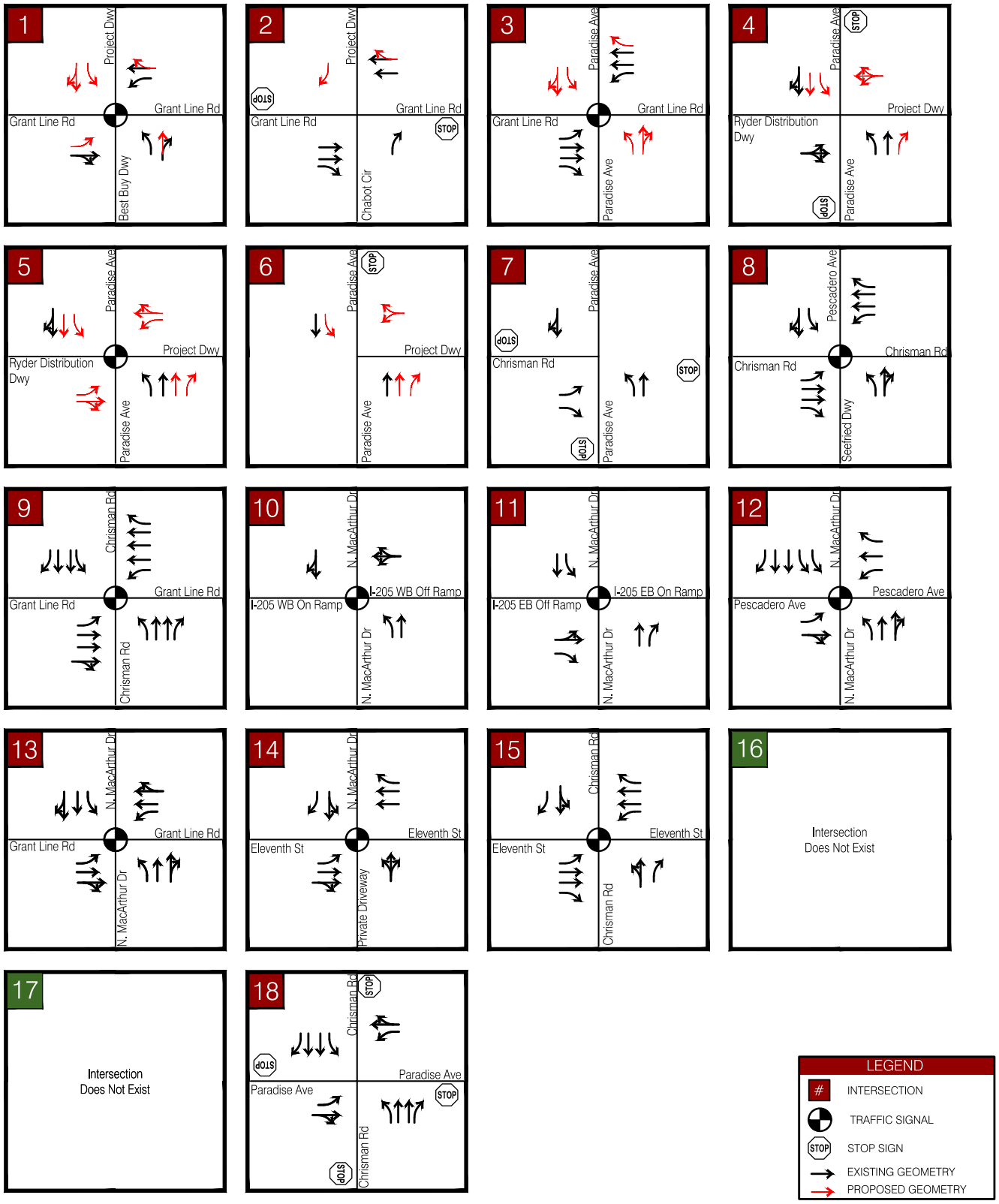

Source: Kimley-Horn and Associates, Inc., February 2021.

Exhibit 3.14-15
Background Plus Project Conditions
Traffic Control and Geometry

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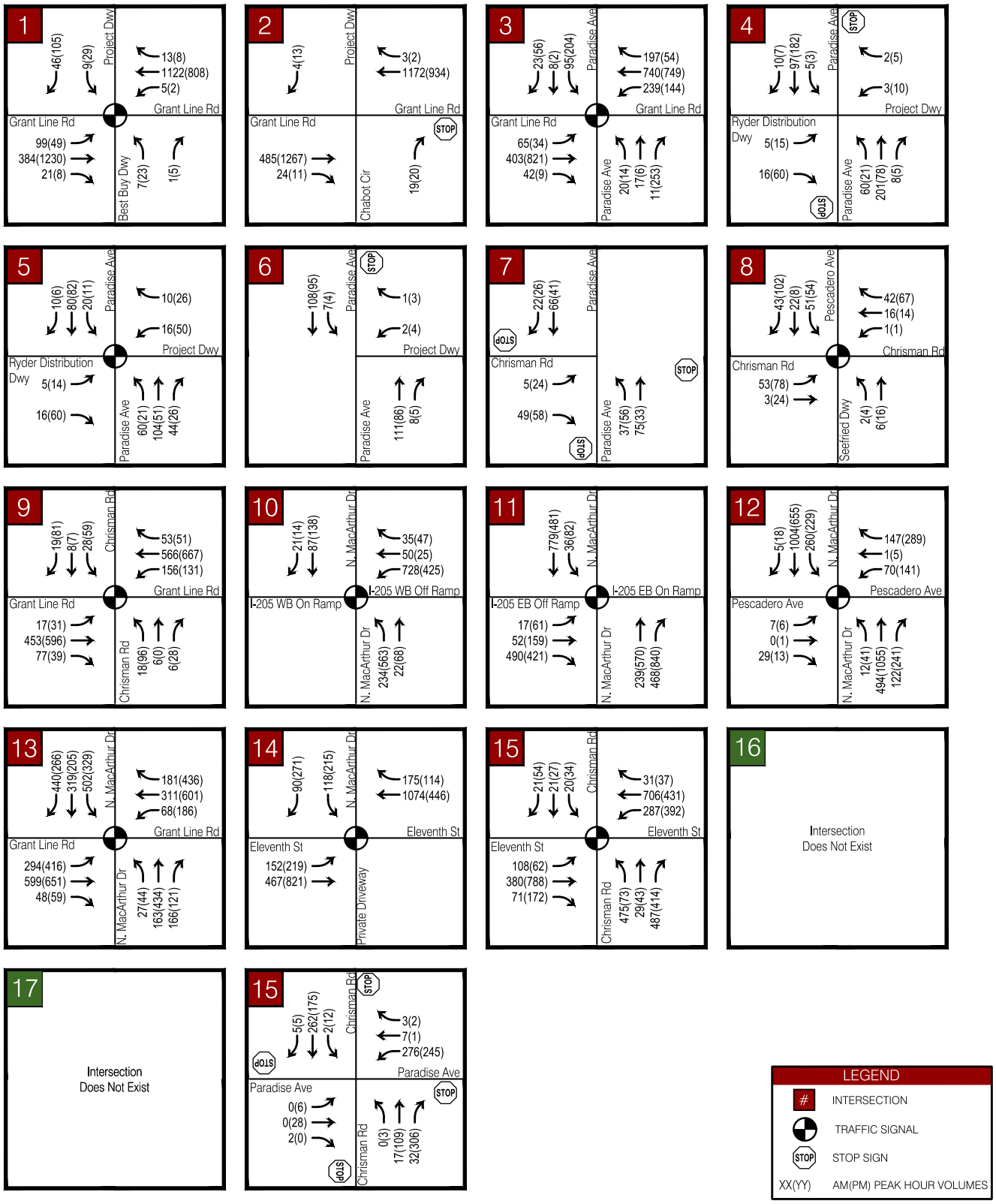

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-16
Background Plus Project Conditions
Peak Hour Traffic Volumes (For Full Project)

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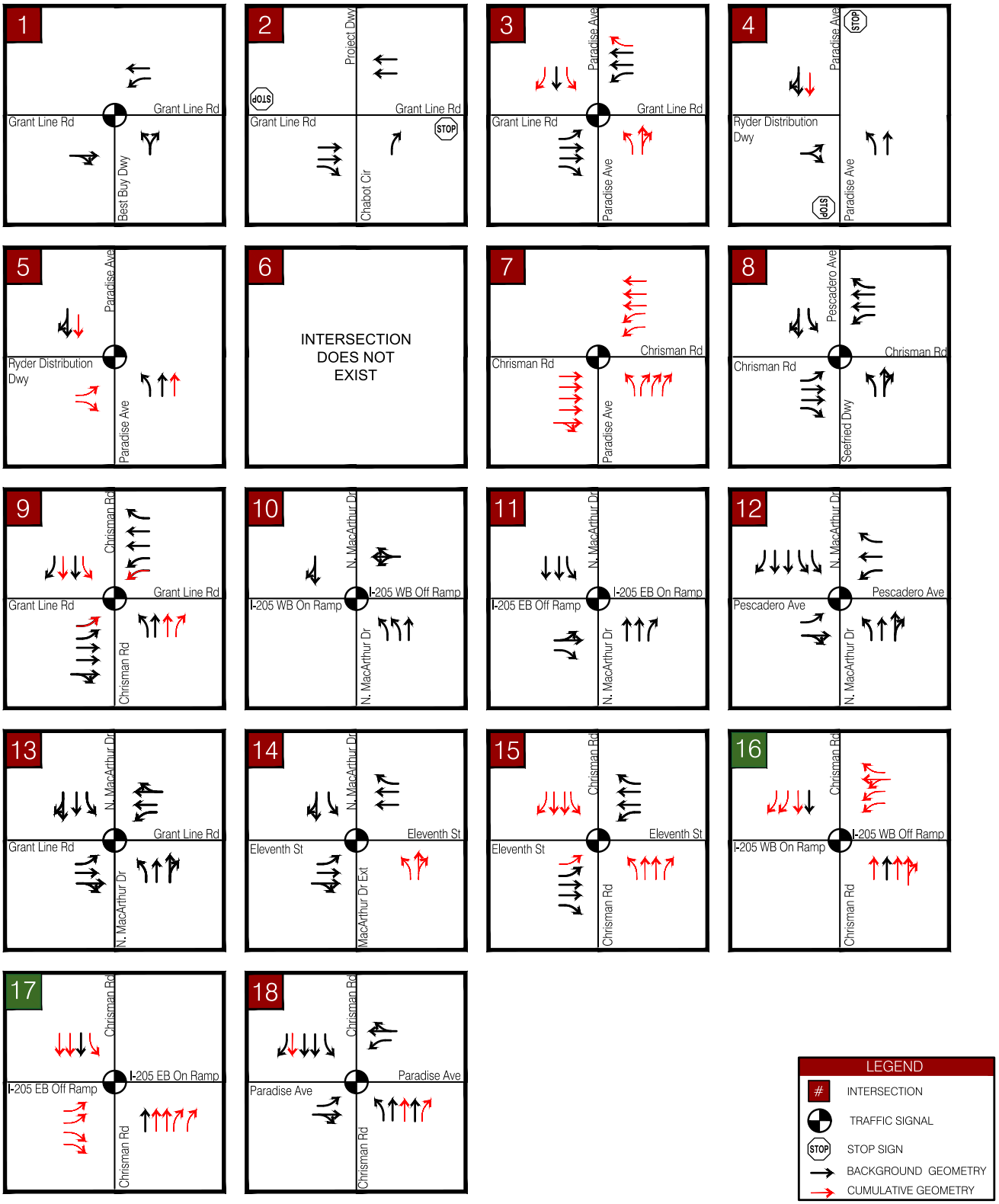

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-17
Cumulative Conditions
Traffic Control and Geometry

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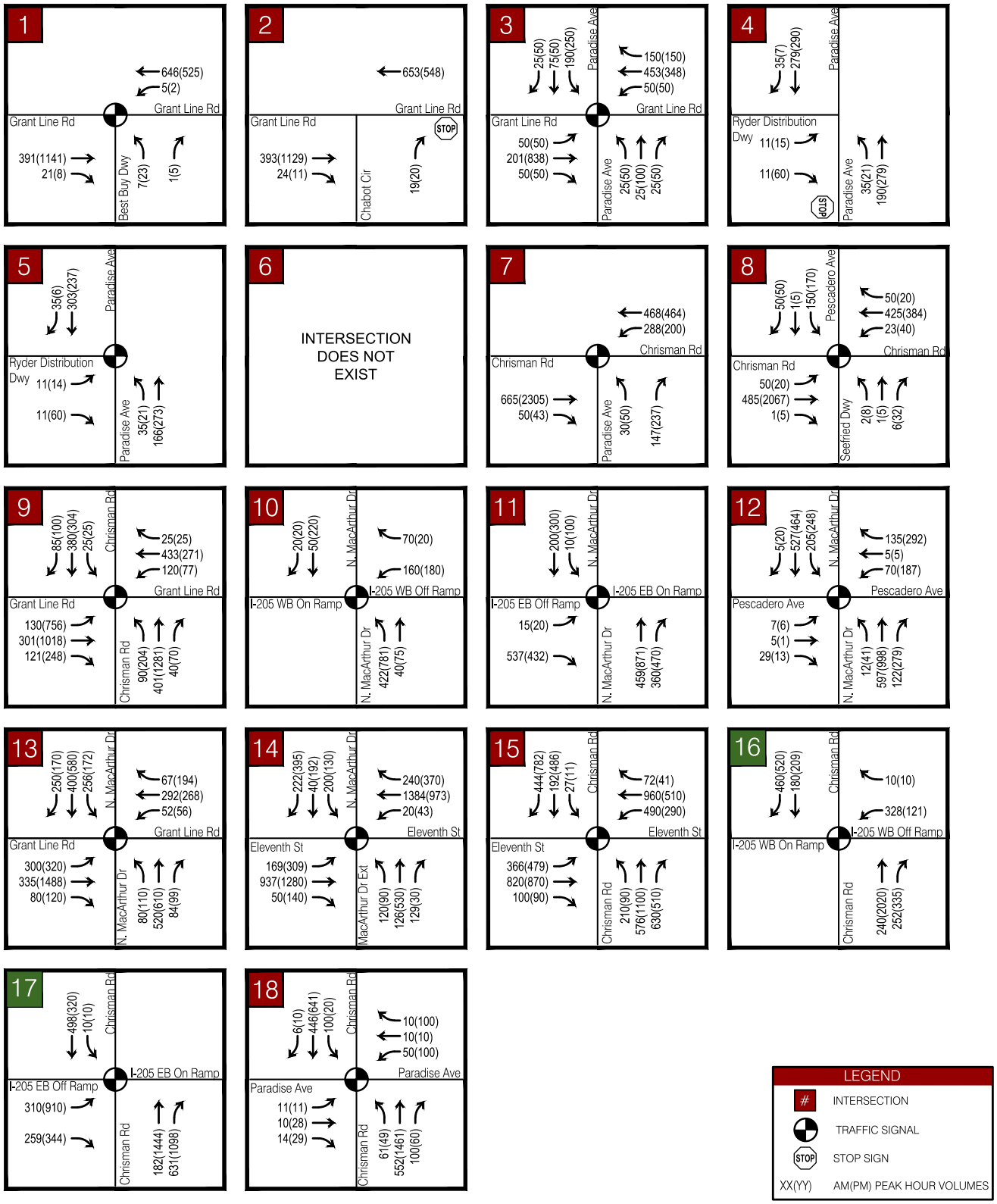

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-18
Cumulative Conditions
Peak Hour Traffic Volumes

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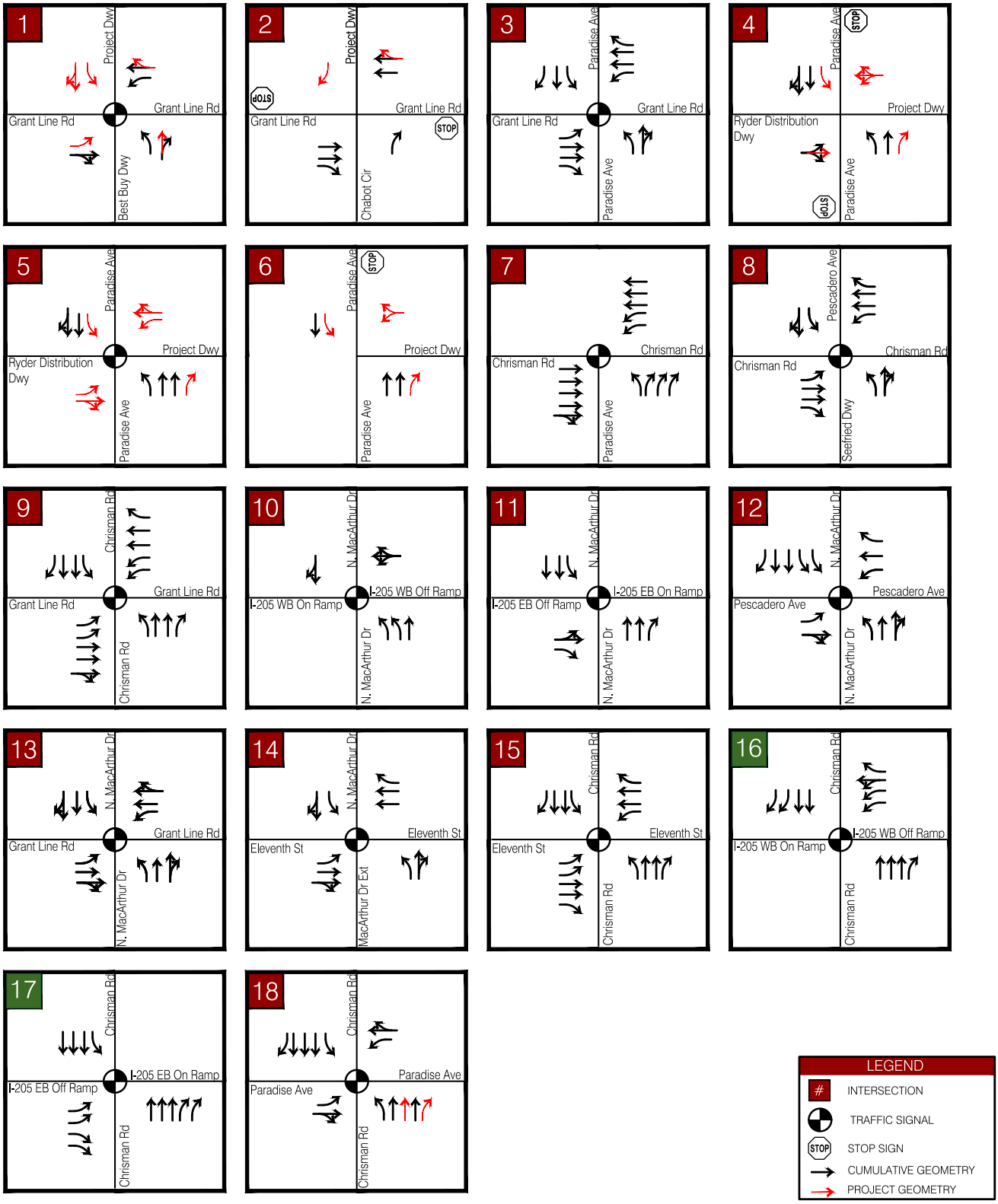

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-19
Cumulative Plus Project Conditions
Traffic Control and Geometry

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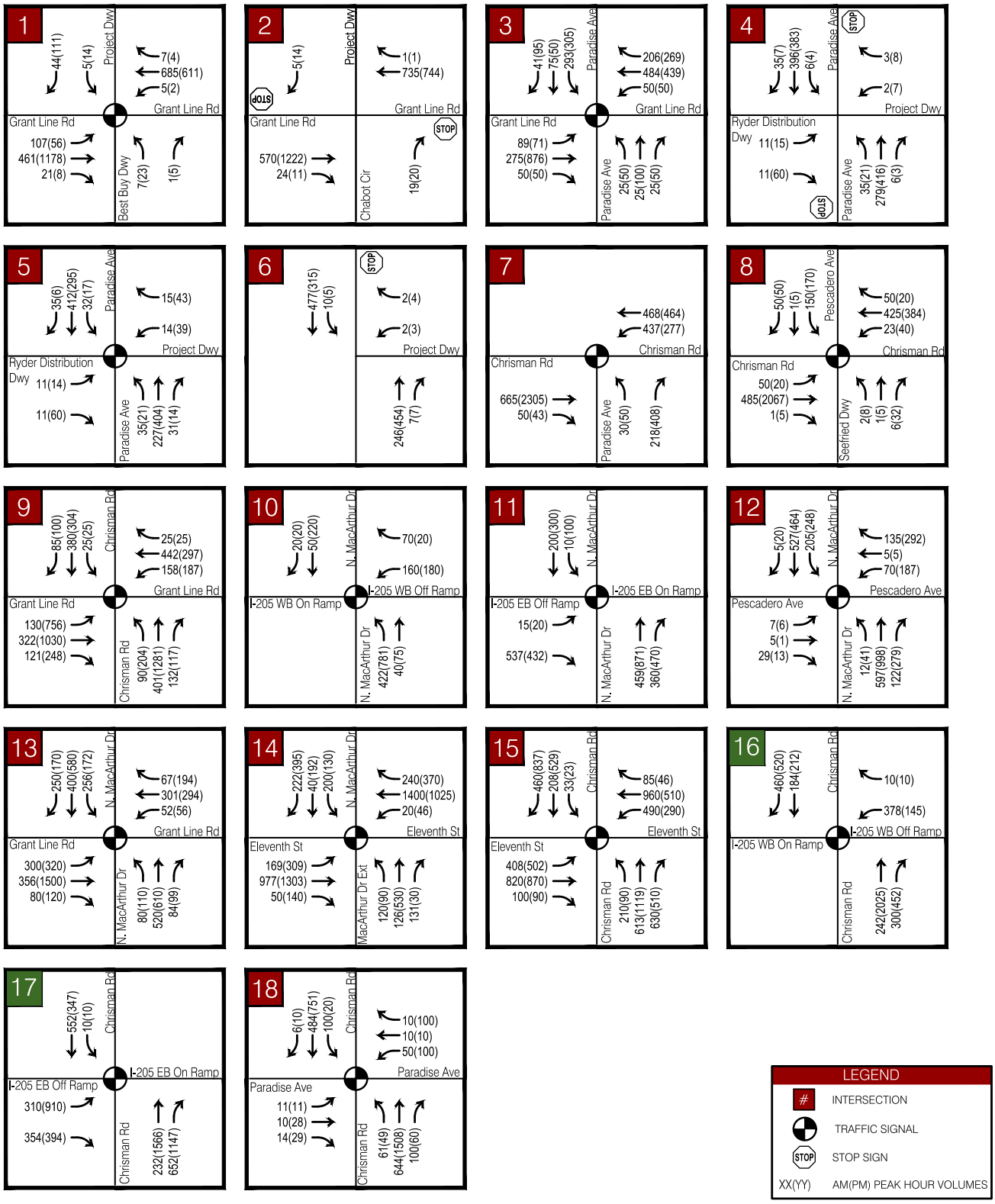

Source: Kimley-Horn and Associates, Inc., February 2021.

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Exhibit 3.14-20
Cumulative Plus Project Conditions
Peak Hour Traffic Volumes

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3.15 - Tribal Cultural Resources

3.15.1 - Introduction

This section describes the existing tribal cultural resources setting in the region, the project site and vicinity as well as the relevant regulatory setting. This section also evaluates the potential impacts related to tribal cultural resources that could result from implementation of the proposed project. Information in this section is based, in part, on initial consultation with the Native American Heritage Commission (NAHC), subsequent consultation with tribal representatives identified by the NAHC who may have interest in or additional information on tribal cultural resources that may be impacted by proposed project development. The analysis in this section is based, in part, on the recommendations provided in the Phase I Cultural Resources Assessment (Phase I CRA) prepared for this project, which is provided in Appendix D. The following comments were received during the Draft Environmental Impact Report (Draft EIR) scoping period related to tribal cultural resources:

One comment letter was received from the NAHC during the Draft EIR scoping period related to cultural and tribal resources.

- Recommends contact with the appropriate California Historical Resources Information System (CHRIS) Center for an archaeological records search.
- Recommends contact with the NAHC for a Sacred Lands File search and Native American Tribal Consultation List.
- Recommends that the Lead Agency include provisions for the identification and evaluation of inadvertently discovered archaeological resources in their Mitigation Monitoring and Reporting Program (MMRP).
- Recommends that Lead Agencies include in their MMRP plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- Recommends that the Lead Agency should include in their MMRP plans provisions for the treatment and disposition of inadvertently discovered Native American human remains.

3.15.2 - Environmental Setting

Tribal Cultural Resources Components

The term “tribal cultural resources” encompasses tribal cultural resources and burial sites. Below is a brief summary of each component:

- **Tribal Cultural Resources:** Tribal Cultural Resources include sites, features, places, or objects that are of cultural value to one or more California Native American Tribes.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred and that are of cultural value to one or more California Native American Tribes.

Overall Tribal Cultural Resources Setting

Following is a brief overview of the prehistory and ethnographic background, providing a context in which to understand the background and relevance of sites found in the general project study area. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview. Further details can be found in ethnographic studies, mission records, and major published sources.[1,2,3,4,5,6]

Prehistoric Background

The Northern San Joaquin Valley remains one of the least known ethnographic areas of California. Although little record of their culture has survived, research indicates Native Americans occupied portions of northern San Joaquin County for over 10,000 years.

Early archaeological investigations in central California were conducted at sites located in the Sacramento-San Joaquin Delta region. The first published account documents investigations in the Lodi and Stockton area.[7] The initial archaeological reports typically contained descriptive narratives, with more systematic approaches sponsored by Sacramento Junior College in the 1930s. At the same time, University of California at Berkeley excavated several sites in the lower Sacramento Valley and Delta region, which resulted in recognizing archaeological site patterns based on variations of inter-site assemblages. Research during the 1930s identified temporal periods in central California prehistory and provided an initial chronological sequence.[8,9] In 1939, Lillard noted that each cultural period led directly to the next and that influences spread from the Delta region to other regions in central California.[10] In the late 1940s and early 1950s, Beardsley documented similarities in artifacts among sites in the San Francisco Bay region and the Delta and refined his findings into a cultural model that ultimately became known as the Central California Taxonomic System (CCTS). This system proposed a uniform, linear sequence of cultural succession.[11] The CCTS system was challenged by Gerow, whose work looked at radiocarbon dating to show that Early and Middle Horizon sites were not subsequent developments but, at least partially, contemporaneous.[12,13,14] To address some of the flaws in the CCTS system, Fredrickson[15] introduced a revision that incorporated a system of

1 Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, D.C. Smithsonian Institution.
2 Beardsley, R.K. 1948. "Cultural Sequences in Central California Archaeology." American Antiquity 14:1-28.
3 Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. Berkeley: University of California Anthropological Records 9(4):295-338.
4 Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park: Stanford University Press.
5 Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.
6 Jones, T.L. and Kathryn A. Klar. 2007. California Prehistory. Lanham: AltaMira Press; Rowman & Littlefield Publishers, Inc.
7 Schenck, W.E., and E.J. Dawson. 1929. Archaeology of the Northern San Joaquin Valley. American Archaeology and Ethnology 25:286–413
8 Lillard, J.B. and W.K. Purves. 1936. The Archaeology of the Deer Creek-Cosumnes Area, Sacramento Co., California. Sacramento. Sacramento Junior College, Department of Anthropology Bulletin 1.
9 Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, Bulletin 2. Sacramento.
10 Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, Bulletin 2. Sacramento.
11 Beardsley, R.K. 1948. "Cultural Sequences in Central California Archaeology." American Antiquity 14:1-28.
12 Gerow, B.A. 1954. The Problem of Cultural Sequences in Central California Archaeology. Paper presented at the Annual Meeting of the American Association for the Advancement of Sciences.
13 Gerow, B.A. 1974. Comments on Fredrickson's Cultural Diversity. The Journal of California Anthropology 1(2):239–246.
14 Gerow, B.A., with R. Force. 1968. An Analysis of the University Village Complex with a Reappraisal of Central California Archaeology. Stanford University Press. Stanford., California.
15 Fredrickson, D.A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.

spatial and cultural integrative units. Fredrickson separated cultural, temporal, and spatial units from each other and assigned them to six chronological periods: Paleo-Indian (12,000 to 8000 Before Present [BP]); Lower, Middle and Upper Archaic (8000 BP to 1500 BP), and Emergent (Upper and Lower, 1500 BP to historic period). The suggested temporal ranges are similar to earlier horizons, which are broad cultural units that can be arranged in a temporal sequence.[16] In addition, Fredrickson defined several patterns—a general way of life shared within a specific geographical region. These patterns include:

- Windmiller Pattern or Early Horizon (5000 to 3000 BP)
- Berkeley Pattern or Middle Horizon (3000 to 1500 BP)
- Augustine Pattern or Late Horizon (1500 BP to historic period)

Brief descriptions of these temporal ranges and their unique characteristics follow.

Windmiller Pattern or Early Horizon (5000 to 3000 BP)

Characterized by the Windmiller Pattern, the Early Horizon was centered in the Cosumnes district of the Delta and emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but minimal obsidian. The large variety of projectile point types and faunal remains suggests exploitation of numerous types of terrestrial and aquatic species.[17,18] Burials occurred in cemeteries and intra-village graves. These burials typically were ventrally extended, although some dorsal extensions are known with a westerly orientation and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than on raw material. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell indicate an extensive trade network that may represent the arrival of Utian populations into central California. Also indicative of this period are rectangular *Haliotis* and *Olivella* shell beads, and charmstones that usually were perforated.

Berkeley Pattern or Middle Horizon (3000 to 1500 BP)

The Middle Horizon is characterized by the Berkeley Pattern, which displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Fredrickson[19] suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the San Francisco Bay Area. Compared with the Early Horizon, there is a higher proportion of grinding implements at this time, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some cremations. As noted by Lillard, Heizer, and Fenenga, the practice of spreading

[16] Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press
[17] Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. University of California Anthropological Records 9(4):295–338.
[18] Ragir, S.R. 1972. The Early Horizon in Central California Prehistory. Contributions of the University of California Archaeological Research Facility 15. Berkeley, CA.
[19] Fredrickson, D.A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.

ground ochre over the burial was common at this time.[20] Grave goods during this period are generally sparse and typically include only utilitarian items and a few ornamental objects. However, objects such as charmstones, quartz crystals, and bone whistles occasionally were present, which suggest the religious or ceremonial significance of the individual.[21] During this period, larger populations are suggested by the number and depth of sites compared with the Windmiller Pattern. According to Fredrickson,[22] the Berkeley Pattern reflects gradual expansion or assimilation of different populations rather than sudden population replacement and a gradual shift in economic emphasis.

Augustine Pattern or Late Horizon (1500 BP to Historic Period)

The Late Horizon is characterized by the Augustine Pattern, which represents a shift in the general subsistence pattern. Changes include the introduction of bow and arrow technology; and most importantly, acorns became the predominant food resource. Trade systems expanded to include raw resources as well as finished products. There are more baked clay artifacts and extensive use of Haliotis ornaments of many elaborate shapes and forms. Burial patterns retained the use of flexed burials with variable orientation, but there was a reduction in the use of ochre and widespread evidence of cremation.[23] Judging from the number and types of grave goods associated with the two types of burials, cremation seems to have been reserved for individuals of higher status, whereas other individuals were buried in flexed positions. Johnson suggests that the Augustine Pattern represents expansion of the Wintuan population from the north, which resulted in combining new traits with those established during the Berkeley Pattern.[24]

Central California research has expanded from an emphasis on defining chronological and cultural units to a more comprehensive look at settlement and subsistence systems. This shift is illustrated by the early use of burials to identify mortuary assemblages and more recent research using osteological data to determine the health of prehistoric populations.[25] Although debate continues over a single model or sequence for central California, the general framework consisting of three temporal/cultural units is generally accepted, although the identification of regional and local variation is a major goal of current archaeological research.

Ethnographic Background

Prior to European American contact, the Tracy area was inhabited by the Northern Valley Yokuts, whose range extended from the Calaveras River to the southern extent of the San Joaquin River. The Northern Valley Yokuts were one of three major subgroups that occupied much of the San Joaquin Valley: the Northern Valley, the Foothill, and the Southern Valley Yokuts. Each ethnolinguistic group was composed of autonomous, culturally, and linguistically related tribes or tribelets. Ethnographic

[20] Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, Bulletin 2. Sacramento.

[21] Hughes, R.E. (editor). 1994. Toward a New Taxonomic Framework for Central California Archaeology: Essays by James A. Bennyhoff and David A. Fredrickson. Assembled and edited by Richard E. Hughes. Contributions of the University of California No. 52, Archaeological Research Facility, Berkeley, CA.

[22] Fredrickson, D.A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.

[23] Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.

[24] Johnson, J.J. 1976. Archaeological Investigations at the Blodgett Site (CA-SAC-267), Sloughhouse Locality, California. Report to the U.S. National Parks Service, Western Regional Office, Tucson, Arizona.

[25] Dickel, D.N., P. D. Schulz, and H.M. McHenry. 1984. Central California: Prehistoric Subsistence Changes and Health. In Paleopathology at the Origins of Agriculture, edited by Mark Nathan Cohen and George J. Armelagos, pp. 439–462. Academic Press, Inc., Orlando, FL.

evidence suggests the project site was part of the Northern Valley Yokuts territory.

The Northern Valley Yokuts, who lived along the San Joaquin River and its tributaries and within the vicinity of the project site, are one of the least known of the California Indian groups. This is due to the almost complete destruction of their tribal life in the early 19th century. What can be gleaned from the diaries and reports of Spanish soldiers and priests is that fish, waterfowl, and acorns were important food resources for the Northern Valley Yokuts. The local rivers and their tule marshes contained salmon, sturgeon, perch, suckers, and pike, which were caught using nets, weighted with stone sinkers and bone harpoons. Waterfowl, such as geese, ducks, and other aquatic birds, were abundant in the marshes and probably played a major role in the Northern Valley Yokuts subsistence base.[26] Dogs were domesticated and may have been raised for food, a taboo to some tribes but not the Yokuts.[27,28] Wild plant resources, especially acorns, were of prime importance and in a good year a valley oak could produce 300 to 500 pounds of acorns, which were then ground into meal and cooked into porridge. Tule reed roots were likewise gathered and ground into meal that was traditionally served as porridge.[29]

Stone mortars and pestles, milling stones, hammers, choppers, and projectile points were manufactured from local rock sources. Notably, although obsidian was imported into the area, it was used infrequently for tools or weapons. Bone tools, particularly awls, were used in basket manufacture.[30] Most villages were built near rivers on elevated land to avoid flooding during heavy rains or spring runoff from the Sierras. Archaeological excavations in Merced and Fresno counties indicate that houses were single-family dwellings, probably made with an oval framework of lightweight poles covered by mats of tule reeds. Hard-packed earthen floors 25 to 40 feet in diameter were constructed several feet below ground level. Communities typically contained a sweathouse and sometimes a large ceremonial structure. The size of the Yokuts communities is uncertain, but estimates indicate that the principal settlements contained 200-250 inhabitants.[31]

Several northern Yokut tribelets lived near what is now the City of Tracy: including the Chulamni to the north and the Hoyima to the southeast. The Chulamni tribelet built their villages near the City, along the banks of the Old River and San Joaquin River and along creeks in the Diablo Range. The largest Chulamni village site near the City was named “Pescadero” by the Spanish during one of their first expeditions in 1810 and 1811. Contact with Europeans was particularly devastating for the Northern Valley Yokuts. This group was adversely impacted by missionization in the early 1800s, European diseases, and the influx of miners and settlers because of the 1849 gold rush.[32] Kroeber

[26] Wallace, W.J. 1978. Northern Valley Yokuts. In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer, 448–461. Washington, DC. Smithsonian Institution.
[27] Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, DC. Smithsonian Institution.
[28] Wallace, W.J. 1978. Northern Valley Yokuts. In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer, 448–461. Washington, DC. Smithsonian Institution.
[29] Ibid.
[30] Ibid.
[31] Ibid.
[32] Ibid.

observed that their habitat in the open river valley left them especially vulnerable, compared to mountain dwellers, to "the full brunt of civilization."[33]

Contact with the Spanish commenced early in the 19th century and normally consisted of sporadic visits by small exploration parties. However, between 1805 and the 1820s, Franciscan priests from the coastal missions began recruiting converts from further inland, and a large portion of the Yokuts population was taken to various missions in San José, Santa Clara, Soledad, San Juan Bautista, and San Antonio. Many neophytes deserted and returned to their homes, but were sought and brought back by Spanish soldiers. A decade after the Mexican government claimed independence from Spain in 1822, the missions were converted into parish churches, and many Native Americans were released and returned to their former territory, though not necessarily to the specific location from which they came.

After the American conquest of California in 1846, the remaining Northern Valley Yokuts were driven off their land by miners heading south, farmers pursuing the locally rich soil, and the construction of various railroads. By the time scholars were interested in gathering information on California native groups, there were few people left to provide descriptions of native life before European contact.[34]

Records Searches to Identify Existing Tribal Cultural Resources

NAHC Sacred Lands File Search and Tribal Correspondence

On March 31, 2020, FCS sent a letter to the NAHC to determine whether any sacred sites are listed on its Sacred Lands File for the project site. A response was received on April 1, 2020, indicating that the Sacred Lands File search failed to indicate the presence of Native American tribal cultural resources in the vicinity of the project site. The NAHC included a list of two tribal representatives available for consultation. To ensure that all Native American knowledge and concerns over potential tribal cultural resources that may be affected by the project are addressed, FCS sent a letter containing project information and requesting any additional information to each tribal representative on April 2, 2020. The City initiated Senate Bill (SB) 18 consultation on April 15, 2020. No responses have been received to date. NAHC Sacred Lands File Search and Tribal Correspondence is provided in Appendix D.

3.15.3 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the National Register of Historic Places (NRHP), which contains an inventory of the nation's significant prehistoric and historic properties. Under the Code of Federal Regulations (36 Code of Federal Regulations [CFR]

[33] Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, DC. Smithsonian Institution.

[34] Wallace, W.J. 1978. Northern Valley Yokuts. In Handbook of North American Indians, Vol. 8: California, edited by R.F. Heizer, 448–461. Washington, DC. Smithsonian Institution.

60), a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above. Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 United States Code [USC] 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected and required special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) established federal policy to protect and preserve the inherent rights of freedom for Native American groups to believe, express, and exercise their traditional religions. These rights include but are not limited to access to sites, use and possession of sacred objects, and freedom to worship through ceremonials and traditional rites.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

CEQA Guidelines Section 15064.5(a)—CEQA Definition of Historical Resources

California Environmental Quality Act (CEQA) Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a "historical resource" as:

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.

(2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources.

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is not included on any local, State, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource for the purposes of CEQA if there is substantial evidence supporting such a determination. A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the California Register of Historical Resources (CRHR).

Archaeological and historical sites are protected pursuant to a wide variety of State policies and regulations, as enumerated in the Public Resources Code. Cultural resources are recognized as nonrenewable resources and receive additional protection under the Public Resources Code and CEQA.

CEQA Guidelines Section 15064.5(a)(3)—California Register of Historical Resources Criteria

As defined by CEQA Guidelines, Section 15064.5(a)(3)(A-D), a resource shall be considered historically significant if the resource meets the criteria for listing on the CRHR. The CRHR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model (see

criteria described above under the description of the NHPA), since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets NRHP criteria is clearly significant. In addition, a resource that does not meet NRHP standards may still be considered historically significant at a local or State level.

California Public Resources Code Section 5024.1—California Register of Historic Resources

Section 5024.1 of the Public Resources Code states that the CRHR is a guide to be used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected from substantial adverse change. Administration of the CRHR is to be overseen by the NAHC. Section 5024.1 indicates that the register shall include historical resources determined by the NAHC, according to adopted procedures, to be significant and to meet the criteria in subdivision (c).

CEQA Guidelines 15064.5(c)—Effects on Archaeological Resources

CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine whether they meet the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered. If an archaeological site is considered not to be a historical resource but meets the definition of a "unique archaeological resource" as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

CEQA Guidelines Section 15064.5(d)—Effects on Human Remains

Native American human remains and associated burial items may be significant to descendant communities and/or may be scientifically important for their informational value. They may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons. Human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines § 15064.5(d); PRC § 5097.98). CEQA and other State regulations regarding Native American human remains provide the following procedural requirements to assist in avoiding potential adverse effects on human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would affect Native American human remains, the Lead Agency is to contact and work with the appropriate Native American representatives identified through the NAHC to develop an agreement for the treatment and disposal of the human remains and any associated burial items (CEQA Guidelines § 15064.5(d); PRC § 5097.98).
- If human remains are accidentally discovered, the County Coroner must be contacted. If the County Coroner determines that the human remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC must identify the most likely descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items.

- If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (PRC § 5097.98).
- If potentially affected human remains or a burial site may have scientific significance, whether or not it has significance to Native Americans or other descendant communities, then under CEQA, the appropriate mitigation of effect may require the recovery of the scientific information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (CEQA Guidelines § 15064.5(c)(2)).

California Public Resources Code Section 5097.91—Native American Heritage Commission

Section 5097.91 of the Public Resources Code established the NAHC, whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Under Section 5097.91 of the Public Resources Code, a State policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites or sacred shrines located on public property. Section 5097.98 of the Public Resources Code specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a County Coroner. Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

California Senate Bill 18—Protection of Tribal Cultural Places

SB 18 (California Government Code § 65352.3) incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties, and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American tribes as part of the adoption or amendment of any general or specific plan proposed on or after March 1, 2005. SB 18 requires public notice to be sent to tribes listed on the NAHC SB 18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether or not they want to consult with the local government. Consultations are for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code that may be affected by the proposed adoption or amendment to a general or specific plan.

California Assembly Bill 52—Effects on Tribal Cultural Resources

Assembly Bill (AB) 52 was signed into law on September 25, 2014, and provides that any public or private "project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." Tribal Cultural Resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources."

Under prior law, Tribal Cultural Resources (TCRs) were typically addressed under the umbrella of "cultural resources," as discussed above. AB 52 formally added the category of "tribal cultural resources" to CEQA and extends the consultation and confidentiality requirements to all projects, rather than just projects subject to SB 18 as discussed above.

The parties must consult in good faith, and consultation is deemed concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource (if such a significant effect exists); or (2) when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place
- Protecting the cultural character and integrity of the resource
- Protecting the traditional use of the resource
- Protecting the confidentiality of the resource
- Permanent conservation easements with culturally appropriate management criteria

AB 52 amended the CEQA statute to identify an additional category of resource to be considered under CEQA, called "tribal cultural resources," and added Public Resource Code Section 21074, which defines "tribal cultural resources" as follows:

(a) "Tribal cultural resources" are either of the following:
  (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    A) Included or determined to be eligible for inclusion in the CRHR.
    B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
  (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Local

City of Tracy General Plan

The Tracy General Plan includes the following goals, policies, and actions related to the protection of TCRs applicable to the proposed project.

Goal CC-3: Preserve and Enhance Historic Resources

Objective CC-3.1: Identify and Preserve Cultural and Historic Resources

Policies:

Policy P4 As part of the development review process, there shall be a standard condition of approval that if any resources are found during construction, all operations within the project area shall halt until an assessment can be made by appropriate professionals regarding the presence of archaeological and paleontological resources and the potential for adverse impacts on these resources.

Policy P5 Any archaeological or paleontological resources on private property shall be either preserved on their sites or adequately documented and conserved as a condition of removal. If any resources are found unexpectedly during development, then construction must cease immediately until accurate study and conservation measures are implemented.

Policy P6 If Native American artifacts are discovered on a site, the City shall consult representatives of the Native American community to ensure the respectful treatment of Native American sacred places.

3.15.4 - Project Impacts and Mitigation Measures

Significance Criteria

According to CEQA Guidelines Appendix G Environmental Checklist, to determine whether impacts related to tribal cultural resources result in significant environmental effects, the following questions are analyzed and evaluated. Would the proposed project:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

   i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

   ii. A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Approach to Analysis

This evaluation focuses on whether the proposed project would impact tribal cultural resources. The tribal cultural resources impact analysis is based, in part, on information collected from record searches at the NAHC and information from tribal consultation conducted pursuant to AB 52 and SB 18. Impacts are typically associated with construction and/or ground-disturbing activities that have the potential to immediately alter, diminish, or destroy all or part of the character and quality of Native American artifacts and/or human remains that could be uncovered.

Impact Evaluation

Significance of Tribal Cultural Resource Eligible for California Register or Local Listing

Impact TCR-1:	**The proposed project could cause a substantial adverse change in the significance of a Tribal Cultural Resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).**

Construction

A review of the CRHR, local registers of historic resources, a records search conducted at the South Central Coastal Information Center (SCCIC), and an NAHC Sacred Lands File search failed to identify any listed tribal cultural resources that may be adversely affected by the proposed project. While it is possible that potentially eligible tribal cultural resources may be encountered during project construction, implementation of Mitigation Measure (MM) CUL-1 and MM CUL-3 would reduce potential impacts to a less than significant level.

Operation

Impacts related to a project's potential to cause a substantial adverse change in the significance of a State listed or eligible tribal cultural resource are limited to construction impacts. No respective operational impacts would occur.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

Implement MM CUL-1 and MM CUL-3

Level of Significance After Mitigation

Less Than Significant Impact

Significance of Tribal Cultural Resource and Eligibility as Determined by Lead Agency

Impact TCR-2:	**The proposed project could cause a substantial adverse change in the significance of a Tribal Cultural Resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.**

Construction

On March 31, 2020, a letter was sent to the NAHC to determine whether any sacred sites are listed on its Sacred Lands File for the project study area, which consists of the project site and standard 0.5-mile search radius. A response was received on April 2, 2020, indicating the search returned negative results for tribal cultural resources in the project study area and recommended contacting tribal representatives for additional information. The NAHC response letter included a list of two tribal representatives available for consultation. To ensure that Native American knowledge and concerns over potential tribal cultural resources that could be affected by the project are addressed, FCS sent a letter containing project information and requesting any additional information was sent to each of the tribal representatives on April 2, 2020.

On April 15, 2020, the City of Tracy Department of Development Services notified applicable tribal representatives of an opportunity to consult on the project pursuant to SB 18 (California Government Code § 65352.3). No responses have been received to date. The City of Tracy, in its capacity as Lead Agency, has also not identified or determined any known tribal cultural resources to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Although there is the possibility that previously undiscovered tribal cultural resources could be encountered by subsurface earthwork activities associated with the proposed project, the implementation of construction mitigation measures MM CUL-1 and MM CUL-3 would ensure that undiscovered tribal cultural resources are not adversely affected by project-related construction activities.

Operation

Impacts related to a project's potential to cause a substantial adverse change in the significance of a State listed or eligible tribal cultural resource are limited to construction impacts. No respective operational impacts would occur.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

Implement MM CUL-1 and MM CUL-3

Level of Significance After Mitigation

Less Than Significant Impact

3.15.5 - Cumulative Impacts

The geographic scope for the cumulative analysis is the project vicinity. This is because tribal cultural resource impacts tend to be localized, because the integrity of any given resource depends on what occurs in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 0.5-mile radius). The cumulative setting includes existing agricultural and industrial uses. In addition, Cumulative Projects 15, 19, 27, 30, and 35 in Table 3-1, Cumulative Projects are all within a 0.5-mile radius of the project site. Compliance with applicable

federal and State laws and regulations and relevant General Plan policies requiring standard conditions of approval for all cumulative projects and measures (similar to those imposed on the project, i.e., MM CUL-1 and CUL-3) would reduce potentially cumulative impacts related to tribal cultural resources to a less than significant level.

With respect to the project's contribution, although there is the possibility that previously undiscovered tribal cultural resources could be encountered by subsurface earthwork activities associated with the proposed project, the implementation of construction mitigation measures (MM CUL-1 and MM CUL-3) would ensure that the project's contribution to the less than significant cumulative impact to undiscovered tribal cultural resources would not be cumulatively considerable.

Level of Cumulative Significance

Less Than Significant Impact With Mitigation

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3.16 - Utilities and Service Systems

3.16.1 - Introduction

This section describes the existing conditions related to utilities and service systems (water, wastewater, stormwater, solid waste, electric power, natural gas, and telecommunications facilities) in the City of Tracy (City) and the project site and vicinity as well as the relevant regulatory framework. This section also evaluates the potential impacts related to such utilities and service systems that could result from implementation of the proposed project. Analysis in this section is based, in part, on information provided in the Water Supply Assessment (WSA), Flood Protection Technical Memorandum, 2020 Urban Water Management Plan (2020 UWMP), 2012 Citywide Water System Master Plan (2012 WSMP), 2012 Tracy Wastewater Master Plan (2012 WWMP), 2012 Citywide Storm Drainage Master Plan (2012 SDMP), the California Department of Resources Recycling and Recovery (CalRecycle), and the City of Tracy General Plan (General Plan). As of the writing of this Draft Environmental Impact Report (EIR), the 2020 Draft Citywide Water System Master Plan Update (Draft 2020 WSMP), 2020 Draft City of Tracy Wastewater Master Plan Update (Draft 2020 WWMP), and the 2020 Draft Citywide Storm Drainage Master Plan Update (Draft 2020 SDMP), are currently being finalized, but these documents have not yet been approved and adopted by the City. Because these documents have not yet been approved and adopted, they are not "applicable" to the proposed project under the California Environmental Quality Act (CEQA). Accordingly, the technical analysis in this Draft EIR relies on the 2012 WSMP, 2012 WWMP, and 2012 SDMP, which are the relevant documents in place at the time of publication of the Notice of Preparation. A plan is "applicable" when it has been adopted and the proposed project is subject to it. State CEQA Guidelines Section 15125 (specifying that the environmental setting should discuss "existing permits or plans" and "adopted plans" and should not discuss "hypothetical conditions.") *See also* Public Resources Code Section 21083.1; *Chaparral Greens v. City of Chula Vista (1996)* 50 CA4th 1134, 1145 ("A plan that is in draft form cannot be said to be nonetheless legally applicable, or enforceable, as to a particular project.") No comments related to utilities were received as part of the Notice of Preparation (NOP) public scoping process.

3.16.2 - Environmental Setting

Water

No rivers or natural bodies of water are present within the City of Tracy; however, Old River is located approximately 0.5 mile north of the project site, outside of the city limits within unincorporated San Joaquin County.

Water Supply Assessment

A WSA was completed for the proposed project by West Yost in December 2021[1] and is provided in Appendix K. The purpose of the WSA was to complete an evaluation as required by California Water Code sections 10910 through 10915, established by Senate Bill (SB) 610 (explained in detail in Regulatory Framework, below). The WSA evaluates the adequacy of the City's total water supplies, including existing water supplies and future planned water supplies, to meet the City's existing and

[1] West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy). December.

projected future water demands, including those future water demands associated with the proposed project, under all hydrological conditions (Normal Years, Single Dry Years, and Multiple Dry Years).

For the purposes of the WSA and this Draft EIR, "buildout" includes development within the City's Sphere of Influence (SOI) as envisioned by the General Plan and is assumed to occur in 2045.

Water Service Area

The City is in San Joaquin County, California, about 68 miles south of Sacramento and 60 miles east of San Francisco. The existing incorporated area of the City encompasses approximately 22 square miles. The City's General Plan includes the area outside of the city limits that the City expects to annex and urbanize in the future; i.e., the City's SOI. During the City's General Plan update process and in response to Local Agency Formation Commission (LAFCo) policies established in 2007, revisions to the City's SOI were made to more accurately reflect locations where the City may grow in the future, and to identify locations where no urban growth is expected. The adopted revised SOI encompasses an area of approximately 42 square miles, approximately 20 square miles larger than the current city limits. The City's water service area is coterminous with the existing city limits. As future developments within the SOI, but outside the city limits, are approved, it is anticipated that they will be annexed into the City and served by the City's water supply.

Water Source and Supply

The water supplies needed to serve the City's water service area, including the project site (i.e., existing water demands and planned future uses) are predominantly described in the 2020 UWMP. Therefore, the descriptions provided below for the City's water supplies have been taken, for the most part, from the 2020 UWMP.

Sources of the City's water supply include the Central Valley Project (CVP) via the Delta-Mendota Canal (DMC), the Stanislaus River, and groundwater pumped from a total of nine wells operated by the City, and untreated surface water from the Byron-Bethany Irrigation District (BBID) pre-1914 rights (treated at the City's John Jones Water Treatment Plant [JJWTP]). These sources and other supplementary sources are described below.

Surface Water

The City currently receives water from the following sources:

- Untreated surface water from the CVP via the DMC (treated at the City's JJWTP),
- Surface water from the Stanislaus River via the South County Water Supply Project (SCWSP), (delivered by the South San Joaquin Irrigation District [SSJID]),
- Groundwater pumped from nine groundwater wells located within the City, and
- Untreated surface water from the BBID pre-1914 rights (treated at the City's JJWTP).

Also, the City has entered into an agreement with the Semitropic Water Storage District for storage of water supplies for use in dry years, and has implemented an Aquifer Storage and Recovery (ASR)

Program to allow for injection of surface water supplies into the underlying groundwater basin for storage and later extraction. Exhibit 3.16-1 shows the City's historical use of these existing water supplies, which are described in more detail below.

Central Valley Project Water via the Delta-Mendota Canal

The City has contractual entitlements for CVP water as detailed below. In the aggregate, the City's contractual entitlement to the Municipal and Industrial (M&I) reliability CVP water and assignments of agricultural reliability (Ag-reliability) CVP water from Banta-Carbona Irrigation District (BCID) and West Stanislaus Irrigation District (WSID) are referred to as the City's "Existing Contract" with the United States Bureau of Reclamation (USBR). The total quantity of CVP water available to the City under its Existing Contract is 20,000 acre-feet per year (AFY) (10,000 AFY of M&I-reliability water and 10,000 AFY of Ag-reliability water).

The City's CVP water supplies are treated at the City's JJWTP, which was originally constructed in 1979, expanded in 1988, and then expanded again in 2008. The JJWTP is located just north of the DMC in the southern portion of the City. With the latest plant expansion, the current treatment capacity of the JJWTP is 30 million gallons per day (mgd), which is sufficient to treat all the City's existing and future CVP water supplies.[2]

From 2010 through 2018, an average of approximately 630 AFY of water from the Plain View Water District's (now BBID's) USBR allocation was treated at the JJWTP and delivered to the Patterson Pass Business Park through the City's water distribution system. A comparable quantity of BBID water is anticipated to be treated and delivered annually to the Patterson Pass Business Park in the future. Neither the water supply nor the demand for Patterson Pass Business Park are included in the City supply and demand estimates because the water supply is BBID's, not the City's, and the City only provides water treatment and delivery and billing services on a contractual basis for the Patterson Pass Business Park; the City does not manage either the supply or the demand.

Municipal and Industrial Reliability Contract

In July 1974, the City entered into a 40-year contract with the USBR for an annual entitlement of 10,000 AFY of surface water from the CVP via the DMC. The original USBR contract expired in 2014; however, since December 2013, the City and USBR have entered into a series of 2-year interim renewal contracts to provide water service to the City while the terms of the long-term contract renewal were negotiated. In November 2021, the Tracy City Council approved a new long-term contract with USBR which became effective on December 1, 2021. The new contract is for 20,000 AFY, which aggregates the City's M&I-reliability supplies and Ag-reliability supplies (discussed below) from the CVP. The new contract does not have a termination date and would continue as long as water is available and delivered.

Agricultural Reliability Contract

In 2004, the USBR approved the assignment of 5,000 AFY of Ag-reliability CVP contract entitlement to the City from the BCID. Concurrently, the USBR approved the assignment of 2,500 AFY of Ag-reliability CVP contract entitlement water to the City from WSID, with the option to purchase an

[2] Saffi, Lemar. Assistant Engineer, City of Tracy. Personal communication: email. April 1, 2022.

additional 2,500 AFY of CVP contract entitlement from the WSID. In December 2013, the City and WSID approved the additional assignment in which the City's current assignment of WSID CVP water is 5,000 AFY.

South of Delta Allocations

The City's CVP water supplies are subject to allocations determined by the USBR for 'South of Delta' contractors. Historical M&I and Ag allocations for the CVP water supplies are summarized in Table 3.16-1. Based on the historical record, the City's long-term average allocation of CVP water pursuant to the contract is anticipated to be at least 85 percent of the total entitlement. However, due to recent environmental concerns in the Delta and potential future impacts due to climate change, the normal year reliability of CVP water was conservatively assumed to be 75 percent in the 2020 UWMP. In addition, the City conservatively estimated that it will receive 50 percent of its Ag-reliability contractual entitlement in normal water years.[3]

During dry years, a CVP M&I contractor is typically eligible for a minimum shortage allocation equal to 75 percent of adjusted historical use. Per the CVP M&I Water Shortage Allocation Plan, the minimum shortage allocation may be reduced further when the allocation of Ag-reliability water in that year is reduced below 25 percent of contract entitlement. The component of the City's CVP supply that carries Ag-reliability is subject to more significant reductions and is much more dependent on yearly hydrologic conditions than the City's M&I-reliability allocation.

Table 3.16-1: Historical Allocations for United States Bureau of Reclamation Central Valley Water Project Water Supplies

Year	M&I Allocation for South of Delta Contractors (percent of contract supply)	Ag Allocation for South of Delta Contractors (percent of contract supply)
2005	100	85
2006	100	100
2007	75	50
2008	75	40
2009	60	10
2010	75	45
2011	100	80
2012	75	40
2013	70	20
2014	50	0
2015	Public health and safety needs or 25 percent of historical use, whichever is greater	0
2016	55 percent of historical use	5
2017	100 percent of contract amount	100

[3] City of Tracy. 2021. City of Tracy 2020 UWMP, Section 7.1.2.1. June.

Year	M&I Allocation for South of Delta Contractors (percent of contract supply)	Ag Allocation for South of Delta Contractors (percent of contract supply)
2018	Public health and safety needs or 75 percent of historical use, whichever is greater	50
2019	100 percent of historical use	75
2020	Public health and safety needs or 70 percent of historical use, whichever is greater	20

Notes:
M&I = Municipal and Industrial
Source: West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy). December.

Central Valley Project Water Supply Reliability

In February 2017, new guidelines and procedures went into effect associated with the updated CVP M&I Water Shortage Policy. In general, the policy provides for the following:

- When M&I contractor allocations are at 100 percent, the allocation of M&I water will be based on Contract Total.
- When M&I contractor allocations are below 100 percent, the allocation of M&I water will be based on a contractor's historical use of CVP M&I water.
- An M&I contractor's historical use will be determined by calculating the average quantity of CVP water put to beneficial use within the service area during the last 3 years of water deliveries that were unconstrained by the availability of CVP water.

The City's reliability assumptions in the 2020 UWMP are sufficiently conservative to adhere to the 2017 guidelines. The City's CVP water single dry year reliability is based on adjusted historical use and provided in the 2020 UWMP and are assumed as 25 percent for M&I CVP water, and 0 percent for Ag CVP water. Similarly, the City's CVP water multiple dry year reliability is based on adjusted historical use and provided in the 2020 UWMP and are assumed as 40 percent for M&I CVP water, and 0 percent for Ag CVP water.

Surface Water from Byron-Bethany Irrigation District Pre-1914 Water Rights

Part of the proposed Tracy Hills Specific Plan area was annexed into the BBID and is entitled to water service from BBID, using BBID's pre-1914 appropriative water rights. This water is delivered to the City via the DMC and is treated at the JJWTP before delivery to the Tracy Hills Specific Plan area. The City anticipates that up to 4,500 AFY of pre-1914 water rights water could be provided by BBID on a year-round basis to serve the Tracy Hills Specific Plan in the BBID service area. However, the volume of water available to the City through this agreement is limited to the demand in the BBID service area portion of the Tracy Hills Specific Plan. The projected potable water demand in this area is estimated to be 3,330 AFY at buildout. Because the water supply is based on pre-1914 appropriative rights, the supply is firm and well-established. For purposes of this analysis and to ensure clarity with respect to the evaluation of water supply and demand, the Tracy Hills Specific Plan is referenced throughout this analysis because it is provided water from BBID, which does not provide water to the rest of the City.

Stanislaus River Water

The City receives Stanislaus River water, in partnership with the cities of Manteca, Lathrop and Escalon, and the SSJID. This partnership constructed the SCWSP, which consists of the Nick C. DeGroot Water Treatment Plant (DGWTP) near Woodward Reservoir in Stanislaus County and transmission pipelines to deliver treated surface water to each city. The SCWSP can deliver up to 36 mgd of treated water and its water supply source is based on SSJID's senior pre-1914 appropriative water rights to the Stanislaus River, coupled with an agreement with the USBR to store water in New Melones Reservoir.

As part of the SCWSP, the City was initially allocated up to 10,000 AFY of water based upon SSJID's senior water rights. In 2006, the City entered into a temporary contract with Escalon to purchase Escalon's allocation of 2,015 AFY of SCWSP supply until Escalon constructs the necessary infrastructure to convey the SCWSP water.[4] In August 2013, SSJID and the Cities of Tracy and Lathrop approved a Lathrop-Tracy Purchase, Sale and Amendment Agreement for the sale of a portion of the City of Lathrop's SCWSP supply and capacity to the City of Tracy. The agreement provides the City with an additional 1,120 AFY of SCWSP supply and 2 mgd of SCWSP capacity. Thus, the City's current contractual amount of SCWSP water is 13,135 AFY in total. Once the agreement with Escalon sunsets (anticipated to occur in 2025), the City's contractual allocation will be reduced to 11,120 AFY. This additional SCWSP supply has the same reliability as the City's original SCWSP supplies.

Treated water deliveries from the SCWSP commenced in July 2005, and deliveries have been essentially uninterrupted since then (see Exhibit 3.16-1). Although the City's full allocation was available in first few years, deliveries to the City were less than its allocation because the full allocation was not needed.

Because of the seniority of SCWSP's and SSJID's pre-1914 appropriative rights to Stanislaus River water, the City has historically assigned a high reliability to SCWSP water. However, in December 2018, the California State Water Resources Control Board (State Water Board) released proposed amendments to the Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) which included significant changes and could result in significant surface water cutbacks if ultimately adopted. In SSJID's 2020 UWMP, SSJID presented a water reliability analysis assuming that the Bay-Delta Plan Amendment will not be implemented given its uncertainties. As an SSJID retail agency customer, the City relies on SSJID for the reliability projections for the Stanislaus River water supply. Consistent with SSJID's approach, the City's 2020 UWMP assumes that the Bay-Delta Plan Amendment will not be implemented. However, to fully assess the potential impacts of the Bay-Delta Plan Amendment and better plan for the potential shortfalls, the City conducted a parallel set of reliability analyses assuming that the Bay-Delta Plan Amendment will be implemented and included it as Appendix G of its 2020 UWMP.[5]

Consistent with the City's 2020 UWMP and for the purposes of the WSA for the proposed project, the City is assumed to receive 100 percent of its SCWSP contractual entitlement in normal years. In future dry years, it is assumed that allocations would be based on the City's contractual entitlement,

[4] Escalon Amendment to Tracy-SSID Water Supply Development Agreement, March 2006.
[5] EKI Environmental and Water. June. 2020 Urban Water Management Plan (prepared for the City of Tracy), Section 7.1.1.3. 2021.

rather than consumption in a given year. Based on information received from SSJID, in single dry years, the City expects to receive 76 percent of its SCWSP water supply allocation during 2025, 2030, and 2035 and 56 percent during 2040 and 2045. In multiple dry years, the City expects to receive 56 to 100 percent of its SCWSP water supply allocation, depending on hydrological conditions. In addition, SCWSP water transferred from Escalon is assumed to be unavailable after 2025.

The anticipated availability and reliability of the SCWSP supply under normal years, single dry years, and multiple dry years may be revised based on updated evaluations in conjunction with resolution of issues associated with the Bay-Delta Plan Amendment. Further, SSJID anticipates the likelihood that more water will be available for local purposes in 2040 based on more efficient water management and urban development displacing irrigated agricultural land uses.[6]

Groundwater

The City's surface water supply is supplemented by local groundwater. The City overlies a portion of the San Joaquin Valley Groundwater Basin-Tracy Subbasin (Tracy Subbasin). The City currently operates nine groundwater wells, with a total extraction capacity of about 18,300 gallons per minute (gpm), or 26 mgd.[7] Four wells (Production Wells 1, 2, 3 and 4) are located near the City's JJWTP and pump directly into the JJWTP clear wells, where the groundwater is blended with treated surface water. The other wells (Lincoln Well, Lewis Manor Well [Well 5], Park and Ride Well [Well 6], Ball Park Well [Well 7], and Well 8) are located throughout the City and pump water directly into the distribution system after disinfection. The City's newest well, Well 8, located near the intersection of Tracy Boulevard and 6th Street, was designed as an ASR well, and has been put into service as an ASR well as permitted by the Central Valley Regional Water Quality Control Board (Central Valley RWQCB). Additional information about groundwater, including a basin description, groundwater management, groundwater yield, groundwater quality, historical groundwater use, projected future groundwater use, and groundwater sufficiency are provided in Section 3.10, Hydrology and Water Quality, as well as Appendix K.

Semitropic Groundwater Storage Bank

The City has acquired the rights to store and recover water in the Semitropic Groundwater Storage Bank (Semitropic) operated by the Semitropic Water Storage District (Semitropic WSD). The Semitropic facilities are in Kern County alongside the California Aqueduct and the DMC. The first phase of Semitropic was initiated in the early 1990s and established one million acre-feet of storage for a group of agencies referred to as the Original Banking Partners. In response to increased demand for banking capacity, up to 650,000 acre-feet of additional storage was created for the Stored Water Recovery Unit (SWRU). When an agency purchases storage capacity in Semitropic, it is able to recover the volume of water it has banked over a period of 3 consecutive years (i.e., 3,000 acre-feet equates to a maximum recovery rate of 1,000 AFY for 3 years).

The City originally entered into a pilot agreement with Semitropic WSD in June 2006 for 1,000 acre-feet of water storage in Semitropic's SWRU. The pilot agreement was intended to establish the procedures for water deposits and withdrawals by the City and was terminated when the permanent

[6] EKI Environmental and Water. June. 2020 Urban Water Management Plan (prepared for the City of Tracy), Section 7.1.1.2. 2021.
[7] GEI Consultants. 2015. Groundwater Assessment for Drought Emergency Conditions Requiring Groundwater to be Used as the Sole Source of Potable Water Supply (prepared for City of Tracy). August 10.

agreement was implemented. In 2012, the City entered into a long-term agreement with Semitropic WSD for up to 10,500 acre-feet of storage volume.[8] This storage agreement allows the City to withdraw up to 3,500 acre-feet of water annually for 3 years. To store water in Semitropic, the City withdraws less than its available allocation of CVP water from the DMC. This water travels through the DMC where it is diverted by Semitropic and used for local groundwater recharge. When the City wishes to withdraw water that it has banked previously, Semitropic arranges for the City to divert CVP water beyond its allocation from the DMC. This source of water is provided through either an exchange of Semitropic WSD's contractual entitlement to State Water Project (SWP) water or through direct "pump back" of stored groundwater into the California Aqueduct by Semitropic WSD.

Though the City could utilize this supply in any year, it is most valuable during extended drought years when the City's surface water supplies are reduced. The City anticipates that banking water at Semitropic will increase the reliability of the City's water supply and help close any potential future gap between supply and demand during drought conditions or other water supply shortage emergencies. If the City uses water from the Semitropic water bank in any given year, it would manage its supplies during subsequent years such that it could refill the water bank for future use. The City plans to actively maintain storage in Semitropic as feasible. As of December 2020, the City had 6,887 acre-feet of water in storage at Semitropic.

Aquifer Storage and Recovery

The City has been implementing an ASR Program to store surplus treated surface water in the confined aquifer beneath Tracy and extract that water to meet peak demands or supplement surface water sources during dry years. The City has one former groundwater extraction well, Well 8, which has been operated as an ASR well since 2013 after the successful demonstration of ASR feasibility.[9] Well 8 is located near the intersection of Tracy Boulevard and 6th Street and penetrates the Lower Tulare Formation.

The recharge water source of the City's ASR Program is treated SCWSP water.[10] The City's SCWSP water supply is of exceptionally high water quality, with a total dissolved solids (TDS) concentration of approximately 64 milligrams per liter (mg/L).[11] Since the TDS concentration of the recharge water source is much lower than that of the Lower Tulare Formation aquifer's native groundwater, operation of the City's ASR Program reduces the localized salinity of the aquifer, resulting in lower TDS content in water supplies extracted from Well 8 than would be expected in the absence of the ASR Program. Additionally, the reduced salinity in groundwater recovered from Well 8 results in lower salt loading at the City's Wastewater Treatment Plant (WWTP), which eventually reduces the salinity of effluent from the WWTP. This helps the City meet its RWQCB effluent salinity requirements and provides environmental benefits to the river ecosystems.

[8] City of Tracy. 2012 Agreement Between City of Tracy and Semitropic Water Storage District and Its Improvement Districts for Participation in the Stored Water Recovery Unit of the Semitropic Water Banking and Exchange Program. November.

[9] Central Valley Regional Water Quality Control Board (Central Valley RWQCB). 2013. Notice of Applicability for General Water Quality Order 2012-0010-DWQ-RB5S-0002, Aquifer Storage and Recovery Program, City of Tracy (Well No. 8), San Joaquin County. November 13.

[10] Per the terms of its agreement with the RWQCB, the City is not permitted to inject treated DMC/CVP at Well 8.

[11] City of Tracy. 2019. Water Quality Report.

Injection of SCWSP water into the ASR well occurs during the winter months (i.e., November through April), when City demands are low. Extraction occurs primarily in the summer months to meet increased demands associated with irrigation needs and as needed during droughts and water shortage emergencies. It is estimated that between 685 and 915 AFY of potable water could be injected into the aquifer, assuming a 5-month continuous injection rate of 1.5 to 2.0 mgd at Well 8. The City's strategic plan for ASR operations at Well 8 involves injecting up to 1,000 AFY over 6 months during the winter and extracting 75 percent of the injection volume during the following summer. These operations would result in net injection into the Lower Tulare Formation aquifer, which will gradually create a "buffer supply" that the City can utilize in dry years or during water shortage emergencies. In 2020, a net volume of approximately 190 acre-feet was injected and stored at Well 8 for the following year.

The City plans to implement its ASR Program stages as new ASR wells are constructed. The ASR supply will be available to meet demands in dry years, thereby increasing the reliability of the City's water supply during drought conditions or water shortage emergencies.

Recycled Water

The City has invested in infrastructure to produce and deliver recycled water. The City's WWTP has sufficient treatment capacity to produce approximately 9 mgd of tertiary-treated recycled water meeting the Title 22 requirements, which can be reused for landscape irrigation and other non-potable uses. The City's current recycled water system consists of a pump station at the WWTP and approximately 7.6 miles of recycled water transmission line from the WWTP west to Lammers Road and south to West Schulte Road. Currently the only service connection is for the Legacy Fields Sports Complex.

Planned Uses Within the Service Area

At this time, no recycled water is used within the City's service area. The City is planning to expand the existing recycled water system to serve future development areas, as well as a small number of existing parks and irrigated areas. New developments in the City are required to include recycled water distribution systems in accordance with the City's Recycled and Non-Potable Water Ordinance (Tracy Municipal Code, Chapter 11.30). The City's Department of Utilities and Development Services are coordinating planning efforts to connect existing water customers and new development to recycled water.

The City intends to expand the existing recycled water system to serve non-potable water demands in most of the new development areas. Recycled water is planned to be used at: (a) parks, sports fields, and other landscape areas; (b) industrial facilities such as the Tracy Power Plant; (c) fill stations for dust control during construction, street sweeping, and residential emergency landscape irrigation; and (d) the proposed lakes at Tracy Village. The future recycled water use was estimated to be 1,000 AFY in 2025, increasing to 6,300 AFY in 2045 as new development areas buildout, based on the adopted unit water demand factors and the future dwelling units or gross acreage.

Several future service areas already have recycled water distribution pipelines installed by developers, including Cordes Ranch, Ellis Specific Plan Phase 1, and Tracy Hills Phase 1. These pipelines are not yet connected to the recycled water mains, but instead are temporarily connected

to the potable water system to meet irrigation demands. Once recycled water system construction is complete and the appropriate permitting is completed, the pipelines will be connected to the recycled water system and the temporary connections to the potable water system will be removed.

City of Tracy Water Supply Summary

Table 3.16-2 summarizes the existing and additional planned future water supplies within the City of Tracy.

Table 3.16-2: Summary of Existing and Additional Planned Future Water Supplies

Supply	Water Supply Entitlement (AFY)	Supply Ever Used by City
Existing Water Supplies		
USBR CVP–Tracy Contract[(a)]	10,000	Yes
USBR CVP–BCID Contract[(b)]	5,000	Yes
USBR CVP–WSID Contract[(c)]	5,000	Yes
BBID (pre-1914)[(d)]	3,330	Yes
South County Water Supply Project (SSJID) (pre-1914)[(e)]	11,120	Yes
Groundwater[(f)]	9,000	Yes
Dry Year Supplies		
Semitropic Water Storage Bank[(g)]	3,500	Yes
Aquifer Storage and Recovery	1,000	Yes
Additional Planned Future Water Supplies		
Additional USBR CVP (BBID contract)[(h)]	—	No
Recycled Water Exchange (Potable)	7,500	No
Recycled Water (for non-potable uses)[(i)]	6,300	No

Notes:
AFY = acre-feet per year
BCID = Banta-Carbona Irrigation District
CVP = Central Valley Project
USBR = United States Bureau of Reclamation
WSID = West Side Irrigation District

(a) M&I-reliability CVP water. Assumes the terms of the long-term renewal contract with the USBR are consistent with those of the interim renewal contract entered into between the City and USBR in February 2016.
(b) In June 2001, the USBR approved the assignment of 5,000 AFY of BCID's contractual entitlement to Ag-reliability CVP water.
(c) In August 2001, the USBR approved the assignment of 2,500 AFY of WSID's contractual entitlement to Ag-reliability CVP water, with the option to purchase an additional 2,500 AFY in the future. In December 2013, the City and WSID approved the additional assignment; the City's current assignment of WSID CVP water is 5,000 AFY.
(d) The City anticipates that up to 4,500 AFY of BBID pre-1914 water will be available to serve the Tracy Hills Specific Plan development. This water is only available for use in the portion of Tracy Hills that lies within BBID Raw Water Service Area 2 the CVP Consolidated Place of Use, so the quantity of supply is limited to potable water demand in this area. Therefore, the maximum BBID supply delivered to this area is reduced to 3,330 AFY.
(e) Includes the 10,000 AFY allocation and the additional 1,120 AFY obtained through the 2013 Lathrop-Tracy Purchase,

Supply	Water Supply Entitlement (AFY)	Supply Ever Used by City
Sale, and Amendment Agreement. Does not include the interim purchase from Escalon. (f) The City can sustainably extract up to 9,000 AFY of groundwater on a continuous basis from the Tracy Subbasin. However, due to the aging infrastructure and water quality issues in the City's groundwater supplies, the City is projecting to be able to withdraw up to 2,500 AFY in normal years. During dry years, the City anticipates increasing its groundwater production on a short-term basis from the normal year production of 2,500 AFY to 4,500 AFY. (g) The City has purchased 10,500 acre-feet of water storage in the Stored Water Recovery Unit (SRWU), which allows the City to withdraw up to 3,500 AFY for 3 consecutive years. (h) While up to 8,800 AFY of BBID's Ag-reliability CVP water may be available as agricultural lands are converted to other uses, for purposes of water supply planning, the City assumes this supply will not be available. (i) Based on the total projected recycled water demand at buildout of the City. Source: EKI Environmental and Water. June. 2020 Urban Water Management Plan (prepared for the City of Tracy), Table 6-4. Summary of Existing and Additional Planned Future Water Supplies. 2021.		

Water Demand and Use

City of Tracy

Historical and Existing Water Demand

The City's water demand has increased significantly in the last 30 years. In 1986, the City's water demand was 8,104 AFY; by 2007, the City's water demand had increased to 19,176 AFY. In recent years, the City's water demand has decreased as a result of the economic downturn of 2008 through 2011 and water use reductions in response to recent drought conditions. Water demands have rebounded (increased) somewhat in recent years with the end of drought conditions along with increased development activity. Table 3.16-3 shows the City's water demand (based on water production) from 2012 to 2020.

Table 3.16-3: Historical Potable Water Demand

Condition	AFY								
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Water Demand	18,052	18,587	16,213	14,041	15,360	18,160	17,420	17,672	19,527

Notes:
AFY = acre-feet per year
Source: EKI Environment and Water. 2021. 2020 Urban Water Management Plan for the City of Tracy (prepared for the City of Tracy), Table 4-2 Current and Historical Potable Water Demand and Population June.

Future Water Demand

The City's water demand is anticipated to continue to increase as approved projects are constructed and new developments are approved and constructed in accordance with the General Plan within the City's water service area. However, the rate of growth within the City's water service area has slowed, reflecting the Growth Management Ordinance (adopted in 1987 and amended in 2000 by the voter-initiative Measure A) and the slow economic recovery from the economic downturn between 2008 and 2011. Hence, water demands are not anticipated to increase as rapidly as they have in past years.

The 2020 UWMP projects water demands for 2025, 2030, 2035, 2040, and 2045; these projections are, provided in Table 3.-16-4. The City's projected future water demand was determined based on adopted potable water use factors for various land uses, which were developed based on historical metered water use data and anticipated timing future development projects. Buildout of the proposed project is included in the 2040 and buildout (2045) water demand projections.

The water demand projections include consideration for reduced future water use as a result of new building codes, improved water use efficiency, and implementation of water conservation measures. The projections also include savings from passive conservation which refers to water savings resulting from actions and activities that do not depend on direct financial assistance or educational programs from the City. These savings result primarily from: (1) the natural replacement of existing plumbing fixtures with water efficient models required under current plumbing code standards, and (2) the installation of water efficient fixtures and equipment in new buildings and retrofits as required under the California Green Building Standards Code (CALGreen).

Table 3.16-4: Summary of Future Projected Water Production

Condition	AFY				
	2025	2030	2035	2040	2045
Potable Water Demand	20,509	23,100	25,738	28,403	33,079
Recycled Water Demand	1,000	2,067	3,133	4,200	6,300
Total Water Demand	**21,509**	**25,167**	**28,871**	**32,603**	**39,379**

Notes:
AFY = acre-feet per year
Source: EKI Environment and Water. 2021. 2020 Urban Water Management Plan for the City of Tracy (prepared for the City of Tracy), Table 4-2 Current and Historical Potable Water Demand and Population June.

Dry Year Water Demand

The City currently has a water conservation program in place, as described in Chapter 9 of the 2020 UWMP. The projected future water demand presented in Table 3.16-4 includes continued implementation of the City's existing water conservation program and is based on future normal hydrologic years. In the 2020 UWMP, the additional water conservation which may occur in single dry or multiple dry years, was not assumed to happen. This was a conservative assumption as additional water conservation would likely occur because of the City's implementation of additional water conservation measures as outlined in the City's Water Shortage Contingency Plan[12] in response to multiple dry years or other water supply shortages. The City's Water Shortage Contingency Plan includes shortage response actions to reduce water demand and manage supply for water shortage conditions of up to and greater than 50 percent.

[12] The City's Water Shortage Contingency Plan is incorporated into the Water Management Chapter of the Tracy Municipal Code Chapter 11.28 and Appendix H of the 2020 UWMP.

As shown in Table 3.16-3, the City's 2015 demand was significantly lower than 2014 demand in response to the Governor's April 2015 Executive Order B-29-15 mandating 25 percent water conservation Statewide. To reduce water use by 25 percent Statewide, the State Water Board adopted a regulation which placed each urban water supplier into one of eight tiers which were assigned a conservation standard, ranging between 4 percent and 36 percent. Each month, the State Water Board compared every urban water suppliers' water use with their use for the same month in 2013 to determine whether they were on track for meeting their conservation standard. The City was initially placed into Tier 7 with a water conservation standard of 28 percent as compared to 2013 use (the City's conservation standard was reduced to 25 percent in early 2016).

In response, the City Council authorized the implementation and amendment of the City's Phase III and IV water restrictions in June 2015 (as defined in Chapter 11.28 of the Tracy Municipal Code) to meet State Water Board emergency drought regulations. The City's water conservation efforts and results are an example of the City's ability to implement its Water Shortage Contingency Plan and reduce water demands in the event of an emergency water supply shortage. In May 2016, the City's water demand was 32.6 percent less than in May 2013, and the City's cumulative savings from June 2015 to May 2016 was 27.2 percent as compared to 2013, indicating the responsiveness of the City's residents to the call for water conservation.[13]

For purposes of the WSA, the City assumed that dry year potable water demand is the same as normal year demand.

Projected Future Groundwater Use

Table 3.16-5: City of Tracy Projected Future Groundwater Production in Normal and Dry Years

Condition	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Total Groundwater Production During a Normal Year[(a)]	2,500	2,500	2,500	2,500	2,500
Total Groundwater Production During Dry Years[(b)]	4,500	4,500	4,500	4,500	4,500

Notes:
AFY = acre-feet per year
Source:
(a) EKI Environment and Water. 2021. 2020 Urban Water Management Plan for the City of Tracy (prepared for the City of Tracy), Table 7-2 Projected Water Supply in Normal Years. June.
(b) EKI Environment and Water. 2021. 2020 Urban Water Management Plan for the City of Tracy (prepared for the City of Tracy), Section 7.1.2.2 and Section 7.1.2.3. June

The City may sustainably pump up to 9,000 AFY from the local groundwater basin. Since the hard, high TDS groundwater is of lower quality than the City's surface water sources, the City has scaled

[13] California State Water Resources Control Board (State Water Board). 2021. Water Conservation and Production Reports (data from June 21, 2016). Website: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/conservation_reporting.html. Accessed: January 27, 2021.

back its groundwater extraction in most years. However, the City will continue to rely on groundwater for peaking and drought and emergency water supply. Table 3.16-5 shows the anticipated future groundwater production during a normal year and during dry years.

As can be seen in Table 3.16-5, the City anticipates that total extraction during a normal year will be 2,500 AFY through the planning horizon. By reducing groundwater extraction on an average annual basis, the City will: (1) increase the overall quality of its drinking water, thus increasing customer satisfaction and reducing system maintenance and repair caused by the lower-quality groundwater; and (2) recharge the underlying aquifer, effectively increasing the availability of groundwater during a drought or emergency condition (i.e., effectively "banking" groundwater). At the production volumes shown in Table 3.16-5, the City's groundwater supplies are considered to be 100 percent reliable.

The projected uses of groundwater during droughts are consistent with the City's Groundwater Management Policy.[14] In the event that the City is unable to secure additional high-quality surface water supplies in the future, the City is able to expand groundwater production up to 9,000 AFY. In the event of a severe water supply shortage or emergency, the City has the ability to increase production dramatically, up to 22,000 AFY.

Project Site

In November 2020, a Technical Memorandum was prepared by West Yost Associates to summarize the findings of a hydraulic evaluation for the proposed project; the Technical Memorandum is included in Appendix K. For the purposes of the hydraulic evaluation, potable water was conservatively assumed to be used to meet all of the proposed project's water demands, including both potable and non-potable, since recycled water infrastructure has yet to be constructed. Table 3.16-6 provides a summary of the proposed project's water use factors and projected potable water use.

Table 3.16-6: Estimated Annual Water Demand for the Proposed Project

Land Use Designation	Total Area (gross acres)[(a)]	Potable Water Use Area (acres)[(b)]	Landscaped area (acres)[(c)]	Unit Potable Water Use Factors (acre-feet per acre per year)	Annual Potable Water Use (AFY)
Industrial	191.2	162.5	—	1.3	211.3
Irrigation Demand	—	—	28.7	1.9	54.5
UAFW[(d)]	—	—	—	—	28.2
Total	191.2	162.5	28.7	—	294

[14] Pacific Municipal Consultants (PMC). 2011. Groundwater Management Policy Mitigated Negative Declaration (prepared for City of Tracy.) December 7.

Land Use Designation	Total Area (gross acres)[a]	Potable Water Use Area (acres)[b]	Landscaped area (acres)[c]	Unit Potable Water Use Factors (acre-feet per acre per year)	Annual Potable Water Use (AFY)

Notes:
AFY = acre-feet per year
UAFW = Unaccounted for Water
(a) City's NOP of an EIR and Public Scoping Meeting for the Tracy Alliance Project dated August 28, 2020.
(b) 85 percent of gross acres are assumed to use potable water.
(c) 15 percent of gross acres are assumed to be landscaped.
(d) UAFW is equal to 9.6 percent.
Source: West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy). January.

As shown above, projected water demands for buildout of the proposed project total approximately 294 AFY, of which approximately 211 AFY is industrial demand, approximately 55 AFY is irrigation demand, and approximately 28 AFY is unaccounted for water.

Water Infrastructure and Distribution

City of Tracy

The City provides water service to all the water users within the city limits and some areas within the SOI. For the properties within the SOI that the City does not serve, water is supplied through various agreements. The City's water service area is coterminous with the existing city limits. As future developments within the SOI, but outside the city limits, are approved, they will be annexed into the City upon LAFCo approval and served by the City's water supply. Figure 7.2 of the 2020 UWMP depicts the existing water distribution infrastructure serving the City. According to the 2020 UWMP, water is distributed to the City via supply lines located on the western side of the City.

Project Site

A 12-inch water line is located within Paradise Road.

Wastewater

City of Tracy

The City of Tracy's wastewater collection system consists of gravity sewer lines, pump stations, and force mains. The City's wastewater flows toward the northern part of the City where it is treated at the WWTP located just north of I-205 before being discharged into Old River, which is a distributary channel of the Southern Sacramento-San Joaquin Delta.

Project Site

An existing 15-inch wastewater line runs beneath Paradise Road and an existing 10-inch sanitary sewer line is located within Grant Line Road, part of the City's sanitary sewer system operated by the Public Works Department.[15]

[15] De Novo Planning Group. 2019. Tracy Municipal Services Review. July.

Wastewater Generation

City of Tracy

The City projects an increase in residential, commercial, and industrial developments within its SOI, requiring expansion of its existing wastewater conveyance and treatment infrastructure.

Project Site

The project site is in the East Side Industrial future service area, within the City's SOI. Industrial operations are expected to produce approximately 1,500 gallons per day, per acre (gpd/ac).[16] Given the proposed uses and the approximately 191.2-acre size of the project site, the amount of wastewater to be produced by the proposed project would be approximately 286,500 gpd.[17]

Wastewater Treatment

City of Tracy

The WWTP, which was upgraded in 2008, is located between MacArthur Drive and Holly Drive just north of I-205. The National Pollutant Discharge Elimination System (NPDES) permit, CA 0079154, allows for discharge of 10.8 mgd, and up to 16 mgd if applicable treatment facilities are constructed. The WWTP provides disinfected tertiary level treatment meeting Title 22 requirements of the Code of Regulations from the State Water Board. The WWTP includes primary clarifiers, activated sludge, secondary clarifiers, flocculation, tertiary filtration, and disinfection.

Project Site

No wastewater treatment currently occurs on-site.

Stormwater

Generation and Infrastructure

City of Tracy

The City's Public Works Department and the WSID manage Tracy's storm drainage system. The City and entire SOI is confined to the following five watersheds:

- Eastside Channel Watershed
- Westside Channel Watershed
- Lanners Watershed
- Mountain House Watershed
- Tracy Hills Watershed

Stormwater drains through open channels, storm drains, and closed conduits that are owned, operated, and maintained by the City and the WSID. The majority of the City's stormwater management systems are gravity fed; however, pump stations are utilized to carry water over grades. Stormwater is discharged into Old River on the northern side of I-205 from four outfalls: (1) Sugar Cut, (2) 18-inch Storm Drain Force Main (Lammers Road), (3) West Side Irrigation distort (WSID) Main Drain, and (4) Patterson Run. Some of the developed areas within the SOI are not presently

[16] CH2MHill. 2012. Draft Wastewater Master Plan Update, Table ES-1, December.
[17] 191ac x 1500 gpd/ac = 286,500 gpd.

connected to facilities that drain to any of the above outfalls and are currently draining to temporary retention ponds until future facility connections are funded and constructed.

The project site lies within the Eastside Channel Watershed, which is the easternmost watershed in the SOI and is roughly 9.8 square miles in overall area, including minor existing developed areas in the County outside the SOI. The Eastside Channel Watershed can generally be characterized as encompassing roughly the east half of the developed area of the City, plus additional undeveloped areas extending as far south as Linne Road, as far east as Banta Road and as far north as Arbor Avenue. It includes the majority of the City's downtown area, several Residential Specific Plan (RSP) subdivisions, the South MacArthur Subbasin, the Rocha future service area, the Chrisman Road future service area, the UR1 future service area, core residential and industrial areas north and east of the downtown area, the Northeast Industrial (NEI) Specific Plan area, industrial developments north of I-205, the majority of the Larch Clover area, the East Side Industrial future service area, and other existing and proposed development areas.

Project Site

There are no existing stormwater drainage facilities on or near the project site. The project site drains generally toward the northeast toward I-205 and into Pescadero Irrigation District facilities; this stormwater does not currently enter into a City-maintained facility. The proposed project includes an on-site stormwater detention basin (DET 16) that is to be constructed on the northeast corner of the project site (see Exhibit 3.10-1 in Section 3.10, Hydrology and Water Quality).

Stormwater Treatment

City of Tracy

Stormwater runoff from the City is transported northward to four discharge points located on Old River, where it is treated and released. The State of California requires small communities to implement development standards to protect water quality under the "General Permit for Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Order No. 2013-0001-DWQ."[18] These requirements are an extension of similar requirements imposed on larger communities (e.g., the Cities of Stockton, Modesto, and parts of the County of San Joaquin.) The development standards, also known as post-construction stormwater requirements, will become part of every regulated community's development process.

The Cities of Lathrop, Lodi, Manteca, Patterson, Tracy, and San Joaquin County (Partners) collaborated to develop a Multi-Agency Post-Construction Standards Manual to meet the MS4 permit requirement. This multi-agency manual provides consistent guidance for developers and builders working in the region as well as agency staff. Stakeholders from the development community were involved in the development of the Multi-Agency Post-Construction Standards Manual, which was completed and adopted by the City of Tracy in August 2015.

[18] National Pollutant Discharge Elimination System (NPDES). 2013. General Permit for Waste Discharge Requirements (WDRs) for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s). Website: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2013/wqo2013_0001dwq.pdf. Accessed: December 15, 2020.

Solid Waste

Solid Waste Collection

City of Tracy

The City has a franchise agreement with Tracy Delta Solid Waste Management, Inc. for the collection, transportation, and disposal of refuse and garbage, including the collection of recyclable material and yard waste.[19] The City Public Works Department provides solid waste and recycling services for areas within city limits and certain surrounding County areas.

The Public Works Department has a partnership with Tracy Disposal Service Company to provide residential and commercial solid waste collection and disposal, including recycling and organics services.[20,21] Garbage is collected once a week and recycling and yard waste are collected on alternating weeks.[22]

Project Site

Currently, the project site generates minimal solid waste, which is collected by the Tracy Delta Solid Waste Management, Inc.

Solid Waste Generation

City of Tracy

The City generated approximately 103,648 tons of solid waste in 2019, the most recent year with data available.[23]

Project Site

Only one of the existing homes is occupied and produces a minimal amount of solid waste.

Solid Waste Disposal

City of Tracy

The City's solid waste is taken to the Tracy Material Recovery Facility and Solid Waste Transfer (MRF) Station on South MacArthur Drive before being sent to the Foothill Sanitary Landfill on North Waverly Road, east of the City. The MRF has a daily intake capacity of approximately 1,800 tons of solid waste per day. The permitted capacity of the Foothill Landfill is 138 million cubic yards, and the facility currently has capacity to accommodate 125 million cubic yards of solid waste. Current permits indicate a closure in 2082.[24]

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[19] City of Tracy. 2020. Garbage and Recycling Schedule. Website: https://www.ci.tracy.ca.us/?navId=700. Accessed April 23, 2020.
[20] City of Tracy. 2020. Recycling and Solid Waste. Website: https://www.ci.tracy.ca.us/?navId=688. Accessed April 9, 2020.
[21] Tracy Delta Solid Waste Management, Inc. Website: https://www.tdswm.com/. Accessed April 9, 2020.
[22] City of Tracy. 2020. Garbage and Recycling Schedule. Website: https://www.ci.tracy.ca.us/?navId=700. Accessed April 16, 2020.
[23] California Department of Resources Recycling and Recovery (CalRecycle). 2019. Disposal Rate Calculator: Jurisdiction Review Reports. Website: https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator. Accessed December 15, 2020.
[24] California Department of Resources Recycling and Recovery (CalRecycle). 2019. SWIS Facility/Site Activity Details: Foothill Sanitary Landfill (39-AA-0004). Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1424?siteID=3097. Accessed December 15, 2020.

Project Site

Solid waste generated on the project site would be conveyed to Tracy MRF and eventually the Foothill Landfill by Tracy Delta Solid Waste Management.

Energy

The Pacific Gas and Electric Company (PG&E) provides natural gas and electricity services to the City of Tracy. PG&E provides natural gas and electric to approximately 15 million people throughout a 70,000-square-mile service area in northern and central California. PG&E produces or buys its energy from a mix of conventional and renewable generating sources, which travel through our electric transmission and distribution systems to reach customers.

Electricity

PG&E, which is regulated by the California Public Utilities Commission (CPUC), provides electricity to all or part of the 47 counties in California, including San Joaquin County. PG&E charges connection and user fees for all new development and sliding use-based rates for electrical and natural gas service. PG&E-owned generating facilities include nuclear, natural gas, and hydroelectric.

Natural Gas

PG&E provides natural gas to all or part of 39 counties in California comprising most of the northern and central portions of the State. PG&E obtains most of its natural gas supplies from western Canada and the balance from U.S. sources. PG&E operates approximately 49,100 miles of transmission and distribution pipelines and three underground storage fields with a combined storage capacity of approximately 48.7 billion cubic feet.

Electricity and Natural Gas Infrastructure, Demand, and Use

City of Tracy

Electricity and Natural Gas is provided to the City via distribution lines and infrastructure maintained by PG&E. As individual customers request electrical and/or natural gas service, all energy conservation programs, and energy management programs are offered. Additionally, PG&E reviews applications prior to development entitlement to identify the necessary utility easements for provision of gas and electric service.

Project Site

The project site currently contains overhead power lines; as described more fully in the site plan for the Tracy Alliance parcels, certain of these existing lines would be undergrounded as part of project implementation. Natural gas infrastructure would be provided to the project site and would be installed with connections to existing lines located in Grant Line Road on the south side of the project site.

Telecommunications

Telecommunication services include telephone service (both landlines and mobile service) and internet service for businesses and homes.

City of Tracy

Telecommunications in the City are provided by AT&T, Xfinity, Comcast, Verizon, as well as various local providers.

Project Site

If the project site utilizes telecommunications, it would be at the discretion of the project site owners to contract with telecommunications companies for service. The proposed project would not require the relocation or expansion of telecommunications infrastructure, because it would be served by local telecommunications providers with adequate telecommunications capacity and access. Any telecommunications lines would be constructed within Paradise Avenue and Grant Line Road, similar to other dry utilities.

3.16.3 - Regulatory Framework

Federal

Safe Drinking Water Act

The Safe Drinking Water Act authorizes the United States Environmental Protection Agency (EPA) to establish national standards for drinking water, called the National Primary Drinking Water Regulations, to protect against both naturally occurring and man-made contaminants. These standards set enforceable maximum contaminant levels in drinking water and require all water providers in the United States to treat water to remove contaminants, except for private wells serving fewer than 25 people. In California, the State Department of Health Services conducts most enforcement activities.

Clean Water Act (National Pollutant Discharge Elimination System)

The Water Pollution Control Act of 1972, more commonly known as the Clean Water Act (CWA), regulates the discharge of pollutants into watersheds throughout the nation. Under the CWA, the EPA implements pollution control programs and sets wastewater standards.

The NPDES permit program was established within the CWA to regulate M&I discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities. Wastewater discharge is regulated under the NPDES permit program for direct discharges into receiving waters and by the National Pretreatment Program for indirect discharges to a sewage treatment plant.

State

California Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, which was passed in California in 1969, the State Water Board has the ultimate authority over State water rights and water quality policy. Porter-

Cologne also establishes nine RWQCBs to oversee water quality on a day-to-day basis at the local and regional level. The RWQCBs engage in a number of water quality functions in their respective regions and regulate all pollutant or nuisance discharges that may affect either surface water or groundwater.

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Sections 10610–10656) requires that all urban water suppliers with at least 3,000 customers prepare UWMPs and update them every 5 years. The Act requires that UWMPs include a description of water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions. Specifically, UWMPs must:

- Provide current and projected population, climate, and other demographic factors affecting the supplier's water management planning;
- Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier;
- Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage;
- Describe plans to supplement or replace that source with alternative sources or water demand management measures;
- Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis (associated with systems that use surface water);
- Quantify past and current water use;
- Provide a description of the supplier's water demand management measures, including schedule of implementation, program to measure effectiveness of measures, and anticipated water demand reductions associated with the measures; and
- Assess the water supply reliability.

The 2020 UWMP was adopted in June 2021 and includes projections of water demand and supply through 2045.

California Health and Safety Code

Section 64562 of the California Health and Safety Code establishes water supply requirements for service connections to public water systems. Before additional service connections can be permitted, enough water must be available to the public water system from its water sources and distribution reservoirs to adequately, dependably, and safely meet the total requirements of all water users under maximum-demand conditions.

California Senate Bill 610 and 221

SB 610 amended State law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 (described further below) seek to promote more collaborative planning between local water

suppliers and cities and counties by requiring detailed information regarding water availability be provided to decision-makers prior to approval of specified large development projects. For those projects that are covered under SB 610 and otherwise subject to CEQA, this law requires that detailed information be included in a WSA, which is then included in the CEQA document and the related administrative record that serves as the evidentiary basis for an approval action by a city or county. The purpose to this coordination is to ensure that prudent water supply planning has been conducted, and that the water purveyor's projected water supplies are adequate during normal, single-dry and multiple-dry years during a 20-year period to meet the projected water demand associated with a proposed development project, in addition to the water purveyor's existing and planned future uses. SB 610 amended California Water Code (Water Code) Sections 10910 through 10915 (inclusive) to require land use lead agencies to:

- Identify any public water purveyor that may supply water for a proposed development project; and
- Request a WSA from the identified water purveyor for all projects that are subject to SB 610 pursuant to Water Code Section 10912(a).

The purpose of the WSA is to demonstrate the sufficiency of the purveyor's water supplies to satisfy the water demands of a project, while still meeting the water purveyor's existing and planned future uses. Water Code Sections 10910 through 10915 delineate specific information that must be included in a WSA, which is then included in the CEQA document for consideration by the decision-makers.

- **Water Code Section 10910 (a):** Any city or county that determines that a project, as defined in Section 10912, is subject to CEQA (Division 13 [commencing with Section 21000] of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part.
- **Water Code Section 10912 (a):** "Project" means any of the following:
  (1) A proposed residential development of more than 500 dwelling units.
  (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
  (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
  (4) A proposed hotel or motel, or both, having more than 500 rooms.
  (5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
  (6) A mixed-use project that includes one or more of the projects specified in this subdivision.
  (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

Based on the following facts, according to Water Code Section 10910(a), SB 610 applies to the proposed project and a WSA is required because:

- The City has determined that the proposed project is subject to the CEQA and that an EIR is required.
- The proposed project, with more than 40 acres of industrial land use, meets the definition of a "Project" as specified in Water Code Section 10912(a) paragraph (5) as defined for an industrial development.

The proposed project has not been the subject of a previously adopted WSA and has not been included in an adopted WSA for a larger project.

California Senate Bill 221

In 2001, SB 221 amended State law to require that approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply. Per California Government Code Section 66473.7(a)(1), a subdivision means a proposed residential development of more than 500 dwelling units. As the proposed project does not include residential development, it is not subject to the requirements of SB 221.

California Water Conservation Act

The California Water Conservation Act (SB X7-7) was enacted in November 2009 and requires each urban water supplier to select one of four water conservation targets contained in California Water Code Section 10608.20 with the Statewide goal of achieving a 20 percent reduction in urban per capita water use by 2020. Under SB X7-7, urban retail water suppliers are required to develop water use targets and submit a water management plan to the California Department of Water Resources (DWR) by July 2011. The plan must include the baseline daily per capita water use, water use target, interim water use target, and compliance daily per capita water use.

California Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance was adopted by the Office of Administrative Law in September 2009 and requires local agencies to implement water efficiency measures as part of their review of landscaping plans. Local agencies can either adopt the Model Water Efficient Landscape Ordinance or incorporate provisions of the ordinance into code requirements for landscaping. Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed DWR to update the State's Model Water Efficient Landscape Ordinance (Ordinance) through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015.

New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance. This applies to residential, commercial, industrial, and institutional projects that require a permit, plan check, or design review. The previous landscape size threshold for new development projects ranged from 2,500 square feet to 5,000 square feet. The size threshold for existing landscapes that are being rehabilitated has not changed, remaining at 2,500 square feet. Only rehabilitated landscapes that are associated with a building or landscape permit, plan check, or design review are subject to the Ordinance.

Groundwater Management Act

The 1992 Groundwater Management Act, Assembly Bill (AB) 3030, established provisions by which local water agencies could develop and implement Groundwater Management Plans (GMP). GMPs are generally designed to prevent local and regional aquifer overdrafting, which reduces available groundwater resources and which, under certain conditions, can lead to degradation of water quality and to land subsidence. The City has been, and continues to be, involved in both regional and local groundwater management efforts.

Sustainable Groundwater Management Act

On August 29, 2014, the California Legislature passed comprehensive groundwater legislation contained in SBs 1168 and 1319, and AB 1739, which are collectively referred to as the Sustainable Groundwater Management Act (SGMA). This legislation was signed by Governor Brown on September 16, 2014, and it became effective on January 1, 2015. The legislative intent of SGMA is to provide sustainable management of groundwater basins, enhance local management of groundwater, establish minimum standards for sustainable groundwater management, and provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater.

The Tracy Subbasin is designated by DWR as a medium priority basin. As such, the Tracy Subbasin is subject to the requirements of SGMA, which include the formation of one or more Groundwater Sustainability Agencies (GSAs) and the development and implementation of one or more Groundwater Sustainability Plans (GSPs) by January 31, 2022. The GSA adopted the Final Tracy Subbasin Groundwater Sustainability Plan (Final GSP) on January 31, 2022. DWR has up to 2 years to review the GSP.[25]

Originally, the Tracy Subbasin contained areas of San Joaquin, Contra Costa and Alameda Counties. A grant application from the DWR was submitted by the City of Brentwood on December 27, 2018, on behalf of the original Tracy Subbasin. This application included funds to develop the San Joaquin County portion of the GSP. After the grant award, the Contra Costa County area was removed from the Tracy Subbasin, while the City of Lathrop was added, forming the new Tracy Subbasin boundary. The BBID, City of Tracy, City of Lathrop, Stewart Tract, West Side Irrigation District, and San Joaquin County are GSAs within the new Tracy Subbasin. The GSAs recognize that developing and adopting a single GSP for the subbasin would be the most efficient way of achieving sustainability and preventing State intervention into local groundwater management.

Working with San Joaquin County and the Tracy Subbasin GSAs, a Memorandum of Agreement (MOA) was negotiated and signed, covering the development of the San Joaquin County GSP for the Tracy Subbasin. Under the terms of the MOA, San Joaquin County is designated as the lead entity to enter into an agreement with the City of Brentwood to coordinate the allocation of grant funds.

[25] Tracy Subbasin. 2022. News Resources. January 21. Website: https://tracysubbasin.org/resources/. Accessed.: February 22, 2022.

Groundwater Management Plan for the Northern Agencies in the Delta-Mendota Canal Service Area and a Portion of San Joaquin County

In 1996, the City adopted the Northern Delta-Mendota Canal Groundwater Management Plan[26] (1996 GMP) pursuant to Water Code Sections 10750 *et seq*., also known as AB 3030. The 1996 GMP was developed in coordination with other DMC northern agencies, including: BCID, BBID, Del Puerto Water District, Patterson Irrigation District, WSID, San Joaquin County, and the City of Tracy. The 1996 GMP included information on groundwater levels and quality, conjunctive management of groundwater and surface water resources, and measures to protect groundwater resources within the plan area.

In 2011, the GMP was revised to include additional information to comply with new provisions adopted by the State Legislature which included:

- The DWR to establish a priority schedule for monitoring groundwater basins and elevation reports as well as issuing recommendations to local entities to improve water quality.
- The State to allow local entities to determine best methods of groundwater monitoring to meet local demand.
- The DWR to implement groundwater monitoring if local agencies fail to do so. This will result in loss of eligibility for State grant funds.

A public hearing regarding the revised 1996 GMP was held on February 7, 2012. The revised 1996 GMP was adopted by the Tracy City Council on May 1, 2012.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed AB 939, the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent in 1995 and 50 percent in 2000; established a comprehensive Statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. In 2007, amendments to the California Integrated Waste Management Act introduced a new per capita disposal and goal measurement system that moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a per capita disposal rate factor. As such, the new disposal-based indicator (pounds per person per year) uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities.

California Public Utilities Commission

The CPUC regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers safe, reliable utility service at reasonable rates; (2) protect utility

[26] Stoddard & Associates. 1996. Groundwater Management Plan for the Northern Agencies in the Delta-Mendota Canal Service Area and a Portion of San Joaquin County. April.

customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings

Title 24, Part 6, of the California Code of Regulations establishes California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Standards). The 2019 Standards continue to improve upon the previous Standards for new construction of and additions and alterations to, residential and nonresidential buildings. The effective date of the 2019 Standards is January 1, 2020. For nonresidential buildings, the Standards establish minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), indoor and outdoor lighting, and illuminated signs.

Regional

Tracy Regional Groundwater Management Plan (Regional Groundwater Management Plan)

In addition to participating in the development of the Tracy Subbasin GMP, in 2005, the City was awarded a DWR grant for approximately $185,000 to prepare a Tracy Regional Groundwater Management Plan (Tracy Regional GMP) for the portion of the Tracy Subbasin that underlies the City. The Tracy Regional GMP was completed in March 2007. A key objective of the Tracy Regional GMP was the development of Basin Management Objectives (BMOs) for groundwater levels, groundwater quality, and land subsidence in the region.

Local

City of Tracy

General Plan

The General Plan sets forth the following goals, policies, and programs related to utilities and service systems.

Public Facilities and Services Element

Goal PF-5: Reduction in the volume of solid waste.

Objective PF-5.1: Reduce volumes of solid waste generated in Tracy through recycling and resource conservation.

Policies

Policy P1 Promote redesign, reuse, composting and shared producer responsibility of discarded materials.

Policy P5 Salvage and reuse of construction and demolition materials and debris is encouraged at all construction projects within the City.

Policy P8 Residential, industrial, commercial, and retail buildings should be designed or improved to accommodate an increase in the amount and type of recycled materials.

Objective PF-5.2: Ensure adequate solid waste collection and disposal.

Goal PF-6: Adequate supplies of water for all types of users.

Objective PF-6.1: Ensure that reliable water supply can be provided within the City's service area, even during drought conditions, while protecting the natural environment.

Policies

Policy P4 The City shall establish water demand reduction standards for new development and redevelopment to reduce per capita and total demand for water.

Objective PF-6.3: Promote coordination between land use planning and water facilities and service.

Policies

Policy P2 New developments shall dedicate land for utility infrastructure such as treatment facilities, tanks, pump stations and wells as needed to support the development of their project.

Policy P3 The City shall be responsible for construction of new transmission water lines, as needed to meet future needs. Individual development projects shall be responsible for the construction of all water transmission means.

Policy P4 All new water facilities shall be designed to accommodate expected capacity for buildout of areas served by these facilities but may be constructed in phases to reduce initial and overall costs.

Policy P5 The availability of sufficient, reliable water shall be taken into account when considering the approval of new development.

Policy P6 Costs for water service expansion shall be distributed among new water users fairly and equitably.

Objective PF-6.5: Use recycled water to reduce non-potable water demands whenever practicable and feasible.

Policies

Policy P2 Recycled water piping systems ("purple pipe") shall be constructed as appropriate in all new development projects to facilitate the distribution and use of recycled water. The specific location and size of the recycled water systems shall be determined during the development review process.

Policy P4 The City shall plan for recycled water infrastructure in the City's Infrastructure Master Plans and, to the extent feasible, recycled water should be utilized for non-potable uses, such as landscape irrigation, dust control, industrial uses, cooling water and irrigation of agricultural lands.

Goal PF-7: Meet all wastewater treatment demands and federal and State regulations.

Objective PF-7.1. Collect, transmit, treat, and dispose of wastewater in ways that are safe, sanitary, and environmentally acceptable.

Policies

Policy P3 New habitable structures located within the city limits shall connect to public wastewater collection system.

Objective PF-7.3. Promote coordination between land use planning and wastewater conveyance, treatment, and disposal.

Policy P1 Wastewater collection and treatment facilities shall be designed to serve expected buildout of the areas served by these facilities but constructed in phases to reduce initial and overall costs.

Policy P2 The City shall construct new wastewater trunk lines as needed. Individual development projects shall be responsible for construction of all collection lines other than trunk lines.

Policy P3 The approval of new development shall be conditioned on the availability of sufficient capacity in the wastewater collection and treatment system to serve the project.

Policy P5 New development shall fully fund the cost of new wastewater treatment and disposal facilities.

Policy P6 Prior to any development approvals within an Urban Reserve, the City shall complete new wastewater master planning and wastewater treatment and disposal studies, particularly for the west side of the City. These studies are to be funded by proponents of new development and must show how adequate wastewater treatment will be provided to the Urban Reserve in question.

Objective PF-7.4. Pursue innovative solutions for wastewater treatment and disposal that are compatible with the environment.

Policies

Policy P3 Biosolid disposal shall be managed so as to minimize impacts to the environment and public health.

Policy P4 The City shall establish wastewater treatment demand reduction standards for new development and redevelopment to reduce per capita and total demand for wastewater treatment.

Goal PF-8: Protect property from flooding.

Objective PF-8.1. Collect, convey, store, and dispose of stormwater in ways that provide an appropriate level of protection against flooding, account for future development and address applicable environmental concerns.

Policies

Policy P1 Stormwater infrastructure shall be maintained in good condition.

Policy P2 Stormwater infrastructure shall minimize local flooding by attaining capacity that conforms with the Storm Drainage Master Plan and City Design Standards.

Policy P3 New permanent stormwater infrastructure shall be designed to serve dual purposes to the extent possible. This includes the following:

- Drainage facilities integrated into recreation corridors with bike paths, sidewalks, and landscaping.
- Drainage channel integrated with transportation and environmental corridors.
- Stormwater detention basins shall incorporate active and passive recreation areas where feasible. These areas shall not count toward parks dedication requirements.

Policy P5 The City shall ensure a fair and equitable distribution of costs for stormwater system upgrades, expansion, and maintenance.

Policy P6 Design of storm drainage facilities shall be consistent with State and federal requirements, including NPDES requirements.

Policy P7 Planning for stormwater facilities should consider possible future retrofitting needs associated with changing regulations pertaining to stormwater quality, including NPDES requirements.

Objective PF-8.2. Provide effective storm drainage facilities for development projects.

Policies

Policy P1 To the extent feasible, new development projects shall incorporate methods of reducing storm runoff within the project to reduce the requirements for downstream storm drainage infrastructure and improve stormwater quality.

Policy P2 New storm drainage facilities shall meet adopted City standards, including the standards and policies contained in the Storm Water Management Plan, the Storm Drainage Master Plan, and the Parkways Design Manual.

Policy P3 New development projects shall only be approved if necessary, stormwater infrastructure is planned and is in compliance with environmental regulations.

Policy P4 If sufficient downstream stormwater infrastructure has not yet been constructed, new development projects shall be required to implement temporary on-site retention facilities in conformance with City standards.

Northeast Industrial Specific Plan

The NEI Specific Plan includes the following goals, policies, and programs related to utilities and service systems.

Water Supply and Distribution

The distribution, location, and extent of the water improvements within the NEI Specific Plan area are subject to the NEI Phase I Finance and Implementation Plans, dated December 1999 (Resolution Numbers 99-462 and 99- 485), as amended or extended by subsequent resolutions dated April 1, 2003 (Resolution Number 2003-100), January 4, 2005 (Resolution Number 2005-023), February 21, 2006 (Resolution Number 2006-069), and April 15, 2008 (Resolution Number 2008-065). Improvements within the Specific Plan area are also subject the NEI Phase II Finance and Implementation Plans, dated January 2006 (Resolution Number 2006-038) and January 15, 2008 (Resolution Number 2008-010).

All future water and/or wastewater improvements will also be subject to any revisions or updates to the NEI Finance and Implementation Plans and subject to the applicable development impact fees as established in those plans.

Wastewater Collection and Disposal

The distribution, location, and extent of the wastewater conveyance treatment and discharge and any future improvements within the NEI Specific Plan area are subject to the same NEI Phase I Finance and Implementation Plans and resolutions identified above.

Storm Drainage

The distribution, location, and extent of the storm drainage improvements and any future improvements within the NEI Specific Plan area are subject to the same NEI Phase I Finance and Implementation Plans and resolutions identified above.

Hazardous Wastes and Water Pollutants

All new industries with the NEI Specific Plan area are required to obtain a Discharge Permit from the Director of Utilities prior to occupancy. The permit establishes the amount and quality of wastes allowed to be discharged into the City's sanitary sewer.

The quality of wastewater entering the City's sewage system from the proposed uses would be measured by the Biochemical Oxygen Demand and Total Suspended Solids levels referenced in the local Water Quality Control Board 208 Plan. Users that are not expected to comply with these standards will be required to provide on-site pretreatment facilities.

City of Tracy 2020 Urban Water Management Plan

The City prepared the 2020 UWMP to meet the requirements of the California Urban Water Management Planning Act. The 2020 UWMP evaluates sources of the water supply for the City's

projected population and future water demand until 2045, the planning horizon. The UWMPs are intended to help facilitate implementation of SB 610 and SB 221.

3.16.4 - Impacts and Mitigation Measures

Significance Criteria

The City has elected, in its discretion, to utilize the questions in the CEQA Guidelines Appendix G Environmental Checklist as thresholds of significance for this project. According to the CEQA Guidelines Appendix G Environmental Checklist, to determine whether impacts to utilities and service systems would have significant environmental effects, the following questions are analyzed and evaluated. Would the proposed project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

b) Have sufficient water supplies available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years?

c) Result in a determination by the wastewater treatment provider, which serves or may serve the proposed project, that it has adequate capacity to serve the proposed project's projected demand in addition to the provider's existing commitments?

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Approach to Analysis

For purposes of this analysis, the following thresholds are used to evaluate the significance of utilities and services systems impacts resulting from implementation of the proposed project.

- Create a need for relocated, new, or expanded water supply, wastewater treatment, stormwater drainage facilities, electric power, natural gas, or telecommunications facilities, the construction of which would result in significant construction-related traffic, air quality, GHG emissions, energy, or noise impacts. Determination of significance of construction-related air quality, GHG emissions, energy, noise, and transportation impacts associated with the development of the foregoing infrastructure is based on the respective specific thresholds of significance listed in Section 3.3, Air Quality; Section 3.6, Energy; Section 3.8, Greenhouse Gas Emissions; Section 3.12, Noise; and Section 3.14, Transportation, and are addressed in those sections.
- Result in insufficient water supply to serve the proposed project's potable water demand during normal, dry, and multiple dry years.
- Inadequate capacity at the WWTP to serve the proposed plan's wastewater generation.

- Insufficient daily capacity or permitted daily capacity at the Foothill Sanitary Landfill to serve the proposed project's waste generation.
- Unable to comply with AB 939 solid waste diversion goals.

Water

A WSA was completed for the proposed project by West Yost in December 2021[27] and is provided in Appendix K. The purpose of the WSA was to perform the evaluation required by California Water Code sections 10910 through 10915, as established by SB 610. The WSA evaluates the adequacy of the total project water supplies of the City (as the water purveyor to the proposed project), including existing water supplies and future planned water supplies, to meet the City's existing and projected future water demands, including those future water demands associated with the proposed project, under all hydrological conditions (Normal Years, Single Dry Years, and Multiple Dry Years).

Wastewater

Wastewater production was calculated and compared with the City's treatment capacity to determine whether wastewater treatment requirements would be exceeded. The City's wastewater discharge permitting requirements were also reviewed.

Stormwater

Stormwater production was calculated and compared with the City's stormwater facility treatment capacity to determine whether stormwater collection requirements would be exceeded.

Solid Waste

Solid waste production was calculated and compared with the applicable landfill capacity to determine whether landfill daily permitted capacity and total storage capacity would be exceeded. The City's and RecycleSmart's solid waste regulations and policies were also reviewed.

Electricity and Natural Gas

Electricity and natural gas usage were calculated and compared to existing capacity to determine whether existing sources would meet project demands. Section 3.6, Energy and Section 3.8, Greenhouse Gas Emissions, also address electricity and natural gas demands.

Telecommunications

The telecommunications providers in the City of Tracy were identified.

[27] West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy). December.

Impact Analysis

Water, Wastewater, Stormwater, Electric Power, Natural Gas, and Telecommunications Facilities

Impact UTIL-1:	**The proposed project could require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**

Construction

Water

Water Supply

Construction of the proposed project would result in a relatively nominal amount of water use for dust control, mixing concrete, washing equipment and vehicles, and other activities, such as personal consumption. Because construction would require a minimal, limited quantity of water, it is reasonable to conclude that the City would have adequate water supply capacity to serve construction demands in addition to its other existing commitments, and new or expanded entitlements would not be necessary. Therefore, construction impacts related to need for new water supply infrastructure facilities because of water demand would be less than significant.

Infrastructure Construction, Expansion, or Relocation

The implementation of the proposed project would result in the construction of new water line connections from existing water lines within Paradise Road. Potential construction impacts related to expansion of existing water infrastructure are included in the construction analyses throughout this Draft EIR including in Section 3.3, Air Quality; Section 3.4, Biological Resources; Section 3.5, Cultural Resources; Section 3.6, Energy; Section 3.8, Greenhouse Gas Emissions; Section 3.12, Noise; Section 3.14, Transportation; and Section 3.15, Tribal Cultural Resources. Beyond the foregoing, there are no additional impacts associated with the construction or expansion of water infrastructure that would result in potentially significant impacts, and no additional mitigation would be required to address potential impacts related to construction or expansion of water supply infrastructure facilities. Therefore, construction impacts related to planned construction, expansion, and relocation of water infrastructure facilities would be less than significant.

Wastewater

Generation

Construction of the proposed project would result in the generation of wastewater associated with water used for dust control, mixing concrete, washing equipment and vehicles, and other activities as well as wastewater generated from construction workers. The WWTP would treat wastewater generated by construction of the proposed project consistent with applicable standards established by the Central Valley RWQCB. As discussed under Impact UTIL-3, the WWTP would have sufficient capacity to serve the proposed project (both construction and operation) and a new or expanded wastewater treatment facility would not be required. Therefore, construction impacts related to need for new wastewater infrastructure facilities as a result of wastewater generation would be less than significant.

Infrastructure Construction, Expansion, or Relocation

No new or expanded wastewater treatment facilities would be required as a result of construction of the proposed project.

The proposed project is anticipated to include connections to the existing City sanitary sewer system operated by the Public Works Department via the existing 15-inch wastewater line beneath Paradise Road and the existing 10-inch sanitary sewer line beneath Grant Line Road. Based on the individual development application submitted in connection therewith, the development of the Tracy Alliance parcels would be served as follows:

- **Building A:** would be served via two proposed 8-inch sanitary sewer lines that would each connect to the existing 15-inch sanitary sewer line in Paradise Road.
- **Building B:** would be served by a proposed 6-inch sanitary sewer line that would traverse the northern side of Building A, connecting to the existing 15-inch sanitary sewer line in Paradise Road.
- **Building C:** would be served by two sanitary sewer lines: (1) a proposed 6-inch sanitary sewer line that would connect to an existing 10-inch sanitary sewer line in Grant Line Road, and (2) a proposed 8-inch sanitary sewer line that would connect to the existing 15-inch sanitary sewer line in Paradise Road.

With respect to the remainder of the project site, since no individual development proposals have been submitted to the City for either the Suvik Farms or Zuriakat parcels at this time, the exact location and sizing of an on-site sanitary sewer system is not currently known. Rather, this information would be identified and reviewed by the City as part of subsequent engineering and related plans when individual development applications are submitted for these parcels; all proposed infrastructure in connection with these applications would be required to meet all applicable standards and requirements. Though the exact overall capacity of the wastewater output for the Suvik Farms and Zuriakat parcels are not known at this time, both the Suvik Farms and Zuriakat parcels are within the City's SOI and were planned for as industrial sites by the City as analyzed within the Tracy's Municipal Services Review,[28] and therefore wastewater services would be available to serve the properties.

Potential construction impacts related to construction or expansion of wastewater infrastructure are included in the construction analyses throughout this Draft EIR including in Section 3.3, Air Quality; Section 3.4, Biological Resources; Section 3.5, Cultural Resources; Section 3.6, Energy; Section 3.8, Greenhouse Gas Emissions; Section 3.12, Noise; Section 3.14, Transportation; and Section 3.15, Tribal Cultural Resources. Beyond the foregoing, there are no additional impacts associated with the construction or expansion of wastewater infrastructure that would result in potentially significant impacts, and no additional mitigation would be required to address potential construction impacts related to the need for expansion of wastewater infrastructure. Therefore, impacts related to the

[28] De Novo Planning Group. 2019. Tracy Municipal Services Review. July.

planned construction, expansion, and relocation of wastewater infrastructure facilities would be less than significant.

Stormwater

The construction of the proposed project itself would not result in the need for increased stormwater infrastructure improvements beyond those proposed on-site to serve the proposed project. Specifically, the proposed project is anticipated to construct various storm drainage improvements including the proposed project's on-site stormwater detention basin, bioretention basins and a 12-inch forced main storm drain line along Paradise Road. Potential construction impacts related to construction of the foregoing improvements are included in the construction analysis throughout this Draft EIR including in Section 3.3, Air Quality; Section 3.4, Biological Resources; Section 3.5, Cultural Resources; Section 3.6, Energy; Section 3.8, Greenhouse Gas Emissions; Section 3.12, Noise; Section 3.14, Transportation; and Section 3.15, Tribal Cultural Resources. There are no additional impacts associated with the construction of new or expanded stormwater facilities that would result in potentially significant impacts, and no additional mitigation would be required to address potential impacts related to construction or expansion of these facilities. Therefore, construction impacts related to planned construction, expansion, and relocation of stormwater facilities would be less than significant.

Electric Power

Demand and Consumption

Construction of the proposed project would consume electricity for construction work areas, field services (office trailers), and electric-driven equipment such as pumps and other tools. As on-site construction activities would be restricted between permitted construction hours (7:00 a.m. and 10:00 p.m. on weekdays or between the hours of 7:00 a.m. and 10:00 p.m. on weekends and federal holidays),[29] it is anticipated that the use of construction lighting would be relatively limited. As discussed more fully in Section 3.6, Energy, due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, construction demand and consumption of electricity would not be significant. Therefore, construction impacts related to need for new electrical supply infrastructure facilities because of electricity demand would be less than significant.

Infrastructure Construction, Expansion, or Relocation

Construction of the proposed project would include new connections from existing electrical lines along Grant Line Road to the proposed project. In addition, the existing overhead electrical linealong the eastern side of Paradise Road would be removed and placed underground during construction. Potential construction impacts related to expansion of existing electrical infrastructure are included in the construction analysis throughout this Draft EIR including in Section 3.3, Air Quality; Section 3.4, Biological Resources; Section 3.5, Cultural Resources; Section 3.6, Energy; Section 3.8, Greenhouse Gas Emissions; Section 3.12, Noise; Section 3.14, Transportation; and Section 3.15, Tribal Cultural Resources. Beyond the foregoing, there are no additional impacts associated with the

[29] City of Tracy Municipal Code. No date. Title 4, Chapter 12, Article 9. Website: https://library.municode.com/ca/tracy/codes/code_of_ordinances?nodeId=TIT4PUWEMOCO_CH4.12MIRE_ART9NOCO_4.12.720DEPO. Accessed: December 18, 2020.

construction or expansion of electrical facilities that would result in potentially significant impacts, and no additional mitigation would be required to address potential impacts related to the need for relocation or construction of expanded electrical facilities. Therefore, construction impacts related to planned construction, expansion, and relocation of electrical infrastructure facilities would be less than significant.

Natural Gas

Demand and Consumption

Implementation of the proposed project would not consume natural gas for construction purposes. Therefore, there would be no construction impact related to need for new or expanded natural gas supply infrastructure facilities as a result of natural gas demand.

Infrastructure Construction, Expansion, or Relocation

Implementation of the proposed project would include new connections from existing natural gas lines along Grant Line Road to the project site. Potential construction impacts associated with the expansion of existing natural gas infrastructure are included in the construction analysis throughout this Draft EIR including in Section 3.3, Air Quality; Section 3.4, Biological Resources; Section 3.5, Cultural Resources; Section 3.6, Energy; Section 3.8, Greenhouse Gas Emissions; Section 3.12, Noise; Section 3.14, Transportation; and Section 3.15, Tribal Cultural Resources. Beyond the foregoing, there are no additional impacts associated with the expansion of existing natural gas infrastructure, and no additional mitigation would be required to address potential impacts related to the need for construction of expanded natural gas facilities. Therefore, construction impacts related to planned construction, expansion, and relocation of electrical infrastructure facilities would be less than significant.

Telecommunications

Demand

Implementation of the proposed project would use telecommunications (phone and internet) for construction field services (office trailers). Implementation of the proposed project would not result in a substantial demand for service. Therefore, construction impacts related to need for new telecommunications infrastructure facilities as a result of telecommunications demand would be less than significant.

Infrastructure Construction, Expansion, or Relocation

Implementation of the proposed project would include new connections from existing telecommunications lines to the proposed project site. Potential construction impacts related to expansion of existing telecommunications infrastructure are included in the construction analysis throughout this Draft EIR including in Section 3.3, Air Quality; Section 3.4, Biological Resources; Section 3.5, Cultural Resources; Section 3.6, Energy; Section 3.8, Greenhouse Gas Emissions; Section 3.12, Noise; Section 3.14, Transportation; and Section 3.15, Tribal Cultural Resources. Beyond the foregoing, there are no additional impacts associated with extension and expansion of existing telecommunications infrastructure, and no additional mitigation measures would be required to address potential impacts related to construction of these facilities. Therefore, construction impacts related to planned construction, expansion, and relocation of telecommunications infrastructure facilities would be less than significant.

Operation

Water

For the purposes of this analysis, buildout is assumed to be 2045, but would occur beyond that planning horizon.

Water Supply Availability and Reliability

As discussed herein and detailed in the attached WSA, sufficient water supplies are available to serve the proposed project during normal, dry, and multiple dry year scenarios with reliance on existing and additional supplies from future planned projects, including ASR Program Expansion, Recycled Water Distribution Network and Exchange Program for additional CVP water supplies, and recycled water distribution for non-potable use.

Water Code Section 10910 (c)(4) requires that a WSA include a discussion with regard to "whether total projected water supplies, determined to be available by the city or county for the proposed project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses." Accordingly, the WSA addresses these three hydrologic conditions through the year 2045.

Also, in response to drought conditions and the State of Emergency proclaimed by Governor Brown, first in January 2014 and again in April 2015, the WSA provides a discussion of the availability and reliability of the City's available water supplies to meet the City's water demands if the City's surface water supplies are limited under emergency water supply conditions.

The reliability of each of the City's existing and additional planned water supplies and their projected availability during normal, single dry, and multiple dry years is described below and summarized in Table 3.16-7.

Table 3.16-7: Water Supply Reliability in Normal, Single Dry, and Multiple Dry Years

Supply Source	Anticipated Reliability (% of Entitlement)		
	Normal Years	Single Dry Years	Multiple Dry Years
Current Water Supplies			
USBR CVP			
M&I Reliability Water (Tracy Contract)[(a)]	75	25	40
Ag Reliability Water (BCID and WSID Contract)	50	0	0
BBID for Tracy Hills Demand	100	100	100
South County Water Supply Project (SSJID)	100	56-76[(b)]	56-100[(b)]
Groundwater[(c)]	100	100	100

Supply Source	Anticipated Reliability (% of Entitlement)		
	Normal Years	Single Dry Years	Multiple Dry Years
Current Dry Year Supplies			
Semitropic Water Storage Bank[d]	—	0	67
Aquifer Storage and Recovery	—	100	100
Additional Planned Future Water Supplies			
USBR CVP (BBID contract) (Ag Reliability Water)	0	0	0
Recycled Water Exchange (Potable)	100	100	100
Recycled Water (for non-potable uses)[e]	100	100	100

Notes:
AFY = acre-feet per year
BBID = Byron-Bethany Irrigation District
BCID = Banta-Carbona Irrigation District
CVP = Central Valley Project
SSJID = South County Water Supply Project
USBR = United States Bureau of Reclamation
WSID = West Side Irrigation District
(a) Anticipated reliability percentage is based on historical use in accordance with 2017 USBR CVP Municipal and Industrial Water Shortage Policy Update.
(b) Based on information from SSJID.
(c) Although the City can sustainably extract up to 9,000 AFY of groundwater on a continuous basis, the City is planning to scale back its groundwater extraction in normal years to increase the overall quality of its water supply. With these reduced supply volumes, the groundwater resource is considered 100 percent reliable.
(d) Because of the difficulties experienced by the City in accessing stored water via the DMC, the City has conservatively assumed that 0 percent of the City's Semitropic water supply will be available in the first year of a multiple dry year period and 100 percent will be available in the second and third year. The 67 percent presented in this table for multiple dry years is the average value for a 3-year period.
(e) Although recycled water supplies are currently available from the City's WWTP, required recycled water pipelines and pump stations to convey and deliver the recycled water to the recycled water use areas have not yet been constructed. See Section 6.3.1 of this WSA for additional information regarding the City's plan for implementation of its recycled water system.
Source: West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy). December.
EKI Environmental and Water. 2021. 2020 Urban Water Management Plan (prepared for the City of Tracy), Tables 7-2 and 7-3 and Section 7.1.2.3. June.

Normal Years

Normal or wet water years are those water years that match or exceed median rainfall and runoff levels. The following describes the availability and reliability of the City's existing and future water supplies and their projected availability under normal year conditions:

- The City's contract with the USBR for 10,000 AFY of CVP water is subject to M&I reliability. Based on the historical record, the City's long-term average allocation of DMC/CVP water pursuant to this contract is anticipated to be at least 85 percent of the total entitlement. However, due to recent environmental concerns in the Delta and potential future impacts due to climate change, the normal year reliability of CVP M&I water is conservatively assumed to be 75 percent of the City's historical use. Based on a historical use of 5,930 AFY (i.e., the

average quantity of CVP water put to beneficial use by the City during the last 3 years of water deliveries that were unconstrained by the availability of CVP water), the projected normal year supply is 4,448 AFY.

- The City has received acquired assignments from BCID (5,000 AFY) and WSID (5,000 AFY) for a total entitlement of 10,000 AFY of DMC/CVP water. These supplies are subject to Ag-reliability. The City is conservatively estimating that it will receive 50 percent of its Ag-reliability contractual entitlement (5,000 AFY) in normal years.
- The City has acquired up to 4,500 AFY of pre-1914 appropriative water rights water from BBID. These supplies are restricted in their place of use, and therefore the supply is anticipated to be equal to the projected demand within that place of use (i.e., the Tracy Hills area) ranging from 800 AFY in 2025 to 3,300 AFY in 2045. The City anticipates being able to receive 100 percent of this supply in normal years.
- The City has a total contractual entitlement of 13,135 AFY of Stanislaus River water provided through the SCWSP, including 10,000 AFY from its original contract with SSJID and 1,120 AFY purchased from the City of Lathrop's supply entitlement, and 2,015 AFY purchased on an interim basis from Escalon. The agreement between Tracy and Escalon is assumed to terminate after 2025. Based on information provided by SSJID, the City expects to receive 100 percent of its SCWSP water supply allocation during a normal water year. As such, the City anticipates being able to receive 13,135 AFY of SCWSP supply in 2025 and 11,120 AFY afterward, assuming normal year conditions.
- The City is able to withdraw up to 9,000 AFY of groundwater from the Tracy Subbasin. However, because of the aging infrastructure and water quality issues in the City's groundwater supplies, the City is projecting to withdraw only up to 2,500 AFY in normal years. This groundwater supply is considered to be 100 percent reliable.
- The City does not anticipate using its dry year supplies of Semitropic water in normal years.

  The City anticipates that a Recycled Water Distribution Network and Exchange agreement will be executed with the USBR by 2030 to provide additional CVP supplies to the City in exchange for the City discharging a like amount of tertiary-treated recycled water to the DMC. The City assumes that the Recycled Water Distribution Network and Exchange will be implemented as needed to meet future demand conditions and is currently projected to supply an amount ranging from 1,925 AFY in 2030 to 7,500 AFY in 2045. This water supply is considered to be 100 percent reliable.
- The City's recycled water supply is expected to be 100 percent reliable. Based on the projected non-potable demands and assuming that the City makes investments in infrastructure and permitting, the City estimates that they will have access to 1,000 AFY of recycled water supply in 2025, increasing to 6,300 AFY in 2045.

The reliability of each of the City's existing and additional planned future water supplies and their projected availability during normal years is shown in Table 3.16-8.

Table 3.16-8: Projected Existing and Additional Planned Future Water Supplies Available in Normal Years at Buildout

Supply	Percent of Entitlement	Projected Available Supplies (AFY)
Existing Water Supplies		
USBR CVP–Tracy Contract[a]	75	4,448
USBR CVP–BCID Contract	50	2,500
USBR CVP–WSID Contract	50	2,500
Total Existing CVP Supplies		**9,448**
BBID (pre-1914 to meet Tracy Hills demand)	100	3,330
SCWSP (SSJID) (pre-1914)	100	11,120
Groundwater	100	2,500
Semitropic Water Storage Bank[b]	0	0
	Total	**16,950**
Total Existing Potable Supplies		**26,368**
Additional Planned Future Water Supplies[a]		
Additional USBR CVP (BBID contract)	0	0
Aquifer Storage and Recovery[b]	0	0
Recycled Water Exchange	100	7,500
Recycled Water (non-potable)	100	6,300
Total Additional Planned Future Potable Supplies		**7,500**
Total Potable Supplies		**33,868**
Total Additional Planned Future Non-Potable Supplies		**6,300**
	Total Water Supply	**40,168**

Notes:
AFY = acre-feet per year
BBID = Byron-Bethany Irrigation District
BCID = Banta-Carbona Irrigation District
CVP = Central Valley Project
USBR = United States Bureau of Reclamation
WSID = West Side Irrigation District
(a) Percent of historical use
(b) Not used in normal years
Source: West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy). December.

Single Dry Year

During a single dry year, all the City's existing surface water allotments are subject to some level of reduction. Assumed reductions are based on actual reductions in CVP deliveries experienced in the recent drought and the new USBR M&I Reliability Policy adopted in 2017. The actual reductions will vary with the severity of the regional water supply shortage and climatic conditions and the

consideration of contract agreements. The following describes the availability and reliability of the City's existing and future water supplies and their projected variability under single dry year conditions:

- The City's contract with the USBR for 10,000 AFY of DMC/CVP water is subject to M&I reliability. During a single dry year, the City estimates to receive 25 percent of the City's historical use. Based on the historical use of 5,930 AFY, the projected supply is 1,483 AFY.
- The City has a total entitlement of 10,000 AFY of DMC/CVP Ag-reliability water. The City anticipates receiving 0 percent of its DMC/CVP Ag-reliability water in a single dry year.
- The City has acquired up to 4,500 AFY of pre-1914 appropriative water rights water from BBID. This supply is restricted with regard to the place of use (Tracy Hills), and therefore the total maximum use is limited to 3,330 AFY (the projected water demand for Tracy Hills). Because the City anticipates being able to receive 85 percent of its contractual entitlement in a single dry year (3,825 AFY), the reduction in reliability does not result in a reduction to actual amount of water used. Therefore, the supply in a single dry year is anticipated to be equal to the projected demand within the Tracy Hills area, ranging from 800 AFY in 2025 to 3,300 AFY in 2045.
- The City has a total contractual entitlement of 13,135 AFY of Stanislaus River water provided through the SCWSP. Based on information provided by SSJID, the City expects to receive 76 percent of its SCWSP water supply allocation during 2025, 2030, and 2035 and 56 percent during 2040 and 2045. In addition, the SCWSP water transferred from Escalon is assumed to be unavailable after 2025. As such, the City estimates 9,974 AFY of SCWSP supply in 2025, 8,444 AFY in 2030 and 2035, and 6,177 AFY in 2040 and 2045.
- During a single dry year, the City anticipates increasing its groundwater production on a short-term basis from the normal year production of 2,500 AFY to 4,500 AFY. The groundwater supply is considered to be 100 percent reliable.
- The City anticipates that 700 AFY of water will be available for use in a single dry year through operation of its ASR well. An additional 300 AFY is estimated to be available by 2040 (and would also be available in 2045) for a total of 1,000 AFY. This water supply is considered to be 100 percent reliable assuming that the City is consistently able to refill the ASR storage during non-drought years to maintain at least 1,000 acre-feet in storage at the beginning of a single dry year.
- The City has acquired 10,500 AFY of storage in Semitropic, which allows the City to withdraw up to 3,500 AFY for 3 consecutive years. Because of the difficulties experienced by the City in accessing stored water via the DMC on a short timeframe, the City has conservatively assumed that 0 percent of Semitropic water will be available in a single dry year.

- The City anticipates that a Recycled Water Distribution Network and Exchange agreement will be executed with the USBR by 2030 to provide additional CVP supplies to the City in exchange for the City discharging a like amount of tertiary-treated recycled water to the DMC. The City assumes that the Recycled Water Distribution Network and Exchange will be implemented as needed to meet future demand conditions and is currently projected to supply an amount ranging from 1,925 AFY in 2030 to 7,500 AFY in 2045. This water supply is considered to be 100 percent reliable.
- The City's recycled water supply is expected to be 100 percent reliable. Based on the projected non-potable demands and assuming that the City makes investments in infrastructure and permitting, the City estimates that they will have access to 1,000 AFY of recycled water supply in 2025, increasing to 6,300 AFY in 2045.

The reliability of each of the City's existing and additional planned future water supplies and their projected availability during a single dry year is shown in Table 3.16-9.

Table 3.16-9: Projected Existing and Additional Planned Future Water Supplies Available in a Single Dry Year at Buildout (2045)

Supply	Percent of Entitlement	Projected Available Supplies, AFY
Current Water Supplies		
USBR CVP–Tracy Contract[a]	25	1,483
USBR CVP–BCID Contract	0	0
USBR CVP–WSID Contract	0	0
Total Existing CVP Supplies		**1,483**
BBID (pre-1914 to meet Tracy Hills demand)	100	3,300
SCWSP (SSJID) (pre-1914)[b]	56	6,177
Groundwater[c]	100	4,500
Semitropic Water Storage Bank	0	0
Total Existing Potable Supplies		**15,460**
Additional Planned Future Water Supplies		
Additional USBR CVP (BBID contract)	0	0
Aquifer Storage and Recovery[c][d]	100	1,000
Recycled Water Exchange[c]	100	7,500
Recycled Water (non-potable)[c]	100	6,300
Total Additional Planned Future Potable Supplies		**8,500**
Total Potable Supplies[c]		**23,959**
Total Additional Planned Future Non-Potable Supplies		**6,300**
	Total Water Supply	**30,259**

Supply	Percent of Entitlement	Projected Available Supplies, AFY

Notes:
AFY = acre-feet per year
BBID = Byron-Bethany Irrigation District
BCID = Banta-Carbona Irrigation District
CVP = Central Valley Project
USBR = United States Bureau of Reclamation
WSID = West Side Irrigation District
(a) Percent of historical use
(b) Percentage of contract entitlement is based on information from SSJID for 2040 and later
(c) Groundwater and recycled water volumes assume the City invests in infrastructure and/or permitting
(d) ASR volumes assume surplus supplies are available in wet years to inject and store and additional investment in ASR construction and operation.
Source: West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy). December.

Multiple Dry Years

If there are multiple dry years, the City's surface water supplies (from both the CVP and SCWSP) may be significantly reduced. Thus, in the event of drought, the City will have to depend more heavily on conservation efforts, groundwater, and the proposed future supply projects.

The following describes the availability and reliability of the City's existing and future water supplies and their projected availability during a 5 consecutive year drought:

- The City's contract with the USBR for 10,000 AFY of DMC/CVP water is subject to M&I reliability. During multiple dry years, the City estimates receiving 40 percent of the City's historical use. Based on the historical use of 5,930 AFY, the projected supply is 2,372 AFY.
- The City has a total entitlement of 10,000 AFY of DMC/CVP Ag-reliability water. The City anticipates receiving 0 percent of its DMC/CVP Ag-reliability water in multiple dry years.
- The City has acquired up to 4,500 AFY of pre-1914 appropriative water rights water from BBID. This supply is restricted with regard to the place of use (Tracy Hills). The City anticipates being able to receive 85 percent of its contractual entitlement in multiple dry years (3,825 AFY). As the projected demand is 3,300 AFY in 2045 and is lower than the 3,825 AFY of available supply, the reduction in reliability does not result in a reduction to actual amount of water used. Therefore, the supply in multiple dry years is anticipated to be equal to the projected demand within the Tracy Hills area, ranging from 800 AFY in 2025 to 3,300 AFY in 2045.
- The City has a total contractual entitlement of 13,135 AFY of Stanislaus River water provided through the SCWSP. Based on information provided by SSJID, the City's SCWSP water supply reliability during multiple dry years range from 56 to 100 percent. In addition, the SCWSP water transferred from Escalon is assumed to be unavailable after 2025. The City's projected SCWSP supply is presented in Table 3.16-10.
- During multiple dry years, the City anticipates increasing its groundwater production on a short-term basis from the normal year production of 2,500 AFY to 4,500 AFY. The groundwater supply is considered to be 100 percent reliable.

- The City anticipates that 700 acre-feet of water will be available for use in multiple dry years through operation of its ASR well. An additional 300 AF is estimated to be available by 2040 for a total of 1,000 acre-feet. The City is assumed to be unable to refill the ASR storage during multiple dry years. Therefore, the annual ASR supply available is assumed to equal one fifth of the total stored volume (i.e., 140 AFY between 2025 and 2035 and 200 AFY between 2040 and 2045). This water supply is considered to be 100 percent reliable assuming that the City is consistently able to refill the ASR storage in non-drought years to maintain at least 1,000 acre-feet in storage at the beginning of a multiple dry year sequence.
- The City has acquired 10,500 AFY of storage in Semitropic, which allows the City to withdraw up to 3,500 AFY for 3 consecutive years. Because of the difficulties experienced by the City in accessing stored water via the DMC on a short timeframe, the City has conservatively estimated that 0 percent of the City's storage will be available in the first year of a 5 consecutive year drought and 100 percent will be available over the following 4 years. Based on the City's current storage at Semitropic of 6,887 acre-feet, the amount available in the second to fifth year of a 5 consecutive year drought is assumed to be 1,722 AFY (6,887 acre-feet divided by four). A similar reliability estimate is provided for all dry year sequences under the assumption that the City is consistently able to refill the water bank in non-drought years to maintain at least 7,000 AFY in storage at the beginning of a multiple dry year sequence.
- The City anticipates that a Recycled Water Distribution Network and Exchange agreement will be executed with the USBR by 2030 to provide additional CVP supplies to the City in exchange for the City discharging a like amount of tertiary-treated recycled water to the DMC. The City assumes that the Recycled Water Distribution Network and Exchange will be implemented as needed to meet future demand conditions and is currently projected to supply an amount ranging from 1,925 AFY in 2030 to 7,500 AFY in 2045. This water supply is considered to be 100 percent reliable.
- The City's recycled water supply is expected to be 100 percent reliable. Based on the projected non-potable demands and assuming that the City makes investments in infrastructure and permitting, the City estimates that they will have access to 1,000 AFY of recycled water supply in 2025, increasing to 6,300 AFY in 2045.

The reliability of each of the City's existing and additional planned future water supplies and their projected availability during a five-conservative dry year (multiple dry year) period at buildout (2045) is shown in Table 3.16-10.

Table 3.16-10: Projected Existing and Additional Planned Future Water Supplies Available in Multiple Dry Years at Buildout (2045)

Supply	Percent of Entitlement	Projected Available Supplies Year 1 (AFY)	Projected Available Supplies Year 2 (AFY)	Projected Available Supplies Year 3 (AFY)	Projected Available Supplies Year 4 (AFY)	Projected Available Supplies Year 5 (AFY)
Existing Water Supplies						
USBR CVP–Tracy[(a)] Contract	40	2,372	2,372	2,372	2,372	2,372
USBR CVP–BCID Contract	0	0	0	0	0	0
USBR CVP–WSID Contract	0	0	0	0	0	0
Total CVP Supplies		**2,372**	**2,372**	**2,372**	**2,372**	**2,372**
BBID (pre-1914 to meet Tracy Hills demand)	100	3,300	3,300	3,300	3,300	3,300
South County Water Supply Project (SSJID) (pre-1914)	See note (b)	11,120	11,120	6,177	6,177	11,120
Groundwater[(c)]	100	4,500	4,500	4,500	4,500	4,500
Semitropic Water Storage Bank	100	0	1,722	1,722	1,722	1,722
Total Existing Potable Supplies		**21,292**	**23,014**	**18,071**	**18,071**	**23,014**
Additional Planned Future Water Supplies						
Additional USBR CVP (BBID contract)	0	0	0	0	0	0
Aquifer Storage and Recovery[(c)(d)]	100	200	200	200	200	200
Recycled Water Exchange[(c)]	100	7,500	7,500	7,500	7,500	7,500
Recycled Water (non-potable)[(c)]	100	6,300	6,300	6,300	6,300	6,300
Total Additional Planned Future Potable Supplies		**7,700**	**7,700**	**7,700**	**7,700**	**7,700**
Total Potable Supplies		**28,992**	**30,714**	**25,771**	**25,771**	**30,714**
Total Additional Planned Future Non-Potable Supplies		**6,300**	**6,300**	**6.300**	**6,300**	**6,300**
Total Water Supply		**35,292**	**37,014**	**32,071**	**32,071**	**37,014**

Supply	Percent of Entitlement	Projected Available Supplies Year 1 (AFY)	Projected Available Supplies Year 2 (AFY)	Projected Available Supplies Year 3 (AFY)	Projected Available Supplies Year 4 (AFY)	Projected Available Supplies Year 5 (AFY)

Notes:
AFY = acre-feet per year
BBID = Byron-Bethany Irrigation District
BCID = Banta-Carbona Irrigation District
CVP = Central Valley Project
USBR = United States Bureau of Reclamation
WSID = West Side Irrigation District
(a) Percent of historical use
(b) Information provided by SSJID. SSJID's reliability estimates for a 5 consecutive year drought were based on the historical supplies available during the 2012 to 2016 drought period. During 2012, 2013, and 2016 (the first, second, and fifth years), SSJID was able to provide the full allocation, whereas during 2014 and 2015 (the third and fourth years), SSJID was only able to provide 75 percent of the full allocation.
(c) Groundwater and recycled water volumes assume the City invests in infrastructure and/or permitting.
(d) ASR volumes assume surplus supplies are available in wet years to inject and store and additional investment in ASR construction and operation.
Source: West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy). December.

Emergency Water Supply Conditions

During the recent drought conditions in California, water supply deliveries from the SWP and CVP (and other surface water supply sources throughout California) were severely reduced and even the availability of pre-1914 water rights was challenged. Many water supply agencies, including the City, implemented their Water Shortage Contingency Plans, including mandatory water conservation measures, to reduce water use. Even with 0 percent deliveries from the City's USBR CVP agricultural supplies in 2014, the diversity of the City's water supply portfolio, together with water conservation efforts by the City's customers, allowed the City to meet all water demands. If the recent drought were to re-occur and deliveries of surface water supplies are reduced further, the City's Water Shortage Contingency Plan would be enacted as needed.

The City's Water Shortage Contingency Plan includes shortage response actions for six water shortage levels up to greater than 50 percent shortage due to foreseeable or unforeseeable events. The City's Water Shortage Contingency Plan is included in Appendix H of the 2020 UWMP. The City may implement demand reduction actions, supply augmentation, mandatory restrictions, and other actions as appropriate for the shortage level to reduce the gap between supply and demand.

Further, the City has prepared a Water System Emergency Response Plan which provides a framework for emergency response by the City's Utilities Department by describing the department's emergency management organization, roles, and responsibilities and emergency policies and procedures. The Water System Emergency Response Plan provides action plans to be implemented to address the emergency.

Water Supply Sufficiency

Pursuant to Water Code Section 10910(c)(4), analyses were conducted to assess the sufficiency of total projected water supply for existing and planned future demands, including the demands of the proposed project, during normal, single dry, and multiple dry water years over a 20 year projection.

Table 3.16-11 summarizes the projected availability of the City's existing and planned future potable water supplies compared with projected water demands in normal, single dry, and multiple dry years at buildout (2045). Exhibit 3.16-2 shows the City's existing and planned future potable water supplies and the City's projected water demands in normal, single dry, and multiple dry years at buildout.

To be conservative, water demands were assumed to be at normal levels without any conservation measures in place. With future planned projects implemented, the results of the assessment show that water supply is sufficient during normal years. However, during a single dry year or a multiple dry year period, the City must depend more heavily on conservation efforts, groundwater, and the proposed future supply projects, described in more detail below, to overcome the gap between supply and demand. As described in the WSA and the 2020 UWMP, these findings are primarily due to projected reduced reliability of the City's CVP supplies and SSJID supplies in dry years.

Table 3.16-11: Summary of Buildout Total Water Demand Versus Supply During Hydrologic Normal, Single Dry, and Multiple Dry Years

Hydrologic Condition		Supply and Demand Comparison, AFY[a]
Normal Year[b]		
Available Total Water Supply		40,168
Total Water Demand (with Proposed Project)		39,379
	Potential Surplus (Deficit)	789
	Percent Shortfall of Demand	—
Single Dry Year[c]		
Available Potable Water Supply		30,259
Total Water Demand (with Proposed Project)		39,379
	Potential Surplus (Deficit)	(9,120)*
	Percent Shortfall of Demand	(23 percent) *
Multiple Dry Years[d]		
Multiple-Dry Year 1	Available Total Water Supply[e]	35,292
	Total Water Demand (with Proposed Project)	39,379
	Potential Surplus (Deficit)	(4,087) *
	Percent Shortfall of Demand	(10.4 percent) *

Hydrologic Condition		Supply and Demand Comparison, AFY[(a)]
Multiple-Dry Year 2	Available Total Water Supply	37,014
	Total Water Demand (with Proposed Project)	39,379
	Potential Surplus (Deficit)	(2,365) *
	Percent Shortfall of Demand	(6.0 percent) *
Multiple-Dry Year 3	Available Total Water Supply	32,071
	Total Water Demand (with Proposed Project)	39,379
	Potential Surplus (Deficit)	(7,308) *
	Percent Shortfall of Demand	(18.6 percent) *
Multiple-Dry Year 4	Available Total Water Supply	32,071
	Total Water Demand (with Proposed Project)	39,379
	Potential Surplus (Deficit)	(7,308) *
	Percent Shortfall of Demand	(18.6 percent) *
Multiple-Dry Year 5	Available Total Water Supply	37,014
	Total Water Demand (with Proposed Project)	39,379
	Potential Surplus (Deficit)	(2,365) *
	Percent Shortfall of Demand	(6.0 percent) *

Notes:
AFY = acre-feet per year
WSA = Water Supply Assessment
(a) Water demands are from Table 5-2 of the WSA.
(b) Normal Year supplies are from Table 6-6 of the WSA.
(c) Single Dry Year supplies are from Table 6-7 of the WSA.
(d) Multiple Dry Year supplies are from Table 6-8 of the WSA.
(e) Assumes 0 percent of the City's storage in Semitropic is available for the first year.
* (X) denotes there is a potential deficit
Source: West Yost. 2021. Tracy Alliance Project Water Supply Assessment (prepared for the City of Tracy). December.

To close any gap between supply and demand during dry years, the City would need to implement its Water Shortage Contingency Plan to reduce water demands. As discussed in Section 5.3 in the WSA, the City has shown that it can achieve its water conservation goals. During the 2012-2016 Statewide drought, the City exceeded its water conservation goal of 25 percent. Further, the City must fully implement its proposed future water supply projects, including the Recycled Water Distribution Network and Exchange Program and expansion of the ASR Program. Investments in wet year water supplies will also be needed to refill storage in Semitropic and expand the City's ASR Program. Delays in implementing the proposed future water supply projects could result in greater water supply shortages and the need for additional water conservation to meet demands.

The dry year shortfalls presented in Table 3.16-11 are based on water supply and demand projections with numerous uncertainties. The City continues to work on strategies and actions to

address the projected water supply shortfall. Uncertainties are itemized below, along with the City's water management strategies and options.

Uncertainties in Dry Year Water Supply Projections

Significant water supply shortfalls are currently projected in future single and multiple dry years. These projections include numerous sources of uncertainty as summarized below:

- The Bay-Delta Plan Amendment implementation is under negotiation. The SSJID and others are continuing negotiations with the State Water Board on implementation of the Bay-Delta Plan Amendment for water supply cutbacks, particularly during droughts. This is a dynamic situation and the projected drought cutback allocations may need to be revised before the next (i.e., 2025) UWMP depending on the outcome of ongoing negotiations. The City has considered a conservative estimate of the potential impacts of the Bay-Delta Plan Amendment on the SCWSP (and therefore the City), which is provided in Appendix G of its 2020 UWMP.
- The supply yield of the City's development of additional ASR and recycled water supplies are accounted for in current supply projections. However, implementation of these projects will require significant investment by the City. Similarly, investments in wet years supplies will be needed to refill storage in Semitropic and expand the City's ASR Program.
- The City continues to work closely with the USBR and SSJID on their rationing policies to ensure that M&I needs can be met. Rationing policies may potentially be revised.
- The City's projected water demands are subject to change in the future based on water conservation policies and regulations for current and future development, and the pace and extent of development.
- Frequency and duration of cutbacks and, therefore, the shortfalls are also uncertain. In addition to the supply volumes, the above listed uncertainties would also impact the projected frequency and duration of shortfalls.

Water Management Strategies and Options

The City has developed strategies and actions to address the projected supply shortfalls discussed in the 2020 UWMP which are provided below.

- **Recycled Water for Non-Potable Use:** The City continues to develop recycled water supplies as discussed in Section 6.2 of the WSA. Recycled water is planned to augment non-potable demands that would otherwise be supplied with potable water.
- **Future Water Supply Projects:** The City continues to evaluate the expansion of its existing supply and to obtain new supply sources, including the ASR Program and Recycled Water Distribution Network and Exchange Program. Other potential supply options, such as direct potable reuse of recycled water, are also being considered.
- **Implementation of Demand Management Measures:** The City has an active water conservation program and continues to implement the demand management measures described in Section 9 of the 2020 UWMP. Further, in response to the anticipated future shortfalls, the City has developed a robust Water Shortage Contingency Plan (WSCP) that

systematically identifies ways in which the City can reduce water demands. The WSCP is included in Section 8 of the 2020 UWMP.

- **Policy Based Water Efficiency Tools:** The City is currently exploring other policy-based water efficiency tools that other supply-constrained agencies across California have implemented. These policy-based tools are often bundled together and referred to as Water Demand Offset (WDO) or Water Neutrality policies. Through these policies, project developers are generally required to offset the new demand anticipated by the development through some combination of demand mitigation options, such as: on-site retrofits, off-site retrofits, on-site reuse, supply augmentation, and WDO fees.

Water Supply Availability and Reliability Conclusion

As described above, water demand within the City's water service area is not expected to exceed the City's supplies at buildout under normal hydrologic conditions if the City is able to fully implement its future planned projects, which include ASR Program Expansion, Recycled Water Distribution Network and Exchange Program for additional CVP water supplies, and recycled water distribution for non-potable use. During a single dry year or a multiple dry year period, the City must depend more heavily on water conservation efforts, groundwater, and the proposed future supply projects to overcome the gap between supply and demand. Investments in wet year water supplies will also be needed to refill storage in Semitropic and expand the City's ASR Program.

The identified improvements to the recycled water infrastructure as part of the Recycled Water Distribution Network and Exchange Program have been incorporated into the City's Capital Improvement Plan (CIP). Each applicant for development of individual proposals for any of the parcels within the project site would be required to pay applicable development impact fees to ensure they each provide their respective proportionate share of required funding to the City for the completion of the water infrastructure improvements (which includes recycled water infrastructure) as required by Mitigation Measure (MM) UTIL-1a. In addition, each applicant for development of individual proposals for any of the parcels within the project site would be required to pay applicable development impact fees to ensure they each provide their respective proportionate share of required funding to the City for the acquisition, treatment, and delivery of treated potable and recycled water supplies to the project site. Therefore, operational impacts related to need for new water supply facilities as a result of water demand associated with the proposed project would be less than significant with mitigation.

Infrastructure and Treatment Facilities Capacity

The City, through its Public Works Department, would supply potable water (and recycled water when available to the project site). There is a 12-inch water line in Paradise Road; planned water lines that would traverse through the project site have not yet been installed. Potable water service for the proposed project would be provided by the City's existing Pressure Zone 1 (Zone 1) pipelines in Paradise Avenue and Grant Line Road.

The storage requirement for the City's potable water system consists of three components:

- **Operational Storage:** 30 percent of a maximum day demand.

- **Emergency Storage**: 1.5 times an average day demand.
- **Fire Flow Storage:** The required fire flow rate multiplied by the associated fire flow duration period. In larger pressure zones like Zone 1, the City requires the fire flow storage to equal the volume required for two concurrent fire flow events: a Single-Family Residential fire (0.18 million gallons) and an Industrial fire in a sprinklered building (0.96 million gallons).[30] Thus, the total Zone 1 fire flow storage required is 1.14 million gallons.

The required fire flow storage component for this proposed project would be shared with other existing and proposed developments served by Zone 1 and Pressure Zone 2 (Zone 2). However, the proposed project's required operational and emergency storage capacity would be in addition to the requirements from existing buildings and other proposed developments in Zone 1 and Pressure Zone 2 (Zone 2). The required operational and emergency storage components for the proposed project are approximately 0.14 and 0.39 million gallons, respectively. Based on the City's available storage capacity and emergency storage credit in Zones 1 and 2, there is a storage capacity surplus of approximately 2.7 million gallons after accounting for the proposed project's storage requirements.

Peak-hour Demand Evaluation

The proposed project involves three domestic service connection points to the City's potable water system as shown in Exhibit 2-9 in the Project Description: (1) two in Paradise Avenue and (2) one at the eastern end of the 12-inch diameter water main in Grant Line Road. Pursuant to the preliminary site plans for the Tracy Alliance parcels, nearly all the demand for these parcels (i.e., Buildings A and B) would be served from Paradise Avenue (with the much smaller Building B served from Grant Line Road). Since applications for individual development proposals have not been submitted for either the Suvik Farms or Zuriakat parcels at the time of this writing, based on reasonably available information, it was assumed that future demands for those parcels would be served from Grant Line Road given their locations.

Exhibit 3.16-3 displays the service connection points, in addition to the system pressure and pipeline velocities during a peak-hour demand condition. Pressures at service connection points on Paradise Avenue and Grant Line Road are approximately 62 and 61 pounds per square inch (psi), respectively, while pressures at other service locations in Zone 1 remain above 40 psi. No distribution pipelines exceed the maximum pipeline velocity limit of 8 feet per second. Therefore, the proposed domestic service connection points are adequate to meet peak-hour demand created by the proposed project.

Maximum Day Demand Plus Fire Flow Evaluation

To meet the proposed project's fire flow requirements, the water system must be able to provide 4,500 gpm to the proposed project and adjacent industrial sites during a maximum day demand condition while maintaining 20 psi residual system pressure (primary criterion) and pipeline velocities below 12 feet per second (secondary criterion). Exhibit 3.16-4 shows the water infrastructure as currently proposed does not meet a fire flow requirement of 4,500 gpm, as available fire flow along Grant Line Road is between approximately 4,120 and 4,230 gpm. This deficiency is because of the 12-inch diameter dead-end pipeline located east of the intersection of

[30] In sprinklered Industrial buildings, the fire flow requirement is 4,500 gpm for 4 hours, which includes 500 gpm for on-site sprinkler flow. Fire flow storage does not include sprinkler flow, so fire flow storage for sprinklered Industrial buildings is based on 4,000 gpm per 4 hours.

Paradise Road and Grant Line Road, where flow is restricted by the 12 feet per second pipeline velocity limit.

The identified pipeline improvements in the area are not critical, as the existing distribution system can meet fire flow requirements for the proposed project if the secondary pipeline velocity criterion is not met prior to occupancy. However, it is recommended that the proposed project install additional 12-inch diameter pipelines on-site to create loops with the existing public water mains in Paradise Avenue and Grant Line Road. The recommended improvements and updated fire flow evaluation results are shown on Exhibit 3.16-5.

Service Lateral Evaluation

The proposed utility plan for the Tracy Alliance parcels includes three 10-inch-diameter laterals for fire service and three 10-inch-diameter laterals for domestic service. Pipeline velocities for each service lateral were calculated using the fire flow requirements and peak-hour demands specified in the WSA. During a fire flow of 4,500 gpm in a 10-inch fire service lateral, the velocity would be approximately 18 feet per second, exceeding the maximum limit of 12 feet per second. Upsizing the fire service laterals to 14-inch diameter would decrease the velocity to an acceptable 9 feet per second. The domestic service laterals can deliver anticipated peak-hour demands at velocities well below the 8 feet per second limit. Detailed utility plans for the Suvik Farms and Zuriakat parcels are not available at the time of writing since applications for individual development proposals have not been submitted. However, since those parcels should have the same fire flow requirement (4,500 gpm) as the Tracy Alliance parcels, it is reasonable to assume that planned fire service laterals should also be 14-inches in diameter.

Conclusion

The City currently has sufficient storage capacity in Zones 1 and 2 to meet the needs of the proposed project.

Under peak-hour demand conditions, the City's existing water system infrastructure can provide adequate flows and pressures to the proposed project and adjacent sites in the NEI Specific Plan area. Under maximum day demands plus fire flow conditions, the distribution system can deliver fire flows to the proposed project while maintaining 20 psi residual pressure, but the 12-inch diameter dead-end pipeline in Grant Line Road has a velocity exceeding 12 feet per second.

Pursuant to MM UTIL-1b, each applicant for individual development proposals within the project site would be required to provide final engineering plans to the City that include 12 inch diameter pipelines on-site, as shown on Exhibit 3.15-5 and upsized fire service lateral pipelines for review and approval. With implementation of this mitigation measure, the proposed project would meet the City's pipeline velocity criteria.

Wastewater

At operation, the proposed project would require upgraded infrastructure and would result in an increase in wastewater generation compared to existing conditions. As discussed under Impact UTIL-3, because the City of Tracy General Plan (General Plan) designates the site as Industrial, the City has anticipated the industrial use of the project site. With the existing available capacity along with the

anticipated improvements to the WWTP, with an estimated completion date of December 2023 ,[31] prior to the start of operations on the Tracy Alliance parcels, there would be sufficient wastewater capacity and infrastructure facilities available to serve the proposed project. Each applicant for an individual development proposal of any of the parcels within the project site would be required to participate in the implementation of the currently adopted WWMP through the payment of applicable impact fees as required by MM UTIL-3a. Therefore, operational impacts related to need for new wastewater supply infrastructure facilities as a result of wastewater demand would be less than significant with mitigation.

Stormwater

Generation

Compared to existing conditions, the proposed project would result in a substantial increase of impervious surfaces, with a commensurate increase in stormwater runoff. As a result, the proposed project would result in the need for new or expanded storm drainage facilities.

As described in the Project Description, the proposed project includes construction of an on-site stormwater detention basin with pump station on-site. The proposed approximately 12.44-acre on-site stormwater detention basin with a pump station would be located along the northeast site boundary and would connect to the City's NEI detention basin west of the project site (see Exhibit 3.10-1). The proposed project's on-site stormwater detention basin would be required to comply with applicable provisions of the Multi-Agency Post-Construction Stormwater Standards Manual which identifies BMPs to control the potential pollutant load of stormwater runoff. Additionally, Chapter 11.32 of the Municipal Code requires each applicant for its respective individual development proposal within the project site to pay applicable stormwater impact fees in connection with their respective development proposals, which would ensure the operation, maintenance, and replacement of existing and future stormwater facilities. Each applicant for its respective individual development proposal within the project site would be required to prepare a clearly defined Operations and Maintenance (O&M) Plan in connection with its respective individual development proposal to ensure that installed stormwater treatment measures and hydromodification management controls are inspected and properly operated and maintained for the life of the relevant individual development proposal. Therefore, pursuant to the foregoing and with each applicants' compliance with all other applicable laws and regulations, operation-related project impacts related to surface and groundwater and respective water quality would be less than significant.

Infrastructure and Treatment Facilities Capacity

As described above, the proposed project includes construction of an on-site stormwater detention basin.

As noted above, the proposed project would construct a 12-inch forced main storm drain line along Paradise Road at I-205 to connect the proposed project's on-site stormwater detention basin to the City's NEI detention basin,[32] adjacent to the western boundary of the project site. Project discharge

[31] Saffi, Lemar. Assistant Engineer, City of Tracy. Personal communication: email. April 1, 2022.

[32] As of the publication of this Draft EIR, the NEI detention basin is currently operational, and modifications are being completed. It would be available to accept stormwater from the project site once the proposed project is operational.

into the proposed project's on-site stormwater detention basin would be held until the NEI detention basin is drained enough to accept inflow; all stormwaters would eventually discharge into the Eastside Channel.

Bioretention treatment areas would intermittently surround the buildings on the project site and would also be interspersed throughout the parking lots. On-site storm drain lines within the Tracy Alliance parcels would be 12-inches in diameter and would connect the bioretention treatment areas to the proposed project's on-site stormwater detention basin.

The proposed project's on-site stormwater detention basin would be sized to accommodate the stormwater discharge for the Tracy Alliance parcels prior to the start of operations on the Tracy Alliance parcels. Following Phase 1, each subsequent applicant for its respective individual development proposal within the project site would be required to confirm that the proposed project's on-site stormwater detention basin and bioretention treatment areas could accommodate project flows to the satisfaction of the City and that post-development stormwater flow rates would not substantially exceed predevelopment rates pursuant to the applicable C.3 requirements.

Since no applications for individual development proposals have been submitted for either specific the Suvik Farms or Zuriakat parcels at the time of this writing, the exact location and sizing of on-site stormwater drainage facilities and how they would connect to the proposed project's on-site stormwater detention basin are not currently known. However, each applicant for its respective individual development proposal within the project site would be required to prepare a clearly defined O&M Plan in connection with its respective individual development proposal to ensure that installed stormwater treatment measures and hydromodification management controls are inspected and properly operated and maintained for the life of the relevant individual development proposal. This information would be identified and reviewed as part of subsequent engineering and related plans when individual development applications are submitted for these parcels. MM UTIL-1c would require the relevant applicant for the development of the Suvik Farms and Zuriakat parcels to submit engineering plans for the parcels that are the subject to the individual development proposal at issue for review and approval by the City that confirm that post-development stormwater flow rates would not substantially exceed predevelopment rates pursuant to the applicable C.3 requirements and other applicable standards and requirements.

Electric Power

Demand and Consumption

At operation, PG&E would provide electricity to the project site for lighting, appliances, and other associated uses. As discussed in Section 3.6, Energy, the proposed project would be required to comply with the State's then-current Title 24 energy efficiency standards. These standards contain advanced energy efficiency standards and would ensure that the proposed project would not require significant or unplanned new electrical sources. Therefore, operational impacts related to need for new electrical infrastructure facilities as a result of electricity demand would be less than significant.

Infrastructure Facilities Capacity

The proposed project would include new connections from existing electrical lines in Grant Line Road, which have the capacity to serve project operations. As such, the proposed project would not require

the relocation or expansion of electrical infrastructure to serve the increased demand, because it would be served by PG&E with adequate electrical supplies. Therefore, operational impacts related to adequacy and capacity of electrical infrastructure facilities would be less than significant.

Natural Gas

Demand and Consumption

The proposed project could utilize natural gas for heating, which would be provided by PG&E. As discussed in Section 3.6, Energy, the proposed project would be required to be designed and constructed consistent with the State's then-current Title 24 energy efficiency standards. These standards would ensure that the proposed project would not require significant or unplanned new natural gas sources. Therefore, operational impacts related to need for new natural gas supply would be less than significant.

Infrastructure Facilities Capacity

The proposed project would include new connections from existing electrical lines in Grant Line Road, which have the capacity to serve project operations. As such, the proposed project would not require the relocation or expansion of electrical infrastructure to meet project demand, because they would be served by PG&E with adequate electrical supplies. Therefore, operational impacts related to adequacy and capacity of electrical infrastructure facilities would be less than significant.

Telecommunications

Demand

At operation, the proposed project would increase demand for internet and telephone services provided by local telecommunications providers. The building tenants/operators would coordinate with telecommunication providers in order to provide service, which have the capacity to serve project operations. Therefore, operational impacts related to need for new or expanded telecommunications infrastructure facilities as a result of telecommunications demand would be less than significant.

Infrastructure Facilities Capacity

The proposed project is located in an area where existing telecommunications providers already offer internet and telephone services and have sufficient capacity to meet project operational demands. The proposed project would include new connections from existing telecommunications lines within Grant Line Road. As such, at operation the proposed project would not require the relocation or expansion of telecommunications infrastructure, because it would be served by local telecommunications providers with adequate telecommunications capacity and access. Therefore, operational impacts related to need for new telecommunications infrastructure facilities as a result of telecommunications demand would be less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

Implement MM UTIL-3 (provided in Impact UTIL-3) and the following mitigation measures:

MM UTIL-1a Adherence to Applicable Performance Standards and Payment of Infrastructure Fees

Prior to the issuance of building permits for an individual development proposal, the relevant applicant shall demonstrate compliance of the individual development proposal at issue with applicable performance standards pursuant to the then-current Urban Water Management Plan, Citywide Water System Master Plan, Wastewater Master Plan, and Citywide Storm Drainage Master Plan. In addition, each applicant for an individual development proposal shall pay its respective proportionate share of required funding, subject to applicable laws governing nexus requirements, to the City for completion of relevant planned City Capital Improvement Plan (CIP) improvements.

MM UTIL-1b Submittal of Final Engineering Plans for Tracy Alliance Parcels

Prior to the issuance of the building permit for the first building on the Tracy Alliance parcels, the applicants for the development of the Tracy Alliance parcels shall submit engineering plans to the City of Tracy for review and approval to confirm compliance with this MM UTIL-1b. These plans shall include additional 12-inch diameter pipelines on-site as shown on Exhibit 3.16-5 of this Draft EIR and the fire service laterals shall be upsized to 14-inch diameter.

MM UTIL-1c Submittal of Final Engineering Plans for Suvik Farms and Zuriakat Parcels

Prior to the issuance of the building permit for the first building on the subject parcel, each relevant applicant for the individual development proposal of the Suvik Farms or Zuriakat Parcels, respectively, shall each submit final engineering plans to the City of Tracy for review and approval to confirm compliance with the relevant performance standards including, but not limited to, those pursuant to the current Urban Water Management Plan, Citywide Water System Master Plan, Wastewater Master Plan, and Citywide Storm Drainage Master Plan in effect at the time building permits are requested.

Level of Significance After Mitigation

Less Than Significant Impact

Water Supply

Impact UTIL-2: The proposed project would have sufficient water supplies available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years.

Construction

Impacts related to water supplies are limited to operational impacts. No respective construction impacts would occur.

Operation

As described in UTIL-1 and in the WSA, water demand within the City's water service area is not expected to exceed the City's supplies at buildout under normal hydrologic conditions based on the City's existing supplies and implementation of the City's additional future planned projects, which include ASR Program Expansion, Recycled Water Distribution Network and Exchange Program for additional CVP water supplies, and recycled water distribution for non-potable use. During a single dry year or a multiple dry year period, the City must depend more heavily on water conservation efforts, groundwater, and the proposed future supply projects to overcome the gap between supply and demand. Investments in wet year water supplies would also be needed to refill storage in Semitropic and expand the City's ASR Program.

The identified improvements to the recycled water infrastructure as part of the Recycled Water Distribution Network and Exchange Program have been incorporated into the City's CIP. Each applicant for development of individual proposals for any of the parcels within the project site would be required to pay applicable development impact fees to ensure they each provide their respective proportionate share of required funding to the City for the completion of the necessary water infrastructure improvements (which includes recycled water infrastructure) as required by MM UTIL-1a. In addition, each applicant for development of individual proposals for any of the parcels within the project site would be required to pay applicable development impact fees to ensure they each provide their respective proportionate share of required funding to the City for the acquisition, treatment, and delivery of treated potable and recycled water supplies to the project site. Therefore, operational impacts related to need for new water supply facilities as a result of water demand associated with the proposed project would be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

Implement MM UTIL-1a

Level of Significance After Mitigation

Less Than Significant Impact

Wastewater Treatment Capacity

Impact UTIL-3:	**The proposed project would result in a determination by the wastewater treatment provider, which serves or may serve the proposed project, that it has adequate capacity to serve the proposed project's projected demand in addition to the provider's existing commitments.**

Construction

Impacts related to adequate wastewater treatment capacity are limited to operational impacts. No respective construction impacts would occur.

Operation

Implementation of the proposed project could have a significant impact if the wastewater treatment provider would not have sufficient capacity to serve the proposed new uses in addition to the provider's existing commitments. Because the General Plan designates the site as Industrial, the City has anticipated development of this site with industrial uses.

Each applicant for individual development proposals of any of the parcels within the project site would be required to participate in the implementation of the infrastructure improvements described in the WWMP in effect at the time building permits are requested through the payment of fees as required by MM UTIL-3.

Therefore, impacts related to wastewater treatment capacity for the proposed project would be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

MM UTIL-3 Payment of Wastewater Infrastructure Fees/Construction of Wastewater Facilities

Prior to the issuance of the first building permit for the subject individual development proposal, the relevant applicant shall participate in the implementation of the Wastewater Master Plan (WWMP) in effect at the time the relevant building permit is requested through the payment of the applicable impact fees as included in the City's Capital Improvement Plan (CIP).

Level of Significance After Mitigation

Less Than Significant Impact

Landfill Capacity and Solid Waste Reduction Goals Consistency

Impact UTIL-4: The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Construction

During construction, the proposed project would generate solid waste from demolition and removal of existing structures on the project site. The EPA estimates 4.34 pounds per square foot for a nonresidential construction project (defined as lodging, office, commercial, health care, educations, religious, public safety, and manufacturing facilities).[33] The proposed industrial buildings and related improvements would cover approximately 191 acres; therefore, at buildout, the proposed project is expected to generate approximately 36,108,800 pounds or 18,054.4 tons of solid waste during

[33] United States Environmental Protection Agency (EPA). 2003. Estimating 2003 Building-Related Construction and Demolition Materials Amounts. Website: https://www.epa.gov/sites/production/files/2017-09/documents/estimating2003buildingrelatedcanddmaterialsamounts.pdf. Accessed: December 28, 2020.

construction.[34] The estimated project construction schedule expects full buildout around 2025, with roughly 1,095 total number of working days. Spread over the 1,095-working day demolition and construction schedule, this equates to approximately 16.48 tons per day. The Foothill Landfill is permitted to receive 1,500 tons of waste per day.[35] As such, the approximately 16.48 tons per day of construction/demolition debris generated by the proposed project represents a nominal percent (approximately 1 percent) of the quantity of solid waste that the landfill currently accepts on a daily basis. In addition, compliance with applicable local and State laws and regulations would ensure that all construction waste would be conveyed to the appropriate solid waste facility and would be disposed of properly. Therefore, construction impacts related to landfill capacity would be less than significant.

Operation

Using 8.93 pounds per employee per day solid waste generation rate[36](the most recent source provided by CalRecyle), the proposed project's approximately 1,871 employees would generate an estimated 16,708.03 pounds of solid waste per day (8.35 tons), [37] and 6,098,430.95 pounds per year (3,049 tons), assuming operation 365 days per year. As described in Section 3.16.2, Environmental Setting, the MRF has a daily intake capacity of 1,500 tons of solid waste per day, and the permitted capacity of the Foothill Landfill is 138 million cubic yards, of which 125 million cubic yards remains available, with an anticipated closure year of 2082. As a result, the proposed project's estimated 8.35 tons of solid waste per day and 3,049 tons per year represent less than 1 percent of daily permitted capacity and overall landfill capacity. Pursuant to AB 939, cities are required to redirect at least 50 percent of municipal waste; as of 2009, the City of Tracy has exceeded this diversion requirement, in accordance with its goal of reaching 75 percent reduction. The proposed project would be required to adhere to the Tracy Municipal Code Section 5.20.250 "Multi-family, commercial and industrial recycling programs," which requires diversion of waste from landfills through recycling.[38] Therefore, the proposed project would be served by a landfill that contains sufficient capacity, and operational impacts related to landfill capacity and solid waste reduction goals consistency would be less than significant.

Level of Significance

Less Than Significant Impact

Solid Waste Regulations Consistency

Impact UTIL-5:	**The proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.**

[34] Calculation: 8,320,000 square feet x 4.34 pounds per square feet = 36,108,800 pounds; 36,108,800 pounds/2,000 = 18,054.4 tons.

[35] California Department of Resources Recycling and Recovery (CalRecycle). 2019. SWIS Facility/Site Activity Details: Foothill Sanitary Landfill (39-AA-0004). Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1424?siteID=3097. Accessed December 15, 2020.

[36] California Department of Resources Recycling and Recovery (CalRecycle). 2019. Estimated Solid Waste Generation Rates. Website: https://www2.calrecycle.ca.gov/wastecharacterization/general/rates. Accessed: December 28, 2020.

[37] Calculation: 8.93 pounds/employee/day x 1,871 employees = 16,708.03 pounds/day; 16,708.03 pounds/day/2,000 = 8.35 tons/day.

[38] City of Tracy Municipal Code. 2020. Section 5.20.520 – Multi-family, commercial and industrial recycling programs. Website: https://library.municode.com/ca/tracy/codes/code_of_ordinances?nodeId=TIT5SAHE_CH5.20INSOWARE_ART1PU_5.20.010PU. Accessed: December 28, 2020.

Construction

During construction, the proposed project would be required to comply with Chapter 5.20 of the Tracy Municipal Code related to solid waste reduction and recycling measures. Compliance with this regulation would ensure compliance with AB 939 by ensuring construction waste is transferred to facilities that can adequately recycle solid waste. Thus, with compliance with the Tracy Municipal Code and AB 939, the proposed project would be required to comply with applicable solid waste regulations and statutes. Therefore, impacts related to solid waste regulations consistency are less than significant.

Operation

During operation, the proposed project would be required to comply with applicable State and local laws and regulations related to solid waste such as AB 939 and Chapter 5.20 of the Tracy Municipal Code. Adherence to AB 939 and the Tracy Municipal Code would ensure sufficient solid waste collection and transportation is available and would ensure that disposal sites contain sufficient capacity through permit review and inspections and recycling programs are implemented to divert waste. As such, operation of the proposed project would not impede the ability of the City to meet waste diversion requirements or cause the City to violate State and local statutes and regulations related to solid waste. Therefore, with compliance with applicable State and City laws and regulations requiring recycling and waste diversion from landfills, operational impacts related to solid waste regulations consistency would be less than significant.

Level of Significance

Less Than Significant Impact

3.16.5 - Cumulative Impacts

Water

The geographic scope of the cumulative potable water analysis is the service area of the City, which provides potable water to residents and businesses within the City service area. The WSA evaluates the adequacy of the City's total project water supplies, including existing water supplies and future planned water supplies, to meet the City's existing and projected future water demands, including those future water demands associated with the proposed project, under all hydrological conditions (Normal Years, Single Dry Years, and Multiple Dry Years).

Cumulative projects, including those listed in Table 3-1 (refer to Chapter 3, Environmental Impact Analysis, Table 3-1, Cumulative Projects), are located within the areas of the City of Tracy, San Joaquin County, and on Caltrans-owned land within 10 miles of the project site for which the City provides water treatment service. As discussed under Impact UTIL-2, a WSA was completed for the proposed project that evaluated projected water demand associated with the proposed project, in addition to existing and other planned future users within the City's service area. Water demand within the City's water service area is not expected to exceed the City's supplies at buildout under normal hydrologic conditions based on the City's existing supplies coupled with the implementation of its additional future planned projects, which include ASR Program Expansion, Recycled Water Distribution Network and Exchange Program for additional CVP water supplies, and recycled water

distribution for non-potable use. During a single dry year or a multiple dry year period, the City must depend more heavily on water conservation efforts, groundwater, and the proposed future supply projects to overcome the gap between supply and demand. Investments in wet year water supplies will also be needed to refill storage in Semitropic and expand the City's ASR Program.

Developers of the other cumulative projects would be required to pay their proportionate share of required funding to the City for completion of water infrastructure improvements (which includes recycled water infrastructure) as included in the City's CIP. In addition, cumulative projects, such as those listed in Table 3-1, would be required to comply with provisions of the applicable laws and regulations in the Municipal Code and CALGreen related to water conservation. Therefore, cumulative impacts would be less than significant.

As discussed above, the proposed project would also be required to comply with City/County ordinances and General Plan policies, as well as other laws and regulations that address water supply. The proposed project would also be required to pay applicable impact fees to help facilitate the completion of necessary water infrastructure. For these reasons, the proposed project would not have a cumulatively considerable contribution toward this less than significant cumulative impact related to water supply and treatment.

Wastewater

The geographic scope of the cumulative wastewater analysis is the service area of the City, which provides wastewater collection and treatment services for the City and its service area.

The City has estimated wastewater generated from its existing and future development in the service area and forecasted the needed facility upgrades. The forecast included treatment facility upgrades needed to accommodate existing needs and the planned growth in the service area and to maintain compliance with applicable regulatory standards for wastewater treatment and discharge.

The cumulative projects, including those listed in Table 3-1, located in the City are within the service area and would generate volumes of wastewater conveyed to and treated at the WWTP. Cumulative projects not located in the City or its service area would convey wastewater to the applicable wastewater treatment plant and are not included in this cumulative analysis. The City has anticipated planned growth and determined that capacity would exist to service the demand for wastewater treatment facilities given the existing capacity coupled with the upgrades discussed in Impact UTL-3. Projects within the service area would participate in the implementation of the WWMP in effect at the time building permits are applied for through the payment of applicable fees and/or the construction of WWMP facilities with corresponding applicable fee credits/reimbursements, as established by the WWMP in effect at the time building permits are issued. Accordingly, cumulative impacts would be less than significant.

Additionally, the proposed project's contribution to this less than significant cumulative impact would not be cumulatively considerable. Each applicant for individual development proposals on any of the parcels within the project site would be required to comply with the applicable WWMP requirements and be responsible for the payment of applicable impact fees and/or construction of wastewater facilities to serve the project site with corresponding applicable fee

credits/reimbursements (see MM UTIL-3), as applicable to the particular parcel and development. Therefore, the proposed project's contribution to this less than significant impact related to wastewater generation and treatment would not be cumulatively considerable.

Storm Drainage

The geographic scope of the cumulative analysis of storm drainage is projects within the East Side Industrial future service area, consisting of areas that drain to the storm drainage system and to the San Joaquin Delta.

The cumulative projects within the East Side Industrial future service area include Cumulative Project 14 and Cumulative Project 35, which are in urban and urban/rural transition. Cumulative Project 14 is an industrial project, which is consistent with the land uses assumed by the City. Project 35 is the I-205/Chrisman Road Interchange project, which would undergo its own CEQA review, which would evaluate and be required to mitigate any potential significant impacts with storm drainage pursuant to applicable laws and regulations. In addition, consistent with measures in the Tracy Municipal Code and other applicable standards and requirements, all development in the City would be required to incorporate a stormwater control plan and stormwater collection systems into the development that would in turn reduce the volume and velocity of stormwater runoff that cumulative projects would generate to adhere to applicable performance standards. Therefore, cumulative impacts in this regard would be less than significant.

As described in the Project Description, the proposed project includes construction of an on-site stormwater detention basin with a pump station on-site that, together with the NEI detention basin, would provide sufficient capacity to accommodate stormwater runoff associated with the proposed project and the other cumulative projects including those listed in Table 3-1. Therefore, the proposed project's contribution to this less than significant impact related to storm drainage would not be cumulatively considerable. (See also Section 3.10, Hydrology and Water Quality).

Solid Waste

The geographic scope of the cumulative solid waste analysis is the service area of the Tracy Delta Solid Waste Management, Inc., which operates solid waste landfills and oversees regional waste diversion programs. Solid waste and recycling collection services would be provided by Tracy Delta Solid Waste Management, Inc.

Cumulative projects, including those listed in Table 3-1 consist predominantly of residential, commercial, and light industrial uses. However, as with the surrounding areas, new cumulative development (residential and nonresidential) would increase demand on solid waste facilities to receive, process, and store solid waste. Existing solid waste facilities provide sufficient capacity to serve all development anticipated in the City, as well as existing, planned, and probable future land uses in the City for the foreseeable future.

The Foothill Landfill has a permitted capacity of 138 million cubic yards, with 125 million cubic yards of remaining capacity that can meet anticipated demand through the facility's closure date of 2082. Additionally, other cumulative projects within the cumulative geographic context, would be required to comply with applicable federal, State and local laws, regulations and policies to address and

mitigate, as necessary, any potentially significant impacts related to solid waste. For these reasons, cumulative impacts to solid waste would be less than significant.

The proposed project's contribution to this less than significant cumulative impact would not be cumulatively considerable. The anticipated waste volume of development associated with the proposed project represents less than 1 percent of the landfill's permitted daily capacity. Therefore, the proposed project, in conjunction with other cumulative projects, would result in a less than significant cumulative impact related to solid waste generation and landfill capacity.

Energy

Cumulative analysis with respect to Energy is addressed in Section 3.6, Energy.

Telecommunications

Cumulative projects would increase demand for internet and telephone services provided by local telecommunications providers. These cumulative projects would coordinate with telecommunication providers to provide service, and would be required to ensure there is sufficient capacity to serve each project, through analysis and adequate mitigation, as necessary. For these reasons, cumulative impacts with respect to telecommunications would be less than significant.

The proposed project would also coordinate with telecommunication providers to provide service, which has capacity to serve project operations, and the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable. Therefore, the proposed project, in conjunction with other cumulative projects, would result in a less than significant cumulative impact related to telecommunications.

Level of Significance

Less Than Significant Impact

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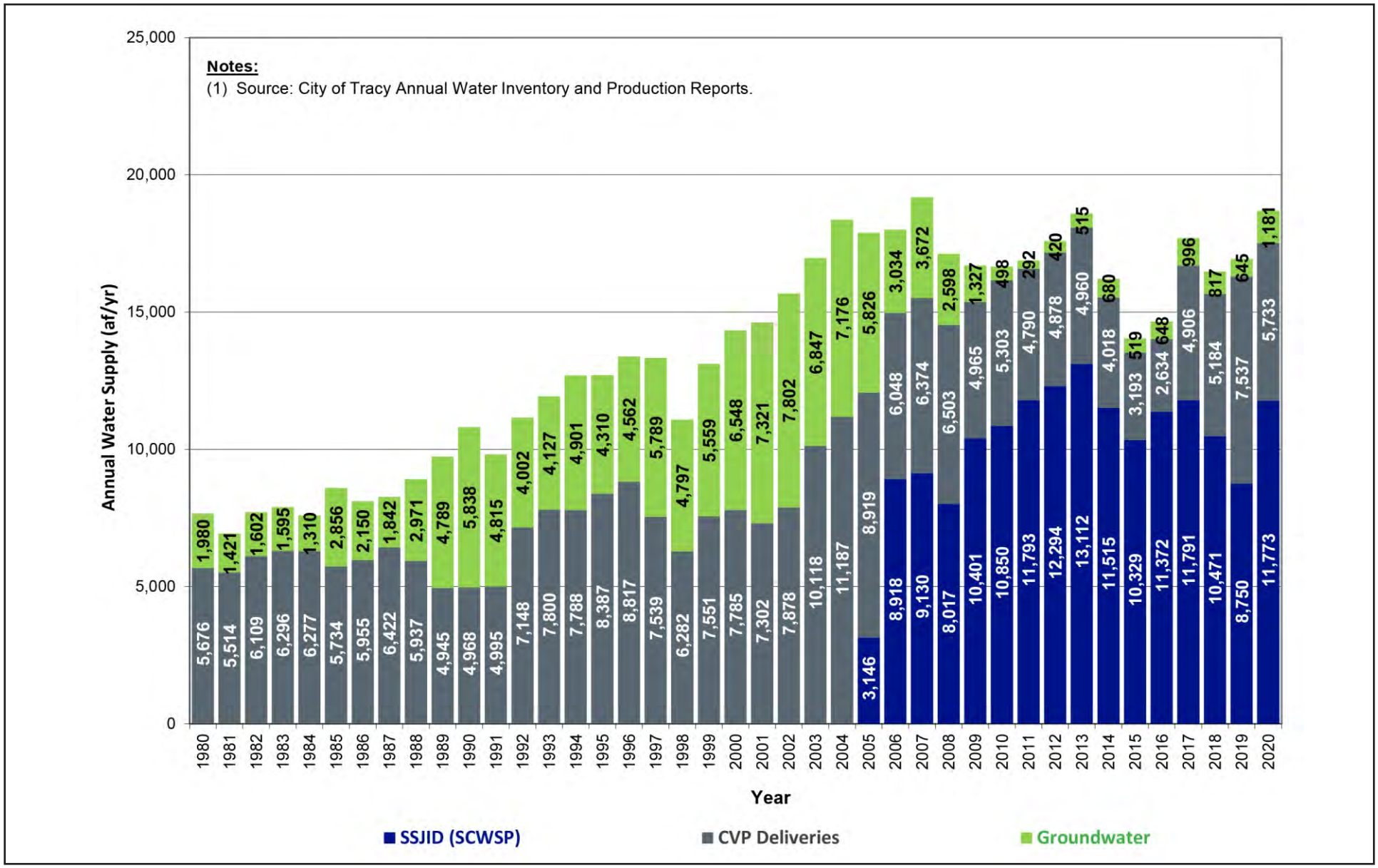

Source: West Yost, December 14, 2021.

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Exhibit 3.16-1
City of Tracy Historical Potable Water Supplies

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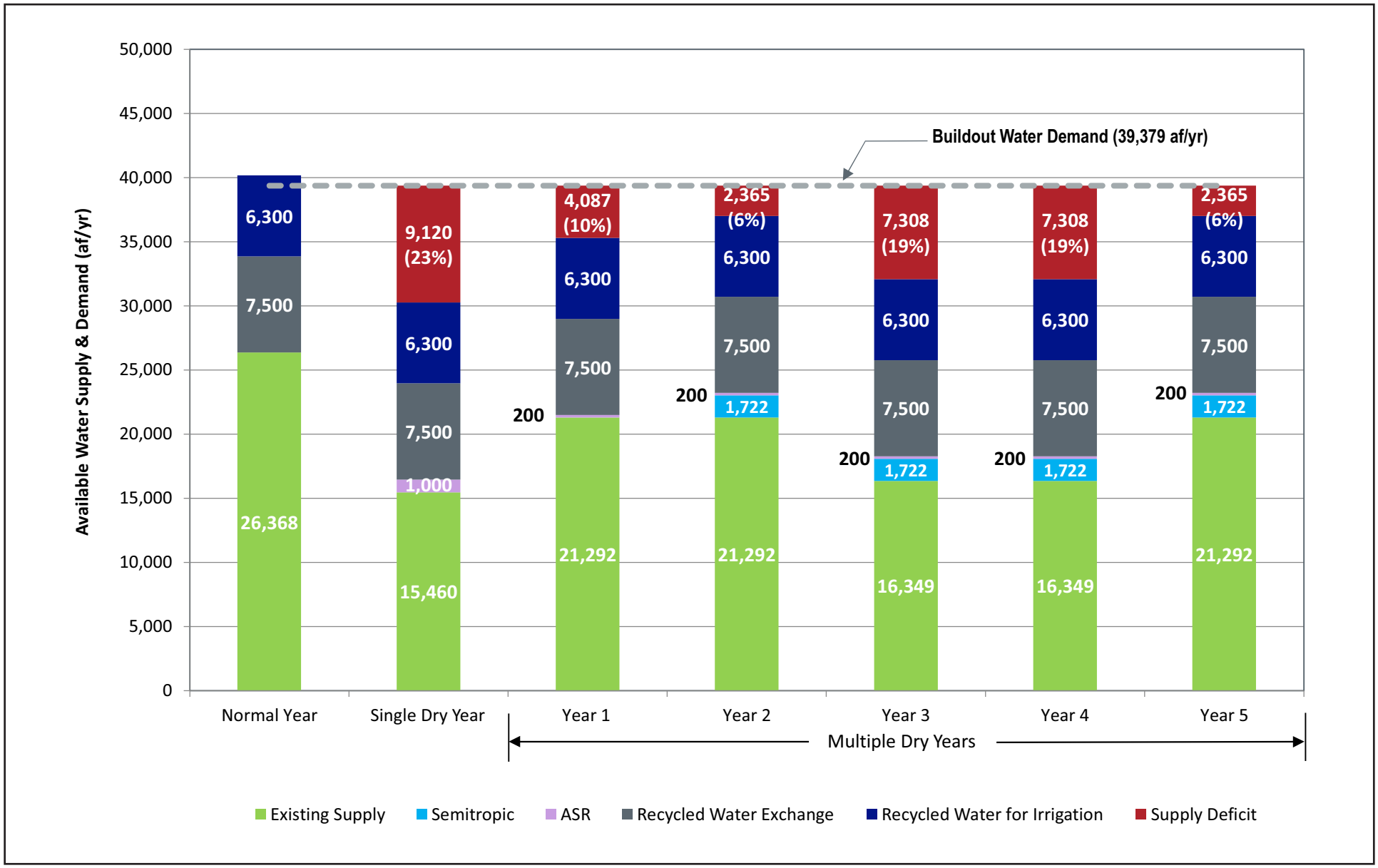

Source: West Yost, August 9, 2021.

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Exhibit 3.16-2
City of Tracy Existing and Planned Future
Potable Water Supplies vs. Projected Demand - Buildout

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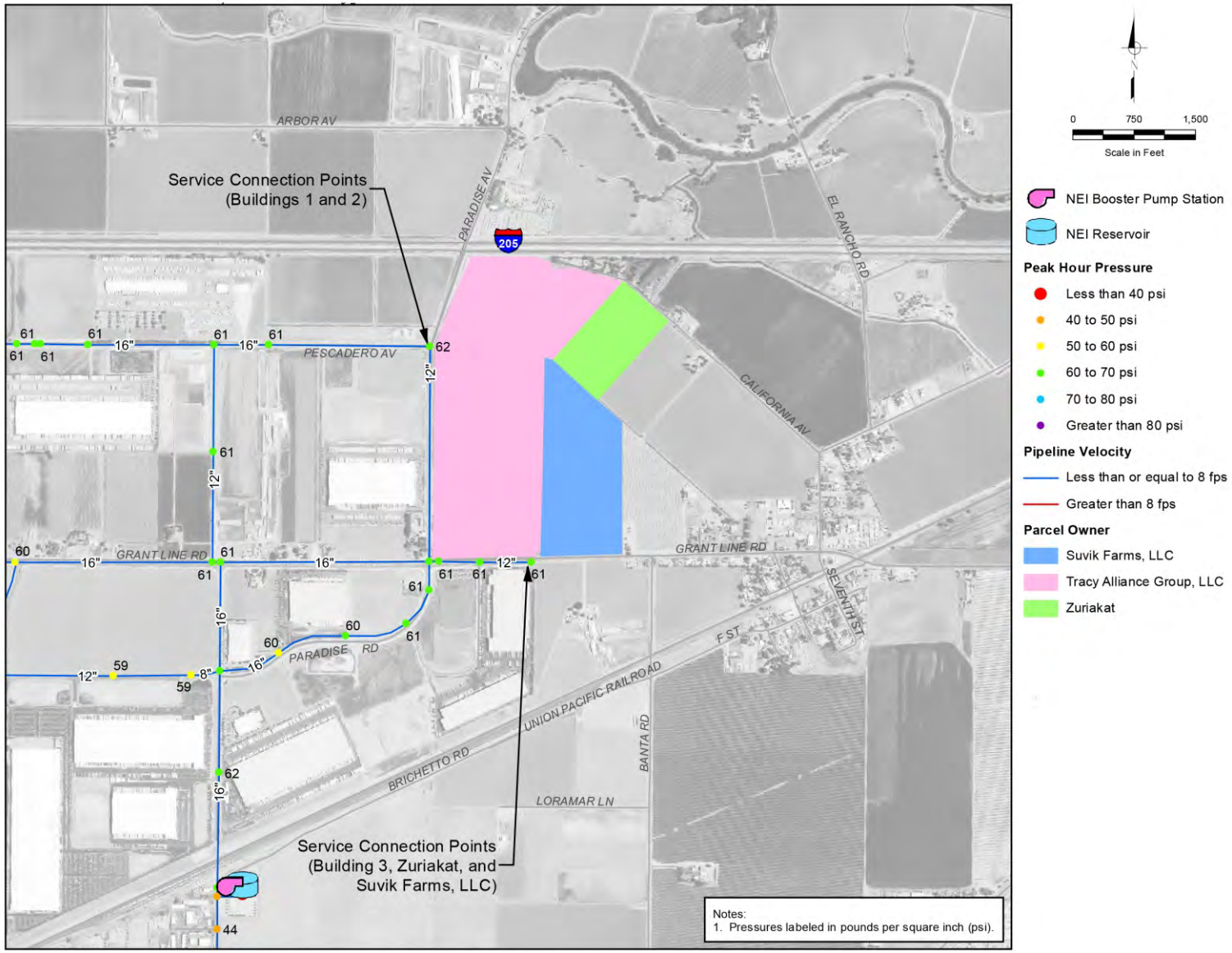

Source: West Yost, November 18, 2020.

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Exhibit 3.16-3
Peak Hour Results

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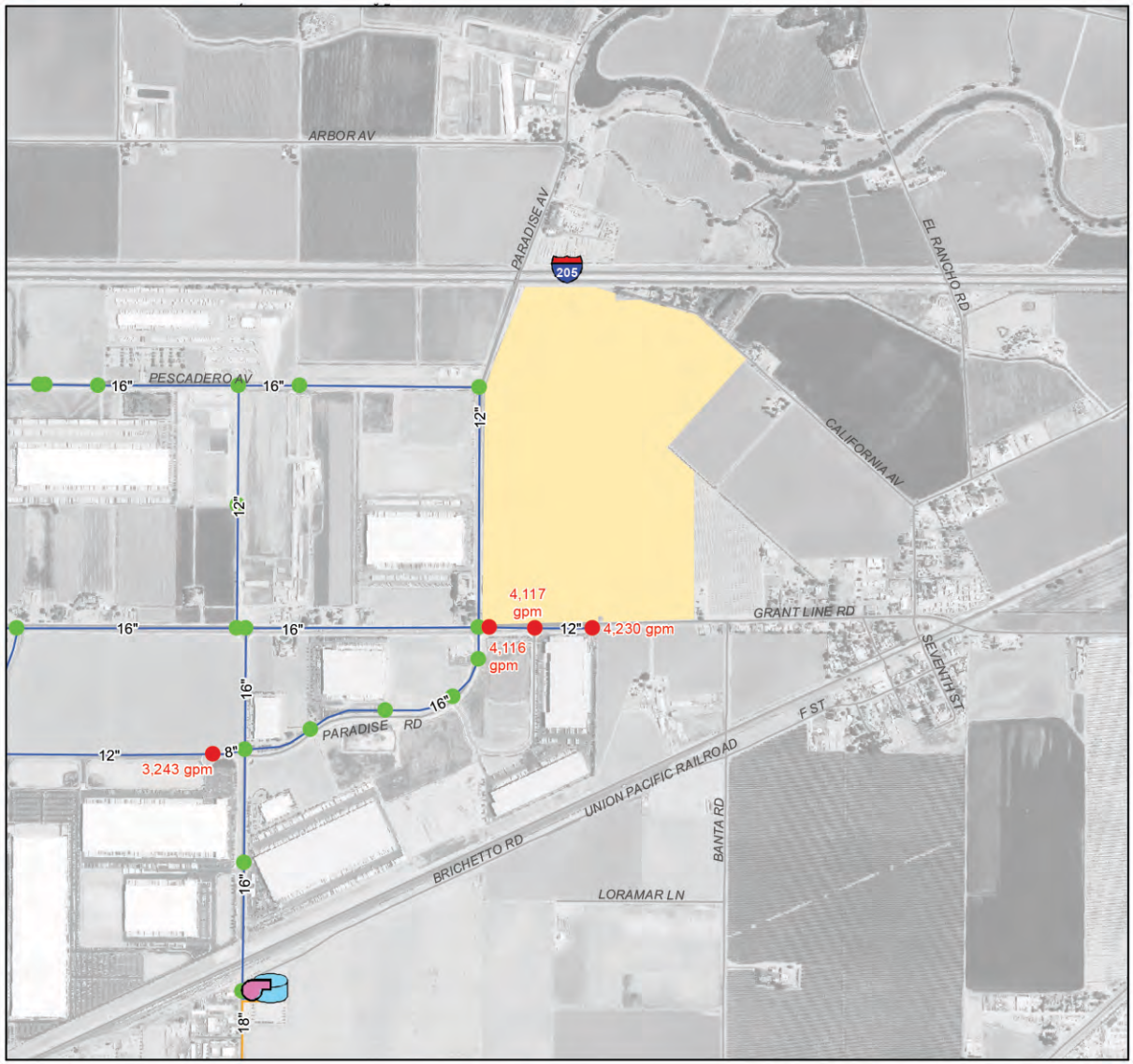

0 750 1,500
Scale in Feet

NEI Booster Pump Station

NEI Reservoir

Available Fire Flow

Does not meet Requirements

Meets Requirements

Pipeline Zone

Zone 1

SSJID

Tracy Alliance Project

Notes:
1. The available fire flow shown is the maximum flow available while maintaining 20 psi residual system pressure and limiting maximum pipeline velocities to 12 fps.
2. Fire flow requirements vary by land use type. Tracy Alliance Project and adjacent locations require 4,500 gpm.

Source: West Yost, November 18, 2020.

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Exhibit 3.16-4
Fire Flow Results

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CITY OF TRACY
TRACY ALLIANCE PROJECT
ENVIRONMENTAL IMPACT REPORT

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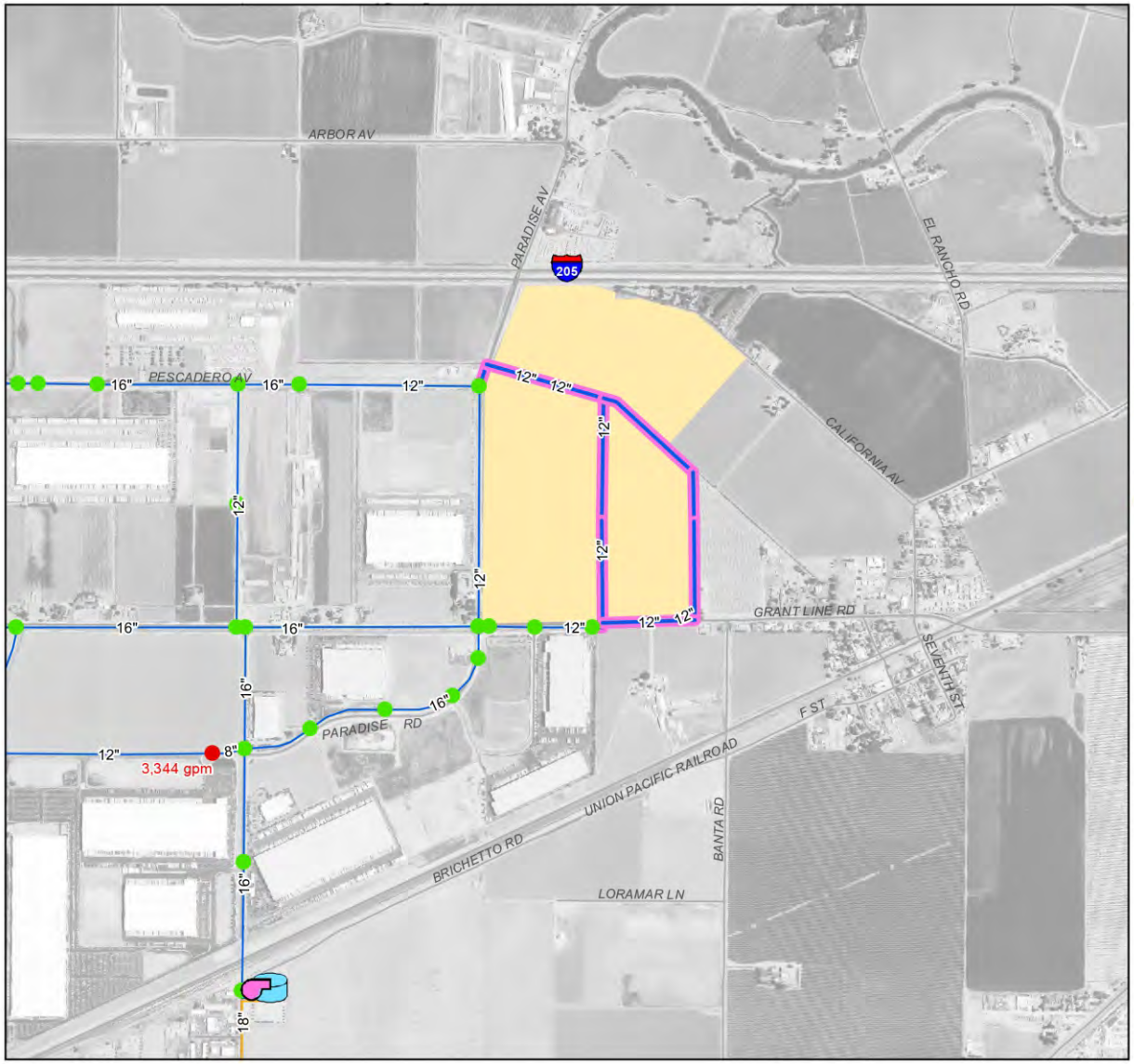

0 750 1,500
Scale in Feet

NEI Booster Pump Station
NEI Reservoir

Available Fire Flow
Does not meet Requirements
Meets Requirements

Pipeline Zone
Zone 1
SSJID

Recommended Improvements
New Pipeline
Tracy Alliance Project

Notes:
1. The available fire flow shown is the maximum flow available while maintaining 20 psi residual system pressure and limiting maximum pipeline velocities to 12 fps.
2. Fire flow requirements vary by land use type. Tracy Alliance Project and adjacent locations require 4,500 gpm.

Source: West Yost, November 18, 2020.

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Exhibit 3.16-5
Fire Flow Results with WSA Recommended Improvements

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3.17 - Wildfire

3.17.1 - Introduction

This section describes the existing wildfire conditions on the project site and vicinity as well as the relevant regulatory framework. This section also evaluates the potential impacts related to wildfire that could result from implementation of the proposed project. Information in this section is based, in part, on information provided by the City of Tracy 2035 General Plan (General Plan), California Air Resources Board (ARB), California Department of Forestry and Fire Protection (CAL FIRE), and the Tracy Fire Department. No public comments were received during the Notice of Preparation (NOP) scoping period related to wildfire.

3.17.2 - Environmental Setting

Wildfire Hazard Area Designations

City of Tracy

The City of Tracy contains mostly urban and suburban uses with relatively little open space or foothill areas susceptible to wildfire hazards. The southwestern most areas within the City's Sphere of Influence (SOI) contain some "Moderate" fire hazard zones. According to CAL FIRE, there are no Very High Fire Hazard Severity Zones in San Joaquin County, and therefore none in the City of Tracy.

Project Site

The project site is not located in a "Fire Hazard Severity Zone" in a State responsibility area or a "Very High Fire Hazard" zone in a local, State, or federal responsibility area.[1,2]

The closest mapped Fire Hazard Severity Zone is a Local Responsibility Area (LRA) Moderate Zone located approximately 3 miles northwest of the project site, at the outer city limits of the City of Lathrop. There is another LRA Moderate Zone located approximately 5 miles to the southwest of the project site just outside of the City of Tracy city limits.[3] The closest State Responsibility Area (SRA) is over 7 miles southwest of the project site.[4]

Wildfire Conducive Conditions

Grassland or other vegetation in California is easily ignited, particularly in dry seasons. Wildfire is a serious hazard in high dry fuel load areas, particularly near areas of natural vegetation and steep slopes since fires tend to burn more rapidly on steeper terrain. Wildfire is also a serious hazard in

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1 California Department of Forestry and Fire Protection (CAL FIRE). 2007. San Joaquin County: Draft Fire Hazard Severity Zones in LRA. Website: https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. Accessed April 9, 2020.

2 CA.gov. 2021. State Responsibility Area. Website: https://gis.data.ca.gov/datasets/5bc422648cf045f38d10e1630fb71a71_0?geometry=-122.077%2C37.605%2C-121.034%2C37.795. Accessed February 11, 2021.

3 California Department of Forestry and Fire Protection (CAL FIRE). 2007. San Joaquin County: Draft Fire Hazard Severity Zones in LRA. Website: https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. Accessed April 9, 2020.

4 CA.gov. 2021. State Responsibility Area. Website: https://gis.data.ca.gov/datasets/5bc422648cf045f38d10e1630fb71a71_0?geometry=-122.077%2C37.605%2C-121.034%2C37.795. Accessed February 11, 2021.

areas of high wind, given that fires will travel faster and farther geographically when winds are higher. Furthermore, wildfire is more likely in areas where electric power lines are located above ground where they may encounter vegetation or building materials.

City of Tracy

The City contains areas of highly flammable vegetation and typically has warm, dry summers that can contribute to wildfire conducive conditions. Areas at risk of wildfire impacts are the outlying residential land uses at the perimeter of the city limits and open land adjacent to these areas.[5]

Project Site

The project site is located adjacent to the northeastern most portion of the City of Tracy. The project site is relatively flat and low in elevation (approximately 15-30 feet above mean sea level) with a gentle topographic slope in the northeast direction.[6] The project site is primarily undeveloped but has been consistently managed as part of the agricultural operations, and thus contains minimal vegetation that is dry in summer and autumn months. The project site is currently occupied by a few existing residences and agricultural structures. In addition, there are streetlights and above-ground power and telecommunication lines in various locations surrounding the project site.

Emergency and Evacuation Routes/Access

City of Tracy

The City has established emergency preparedness procedures to respond to a variety of natural and man-made disasters. These procedures are outlined in the City of Tracy Emergency Plan. The Emergency Plan establishes the Standardized Emergency Management System (SEMS) required by State law, and includes information on mutual aid agreements, hierarchies of command, and different levels of response in emergency situations. The Emergency Plan also explains the functions of the Emergency Operations Center (EOC), which is a designated location for centralized management of coordinated emergency response. There are no specific evacuation routes identified in the Comprehensive Emergency Management Plan.[7]

Project Site

The most likely evacuation routes from the project site would be Interstate 205 (I-205) and Grant Line Road (in the east–west direction), and Paradise Road, I-5, and Tracy Boulevard (in the north–south direction).

Post-fire Slope Instability and Drainage Pattern Changes

Slope instability from wildfire scarring of the landscape can result in slope instability in the form of more intensive flooding and landslides. These post-fire slope soils and altered drainage patterns can more easily creep away downslope sides of foundations and reduce lateral support.

[5] Design, Community & Environment (DCE). 2005. City of Tracy General Plan EIR.
[6] Terracon Consultants, Inc. 2018. Phase I Environmental Site Assessment: Tracy Ridge. December 21.
[7] Design, Community & Environment (DCE). 2005. City of Tracy General Plan EIR.

City of Tracy

The City of Tracy does not contain existing unstable slopes that have been impacted by previous wildfires or post-fire drainage pattern changes.

Project Site

The project site has not been impacted from previous wildfire damage or post-fire drainage pattern changes. As described previously, the project site contains relatively level elevation and does not contain steep slopes.

3.17.3 - Regulatory Framework

Federal

United States Department of Interior

Review and Update of the 1995 Federal Wildland Fire Management Policy

1. Safety—Firefighter and public safety is the first priority. All Fire Management Plans and activities must reflect this commitment.
2. Fire Management and Ecosystem Sustainability—The full range of fire management activities will be used to help achieve ecosystem sustainability, including its interrelated ecological, economic, and social components.
3. Response to Wildland Fire—Fire, as a critical natural process, will be integrated into land and resource management plans and activities on a landscape scale, and across agency boundaries. Response to wildland fire is based on ecological, social, and legal consequences of the fire. The circumstances under which a fire occurs, and the likely consequences on firefighter and public safety and welfare, natural and cultural resources, and values to be protected dictate the appropriate management response to the fire.
4. Use of Wildland Fire—Wildland fire will be used to protect, maintain, and enhance resources and, as nearly as possible, be allowed to function in its natural ecological role. Use of fire will be based on approved Fire Management Plans and will follow specific prescriptions contained in operational plans.
5. Rehabilitation and Restoration—Rehabilitation and restoration efforts will be undertaken to protect and sustain ecosystems, public health, and safety, and to help communities protect infrastructure.
6. Protection Priorities—The protection of human life is the single, overriding priority. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources will be based on the values to be protected, human health and safety, and the costs of protection. Once people have been committed to an incident, these human resources become the highest value to be protected.
7. Wildland Urban Interface—The operational roles of federal agencies as partners in the wildland urban interface (WUI) are wildland firefighting, hazardous fuels reduction, cooperative prevention and education, and technical assistance. Structural fire suppression

is the responsibility of tribal, State, or local governments. Federal agencies may assist with exterior structural protection activities under formal Fire Protection Agreements that specify the mutual responsibilities of the partners, including funding. (Some federal agencies have full structural protection authority for their facilities on lands they administer, and may also enter into formal agreements to assist State and local governments with full structural protection).

8. Planning—Every area with burnable vegetation must have an approved Fire Management Plan. Fire Management Plans are strategic plans that define a program to manage wildland and prescribed fires based on the area's approved land management plan. Fire Management Plans must provide for firefighter and public safety; include fire management strategies, tactics, and alternatives; address values to be protected and public health issues; and be consistent with resource management objectives, activities of the area, and environmental laws and regulations.
9. Science—Fire Management Plans and programs will be based on a foundation of sound science. Research will support ongoing efforts to increase our scientific knowledge of biological, physical, and sociological factors. Information needed to support fire management will be developed through an integrated interagency fire science program. Scientific results must be made available to managers in a timely manner and must be used in the development of land management plans, Fire Management Plans, and implementation plans.
10. Preparedness—Agencies will ensure their capability to provide safe, cost-effective fire management programs in support of land and resource management plans through appropriate planning, staffing, training, equipment, and management oversight.
11. Suppression—Fires are suppressed at minimum cost, considering firefighter and public safety, benefits, and values to be protected, consistent with resource objectives.
12. Prevention—Agencies will work together and with their partners and other affected groups and individuals to prevent unauthorized ignition of wildland fires.
13. Standardization—Agencies will use compatible planning processes, funding mechanisms, training and qualification requirements, operational procedures, values to be protected methodologies, and public education programs for all fire management activities.
14. Interagency Cooperation and Coordination—Fire management planning, preparedness, prevention, suppression, fire use, restoration and rehabilitation, monitoring, research, and education will be conducted on an interagency basis with the involvement of cooperators and partners.
15. Communication and Education—Agencies will enhance knowledge and understanding of wildland fire management policies and practices through internal and external communication and education programs. These programs will be continuously improved through the timely and effective exchange of information among all affected agencies and organizations.

16. Agency Administrator and Employee Roles—Agency administrators will ensure that their employees are trained, certified, and made available to participate in the wildland fire program locally, regionally, and nationally as the situation demands. Employees with operational, administrative, or other skills will support the wildland fire program, as necessary. Agency administrators are responsible and will be held accountable for making employees available.
17. Evaluation—Agencies will develop and implement a systematic method of evaluation to determine effectiveness of projects through implementation of the 2001 Federal Fire Policy. The evaluation will assure accountability, facilitate resolution of areas of conflict, and identify resource shortages and agency priorities.

State Regulations

California Emergency Response Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Responding to a hazardous material incident is one part of this plan. The plan is administered by the California Governor's Office of Emergency Services, which coordinates the responses of other agencies. When San Joaquin County experiences an emergency, an EOC may be opened. In the event an EOC is opened, emergency response team members coordinate efforts and work with local fire and police agencies, emergency medical providers, the California Highway Patrol (CHP), CAL FIRE, California Department of Fish and Wildlife (CDFW), and the California Department of Transportation (Caltrans).

California Department of Forestry and Fire Protection Threat Potential Mapping

CAL FIRE has mapped fire threat potential throughout California. CAL FIRE maps fire threat based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The threat levels include no fire threat, moderate, high, and very high fire threat. Further, the maps designate San Joaquin County as the LRA for the project site. Additionally, CAL FIRE produced a 2010 Strategic Fire Plan for California, which contains goals, objectives, and policies to prepare for and mitigate the effects of fire on California's natural and built environments. The CAL FIRE Office of the State Fire Marshal provides oversight of enforcement of the California Fire Code as well as overseeing hazardous liquid pipeline safety.

California Building Code

The State of California provided a minimum standard for building design through the 2019 California Building Standards Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The 2019 CBC is based on the 2015 International Building Code, but has been modified for California conditions, and is considered the most stringent in the nation. It is generally adopted on a jurisdiction by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all new high-rise buildings and residential buildings; the establishment of fire resistance standards for fire doors, building material; and particular types of construction.

California Public Resources Code

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors[8] on construction equipment that use an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on-site for various types of work in fire prone areas.

These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code [PRC] § 4442).
- Appropriate fire suppression equipment would be maintained during the highest fire danger period—from April 1 to December 1 (PRC § 4428).
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain the appropriate fire suppression equipment (PRC § 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (PRC § 4431).

Local Regulations

City of Tracy

City of Tracy Local Hazard Mitigation Plan

The City of Tracy updated its Hazard Mitigation Plan (HMP) in September of 2019. The HMP identifies potential natural and human-made hazards, assesses their potential risks, and includes mitigation methods to reduce risks and determined the City is susceptible to floods, wildfires, severe weather, and earthquake hazards. The HMP includes 20 mitigation actions including emergency response and evaluation plans, public outreach, building safety and retrofitting, emergency preparedness coordination, education, facility upgrades, and monitoring actions. The HMP contains the following goals aimed at reducing the vulnerability from natural hazards within the City:

Goal 1 Minimize loss of life and property from hazards.

Goal 2 Support community resilience through continuity of essential services during a hazard event.

Goal 3 Increase education and awareness of vulnerability to and mitigation of hazards.

Goal 4 Improve City coordination and capabilities to mitigate hazards.

[8] A spark arrestor is any device that prevents the emission of flammable debris from a combustion source (i.e., fireplaces, internal combustion engines, and wood burning stoves).

City of Tracy General Plan

The City of Tracy General Plan Safety Element contains the following goals, objectives, and policies related to wildland fire hazards:

Goal SA-3–Protection of Lives and Property from Wildland Fire Hazards

Objective SA-3.1: Evaluate the potential for wildland fire hazards when considering new development.

Policies

Policy P1 All development in areas of potential wildland fire hazards shall include the following: clearance around structures, fire-resistant ground cover, and fire-resistant roofing materials.

Policy P2 Development in areas with steep terrain shall be restricted as necessary in order to ensure fire safety.

Policy P3 New development shall satisfy fire flow and hydrant requirements, street widths, and design requirements as established by the City.

City of Tracy Municipal Code

Chapter 11.08 Regulations For Underground Utilities

The City of Tracy Council may require installation of underground utilities when the public necessity, health, safety, or welfare requires such. The Council has the authority to declare a designated area an Underground Utility District and order removal of existing overhead utility facilities and underground installation.

3.17.4 - Impacts and Mitigation Measures

According to the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist, to determine whether wildfire impacts would be considered significant from implementation of the proposed project, the following questions are analyzed and evaluated. If located in or near state responsibility areas or lands classified as Very High Fire Hazard Severity Zones, would the proposed project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Approach to Analysis

The project site is not located in a "Fire Hazard Severity Zone," nor is it located in an SRA or a "Very High Fire Hazard" zone in a local, State, or federal responsibility area. The closest mapped Fire Hazard Severity Zone is an LRA Moderate Zone located approximately 3 miles northwest of the project site, at the outer city limits of the City of Lathrop. There is another LRA Moderate Zone located approximately 5 miles to the southwest of the project site just outside of the City of Tracy city limits. The closest SRA is over 7 miles southwest of the project site. The project site is not identified as a community at risk from wildfire by CAL FIRE's "Fire Risk Assessment Program." Communities at risk from wildfire are those places within 1.5 miles of areas of High or Very High wildfire threat as determined from California Department of Forestry-Fire and Resource Assessment Program (CDF-FRAP) fuels and hazard data.

The following analysis is based, in part, on information provided by the City of Tracy General Plan, the City of Tracy Local HMP, and CAL FIRE. The information obtained from these sources and other relevant materials was reviewed to evaluate the potential presence of wildfire risks on the project site and potential impacts related thereto.

Impact Evaluation

Emergency Response/Evacuation Plan Consistency

Impact WILD-1: The proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

Because the project site is not located in "Fire Hazard Severity Zone," nor is it located in an SRA or a "Very High Fire Hazard" in a local, State, or federal responsibility area, it does not meet the threshold for a potentially significant impact set forth in Section XX of Appendix G of the CEQA Guidelines. Nonetheless, to thoroughly consider the potential wildfire risks associated with the proposed development of the project site, and in the interest of public safety and full disclosure, the City has considered each of the risk categories set forth in Section XX.

Construction

During construction, it is expected that construction equipment and vehicles would access and leave the project site, which in turn could potentially impede evacuation or Emergency Vehicle Access (EVA). However, for the reasons set forth under Impact TRANS-4 in Section 3-14, Transportation, and Impact HAZ-6 in Section 3-9, Hazards and Hazardous Materials, construction of the proposed project would result in a less than significant impact related to EVA. In addition, the proposed project would be designed in compliance with applicable provisions of the HMP, ensuring efficient response to emergency incidents associated with emergencies affecting the City. The HMP does not include specific identified evacuation routes. However, main arterial roads that are in the vicinity and readily accessible, which could reasonably be assumed to serve as emergency evacuation routes in the project vicinity, would be Interstate 205 (I-205) in the east–west direction and I-5 in the north–south direction, as well as Paradise Road and Grant Line Road. Given there are several alternate main arterial roads that provide access to these evacuation routes, the proposed project's construction would not substantially impair these evacuation routes.

Operation

For the reasons set forth in Section 3.13, Public Services, Impact PUB-1 and Impact PUB-2, the proposed project would be adequately served by police and fire services, including respective evacuation and EVA. The proposed project would not create a permanent residential increase in population unaccounted for in the General Plan that could lead to overwhelming calls for emergency services. Additionally, given the nature of the proposed project, it is not expected that the proposed project would trigger the need for significant additional law enforcement, fire protection, or emergency services. In addition, the proposed project would be designed in accordance with the applicable City standards to accommodate EVA by providing more than two points of access to the project site that would be available to emergency vehicles. It would also be designed such that the street network and other project improvements would be consistent with all applicable Fire Code requirements and standards.

Blockage of an evacuation route would not occur during project operation because the proposed project would not result in permanent road closures along Paradise Road, Grant Line Road, or I-205, which are the most likely evacuation routes from the project site. As required by General Plan Policies SA-3-1, Policy 1, and SA-3-1, Policy 2, the proposed project would be required to include the mandated clearance around structures and would be required to incorporate fire-resistant building materials fire flow and hydrant requirements, and adequate street widths to ensure compliance with applicable General Plan safety goals, and with the applicable requirements of the San Joaquin County Emergency Operations Plan and relevant Fire Code provisions.

In conclusion, because the project site is not located in "Fire Hazard Severity Zone," nor is it located in an SRA or a "Very High Fire Hazard" in a local, State, or federal responsibility area, it does not meet the threshold for a potentially significant impact set forth in Section XX of Appendix G of the CEQA Guidelines. There would be no impact.

Level of Significance

No Impact

Expose Project Occupants to Pollutant Concentration from Wildfire

Impact WILD-2:	**Due to slope, prevailing winds, and other factors, the proposed project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.**

Because the project site is not located in "Fire Hazard Severity Zone," nor is it located in an SRA or a "Very High Fire Hazard" in a local, State, or federal responsibility area, it does not meet the threshold for a potentially significant impact set forth in Section XX of Appendix G of the CEQA Guidelines. Nonetheless, to thoroughly consider the potential wildfire risks associated with the proposed development of the project site, and in the interest of public safety and full disclosure, the City has considered each of the risk categories set forth in Section XX.

Construction

Impacts related to exposure of project occupants to pollutants concentrations from wildfire are limited to operational impacts. No respective construction impacts would occur.

Operation

The project site is located adjacent to the northeastern city limit. The area surrounding the project site is mostly agricultural land and light industrial warehouses. The unincorporated community of Banta lies southeast of the project site. As such, the project site is surrounded by urban development without steep terrain or unmanaged open space areas that would be prone to wildfires. The closest open space area, the Ohlone Regional Wilderness, is located approximately 7 miles southwest of the project site.

The ARB monitors air quality in the San Joaquin Valley at a number of stations. The closest station to the project site is located at the Tracy Airport, at 5749 South Tracy Boulevard, approximately 5.12 miles southwest of the project site. According to the ARB, the maximum wind speed ranged from approximately 6 to 33 miles per hour (mph) in 2020.[9] In addition, the project site has not previously experienced wildfire. Given that the project site does not experience consistent high winds and it is not located in or near an area of steep terrain or an area experiencing historical wildfire, the project site would not be prone to greater wildfire risk.

As described previously, neither the City nor the project site are in a Severe or Very High Fire Hazard Severity Zone as designated by CAL FIRE. The closest fire prone areas located in a designated fire hazard zone are the southwest areas of the City's SOI, over 7 miles southwest of the project site. For the reasons set forth in Section 3.13, Public Services, Impact PUB-1 and Impact PUB-2, the proposed project would be adequately served by fire protection and emergency services from the Tracy Fire Department. Furthermore, project structures would be required to comply with applicable provisions of the California Fire Code with regard to emergency access and use of building materials that would limit the spread of wildfire to the greatest extent feasible.

In conclusion, because the project site is not located in "Fire Hazard Severity Zone," nor is it located in an SRA or a "Very High Fire Hazard" in a local, State, or federal responsibility area, it does not meet the threshold for a potentially significant impact set forth in Section XX of Appendix G of the CEQA Guidelines. There would be no impact.

Level of Significance

No Impact

Infrastructure That Exacerbates Fire Risk

Impact WILD-3:	**The proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.**

Because the project site is not located in "Fire Hazard Severity Zone," nor is it located in an SRA or a "Very High Fire Hazard" in a local, State, or federal responsibility area, it does not meet the threshold for a potentially significant impact set forth in Section XX of Appendix G of the CEQA Guidelines. Nonetheless, to thoroughly consider the potential wildfire risks associated with the proposed

[9] California Air Resources Board (ARB). 2021. Quality Assurance Air Monitoring Site Information. Website https://ww3.arb.ca.gov/qaweb/site.php?s_arb_code=39271. Accessed: February 5, 2021.

development of the project site, and in the interest of public safety and full disclosure, the City has considered each of the risk categories set forth in Section XX.

Construction

Impacts related to installation or maintenance of infrastructure (such as roads, fuel breaks, emergency water sources, electrical power lines, or natural gas lines) that may exacerbate fire risk are limited to operational impacts. No respective construction impacts related to infrastructure that exacerbates fire risk would occur.

Operation

The proposed project would be served by eight points of vehicular access (the northerly access point along Paradise Road would be for EVA only):

- Grant Line Road: four access points to the project site.
- Paradise Road: four access points to the project site (the northerly access point along Paradise Road would be for EVA only).

Additionally, the project site is located in a primarily urbanized area surrounded by existing roadways. The proposed project would not require the installation of firebreaks, because it is in a generally urbanized area surrounded by existing development with little natural vegetation. The proposed project would not require emergency water sources, because potable water is currently provided by the City of Tracy, which has adequate water supplies available to serve the proposed project and future development during normal, dry, and multiple dry years as described in Section 3.16, Utilities and Service Systems, Impact UTIL-1. Certain existing overhead lines on the project site (as described more fully in application materials) as well as new electrical power and natural gas lines on and connecting to the project site would be installed below ground, minimizing potential ignition and related fire risk above ground, at the project site according to applicable provisions of the CBC and Tracy Municipal Code Chapter 11.08.

In conclusion, because the project site is not located in “Fire Hazard Severity Zone,” nor is it located in an SRA or a “Very High Fire Hazard” in a local, State, or federal responsibility area, it does not meet the threshold for a potentially significant impact set forth in Section XX of Appendix G of the CEQA Guidelines. There would be no impact.

Level of Significance

No Impact

Flooding and Landslide Hazards Due To Post-fire Slope Instability/Drainage Changes

Impact WILD-4: The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Because the project site is not located in “Fire Hazard Severity Zone,” nor is it located in an SRA or a “Very High Fire Hazard” in a local, State, or federal responsibility area, it does not meet the threshold for a potentially significant impact set forth in Section XX of Appendix G of the CEQA Guidelines. Nonetheless, to thoroughly consider the potential wildfire risks associated with the proposed

development of the project site, and in the interest of public safety and full disclosure, the City has considered each of the risk categories set forth in Section XX.

Construction

Impacts related to post-fire slope instability are limited to operational impacts. No respective construction impacts related to flooding and landslide hazards due to post-fire slope instability or drainage changes would occur.

Operation

The project site is not located on or near steep slopes susceptible to landslides or downstream flooding. As discussed previously, the project site has also not been affected by previous wildfires that could have resulted in drainage changes or loss of vegetation. Additionally, the project site is not located in or near fire prone areas, such as unmanaged open space, or a designated fire hazard zone. As a result, the proposed project would not expose people or structures to significant risks due to post-fire slope instability or drainage changes.

In conclusion, because the project site is not located in "Fire Hazard Severity Zone," nor is it located in an SRA or a "Very High Fire Hazard" in a local, State, or federal responsibility area, it does not meet the threshold for a potentially significant impact set forth in Section XX of Appendix G of the CEQA Guidelines. There would be no impact.

Level of Significance

No Impact

3.17.5 - Cumulative Impacts

The geographic scope of the cumulative wildfire analysis is the City of Tracy and southwestern portion of San Joaquin County. Because of the topography and existing development (including natural and man-made fire breaks), a fire event beyond this geographic scope is unlikely to affect the proposed project and any fires starting in the project site and vicinity would not likely significantly affect lands beyond this geographic scope. The cumulative setting includes the built development and the wildland areas in the southwestern portion of the County. The cumulative projects relevant to this analysis include those listed in Chapter 3, Project Description, Table 3-1. There are no "Fire Hazard Severity Zones" in an SRA or a "Very High Fire Hazard" zone in a local, State, or federal responsibility area located within the City, and none of the cumulative projects are located within these areas.[10,11]

A combination of federal, State, and local laws and regulations limit or minimize the potential for exposure to wildfires by reducing the amount of development in WUI areas, ensuring new development is developed according to the CBC, and incorporating requirements for fire-safe construction into land use planning. Development listed in Table 3-1 (See Chapter 3.0: Environmental

[10] California Department of Forestry and Fire Protection (CAL FIRE). 2007. San Joaquin County: Draft Fire Hazard Severity Zones in LRA. Website: https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. Accessed April 9, 2020.

[11] CA.gov. 2021. State Responsibility Area. Website: https://gis.data.ca.gov/datasets/5bc422648cf045f38d10e1630fb71a71_0?geometry=-122.077%2C37.605%2C-121.034%2C37.795. Accessed February 11, 2021.

Setting) consists predominantly of residential, commercial, and industrial developments, while roadway developments would be implemented by the City, County, and Caltrans separately.

There would be cumulative project construction (including the installation and/or maintenance of associated infrastructure such as roads, fuel breaks, emergency water sources, power lines or other utilities). As discussed in Section 3.9, Hazards and Hazardous Materials, the main arterial streets that would act as evacuation routes out of the City would be I-205 (east–west), I-205 (north–south), and the I-580 (east–west). As discussed in Section 3.13, Public Services, planned uses proposed by the cumulative projects would not significantly increase the need for emergency services and all development would be required to comply with emergency access requirements, which would be imposed as enforceable standard conditions of approval. Cumulative development would not result in permanent road closures, nor impede established emergency access routes or interfere with emergency response requirements. Accordingly, cumulative projects would not exacerbate wildfire risk. Thus, for these reasons and given that none of the cumulative projects are within high wildfire risk areas (as noted above), there would not be a significant cumulative impact related to wildfire hazards or emergency/evacuation response during construction or operation.

The proposed project would have no impact related to wildfire, it is therefore not expected to contribute to wildfire hazards or emergency/evacuation response.

Level of Significance

No Impact

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CHAPTER 4: EFFECTS FOUND NOT TO BE SIGNIFICANT

4.1 - Introduction

This chapter is based, in part, on the Tracy Alliance Project Draft Environmental Impact Report (Draft EIR) Notice of Preparation (NOP), dated August 28, 2020, and contained in Appendix A of this Draft EIR. The NOP was prepared to identify the potentially significant effects of the proposed project and was circulated for public review between August 28, 2020, and September 30, 2020. During the NOP scoping period, certain impacts were anticipated to be less than significant given the nature of the various project components and the project site. In preparing this Draft EIR, certain impacts have been determined to be less than significant in accordance with applicable provisions of the California Environmental Quality Act (CEQA) as detailed more fully herein and based on substantial evidence in the record.

This chapter provides a brief description of effects found not to be significant or less than significant, based on the NOP, NOP public comments received, as well as more detailed analysis conducted as part of the EIR preparation process. No NOP public comments were received during the NOP scoping period related to the following topics: Mineral Resources, Population and Housing, or Recreation. Further information and analysis is set forth below as to the basis for concluding that the foregoing environmental topic areas would not result in any significant impacts. In addition to these topic areas, there are certain impacts in other environmental topic areas that were found to be less than significant, which are addressed in various EIR topical sections (Sections 3.1 through 3.17), providing further discussion to support the conclusion of less than significant.

4.2 - Environmental Effects Found not to be Significant

4.2.1 - Mineral Resources

Loss of Mineral Resources of Statewide or Local Importance

There are no mineral resource recovery sites on or in the vicinity of the project site.[1] Therefore, implementation of the proposed project would not result in the loss of a locally important mineral resource recovery site delineated by an applicable land use plan. A Mineral Resource Zones and Resources Sectors map prepared by the California Geological Survey indicates that the project site is located outside of known mineral deposits of significance. Furthermore, given available information, the project site does not contain any known mineral resources. In addition, the project site is currently zoned for agricultural purposes, which does not include any mineral resource-related operations. As such, no known mineral resources would be impacted by the proposed project, and thus impacts in this regard would not be significant.

[1] California Department of Conservation. 2012. CGS Information Warehouse: Mineral Land Classification. Plate-2. Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/. Accessed April 20, 2020.

4.2.2 - Population and Housing

Growth Inducement

The proposed project's potential growth inducing impacts are discussed in Section 5, Other CEQA Considerations. As detailed more fully therein, growth inducing impacts consider whether a project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. For example, direct population growth would result if the proposed project were to include residential units. Because the proposed project is industrial in nature and would not develop single-family or multi-family residential uses, no direct population growth would be expected to occur because of the proposed project. In terms of the removal of any direct barriers to growth, this would not occur as a result of the proposed project because it would not remove any existing obstacles that currently prevent growth within the City. For example, the proposed project would not require expansion of existing water, wastewater and public facilities and services beyond what was already planned for in the General Plan and Northeast Industrial (NEI) Specific Plan. Furthermore, the utility infrastructure installed as part of the proposed project would be sized and located expressly to serve the proposed project and would not, therefore, induce growth in the project vicinity.

Indirect population growth occurs when a project creates substantial employment opportunities or provides new, upsized infrastructure that could lead to additional unplanned growth. Given the nature of the proposed project, it would likely be staffed primarily by local employees once operational, and the proposed project would help to support the City's jobs-to-housing ratio goal of 1.5, as established by the California Department of Housing and Community Development (HCD), by locating employment-generating uses in relatively close proximity thereby limiting extensive commute times. The City's current jobs-to-housing ratio is 1.3.[2,3,4]

Based on the light industrial nature of the proposed project, it is expected that approximately 1,871 employees would work on-site at full buildout.[5] The industrial uses on the project site were anticipated by the City in the General Plan, and thus, the City anticipated this number of employees needed for such a project. Therefore, the proposed project would not result in a significant, unplanned change to the population of the City, and impacts would be less than significant.

Displacement of Persons or Housing

The proposed project would require removal of one occupied residential structure. The project site would be redeveloped with multiple light industrial, warehouse and distribution uses totaling approximately 3,352,320 square feet at full buildout. Although the proposed project would demolish the existing residence and displace the existing occupant(s), given the nominal amount of displacement and the availability of existing and planned replacement housing to fill this nominal need, the proposed project would not necessitate construction of replacement housing elsewhere not already anticipated

[2] California Department of Finance. 2021. City/County Population and Housing Estimates, January 1, 2021.
[3] United States Census. "OnTheMap" Tool. Website: https://onthemap.ces.census.gov/. Accessed August 9,2021.
[4] There were 34,710 jobs and 26,964 dwelling units within the City limits in 2018. This represents a jobs-housing ratio of approximately 1.3, which indicated that there are more jobs than homes in the City.
[5] Conversation with Barbara Harb, Economic Development Analyst, City of Tracy-employment data collected by conversations with business owners for various industrial businesses, including warehousing, manufacturing, and employee-intensive warehousing, and existing building square footage data, averaged.

by the City. As such, impacts associated with the displacement of significant numbers of people or housing would be less than significant.

4.2.3 - Parks and Recreation

Physical Deterioration of Park and Recreational Facilities

The City maintains 15 shaded picnic areas and over 70 public parks available for City resident, visitor, and employee use.[6] The nearest public park to the project site is Glover Park, located approximately 1.4 miles to the west. As discussed above, the proposed project is anticipated to generate a total of approximately 1,871 employees at full buildout and it is reasonable to assume that some of these employees would utilize, at least to some degree, the City's available park and recreational facilities during the workday. However, given the nonresidential, industrial nature and location of the proposed project, it is likely that any such use would be limited and would not result in substantial physical deterioration of park and residential facilities occurring or being accelerated. Moreover, because the proposed project would not be expected to result in a significant increase to the population of the City (given the anticipated local nature of the workforce), the quantity of existing visitors and total facility usage would not likely increase significantly as a result of the proposed project. As such, the proposed project would not result in substantial physical deterioration of existing park and recreational facilities, and therefore impacts in this regard would be less than significant.

New or Expanded Recreational Facilities

According to the City's General Plan, the City aims to provide parks at a minimum of 4 acres per 1,000 residents.[7] According to the City of Tracy Master Plan, as of April 2013, the City has provided parks at a rate of 4.1 acres for every 1,000 residents, and continues to implement a successful strategy preserving and providing parks.[8]

Because the proposed project is not located within or adjacent to any designated natural or open space areas and would not likely increase the City's residential population, coupled with the limited likely employee usage of such facilities, the proposed project would not trigger the need to construct new or expanded park and recreational facilities to ensure that the applicable ratio of parks to residents would be maintained. As such, the proposed project's impacts in this regard would be less than significant.

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6 City of Tracy. 2020. Park Maps. Website: https://www.ci.tracy.ca.us/?navId=189. Accessed April 20, 2020.
7 City of Tracy. 2011. General Plan. Website: https://www.ci.tracy.ca.us/?navid=562. Accessed April 20, 2020.
8 City of Tracy. 2013. Parks Master Plan (New Developments). April. Website: https://www.ci.tracy.ca.us/documents/Final_Draft_Parks_Master_Plan.pdf, Accessed April 20, 2020.

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CHAPTER 5: OTHER CEQA CONSIDERATIONS

5.1 - Significant Unavoidable Impacts

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(a)(c) requires an Environmental Impact Report (EIR) to identify and focus on significant environmental effects of the project, including effects that cannot be avoided if the project were implemented.

Based on analysis contained in this Draft EIR, the City has determined that the proposed project would result in the following significant and unavoidable impacts:

- **Project-Level Conversion of Prime Farmland:** Although the proposed project is consistent with the site's General Plan designation and conversion of the project site to industrial use was envisioned as part of buildout under the General Plan, development consistent with the proposed project would result in the loss of agricultural land and would result in conversion of Prime Farmland to urban uses. The project applicant would be required to pay applicable Agricultural Mitigation Fees in connection with individual development proposals as implemented by Mitigation Measure (MM) AG-1. No other feasible mitigation is available to further reduce this impact. According, even with the payment of fees and adherence to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), the proposed project would result in significant and unavoidable impacts related to the conversion of Farmland as identified by Farmland Mapping and Monitoring Program (FMMP) mapping to non-agricultural use.
- **Cumulative Conversion of Prime Farmland:** Much of the Northeast Industrial (NEI) Specific Plan area consists of Prime Farmland that would be converted to non-agricultural uses with implementation of the relevant cumulative projects. Like the proposed project, any of the cumulative projects that would convert Prime Farmland to non-agricultural uses would pay the Agricultural Mitigation Fee. The development of the proposed project would result in the loss of approximately 188 acres of Prime Farmland, which would result in a project-level significant and unavoidable impact, would also result in a cumulative considerable contribution to the cumulative impact that would be significant and unavoidable.
- **Project-Level Impact Related to Implementation of the Applicable Air Quality Plan:** The proposed project is consistent with the site's General Plan designation which means the proposed industrial use was accounted for in the Air Quality Plan (AQP) land use projections. However, the proposed project could create a localized violation of State or federal air quality standards, significantly contribute to cumulative non-attainment pollutant violations, and expose sensitive receptors to substantial pollutant concentrations. The proposed project would be required to implement MM AIR-1 through MM AIR-4; however, because full implementation of this mitigation cannot be guaranteed due to potential technical and/or financial infeasibility, the proposed project's potentially significant impact is conservatively identified as significant and unavoidable. Therefore, the proposed project is inconsistent with Criterion 1 of the AQP even after the incorporation of mitigation. The impact would be significant and unavoidable.

- **Project-Level Impact Related to Cumulatively Considerable Net Increase of Reactive Organic Gases and Carbon Monoxide During Construction, and Reactive Organic Gases and Oxides of Nitrogen During Operation:** The construction schedule for the proposed project assumed that none of the three project phases may overlap. In this scenario, after the incorporation of MMs AIR-1a and AIR-1b, construction of the proposed project would not exceed the San Joaquin Valley Air Pollution Control District (Valley Air District) daily emission screening levels for an Ambient Air Quality Analysis (AAQA), pursuant to District Rule 2201. However, the potential remains for project phases to be constructed concurrently. If the three phases of construction occur concurrently, emissions of reactive organic gases (ROG) and carbon monoxide (CO) would exceed the Valley Air District's significance thresholds if all three project phases were constructed concurrently. As such, this impact would remain significant and unavoidable after implementation of identified mitigation.

  During operation, unmitigated emissions would exceed Valley Air District thresholds of significance for ROGs and nitrogen oxides (NO_X). Therefore, MM AIR-1c and MM AIR-1d would be required to mitigate operational emissions to below Valley Air District thresholds. However, the full implementation of MM AIR-1c and MM AIR-1d cannot be guaranteed during project operation; therefore, the reasonable worst-case operational emissions would exceed the Valley Air District's significance thresholds for ROG and NO_X and this impact would remain significant and unavoidable.

- **Project-Level Impact Related to Exposing Sensitive Receptors to Substantial Pollutant Concentrations:** During construction, if all three project phases were constructed concurrently, the proposed project would expose sensitive receptors to CO and diesel particulate matter (DPM) emissions that exceed applicable thresholds even with mitigation incorporated. During operation, the proposed project would expose sensitive receptors to ROGs, NO_X, and DPM levels that exceed applicable thresholds even after incorporation of identified mitigation, resulting in a significant and unavoidable impact.

- **Cumulative Air Quality Impact:** The proposed project would exceed the identified construction or operational significance thresholds; therefore, its emissions would also be cumulatively considerable.

- **Project-Level Vehicle Miles Traveled Impact:** The proposed project's Vehicle Miles Traveled (VMT) would result in a significant impact given that the location-based, service-estimated average one-way trip length for automobile trips generated by the proposed project is more than 20 miles, and the proposed project would be in excess of 15 percent below the nine-county Metropolitan Transportation Commission (MTC) average. The proposed project would be required to implement MM TRANS-1, which would require the applicant to prepare a project-specific Transportation Demand Management (TDM) Program in consultation with the City of Tracy to reduce project-generated VMT. However, even with incorporation of MM TRANS-1, which would partially reduce VMT impacts, the impact would remain significant and unavoidable.

- **Cumulative VMT Impact:** Cumulative projects would be required to comply with applicable State and local laws and regulations that seek to reduce VMT. If found to result in significant VMT impacts, each cumulative project would be required to implement site-specific TDM

measures that would reduce VMT and encourage alternative modes of transportation, such as transit, bicycle use, and walking. Cumulative projects would also be required to include facilities based on future transportation studies prepared for that project and pay into the City's VMT banking program once established. However, even with implementation of all available feasible mitigation, the cumulative VMT would still exceed City standards and would be significant and unavoidable. In addition, as described in Impact TRANS-1, the proposed project's impacts would be significant and unavoidable even with the implementation of mitigation. As such, the proposed project would have a cumulative considerable contribution to a cumulative impact and in conjunction with other projects, would have a significant and unavoidable impact with respect to VMT. The proposed project's contribution would be cumulatively considerable.

5.2 - Growth-inducing Impacts

There are two types of growth-inducing impacts that a project may have: direct and indirect. To assess the potential for the proposed project to result in growth-inducing impacts, this Draft EIR must evaluate project characteristics that may encourage and/or facilitate activities that individually or cumulatively may affect the environment (CEQA Guidelines § 15126.2(e)).

This analysis evaluates whether a project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Direct growth-inducing impacts occur when project development imposes new burdens on a community by directly inducing population growth or by leading to construction of additional developments in the same area. Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve, and could significantly affect the environment, either individually or cumulatively.

The proposed project would include the construction of light industrial, warehouse and distribution uses and related improvements and ancillary uses (e.g., office) that would be expected to employ a total of approximately 1,871 people at full buildout.[1] As described in Chapter 4, Effects Found not to be Significant, direct population growth would result if the proposed project were to include residential units. Because the proposed project is industrial in nature and would not develop single-family or multi-family residential uses, no direct population growth would be expected to occur. In terms of the removal of any direct barriers to growth, this would not occur as a result of the project because the proposed project would not remove any existing obstacles that currently prevent growth within the City. For example, the proposed project would not require expansion of existing water, wastewater and public facilities and services beyond what was already planned for in the

[1] Conversation between Victoria Lombardo, Senior Planner, and Barbara Harb, Economic Development Analyst, City of Tracy in May 2020. Employment data collected by conversations with business owners for various industrial businesses, including warehousing, manufacturing, and distribution, and existing building square footage data, averaged.

General Plan, NEI Specific Plan, and relevant City master infrastructure plans. The utility infrastructure installed as part of the proposed project would be sized and located expressly to serve the proposed project and would not, therefore, induce growth in the project vicinity.

Therefore, because the proposed project does not involve housing, nor would it remove any direct barriers to growth, the proposed project would not directly increase population.

Indirect population growth occurs when a project creates substantial employment opportunities or provides new, upsized infrastructure that could lead to additional unplanned growth. Once operational, the proposed project is expected to employ up to approximately 1,871 people on-site for daily operation. Given the nature of the proposed uses, it is anticipated that the employees would come primarily from the local job market and therefore would not likely trigger significant additional housing development to serve these employees, and the proposed project would help to support the City's jobs-to-housing ratio goal of 1.5 as established by the California Department of Housing and Community Development (HCD). The current ratio is 1.3.[2,3,4] Furthermore, the project site is within the City's existing Sphere of Influence (SOI), and has been designated by the General Plan for industrial uses and therefore, the City has anticipated this growth in employment opportunities that would result from the proposed project.

Infrastructure and services would be expanded to serve the proposed project, but would not require expansion of existing water, wastewater and other facilities and services beyond what was already planned for in the General Plan and relevant City master infrastructure plans, and thus would not encourage additional unplanned growth. For these reasons, implementation of the proposed project would not induce substantial indirect population growth within the City.

The proposed project would not result in direct or indirect growth, negatively alter the existing jobs/housing balance, or be inconsistent with the General Plan, the NEI Specific Plan, or relevant City master infrastructure plans; therefore, growth-inducing impacts would be less than significant.

5.3 - Significant Irreversible Environmental Changes

As mandated by CEQA Guidelines Section 15126.2(d), the Draft EIR must address significant irreversible environmental changes that would result from implementation of the proposed project. Primary impacts and particularly, secondary impacts (such as a highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Specifically, such an irreversible environmental change would occur if:

- The proposed project would involve a large commitment of nonrenewable resources, which makes removal or nonuse thereafter unlikely.
- Irreversible damage can result from environmental accidents associated with the proposed project.

[2] California Department of Finance. 2021. City/County Population and Housing Estimates.
[3] United States Census. "OnTheMap" Tool. Website: https://onthemap.ces.census.gov/. Accessed August 9,2021.
[4] There were 34,710 jobs and 26,964 dwelling units within the City limits in 2018. This represents a jobs-housing ratio of approximately 1.3, which indicated that there are more jobs than homes in the City.

- Any irretrievable commitments of resources are not justified (e.g., the proposed project results in the wasteful use of energy). (Refer to Section 3.6, Energy, which addresses this topic in accordance with CEQA Guidelines Appendix F).

The proposed project involves construction and operation of multiple light industrial, warehouse and distribution uses and related improvements and ancillary uses (e.g., office), which at buildout, would total approximately 3,352,320 square feet. As described more fully in Chapter 2, Project Description, three warehouse and distribution buildings and related improvements are proposed for the Tracy Alliance parcels, totaling approximately 1,849,500 square feet. With respect to the Suvik Farms and Zuriakat parcels, there are no current development proposals; therefore, for purposes of a conservative analysis, it is assumed that at buildout, these parcels would be developed with approximately 1,502,820 square feet. Other project components would include the construction of an approximately 12.44-acre stormwater detention basin with a pump station, as already envisioned in the current City of Tracy Citywide Storm Drainage Master Plan.[5] Existing trees and ornamentals associated with existing residential uses and all crops would be removed as part of the proposed project. The proposed project would be developed within the NEI Specific Plan area, which would help ensure the efficient, cohesive construction and operation of the proposed project near other similar, compatible uses.

Construction would include the use of building materials, such as petroleum-based products and metals, which cannot reasonably be recreated. Construction also would involve significant consumption of energy, consisting predominantly of petroleum-based fuels that deplete supplies of nonrenewable resources. Construction of structures, other improvements and infrastructure would also consume energy and water.

However, construction debris recycling practices would be expected to result in the recovery and reuse of building materials such as concrete, lumber, and steel; these practices would also limit disposal of these materials, some of which are non-renewable. Additionally, construction equipment would have to meet applicable Valley Air District standards as described in Section 3.3, Air Quality. Section 3.6, Energy, addresses energy consumption during construction and explains in more detail why impacts would be less than significant in this regard.

Once construction is complete, land uses associated with the proposed project would use some nonrenewable fuels to heat and light structures. New industrial uses would be required to adhere to the latest adopted edition of the California Green Building Standards Code (CALGreen), which includes a number of standards and features (viewed as some of the most stringent requirements in the country) that would reduce energy demand, water consumption, and wastewater and solid waste generation that would collectively conserve and reduce the demand for resources. This would result in reduced emissions and the generation of less pollution and effluent and lessen the severity of corresponding environmental effects. Although the proposed project would result in an irretrievable commitment of non-renewable resources and water for irrigation and plumbing, these would not be consumed inefficiently, unnecessarily, or wastefully.

[5] Stantec. 2012. City of Tracy Citywide Storm Drainage Master Plan. Figure 5-1a. November.

Furthermore, the proposed industrial uses do not have the potential to cause significant environmental accidents through releases into the environment, as they would not involve large quantities of hazardous materials (see Section 3.9, Hazards and Hazardous Materials). Future tenants/operators would be required to submit a Hazardous Materials Business Plan (HMBP) to San Joaquin Environmental Health for review and approval if the tenants/operators intend to store significant amounts of hazardous materials on-site. According to the California Department of Forestry and Fire Protection (CAL FIRE), there are no Very High Fire Hazard Severity Zones in San Joaquin County, and therefore none in the project site.[6] Because the project site has not previously experienced wildfire and is not located in or near an area of steep terrain or historical wildfire burn, nor does it experience consistent high winds, the project site would not be prone to wildfire risk (see Section 3.17, Wildfire). In addition, as discussed in Section 3.13, Public Services, existing fire protection facilities would be adequate to serve the project site, and the proposed project would not result in a significant impact related to need for new or altered fire protection facilities. Thus, implementation of the proposed project's industrial uses would not have the potential to result in significant environmental accidents related to wildfire hazards and would not result in significant irreversible environmental changes.

[6] California Department of Forestry and Fire Protection (CAL FIRE). Fire Hazard Severity Zone Viewer. Website: https://egis.fire.ca.gov/FHSZ/. Accessed April 9, 2020.

CHAPTER 6: ALTERNATIVES TO THE PROPOSED PROJECT

6.1 - Introduction

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this chapter contains a comparative impact assessment of a reasonable range of alternatives to the Tracy Alliance Project (proposed project). The primary purpose of an alternatives analysis under CEQA is to provide decision-makers, interested organizations and the public with a reasonable number of potentially feasible project alternatives that could attain most of the basic project objectives, while avoiding or reducing any of the project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below (as stated in CEQA Guidelines Section 15126.6). Analysis of three alternatives to the proposed project is provided for purposes of full disclosure and to allow decision-makers to consider the proposed project in light of hypothetical alternative development scenarios, thereby promoting CEQA's purpose as an information disclosure statute. This analysis is guided by the following considerations set forth under CEQA Guidelines Section 15126.6:

- An Environmental Impact Report (EIR) need not consider every conceivable alternative to a project.
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process.
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects.

6.2 - Significant Unavoidable Impacts

The proposed project was analyzed for potentially significant impacts related to each of the environmental issues discussed in Sections 3.1 through 3.18. The results of the analysis indicate that even with the implementation of feasible mitigation, the proposed project would result in the following significant and unavoidable impacts:

- **Project-Level Conversion of Prime Farmland:** Although the proposed project is consistent with the site's General Plan designation and conversion of the project site to industrial use was envisioned as part of buildout under the General Plan, development consistent with the proposed project would result in the loss of agricultural land and conversion of Prime Farmland to urban uses. The project applicants would each be required to pay applicable Agricultural Mitigation Fees in connection with their respective individual development proposals as implemented by Mitigation Measure (MM) AG-1. No other feasible mitigation is available to further reduce this impact. Accordingly, even with the payment of fees and adherence to the San Joaquin County Multi-Species Habitat Conservation and Open Space

Plan (SJMSCP), the proposed project would result in significant and unavoidable impacts related to the conversion of Farmland identified by Farmland Mapping and Monitoring Program (FMMP) mapping to nonagricultural use.

- **Cumulative Conversion of Prime Farmland:** Much of the Northeast Industrial (NEI) Specific Plan area consists of Prime Farmland that would be converted to nonagricultural uses with implementation of the relevant cumulative projects. Like the proposed project, any of the cumulative projects that would convert Prime Farmland to nonagricultural uses would be required to pay the Agricultural Mitigation Fee; however, the cumulative impact remains significant. The development of the proposed project would result in the loss of approximately 188 acres of Prime Farmland, which would result in a project-level significant and unavoidable impact that would also result in a cumulatively considerable contribution to the cumulative impact that would be significant and unavoidable.
- **Project-Level Impact Related to Implementation of the Applicable Air Quality Plan:** The proposed project is consistent with the site's General Plan designation which means the proposed industrial use was accounted for in the Air Quality Plan (AQP) land use projections. However, the proposed project could create a localized violation of State or federal air quality standards, significantly contribute to cumulative non-attainment pollutant violations, and expose sensitive receptors to substantial pollutant concentrations. The proposed project would be required to implement MM AIR-1 through MM AIR-4; however, because full implementation of the mitigation cannot be guaranteed due to potential technical and/or financial feasibility, the proposed project's potentially significant impact is conservatively identified as significant and unavoidable. Therefore, the proposed project is inconsistent with Criterion 1 of the AQP even after the incorporation of mitigation. The impact would be significant and unavoidable.
- **Project-Level Impact Related to Cumulatively Considerable Net Increase of reactive organic gases (ROG) and carbon monoxide (CO) During Construction, and ROG and oxides of nitrogen (NO_X) During Operation:** The construction schedule assumed for the proposed project assumed that none of the three project phases may overlap. In this scenario, after the incorporation of MMs AIR-1a and AIR-1b, construction of the proposed project would not exceed the San Joaquin Valley Air Pollution Control District (Valley Air District) daily emission screening levels for an Ambient Air Quality Analysis (AAQA), pursuant to District Rule 2201. However, the potential remains for project phases to be constructed concurrently. Therefore, for purposes of a conservative analysis, this Draft EIR considers both scenarios (i.e., sequential and concurrent phasing). If the three phases of construction occur concurrently, emissions of ROG and CO would exceed the Valley Air District's significance thresholds after implementation of identified mitigation. As such, this impact would remain significant and unavoidable after implementation of identified mitigation.

  During operation, unmitigated emissions would exceed Valley Air District thresholds of significance for ROGs and NO_X. Therefore, MMs AIR-1c and AIR-1d would be required to mitigate operational emissions to below Valley Air District thresholds. However, the full implementation of MM AIR-1c and MM AIR-1d cannot be guaranteed during project operation; therefore, the worst-case operational emissions would exceed the Valley Air

District's significance thresholds for ROG and NO_X and this impact would remain significant and unavoidable.

- **Project-Level Impact Related to Exposing Sensitive Receptors to Substantial Pollutant Concentrations:** During construction, the proposed project would expose sensitive receptors to CO and diesel particulate matter (DPM) emissions that exceed applicable thresholds even with mitigation incorporated if all three project phases were constructed concurrently. During operation, the proposed project would expose sensitive receptors to ROGs, NO_X, DPM levels that exceed applicable thresholds even after incorporation of identified mitigation resulting in a significant and unavoidable impact.
- **Cumulative Air Quality Impact:** The proposed project would exceed the identified construction or operational significance thresholds, its emissions would also be cumulatively considerable.
- **Project-Level Vehicle Miles Traveled (VMT) Impact:** The proposed project's VMT would result in a significant impact given that the location-based service-estimated average one-way trip length for automobile trips generated by the proposed project is more than 20 miles, and the proposed project would be in excess of 15 percent below the nine-county Metropolitan Transportation Commission (MTC) average. The proposed project would implement MM TRANS-1(a) and MM TRANS-1(b), which would require the applicant for each individual development proposal to prepare a project-specific Transportation Demand Management (TDM) Program with specified measures to reduce project-generated VMT. In addition, the applicant for each individual development proposal would need to pay the applicable VMT banking mitigation fee. However, even with incorporation of MM TRANS-1(a) and MM TRANS-1(b), which would partially reduce VMT impacts, the impact would remain significant and unavoidable.
- **Cumulative VMT Impact:** Cumulative projects would be required to comply with State and local laws and regulations. If found to result in signficant VMT impacts, the cumulative projects would be required to implement TDM measures that would reduce VMT and encourage alternative modes of transportation, such as transit, bicycle use, and walking. The specific types of transit, bicycle, and pedestrian facilities would depend on the proposed project and its location. Cumulative projects would also be required to include facilities based on future transportation studies prepared for that project and pay into the City's VMT banking program once established. However, even with implementation of all available feasible mitigaiton, the cumulative VMT would still exceed City standards and would be significant and unavoidable. In addition, as described in Impact TRANS-1, the proposed project's impacts would be signficant and unavoidable even with the implmentation of mitigation. As such, the proposed project, would have a cumulatively considerable contribution to a cumulative impact and in conjunction with other projects, would have a signficant and unavoidable impact with respect to VMT.

Potential significant impacts were identified with respect to Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Tribal

Cultural Resources, and Utilities and Service Systems; however, mitigation measures were identified that would reduce the impacts to less than significant.

6.3 - Alternative Eliminated from Further Consideration

An EIR must briefly describe the rationale for selection and rejection of alternatives. The lead agency may make an initial determination as to which alternatives are potentially feasible and, therefore, merit in-depth consideration, and which are clearly infeasible. "The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly" (CEQA Guidelines, § 15126.6(b)). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, need not be considered (CEQA Guidelines, § 15126.6(f)(3)).

This chapter identifies one alternative initially considered by the lead agency, but rejected as infeasible, and provides a brief explanation of the reasons for its exclusion. As noted above, this alternative was eliminated from detailed consideration in the Draft EIR since it fails to meet most of the project objectives, and is infeasible.

A maximum decreased intensity reduction was initially considered in an effort to reduce air quality impacts to less than significant levels. To result in less than significant air quality impacts, an extreme reduction in NO_X emissions during operation would be required, from a maximum 35.83 annual tons to a level below applicable threshold of maximum 10 annual tons, which would require a building square footage reduction of 72.9 percent. Given the substantial decrease in intensity, such an alternative would not be financially feasible, would not accomplish any of the project objectives, and is therefore rejected from further consideration.

Alternative locations were initially considered in order to locate a site that would not involve the conversion of 188 acres of Prime Farmland, however for reasons explained below was ultimately rejected. CEQA Guidelines Section 15126.6(f)(2) sets forth considerations to be used in evaluating an alternative location. The section states that the "key question" is whether any of the significant effects of the proposed project would be avoided or substantially lessened by relocating the proposed project.

The CEQA Guidelines identify the following factors that may be taken into account when addressing the feasibility of an alternative location:

1) Site suitability
2) Economic viability
3) Availability of infrastructure
4) General Plan consistency
5) Other plans or regulatory limitations
6) Jurisdictional boundaries
7) Whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site.

This alternative involves review of the potential to construct a development of similar size and scale as the proposed project at alternative locations, thereby lessening or avoiding site-specific impacts to Prime Farmland. Under this alternative, the proposed project would be located at another large, predominantly vacant property that could meet the proposed project's objective to provide a 167-acre industrial development. The primary constraint is that the applicant does not own, control, or otherwise have access to any other sites. Nonetheless, potential off-site alternative locations were screened for consideration based on size and zoning requirements. The City of Tracy is mostly urbanized so it is assumed that there would be availability of infrastructure should the proposed project occur elsewhere within the City. Potential sites within the City of appropriate size generally consisted of other agricultural parcels that are mostly designated as Prime Farmland located along the City's Sphere of Influence (SOI), which would result in similar impacts to agricultural resources as the proposed project and/or increased impacts to other topical areas and would not achieve the intended purpose of alternative site alterative. For example,, one appropriately-sized parcel is located adjacent to Bohn Elementary School and large tracts of residential development. This site was considered but rejected as an alternative location because it could potentially result in increased impacts to sensitive receptors, increased traffic congestion due to its proximity to residential areas and distance from transit hubs, as well as increased air quality impacts. This area is also designated as Prime Farmland and the proposed project would still have significant impacts related conversion of Prime Farmland. In addition, this area is designated as Urban Reserve in the General Plan for potential future residential development. Constructing the proposed project on this site would be inconsistent with the General Plan and would have potentially more significant population and housing and land use and planning impacts than the proposed project. There are no vacant parcels within the City that are not Prime Farmland, can accommodate the size of the proposed project, and are zoned for industrial uses (to be consistent with the General Plan). For these reasons, although alternative sites were considered an alternative location was therefore eliminated from further discussion in this Draft EIR, consistent with CEQA Guidelines Section 15126.6(c).

6.4 - Alternatives to the Proposed Project

Pursuant to CEQA Guidelines Section 15126.6, this Draft EIR presents a range of reasonable alternatives to the proposed project for analysis and evaluation of their comparative merits. These alternatives are considered to cover the range of development alternatives that would meet most of the basic objectives of the proposed project while lessening one or more of its significant impacts. CEQA Guidelines Section 15126.6(a) states that an EIR need not evaluate every conceivable alternative to a project. Information has been provided for each alternative that would allow meaningful comparison with the proposed project.

CEQA requires that an EIR analyze a "no project" alternative (CEQA Guidelines § 15126.6(e)). Where, as here, this alternative means a project would not proceed, the discussion "[sh]ould compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved" (CEQA Guidelines § 15126.6(e)(3)(B)). Another type of alternative to be considered includes consideration of what could reasonably be expected in the foreseeable future if the proposed project is not approved, based on current land use plans/designations/zoning and consistent with available infrastructure and community services.

The three alternatives to the proposed project analyzed in this chapter are as follows:

- **No Project (No Build) Alternative:** Under this alternative, development of the project site would not occur, and the project site would remain in its current existing condition.
- **Outside Storage Allowable Use Alternative.** The Outside Storage Allowable Use Alternative contemplates a reduction in building square footages, an increase in outside storage areas, and the preservation of 25 percent of the existing agricultural operations (approximately 48 acres). This alternative contemplates a combination of "Equipment Storage Yards," which is a Permitted Use under the NEI Specific Plan and/or "Building Materials Sales, Lumberyards (outside storage)," which is a Conditional Use permitted under the NEI Specific Plan. The project site would be developed in such a way to protect some of the on-site Prime Farmland by reducing the overall footprint of the developed areas. The outside storage uses would require less building coverage and the number of employees would be reduced as compared to the proposed project.
- **Agricultural Protection Alternative**: Under this alternative, the proposed project would be developed in such a way as to protect some of the on-site Prime Farmland by reducing the overall footprint of the developed areas and providing a buffer for existing residences along California Avenue. The northern half (approximately 11 acres) of the Zuriakat Parcel would not be converted to nonagricultural uses and could remain in agricultural production.

6.5 - Project Objectives

The purpose of the proposed project is to provide high-quality industrial warehousing to attract businesses to the City of Tracy and to provide local employment opportunities. As stated in Chapter 2, Project Description, the quantifiable objectives of the proposed project are to:

- Development of approximately 167 acres of industrial uses (buildings and parking areas and related improvements)**.**
- Development of approximately 12.44 acres of public facilities (detention basin).
- Reserve approximately 12.51 acres for future planned interchange at Paradise Road and Interstate 205 (I-205).
- Build a maximum of 3,352,320 square feet of employment-generating industrial uses.

Additional qualitative objectives for the proposed project are as follows:

- **Employment Opportunities:** Provide for local and regional employment opportunities that take advantage of the project site's high level of accessibility, allow for the expansion of the City's economic base, help improve the jobs/housing balance, and reduce the commute for regional residents.
- **Transportation**: Provide an efficient circulation system, including reserving land for a future planned interchange at Paradise Road and I-205 (construction of the interchange would not be completed as part of the proposed project).

- **Public Facilities and Services**: Provide infrastructure and services to serve the proposed project that meet applicable City standards and integrate with existing and planned facilities.
- **Phasing**: Establish a logical phasing plan designed to ensure that each phase of development would include necessary public improvements required to meet applicable City standards.

6.6 - Alternative 1—No-Project Alternative

CEQA Guidelines Section 15126.6(e) requires EIRs to evaluate a "No Project Alternative," which is defined as the "circumstance under which the project does not proceed."

Under the No Project Alternative, the 3,353,320 square feet of warehouse development, infrastructure improvements, I-205/Paradise Road/Chrisman Road interchange, and off-site roadway improvements would not be constructed on the project site and in its vicinity. In this scenario, the project site's existing agricultural uses, outbuildings, two existing single-family homes, and garage would remain; road improvements would not occur; reservation of land for the future interchange would not occur; trees and crops would not be removed or impacted; and grading would not take place. This alternative would not require a General Plan Amendment, rezoning, minor subdivision, or Final Development Plan.

6.6.1 - Impact Analysis

Aesthetics

Under the No Project Alternative, the existing row crops, two residences, associated landscaping, and nine agricultural outbuildings would not be converted and could remain on-site. The infrastructure improvements to utilities, the future interchange, and off-site roadway improvements would not occur. There would be no change in visual character, views, nighttime lighting, daytime glare, or shadow, as there would be no change to the existing on-site buildings, parking area, streets, utility lines, topography, or vegetation/landscaping, or conflict with zoning. Thus, there would be no aesthetics impacts under this alternative.

The project impacts related to aesthetics would be less than significant (See Section 3.1, Aesthetics). The No Project Alternative would have less impact compared to the proposed project, although under both this alternative and the proposed project, these impacts would be less than significant.

Agriculture and Forestry Resources

The No Project Alternative would not convert any Prime Farmland as identified by the FMMP to nonagricultural use, nor would it conflict with zoning or a Williamson Act contract.

The project impacts related to Agriculture would be significant and unavoidable (See Section 3.2, Agriculture and Forestry Resources). The proposed project would create no impacts with respect to forestry resources.

The No Project Alternative would avoid the significant and unavoidable impact on agricultural resources that would result from the proposed project.

Air Quality

Under the No Project Alternative, the project site would not be developed with 3,353,320 square feet of warehouse and distribution uses. There would be no ground disturbance within the project site and within the areas proposed for the off-site improvements; therefore, no impacts to air quality would occur under this alternative during construction and the significant and unavoidable impacts in this regard would be avoided. Similarly, the significant and unavoidable air quality impacts related to operations would not occur.

Biological Resources

Under the No Project Alternative, there would be no change related to wildlife or habitat on-site and the No Project Alternative would not have potential impacts to special-status wildlife species or jurisdictional wetlands. Thus, there would be no biological resources impacted under this alternative.

As proposed, the project impacts related to biological resources would be less than significant with mitigation (see Section 3.4, Biological Resources). The No Project Alternative would result in no impact to biological resources; however, this alternative would not meet the project objectives in terms of employment opportunities, transportation improvements, and infrastructure and services.

Cultural Resources

Under the No Project Alternative, there would be no change in historic or archaeological resources, as there would be no change to the existing on-site buildings and no ground disturbance. Thus, there would be no cultural resources impacts under this alternative.

The proposed project's impacts related to cultural resources would be less than significant with mitigation (see Section 3.5, Cultural Resources). The No Project Alternative would have no impact related to cultural resources. However, this alternative would not meet the project objectives in terms of employment opportunities, transportation improvements, and infrastructure and services.

Energy

Under the No Project Alternative, there would be no change related to energy consumption, as there would be no change to the existing land uses or daily vehicle trips. Thus, there would be no impact related to energy use under this alternative.

The proposed project's impacts related to energy use and conservation would be less than significant (see Section 3.6, Energy). The No Project Alternative would not construct the warehouse buildings or infrastructure improvements, and would therefore result in no impact related to energy consumption. However, this alternative would not meet the project objectives in terms of employment opportunities, transportation improvements, and infrastructure and services. It would also not meet the project objective of providing local jobs and reducing the commute for regional residents, which would reduce energy impacts resulting from the use of car fuels.

Geology and Soils

Under the No Project Alternative, there would be no impact related to potential exposure of persons and property to seismic- and soil-related hazards under this alternative, nor would there be potential paleontological impacts. There would be no impact with regard to geology and soils under the No Project Alternative.

The project impacts related to geology and soils would be less than significant with mitigation (see Section 3.7, Geology and Soils). The No Project Alternative would not have geology and soils impacts, as it would not construct warehouses in a seismically active area and on soil that is expansive, unstable, and susceptible to liquefaction and other seismic-related ground failure. It would also have no impact on paleontological resources. Therefore it would have less impacts compared to the proposed project. However, the No Project Alternative would not meet the project objectives in terms of employment opportunities, transportation improvements, and infrastructure and services. Furthermore, there are no project objectives related to geology and soils.

Greenhouse Gas Emissions

Under the No Project Alternative, there would be no change related to greenhouse gas (GHG) emission generation, as there would be no change to the existing land uses or daily vehicle trips. Thus, there would be no impact related to GHG emissions under this alternative.

The project impacts related to GHG emissions would be less than significant (see Section 3.8, Greenhouse Gas Emissions). The No Project Alternative would have no impact related to GHG emissions, as it would not create emissions from construction or operation of the warehouses. Therefore it would have less impacts compared to the proposed project. However, it would not meet any of the project objectives related to GHG emissions, because this alternative would not reduce commutes for regional residents by proving local employment opportunities.

Hazards and Hazardous Material

Under the No Project Alternative, there would be no demolition of the existing on-site buildings, and therefore no impacts related to potential exposure to lead-based paint or asbestos-containing materials (ACM) would occur from demolition activities.

The project impacts related to hazards and hazardous materials would be less than significant with mitigation (see Section 3.9, Hazards and Hazardous Materials). The No Project Alternative would have no impact related to hazards and hazardous materials. Therefore, it would have a lesser level of hazards and hazardous materials impact compared to the project. However, the No Project Alternative would not meet the project objectives in terms of employment opportunities, transportation improvements, and infrastructure and services.

Hydrology and Water Quality

Under the No Project Alternative, there would be no change related to hydrology, stormwater runoff and drainage, water quality, groundwater recharge and depletion, or flooding, as there would be no change to the existing on-site buildings, hardscape, or landscaping resulting in changes in impervious

vs. pervious surfaces on-site. The stormwater detention basin would eventually be constructed by the City as part of their Stormwater Master Plan. Thus, there would be no hydrology and water quality impacts or improvements under this alternative.

The project impacts related to hydrology and water quality would be less than significant with mitigation (see Section 3.10, Hydrology and Water Quality). The No Project Alternative would have no impacts related to hydrology and water quality. However, the No Project Alternative would not meet the project objectives in terms of infrastructure and services such as stormwater drainage improvements.

Land Use and Planning

Under the No Project Alternative, the project site would not be developed with 3,353,320 square feet of warehouse development, and the infrastructure improvements to utilities, the future interchange, and off-site roadway improvements would not occur. There would be no impact under this alternative.

This alternative would not be consistent with the objectives of the General Plan, which focuses on developing employment opportunities and expanding the City's industrial base. While the No Project Alternative would have no land use impacts, it would not be consistent these goals and policies outlined in the General Plan.

The project impacts related to land use and planning would be less than significant, and the project would meet many of the objectives of the General Plan (see Section 3.11, Land Use). In addition, this alternative would not meet the project objectives related to employment opportunities and industrial uses.

Noise

Under the No Project Alternative, there would be no change in groundborne vibration and noise sources (including from traffic-related noise), as there would be no changes to the existing land uses or daily vehicle trips. Noise and vibration levels in the project vicinity would remain the same as under existing conditions. Thus, there would be no noise impacts under this alternative.

The project would result in a less than significant impact with mitigation for temporary increase in ambient noise levels during construction and less than significant impacts for noise land use compatibility, groundborne vibration, and airport noise (see Section 3.12, Noise). Compared to the project, the No Project Alternative would have less projected noise impacts. However, this alternative would not meet any of the project objectives.

Public Services

Under the No Project Alternative, there would be no change related to fire, police, school, or library services, as there would be no change to the existing land uses on the project site. There would be no impact.

The project impacts to public services would be less than significant (see Section 3.13, Public Services). The No Project Alternative would have a lower level of public services impacts compared to the proposed project. However, the No Project Alternative would not meet the project objectives.

Transportation

Under the No Project Alternative, the project site would not be developed with 3,353,320 square feet of warehouse development, and the infrastructure improvements to utilities, the future interchange, and off-site roadway improvements would not occur. Therefore, there would be no impact. However, the positive benefits associated with these improvements would not be realized. Additionally, there would be no enhancements made to roadway safety hazards, emergency access, public transit, pedestrian facilities, and bicycle facilities under this alternative.

The project impacts to transportation and traffic would be significant and unavoidable with respect to an increase in VMT and less than significant with mitigation with respect to roadway safety hazards and emergency access (see Section 3.14, Transportation). The proposed project would implement mitigation, which would require the applicant to prepare a project-specific TDM Program in consultation with the City to reduce project-generated VMT. However, with incorporation of mitigation, impacts would be reduced to the extent feasible, but would remain significant and unavoidable at the project level and under cumulative conditions. The proposed project's impacts related to emergency access, roadway safety hazards, pedestrian facilities, and bicycle facilities would be reduced to less than significant levels with mitigation incorporated. The proposed project's impacts related to public transit would be less than significant without mitigation.

Under the No Project Alternative, no development would occur on the project site or within the areas proposed for off-site improvements, and no new land uses would be introduced. Therefore, no additional VMT would be generated, nor would there be any new demands for public transit, pedestrian facilities, and bicycle facilities under this alternative, and no mitigation would be required. As such, the No Project Alternative would result in reduced impacts related to VMT as compared to the proposed project. However, the No Project Alternative would not result in enhancements to roadway safety hazards, emergency access, public transit, pedestrian facilities, and bicycle facilities, which would occur with the implementation of the project. Furthermore, the No Project Alternative would not meet the project objectives related to reducing the commute for regional residents and providing an efficient circulation system by reserving land for a future interchange at Paradise Road and I-205.

Tribal Cultural Resources

Under the No Project Alternative, there would be no change in tribal cultural resources, as there would be no change to the existing on-site buildings and no ground disturbance. Thus, there would be no tribal cultural resources impacts under this alternative.

The project impacts related to tribal cultural resources would be less than significant with mitigation incorporated (see Section 3.15, Tribal Cultural Resources). The No Project Alternative would have a lower level of tribal cultural resources impact compared to the project, as it would not cause ground-

disturbing activities on the project site. However, this alternative would not meet any of the identified project objectives.

Utilities and Service Systems

Under the No Project Alternative, the infrastructure improvements to utilities, the future interchange, and off-site roadway improvements would not occur. There would be no change related to water supply and wastewater utilities and stormwater and solid waste collection service systems, as there would be no change to the existing on-site residential buildings and agricultural operations and associated utilities demand and infrastructure facilities. Thus, there would be no impact related to utility and service systems under this alternative.

The project impacts to utility and service systems would be less than significant with mitigation (see Section 3.16, Utility and Service Systems). The No Project Alternative would have a lower level of utility and service systems impact compared to the project; however, this alternative would not meet the project objectives.

Wildfire

Under the No Project Alternative, there would be no change to the project site with regard to wildfire susceptibility. Thus, there would be no impact related to wildfire under this alternative.

The proposed project would not have impacts related to wildfire(See Section 3.17, Wildfire). The proposed project is not located in a “Fire Hazard Severity Zone” nor is it located in an State Responsibility Area (SRA) or a “Very High Fire Hazard Severity Zone” in a local, State, or federal responsibility area. The No Project Alternative would not exacerbate existing wildfire conditions have a lower level of wildfire risk, as the existing residential uses and agricultural operations would remain on-site and not add additional facilities and associated employees, potentially exposing additional persons to wildfire risk. However, the No Project Alternative would not add enhancements to reduce roadway safety hazards or improve emergency access, which would reduce impacts associated with wildfires. Additionally, the No Project Alternative would not meet any of the objectives of the project.

Conclusion

The No Project Alternative would avoid the majority of the project’s impacts by leaving the site in its existing condition, thus avoiding impacts caused by the demolition of on-site buildings, construction of warehouse buildings, infrastructure and off-site improvements, and impacts caused by the operation of the proposed project. However, the No Project Alternative would not advance any of the overall project objectives.

6.7 - Alternative 2—Outside Storage Allowable Use Alternative

Under the Outside Storage Allowable Use Alternative, there would be a reduction in building square footages, an increase in outside storage areas, and the preservation of 25 percent of the existing agricultural operations (approximately 48 acres). This alternative contemplates a combination of “Equipment Storage Yards,” which is a Permitted Use under the NEI Specific Plan and/or “Building

Materials Sales, Lumberyards (outside storage)," which is a Conditional Use permitted under the NEI Specific Plan. The project site would be developed in such a way to protect some of the on-site Prime Farmland by reducing the overall footprint of the developed areas. The outside storage uses would require less building coverage, and the number of employees would be reduced as compared to the proposed project.

6.7.1 - Impact Analysis

Aesthetics

The project's impacts related to aesthetics would be less than significant (see Section 3.1, Aesthetics). The Outside Storage Allowable Use Alternative would consist of a reduction in building square footages and an increase in outside storage areas as compared to the proposed project. As compared to the proposed project, this alternative would result in fewer changes from the existing conditions. Additionally, this alternative would preserve 25 percent of the existing agricultural operations. However, the outside storage of building materials and/or equipment would introduce a new aesthetic impact. Nonetheless, the reduction of building square footage and preservation of some agricultural uses would reduce the project's aesthetic impacts as compared to the proposed project. Therefore, this alternative would result in reduced changes to visual character, views, nighttime lighting, daytime glare, and shadow because the building square footages would be reduced and there would be reduced changes to the existing agricultural operations. Thus, similar to the proposed project, there would be less than significant aesthetics impacts under this alternative. The Outside Storage Allowable Use Alternative would have less impacts compared to the proposed project, impacts would be considered less than significant.

Agriculture and Forestry Resources

The project's impacts related to agriculture would be significant and unavoidable due to the conversion of Farmland pursuant to the FMMP to nonagricultural use (See Section 3.2, Agriculture and Forestry Resources). The Outside Storage Allowable Use Alternative would consist of a reduction in building square footages and would preserve 25 percent (48 acres) of the existing agricultural operations on the project site. As compared to the proposed project, this alternative would result in fewer changes to the existing agricultural uses on the project site. This alternative would protect more of the on-site Prime Farmland and would maintain a buffer between the site existing residences. This alternative would not conflict with zoning or a Williamson Act contract. No forest land would be lost or converted. However, this alternative would still convert Prime Farmland into industrial uses. Thus, there would be significant and unavoidable agricultural impacts under this alternative.

Because it would preserve some Farmland, this alternative would be more consistent with the General Plan's goal to preserve and protect significant agricultural resources as compared to the proposed project. This alternative would only partially meet qualitative objectives related to employment opportunities, reducing the commute for regional residents, providing an improved circulation system, and providing public facilities and services, such as stormwater drainage improvements. Additionally, by reducing the size and purpose of the warehouse buildings, and re-purposing parking areas as storage yards, this alternative would not meet the project's quantitative

objectives for the amount of employment-generating industrial uses and would be less consistent with the General Plan objectives related to employment growth.

Air Quality

The project's impacts related to air quality would be significant and unavoidable for criteria pollutant and toxic air contaminant emissions generation (See Section 3.3, Air Quality). Under the Outside Storage Allowable Use Alternative, the square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. The new emissions generated by construction and operation of this alternative would be slightly lower than those produced by the proposed project because of the reduced square footage of the buildings, although overall impacts would remain significant and unavoidable.

This alternative would only partially meet qualitative objectives related to employment opportunities, reducing the commute for regional residents, providing an improved circulation system, and providing public facilities and services, such as stormwater drainage improvements. Additionally, by reducing the size and purpose of the warehouse buildings, and re-purposing parking areas as storage yards, this alternative would not meet the project's quantitative objectives for the amount of employment-generating industrial uses and would be less consistent with the General Plan objectives related to employment growth. As a result, this alternative would be less consistent with the objectives of the General Plan, which focuses on developing employment opportunities and expanding the City's industrial base.

Biological Resources

The project impacts related to biological resources would be less than significant with mitigation (see Section 3.4, Biological Resources). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. This would protect more of the on-site Prime Farmland and would maintain a buffer between the site and existing residences. The Outside Storage Allowable Use Alternative would reduce impacts to special-status bats or nesting birds because fewer habitats could be disturbed as a result of the reduced square footage of the buildings and preservation of more agricultural land. Overall, this Alternative would have slightly reduced impacts to biological resources than the proposed project, although the avoidance mitigation measures to prevent impacts to birds and bats would still be required under this alternative for the areas that would be developed. Therefore, impacts under this alternative would be less than significant with mitigation.

Cultural Resources

The project impacts related to cultural resources would be less than significant with mitigation (see Section 3.5, Cultural Resources). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. Because the Outside Storage Allowable Use Alternative would have a reduced building square footage compared to the proposed project, there could be less ground disturbance and fewer impacts on Cultural

Resources, although the outside storage areas would also have the potential for ground disturbance. Therefore, the mitigation measures to prevent impacts to cultural resources from ground disturbance would still be required under this alternative. Impacts under this alternative would be less than significant with mitigation.

Energy

The project's impacts related to energy would be less than significant (see Section 3.6, Energy). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in Agricultural production, and there would be an increase in outside storage areas. Under this Alternative, there would be a smaller change related to energy consumption during construction and operation, as the warehouse facilities would have a smaller square footage, and the additional outdoor storage would not contribute to a significant increase to energy impacts. Therefore, there would be a less than significant impact related to energy under this alternative.

Geology and Soils

The project impacts related to geology and soils would be less than significant with mitigation (see Section 3.7, Geology and Soils). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. However, because geological impacts such as seismic hazards are due to the project's location, this Alternative would still require mitigation (incorporation of geotechnical engineering report recommendations) to reduce geological impacts to less than significant. Additionally, this alternative would have a reduced impact on paleontological resources because the development footprint is smaller than the proposed project; however, because this alternative would disturb ground, MM GEO-6 would still be required during construction. Therefore, this alternative would be less than significant with mitigation. With the implementation of mitigation, the Outside Storage Allowable Use Alternative would have a similar level of impacts as the proposed project.

Greenhouse Gas Emissions

The project's impacts related to GHG emissions would be less than significant (see Section 3.8, Greenhouse Gases). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. Because this alternative would result in a reduced square footage of buildings, there would be smaller construction footprint and fewer operational vehicle trips, and the additional outdoor storage would not contribute to a significant increase to GHG impacts as compared to the proposed project. Thus, this Alternative would have a reduced impact on GHG emissions compared to the project. The level of impacts would be less than significant.

Hazards and Hazardous Material

The project impacts related to hazards and hazardous materials would be less than significant with mitigation (see Section 3.9, Hazards and Hazardous Materials). Under the Outside Storage Allowable

Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. Existing buildings would be demolished under this alternative, so the impacts related to potential exposure to lead-based paint or ACM would be the same as the proposed project, and mitigation measures would still be required. Thus, impacts would be less than significant with mitigation.

Hydrology and Water Quality

The project impacts related to hydrology and water quality would be less than significant with mitigation (see Section 3.10, Hydrology and Water Quality). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. Because of the reduced impervious hardscape due to preservation of approximately 48 acres of existing agricultural lands, impacts related to hydrology, stormwater runoff and drainage, water quality, groundwater recharge and depletion, or flooding would be reduced. Thus, there would be fewer hydrology and water quality impacts or improvements under this alternative. However, a Storm Water Pollution Prevention Plan (SWPPP) and Storm Water Management Plan would still be required pursuant to MM HYD-1 and MM HYD-2, and a drainage plan would be required pursuant to MM HYD-3. Therefore, impacts related to hydrology and water quality would be less than significant with mitigation.

Land Use and Planning

The project impacts related to land use and planning would be less than significant, and the project would meet many of the objectives of the General Plan (see Section 3.11, Land Use). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. This alternative would result in fewer employees. Therefore, as compared with the proposed project, this alternative would not be as consistent with the objectives of the General Plan, which focuses on developing employment opportunities and expanding the City's industrial base. Because of the reduced building square footage, the Outside Storage Allowable Use Alternative would generate fewer employment opportunities and would be less consistent with General Plan Goals and Policies that promote the development of employment opportunities and the expansion of the City's industrial base.

This alternative would only partially meet qualitative objectives related to employment opportunities, reducing the commute for regional residents, providing an improved circulation system, and providing public facilities and services, such as stormwater drainage improvements. Additionally, by reducing the size and purpose of the warehouse buildings, and re-purposing parking areas as storage yards, this alternative would not meet the proposed project's quantitative objectives for the amount of employment-generating industrial uses and would be less consistent with the General Plan objectives related to employment growth. Impacts related to land use and planning would be less than significant.

Noise

The project would result in a less than significant impact with mitigation for temporary increase in ambient noise levels during construction and less than significant impacts for noise land use compatibility, groundborne vibration, and airport noise (see Section 3.12, Noise). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. Under this alternative, there would be a smaller change in groundborne vibration and noise sources (including from traffic-related noise) during project operations as a result of the fewer number of employees, which would result in fewer daily vehicle trips when compared to the proposed project. Noise and vibration levels during the construction phase would likely be the same as the project. However, because this alternative would maintain a buffer between sensitive receptors because of the preservation of more agricultural lands, noise impacts on those sensitive receptors would be reduced. Overall, there would be reduced noise impacts under this alternative when compared with the proposed project. However, because the proposed project would generate noise and vibration, mitigation would still be required. Therefore, impacts would be less than significant with mitigation.

Public Services

The project impacts to public services would be less than significant (see Section 3.13, Public Services). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. Because this alternative would result in fewer employees, there would be a corresponding reduced impact related to fire, police, school, and library services, which would result in fewer demands for these services when compared to the proposed project. Impacts would be less than significant.

Transportation

The project would result in significant and unavoidable impacts related to VMT (see Section 3.14 Transportation). The proposed project would implement mitigation, which would require the applicant to prepare a project-specific TDM Program in consultation with the City to reduce project-generated VMT. However, with mitigation, impacts would be reduced to the extent feasible, but would remain significant and unavoidable at the project level and under cumulative conditions. The project's impacts related to roadway safety hazards, pedestrian facilities, and bicycle facilities would be reduced to less than significant levels with mitigation incorporated. The project's impacts related to emergency access and public transit would be less than significant and would not require mitigation.

Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas.

Similar to the proposed project, the Outside Storage Allowable Use Alternative would generate VMT. The significant and unavoidable VMT impact would be similar to the proposed project because the average one-way trip length for automobile trips generated by this alternative would be similar to

the trip length for the proposed project. Similar to the proposed project, this alternative would be required to implement mitigation to reduce VMT, including implementation of TDM strategies. Similar to the proposed project, impacts related to VMT would be reduced to the extent feasible with the incorporation of mitigation; however, impacts would remain significant and unavoidable at the project level and under cumulative conditions under this alternative.

Similar to the proposed project, this alternative would result in potential impacts related to emergency access, roadway safety hazards, pedestrian facilities, and bicycle facilities and would require similar mitigation to reduce impacts to less than significant. Similar to the proposed project, this alternative would result in less than significant impacts to public transit.

In conclusion, the Outside Storage Allowable Use Alternative would result in similar impacts related to transportation as compared to the project, and the VMT impacts would be significant and unavoidable, reduced to the extent feasible with mitigation. This alternative would only partially meet qualitative objectives related to employment opportunities, reducing the commute for regional residents, providing an improved circulation system, and providing public facilities and services, such as stormwater drainage improvements. Additionally, by reducing the size and purpose of the warehouse buildings, and re-purposing parking areas as storage yards, this alternative would not meet the project's quantitative objectives for the amount of employment-generating industrial uses and would be less consistent with the General Plan objectives related to employment growth.

Tribal Cultural Resources

The project's impacts related to tribal cultural resources would be less than significant with mitigation incorporated (see Section 3.15, Tribal Cultural Resources). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. The reduced square footage and increased preservation of agricultural lands would lead to reduced impacts on tribal cultural resources because less ground disturbance would occur. However, because ground disturbance would still occur under this alternative, mitigation would be required. There would be reduced tribal cultural resources impacts under this alternative. However, impacts would be less than significant with mitigation.

Utilities and Service Systems

The project's impacts related to utility and service systems would be less than significant with mitigation (see Section 3.16, Utility and Service Systems). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. Because of the reduced square footage of the buildings and fewer employees, there would be a correspondingly reduced demand for water supply, wastewater, and solid waste collection service systems. Thus, there would be a reduced impact related to utilities and service systems under this alternative. However, similar to the proposed project, this alternative would still require adherence to performance standards and payment of fees pursuant to MM UTIL-1a, submittal of Final Engineering Plans pursuant to MM UTIL-1b and MM UTIL-1c, and payment of wastewater

infrastructure fees pursuant to MM UTIL-3. Therefore, similar to the proposed project, impacts would be less than significant with mitigation.

Wildfire

There are no project impacts related to wildfire (See Section 3.17, Wildfire). Under the Outside Storage Allowable Use Alternative, the overall square footage of the buildings would be reduced, approximately 48 acres of land would remain in agricultural production, and there would be an increase in outside storage areas. The project is not located in a Fire Hazard Severity Zone nor is it located in an SRA or a Very High Fire Hazard Severity Zone in a local, State, or federal responsibility area. The Outside Storage Allowable Use Alternative also would not have wildfire risks.

6.7.2 - Conclusion

The Outside Storage Allowable Use Alternative would have a lower level of impacts for aesthetics, agriculture and forest resources, air quality, biological resources, cultural resources, energy, GHG emissions, hydrology and water quality, noise, public services, tribal cultural resources, utilities and service systems, and wildfire. Overall, the impacts would be reduced due to a smaller square footage of the buildings and the reduced number of employees. However, the project's mitigation measures would still be required under this alternative. Furthermore, this alternative would not meet quantitative objectives for the amount of employment-generating industrial uses and would therefore not meet the project objectives related to employment opportunities.

6.8 - Alternative 3—Agricultural Protection Alternative

Under the Agricultural Protection Alternative, the project site would be developed in such a way to protect some of the on-site Prime Farmland by reducing the overall footprint of the developed areas while maintaining a buffer between existing residences along California Avenue. The northern half (approximately 11 acres) of the Zuriakat Parcel would remain in agricultural production.

6.8.1 - Impact Analysis

Aesthetics

Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in agricultural production along California Avenue within the Zuriakat Parcel. This would protect some of the on-site Prime Farmland and maintain a buffer between the site and existing residences along California Avenue. There would still be changes in visual character, views, and nighttime lighting, because of the construction of warehouse buildings. However, the preservation of Agricultural production along California Avenue would create a visual buffer. Thus, there would be a less than significant impact.

Similarly, the project impacts related to aesthetics would be less than significant (see Section 3.1, Aesthetics). The Agricultural Protection Alternative would have a reduced level of aesthetics and light and glare compared to the project because the preserved agricultural production along California Avenue would create a visual buffer. The Agricultural Protection Alternative would have a less than significant impact.

Agriculture and Forestry Resources

The project impacts related to Agriculture would be significant and unavoidable (See Section 3.2, Agriculture and Forestry Resources). The project would create no impacts with respect to forestry resources.

Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in agricultural production along California Avenue within the Zuriakat Parcel. This would protect some of the on-site Prime Farmland and would also maintain a buffer between the site existing residences along California Avenue. While the Agricultural Protection Alternative would convert Farmland pursuant to the FMMP to nonagricultural use, some Prime Farmland would be preserved. This alternative would not conflict with zoning or a Williamson Act contract. No forest land would be lost or converted.

While the Agricultural Protection Alternative would preserve some Prime Farmland, it would still convert Prime Farmland into industrial uses, and therefore, impacts would also be significant and unavoidable. However, because it would preserve some Farmland, this alternative would be more consistent with the General Plan's goal to preserve and protect significant agricultural resources. This alternative would meet qualitative objectives related to employment opportunities, reducing the commute for regional residents, providing an efficient circulation system, and providing public facilities and services. However, because the alternative would result in the construction of a smaller facility, it would not meet quantitative objectives for the amount of employment-generating industrial uses. Thus, there would be significant and unavoidable agricultural impacts under this alternative.

Air Quality

The project impacts related to air quality would be significant and unavoidable for criteria pollutant and toxic air contaminant emissions generation (See Section 3.3, Air Quality). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in agricultural production along California Avenue, within the Zuriakat Parcel. The new emissions generated by construction and operation of this alternative would be slightly lower than those produced by the project because of the reduced size of the warehouse buildings, although overall impacts would remain significant and unavoidable.

This alternative would meet qualitative objectives related to employment opportunities, reducing the commute for regional residents, providing an efficient circulation system, and providing public facilities and services. However, because the alternative would result in the construction of a smaller facility, it would not meet the project's quantitative objectives for the amount of employment-generating industrial uses, and would be less consistent with the objectives of the General Plan, which focuses on developing employment opportunities and expanding the City's industrial base.

Biological Resources

The project impacts related to biological resources would be less than significant with mitigation (see Section 3.4, Biological Resources). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would

remain in Agricultural production along California Avenue within the Zuriakat Parcel. This would protect some of the on-site Prime Farmland and would maintain a buffer between the site and existing residences along California Avenue. The Agricultural Protection Alternative would reduce impacts to special-status bats or nesting birds because fewer habitats could be disturbed as a result of the reduced square footage of the proposed buildings and preservation of some agricultural land. Overall, this Alternative would have slightly reduced impacts to biological resources than the proposed project, although mitigation to prevent impacts to birds, kit fox, and bats would still be required under this alternative. Therefore, impacts under this alternative would be less than significant with mitigation.

Cultural Resources

The project impacts related to cultural resources would be less than significant with mitigation (see Section 3.5, Cultural Resources). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in agricultural production along California Avenue within the Zuriakat Parcel. Because the Agricultural Protection Alternative would have a reduced building square footage compared to the proposed project, there could be less ground disturbance and fewer impacts on Cultural Resources. However, because ground will be disturbed under this alternative, the mitigation measures to prevent impacts to cultural resources from ground disturbance would still be required under this alternative. Therefore, impacts under this alternative would be less than significant with mitigation.

Energy

The project impacts related to energy would be less than significant (see Section 3.6, Energy). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in agricultural production along California Avenue within the Zuriakat Parcel. Under this Alternative, there would be a smaller change related to energy consumption during construction and operation, as the warehouse facilities would be smaller. There would be a less than significant impact related to energy under this alternative.

Geology and Soils

The project impacts related to geology and soils would be less than significant with mitigation (see Section 3.7, Geology and Soils). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel. However, this Alternative would still require mitigation (incorporation of geotechnical engineering report recommendations) to reduce geological hazards impacts to less than significant. With the implementation of this mitigation measure, the Agricultural Protection Alternative would have a similar level of impacts as the proposed project.

This alternative would have a reduced impact on paleontological resources because the development footprint is smaller than the proposed project. However, because this alternative would disturb ground during construction, MM GEO-6 would be required. Therefore, impacts would be less than significant with mitigation.

Greenhouse Gas Emissions

The project impacts related to Greenhouse Gases would be less than significant (see Section 3.8, Greenhouse Gases). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel. Because this would be a smaller facility, GHG emission generation would be reduced as there would be smaller construction footprint and fewer operational vehicle trips. Thus, this Alternative would have a reduced impact on GHG emissions compared to the project. The level of impacts would be less than significant.

Hazards and Hazardous Material

The project impacts related to hazards and hazardous materials would be less than significant with mitigation (see Section 3.9, Hazards and Hazardous Materials). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel. All on-site buildings would be demolished under this alternative, so the impacts related to potential exposure to lead-based paint or ACM would be the same as the project, and mitigation would still be required under this alternative. Therefore, impacts would be less than significant with mitigation.

Hydrology and Water Quality

The project impacts related to hydrology and water quality would be less than significant with mitigation (see Section 3.10, Hydrology and Water Quality). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel. Because of the reduced development footprint and less impervious hardscape, impacts related to hydrology, stormwater runoff and drainage, water quality, groundwater recharge and depletion, or flooding would be reduced. Thus, there would be fewer hydrology and water quality impacts or improvements under this alternative. However, a SWPPP and Storm Water Management Plan would still be required pursuant to MM HYD-1 and MM HYD-2, and a drainage plan would be required pursuant to MM HYD-3. Therefore, impacts related to hydrology and water quality would be less than significant with mitigation.

Land Use and Planning

The project impacts related to land use and planning would be less than significant, and the project would meet many of the objectives of the General Plan (see Section 3.11, Land Use). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel. This alternative would not be as consistent as the proposed project with the objectives of the General Plan, which focus on developing employment opportunities and expanding the City's industrial base.

Because of the reduced size of the Agricultural Protection Alternative, it would generate fewer employment opportunities and would be less consistent with General Plan Goals and Policies that

promote the development of employment opportunities and the expansion of the City's industrial base. This alternative would meet qualitative objectives related to employment opportunities, reducing the commute for regional residents, providing an efficient circulation system, and providing public facilities and services, such as stormwater drainage improvements. However, because the alternative would result in the construction of a smaller facility, it would not meet the project's quantitative objectives for the amount of employment-generating industrial uses, and would be less consistent with the City's General Plan objectives related to employment growth and expanding the City's industrial base. Impacts related to land use and planning would be less than significant.

Noise

The project would result in a less than significant impact with mitigation for temporary increase in ambient noise levels during construction and less than significant impacts for noise land use compatibility, groundborne vibration, and airport noise (see Section 3.12, Noise). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel. Under the Agricultural Protection Alternative, there would be a smaller change in groundborne vibration and noise sources (including from traffic-related noise), as a result of the reduced project footprint and fewer number of employees would result in fewer daily vehicle trips when compared to the proposed project. Noise and vibration levels in the project vicinity would be reduced. Additionally, this alternative would maintain a buffer between sensitive receptors along California Avenue and the site, further reducing noise impacts on those sensitive receptors. Overall, there would be fewer noise impacts under this alternative when compared with the proposed project. However, because the proposed project would generate noise and vibration, mitigation would still be required. Therefore, impacts would be less than significant with mitigation.

Public Services

The project impacts to public services would be less than significant (see Section 3.13, Public Services). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel. There would be a corresponding reduced impact related to fire, police, school, or library services, as the smaller facility would result in fewer employees and, therefore, fewer demands for these services when compared to the proposed project. Impacts would be less than significant.

Transportation

The proposed project would result in significant and unavoidable impacts related to the project's effect on VMT (see Section 3.14 Transportation). The proposed project would implement mitigation, which would require the applicant to prepare a project-specific TDM Program in consultation with the City to reduce project-generated VMT. However, with incorporation of mitigation, impacts would be reduced to the extent feasible, but would remain significant and unavoidable at the project level and under cumulative conditions. The proposed project's impacts related to roadway safety hazards, pedestrian facilities, and bicycle facilities would be reduced to less than significant levels with

mitigation incorporated. The proposed project's impacts related to emergency access and public transit would be less than significant without mitigation.

Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel.

Similar to the proposed project, the Agricultural Protection Alternative would generate additional VMT. The significant and unavoidable VMT impact would be similar to the proposed project because the average one-way trip length for automobile trips generated by the Agricultural Protection Alternative would be similar to the trip length for the proposed project. Similar to the proposed project, this alternative would be required to implement mitigation to reduce VMT, including implementation of TDM strategies. Similar to the proposed project, impacts related to VMT would be reduced to the extent feasible with the incorporation of mitigation; but impacts would remain significant and unavoidable at the project level and under cumulative conditions under this alternative.

Similar to the proposed project, the Agricultural Protection Alternative would result in potential impacts related to emergency access, roadway safety hazards, pedestrian facilities, and bicycle facilities and would require similar mitigation to reduce impacts to less than significant. The Agricultural Protection Alternative would result in less than significant impacts to public transit without mitigation.

In conclusion, the Agricultural Protection Alternative would result in similar impacts related to transportation as compared to the proposed project, and the VMT impact would be significant and unavoidable, reduced to the extent feasible with mitigation. This alternative would meet qualitative objectives related to employment opportunities, reducing the commute for regional residents, providing an efficient circulation system, and providing public facilities and services, such as stormwater drainage improvements. However, because the alternative would result in the construction of a smaller facility, it would not meet quantitative objectives for the amount of employment-generating industrial uses.

Tribal Cultural Resources

The project impacts related to tribal cultural resources would be less than significant with mitigation incorporated (see Section 3.15, Tribal Cultural Resources). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel. The reduced development footprint would lead to reduced impacts on tribal cultural resources because less ground disturbance would occur. However, because ground disturbance would still occur under this alternative, mitigation would be required. Thus, there would be reduced tribal cultural resources impacts under this alternative. Impacts would be less than significant with mitigation.

Utilities and Service Systems

The project impacts to utility and service systems would be less than significant with mitigation (see Section 3.16, Utility and Service Systems). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel. Because of the reduced development footprint, there would be a correspondingly reduced change related to water supply, wastewater, and solid waste collection service systems because there would less demand for these utilities. Thus, there would be a reduced impact related to utility and service systems under this alternative. However, this alternative would still require adherence to performance standards and payment of fees pursuant to MM UTIL-1a, submittal of Final Engineering Plans pursuant to MM UTIL-1b and MM UTIL-1c, and payment of wastewater infrastructure fees pursuant to MM UTIL-3. Therefore, impacts would be less than significant with mitigation.

Wildfire

The proposed project would have no impacts related to wildfire (See Section 3.17, Wildfire). Under the Agricultural Protection Alternative, the overall footprint of the developed areas would be reduced and approximately 11 acres of land would remain in Agricultural production along California Avenue within the Zuriakat Parcel.

The project is not located in a “Fire Hazard Severity Zone” nor is it located in an SRA or a “Very High Fire Hazard Severity Zone” in a local, State, or federal responsibility area. Therefore, there would be no impacts related to wildfire.

6.8.2 - Conclusion

The Agricultural Protection Alternative would reduce to a certain extent those impacts related to ground disturbance by reducing the overall footprint of developed areas, preserving some of the site’s Prime Farmland. Additionally, wildfire impacts would be reduced under this alternative. However, while it would result in some degree of reduction, it would not eliminate the significant and unavoidable impact with respect to agricultural resources, nor any of the other significant and unavoidable impacts. Furthermore, the mitigation measures would still be required. This alternative would meet certain qualitative objectives related to employment opportunities, reducing the commute for regional residents, providing an efficient circulation system, and providing public facilities and services, such as stormwater drainage improvements but not to the degree of the proposed project. However, by reducing the size of the warehouse and distribution buildings, this alternative would not meet most of the project’s quantitative objectives for the amount of employment-generating industrial uses, and would be less consistent with the City’s General Plan objectives related to employment growth and expanding the City’s industrial base.

6.9 - Environmentally Superior Alternative

The qualitative environmental effects of each alternative in relation to the proposed project are summarized in Table 6-1 below. As shown in Table 6-1, the No Project Alternative is the environmentally superior alternative, as future development within the planning area under the current General Plan and Zoning would result in fewer and less severe impacts.

CEQA Guidelines Section 15126(e)(2) requires identification of an environmentally superior alternative. If the No Project Alternative is environmentally superior, CEQA requires selection of the "environmentally superior alternative other than the No Project Alternative" from among the proposed project and the alternatives evaluated.

Of the two remaining alternatives, the Outside Storage Allowable Use Alternative (Alternative 2) has the potential to yield the greatest reductions in the severity of the proposed significant and unavoidable impacts because it would preserve approximately 48 acres of the existing agricultural operations including Prime Farmland. However, this alternative would not achieve the project objective of developing a maximum of 3,352,210 square feet of employment-generating industrial uses. It also would not be as effective at achieving the employment-generating opportunity objective as it would not provide as many local and regional employment opportunities take advantage of the proposed project area's high level of accessibility, allow for the expansion of the City's economic base, help improve the jobs/housing balance, and reduce the commute for regional residents.

Table 6-1: Summary of Alternatives' Impacts

Impact	Proposed Project	Alternative 1—No Project Alternative	Alternative 2—Alternate Building Layout of the Tracy Alliance Parcel Alternative	Alternative 3–Agricultural Protection Alternative
Aesthetics	LTS	Less Impact, LTS	Less Impact, LTS	Less Impact, LTS
Agriculture and Forestry Resources	SU	Less Impact, SU	Less Impact, SU	Less Impact, SU
Air Quality	SU	Less Impact, SU	Less Impact, SU	Less Impact, SU
Biological Resources	LTSM	Less Impact, LTSM	Less Impact, LTSM	Less Impact, LTSM
Cultural Resources	LTSM	Less Impact, LTSM	Less Impact, LTSM	Less Impact, LTSM
Energy	LTS	Less Impact, LTS	Less Impact, LTS	Less Impact, LTS
Geology and Soils	LTSM	Less Impact, LTSM	Similar Impact, LTSM	Similar Impact, LTSM
Greenhouse Gas Emissions	LTS	Less Impact, LTS	Less Impact, LTS	Less Impact, LTS
Hazards and Hazardous Materials	LTSM	Less Impact, LTSM	Similar Impact, LTSM	Similar Impact, LTSM
Hydrology and Water Quality	LTSM	Less Impact, LTSM	Less Impact, LTSM	Less Impact, LTSM
Land Use and Planning	LTS	Less Impact, LTS	Similar Impact, LTS	Similar Impact, LTS
Noise	LTSM	Less Impact, LTSM	Less Impact, LTSM	Less Impact, LTSM
Public Services	LTS	Less Impact, LTS	Less Impact, LTS	Less Impact, LTS
Transportation	SU	Less Impact, SU	Similar Impact, SU	Similar Impact, SU
Tribal Cultural Resources	LTSM	Less Impact, LTSM	Less Impact, LTSM	Less Impact, LTSM
Utilities and Service Systems	LTSM	Less Impact, LTSM	Less Impact, LTSM	Less Impact, LTSM
Wildfire	NI	Less Impact, NI	Similar Impact, NI	Similar Impact, NI

Impact	Proposed Project	Alternative 1— No Project Alternative	Alternative 2— Alternate Building Layout of the Tracy Alliance Parcel Alternative	Alternative 3– Agricultural Protection Alternative
Notes: NI = No Impact. LTS = Less Than Significant Impact. LTSM = Less Than Significant Impact With Mitigation incorporated. SU = Significant and Unavoidable Impact. Source: Compiled by FirstCarbon Solutions (FCS) 2022.				

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SECTION 7: PERSONS AND ORGANIZATIONS CONSULTED/LIST OF PREPARERS

7.1 - Persons and Organizations Consulted

7.1.1 - CEQA Lead Agency

City of Tracy

Planning Department

Assistant Development Services Director..... William Dean
Senior Planner..... Victoria Lombardo

Engineering Department

City Engineer.....Robert Armijo, PE
Traffic Engineer ..... Anju Pillai, PE

Fire Department

Fire Marshal ..... Chief Tim Spears
Executive Assistant..... Jackie Heefner

7.1.2 - Other Agency Support

State Agencies

California Department of Toxic Substances Control

Project Manager..... Gavin McCreary

Native American Heritage Commission

Cultural Resources Analyst ..... Nancy Gonzalez-Lopez

California Department of Conservation

Conservation Program Support Supervisor .....Monique Wilber

Local Agencies

Central Valley Regional Water Quality Control Board

Water Resource Control Engineer.....Nicholas White

San Joaquin Council of Governments

Associate Habitat Planner.....Laurel Boyd

San Joaquin Valley Air Pollution Control District

Air Quality Specialist..... Michael Corder

Delta Stewardship Council

Deputy Executive Officer .....Jeff Henderson

7.2 - Project Sponsor and Sponsor Consultants

7.2.1 - Tracy Alliance Group, Suvik Farms, LLC, and Zuriakat

Vice President ..... Trevor Smith
Chief Executive Officer..... Mike Souza

7.2.2 - Terracon (Geotechnical Investigation, Phase I Environmental Site Assessment, Limited Site Investigation)

Principal ..... Garret Hubbart
Senior Associate .....Patrick Craig Dell
Senior Geologist ..... Brian Carey, PG
Environmental Department Manager ..... Sam Noaman
Field Environmental Specialist .....Tamara Woods
Senior Geologist .....Tony Mikacich
Professional Geologist .....Scott Gable, PG

7.3 - City of Tracy Consultants

7.3.1 - FirstCarbon Solutions (Environmental Impact Report)

Project Director ..... Mary Bean
Project Manager ..... Tsui Li, MURP
Senior Reviewer .....Liza Baskir
Senior Cultural Resources Specialist.....Dana DePietro, PhD, RPA
Senior Noise Specialist..... Phil Ault, MS, LEED AP
Air Quality Specialist..... Lance Park
Senior Biologist..... Bernhard Warzecha, MS
Biologist ..... Robert Carroll
Biologist ..... Alec Villanueva
Environmental Analyst..... Spencer Pignotti
Environmental Analyst.....Kevin Bolland
Senior Editor.....Susie Harris
Word Processor .....Melissa Ramirez
Senior Graphic Designer ..... Yiu Kam
Graphics ..... Karlee McCracken

7.3.2 - FirstCarbon Solutions Subconsultants

Kenneth L. Finger PhD (Paleontological Records Search)

Consulting Paleontologist .....Kenneth L. Finger PhD

Kimley-Horn (Transportation Impact Assessment)

Civil Engineer, Vice President.....Frederik Venter, PE
Planner, Associate .....Michael Schmitt. AICP
Civil Analyst..... Colin Ogilvie, EIT
Civil Analyst.....Anthony Nuti, EIT

EAS (Phase I Environmental Site Assessment)

CEO/President..... Gavin Leaver
Project Supervisor ..... Jess Randle

7.3.3 - Wood Rodgers (Flood Protection Technical Memorandum)

Associate.....Harvey Oslick, PE, CFM, CPSWQ, EnvSP

7.3.4 - West Yost Associates (Water Supply Assessment)

Project Manager..... Amy Kwong, PE
Project Manager.....Elizabeth Drayer, PE

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City of Tracy, California
Notice of Preparation and Notice of Public Scoping Meeting
Tracy Alliance Project

Date:	August 28, 2020
To:	Public Agencies and Interested Parties
From:	Bill Dean, Assistant Development Services Director Victoria Lombardo, Senior Planner
Subject:	**Notice of Preparation of an Environmental Impact Report and Public Scoping Meeting for the Tracy Alliance Project**

The City of Tracy (City) is the Lead Agency and will prepare a Draft Environmental Impact Report (Draft EIR) for the Tracy Alliance Project (proposed project) identified herein.

The City is soliciting comments from public agencies, organizations, and members of the public regarding the scope and content of the Draft EIR, and environmental issues and alternatives to the proposed project to be addressed in the Draft EIR. The City requests that interested parties provide comments on the proposed project's scope and the content of descriptions of significant environmental issues, reasonable alternatives, and mitigation measures to be explored in the Draft EIR. Public agencies may need to use the EIR when considering permitting or other approvals that are relevant to the agencies' statutory responsibilities in connection with the proposed project.

Because of time limits mandated by State law, public agencies must submit any comments in response to this notice at the earliest possible date, but not later than 30 days after receipt of this notice. The City of Tracy will also accept comments from other interested parties regarding this notice during this period.

Public agencies providing comments are requested to include a contact person for the respective agency. Please send written responses to Victoria Lombardo at the address shown below by September 30, 2020.

Victoria Lombardo, Senior Planner
City of Tracy, Development Services
333 Civic Center Plaza
Tracy, CA 95376
Phone: 209.831.6428
Email: Victoria.Lombardo@cityoftracy.org

Public Scoping Meeting

A public scoping meeting, convened by the City of Tracy Planning Commission, will be held on **September 9, 2020,** starting at **7:00 p.m.** as a Teleconference Meeting, using Webex.

In response to the COVID-19 crisis and Governor's Executive Order N-29-20, this hearing will be conducted utilizing teleconferencing technology. Participants can join the scoping meeting by viewing the City's WebEx Event at https://cityoftracyevents.webex.com and using the following Event

Number: **126 086 2910** and Event Password: **Planning1**; or via phone by dialing (209) 831-6010 during the public comment portion of this item.

At this meeting public agencies, organizations, and members of the public will be able to review the proposed project application materials and provide comments on the scope of the environmental review process.

TRACY ALLIANCE PROJECT

The project site is located on approximately 191 acres at the northeast corner of Grant Line Road and Paradise Road, in unincorporated San Joaquin County, adjacent to the northeastern boundary of the City of Tracy city limits and the Northeast Industrial (NEI) Specific Plan boundary, but within the City's Sphere of Influence (SOI) (Exhibits 1 and 2). The unincorporated community of Banta lies southeast of the project site. The proposed project is on the United States Geological Survey (USGS) *Union Island* 7.5-minute topographic quadrangle Section 22, 23, and 24 (and El Pescadero Land Grant), Township 2 South, Range 5 East (Assessor's Parcel Numbers [APNs] 213-170-14, -24, -25, -26, -27, and -48).

1.1 - Overview

The Tracy Alliance Group, Suvik Farms, LLC., and Zuriakat (co-applicants) are proposing the Tracy Alliance Project (proposed project), which consists of the development of up to 3,352,320 square feet of warehouse development on approximately 191 acres comprising six parcels. The six parcels consist of two Tracy Alliance parcels (totaling 122.44 acres), three Suvik Farms, LLC., parcels (totaling 46.61 acres), and one Zuriakat parcel (22.17 acres).

The project site is within unincorporated San Joaquin County adjacent to the City of Tracy's northeastern city limits and adjacent to the City of Tracy NEI Specific Plan area. The proposed project would require approval of annexation into the City of Tracy, pre-zoning, an amendment to the NEI Specific Plan, and a Tentative Parcel Maps or Lot Line Adjustment to create final development lots.

Development on the two Tracy Alliance parcels, as proposed by co-applicant, Tracy Alliance Group, would consist of 1,849,500 square feet of warehouse space located in three buildings, as well as a stormwater detention basin with a pump station (that would be City-owned and managed). Approximately 13.36 acres of the Tracy Alliance land would be reserved to accommodate a portion of a planned interchange at Paradise Road and Interstate 205 (I-205). The future design of the interchange would undergo a separate environmental review process pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) once funding is programmed and available.

Development plans for the Suvik Farms, LLC., parcels (identified as Suvik Farms parcels) and the Zuriakat parcel are not specified at this time. For the purposes of analysis in the Draft Environmental Impact Report (Draft EIR), buildout of these parcels is estimated to consist of 1,502,820 square feet of warehouse development, consistent with the maximum allowable density per acre identified in the NEI Specific Plan.

The proposed project also includes demolition of existing residential and agricultural buildings, removal of existing trees and crops, road improvements, and grading of approximately 500,000 cubic yards, which would be balanced on-site. Of the 500,000 cubic yards of material graded, approximately 300,000 cubic yards would occur on the Tracy Alliance parcels, approximately 150,000 cubic yards would occur in development of the Suvik Farms parcels, and approximately 50,000 cubic yards would occur in development of the Zuriakat parcel.

1.1.1 - Surrounding Land Uses

The area surrounding the project site has both an agricultural and industrial character. Land uses north of the project site consist of single-family homes north of California Avenue; there is a cell tower just east of the terminus of California Avenue. A vehicle dealership and agricultural lands are also to the north (north of I-205). East of the project site is agricultural land with associated single-family homes and agricultural structures and outbuildings. Neighboring properties south and west of the project site consist of agricultural lands and industrial warehouses, which are part of the NEI Specific Plan area, with vacant lots interspersed among the agricultural and industrial lands to the west.

Existing Conditions

The project site consists of six parcels, as shown in Exhibit 3 and listed in Table 1.

Table 1: Existing Parcels

Assessor's Parcel Number	Parcel Naming Convention	Address	Ownership/Applicant	Acreage
213-170-14	Zuriakat Parcel	6050 California Avenue	Zuriakat/ Not Applicable	22.17
213-170-24 213-170-25 213-170-26	Suvik Farms Parcels	6103 Grant Line Road 6281 Grant Line Road 6301 Grant Line Road	Suvik Farms/Souza Realty & Development	31.67 11.70 3.24
213-170-27 213-170-48	Tracy Alliance Parcels	6599 Grant Line Road Grant Line Road (no street number)	Tracy Alliance /Tracy Alliance Group Pacific T & T Company/Tracy Alliance Group	122.39 0.05
			Total	**191.22**
Source: San Joaquin County. no date. Assessor's Map. Book 213. Page 17.				

The project site is relatively flat and low in elevation (15-30 feet above mean sea level) with a gentle topographic slope in the north-northeast direction.[1,2] There are two existing residences (one occupied and one vacant) and nine agricultural structures on-site in the southwest corner of the Tracy Alliance parcels. The Suvik and Zuriakat parcels do not contain any structures, only row crops. Approximately 118-acres of the Tracy Alliance parcels are currently used for row crop production, including alfalfa, winter wheat, and almonds, with a small cattail marsh in a drainage ditch along the southern side of California Avenue.

Several private dirt roads provide access within the project site; irrigation/ drainage canals run along several of these roads. There is also a paved irrigation/drainage canal between the Tracy Alliance parcels and Zuriakat parcel. In addition, there are streetlights and power and telecommunication lines in various locations surrounding the project site.

[1] Terracon Consultants, Inc. 2018. Phase I Environmental Site Assessment: Tracy Ridge. December 21.
[2] Environmental Assessment Specialists, Inc. 2020. Phase I Environmental Site Assessment: Suvik and Zuriakat Properties, page 5.

The site provides suitable foraging habitat with potential to support birds of prey, including Swainson's hawk. Northern portions of the site are within a 100-year floodplain as designated by the Federal Emergency Management Agency (FEMA).[3] The project site consists of mostly Prime Farmland as mapped by the California Department of Conservation Farmland Mapping and Monitoring Program. Prime Farmland has the best combination of features able to sustain long-term agricultural production with sustained high yields.[4] The Suvik Farm parcels are bound by a Williamson Act contract.[5] The contract is set to expire in 2026. Should development of the Suvik parcels be pursued prior to the Williamson Act contract expiration date, the Suvik landowner will be required to petition the City Council for cancellation.

The Tracy Municipal Airport is approximately 5.82 miles southwest of the project site; the site is not within the Airport Influence Area. The Altamont Corridor Express (ACE) runs trains east from Stockton to San Jose in the morning and back west in the evening; the Tracy Station is located 5.05 miles southwest of the project site. The closest bus stop to the project site is 1.59 miles west at the Shops at Northgate Village. The stop is served by the City of Tracy TRACER bus service Route E, connecting to the Tracy Transit Station, and San Joaquin Regional Transit District bus routes 90 and 97, connecting to Lathrop and Stockton.[6,7,8]

Land Use Designations

The San Joaquin County General Plan (County General Plan) designates the site Agriculture-Urban Reserve (A/UR) (Exhibit 4) which allows for agricultural uses, farm-related residential use, and open space and parks.[9] The A/UR designation reserves areas for urban development if the area is designated for urban development in a city's general plan, and the County determines the area is a reasonable future expansion for the city.

The City of Tracy General Plan (General Plan) designates the project site Industrial (I) (Exhibit 5). Primary land uses allowed under this designation consist of flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs (e.g. restaurants, parks, consumers services, etc.). The maximum floor area ratio (FAR) is 0.5.[10]

Zoning

The site is located within the General Agriculture Zoning District with a minimum parcel size of 40 acres (AG-40) on the County's Zoning Map (Exhibit 4). The AG zoning preserves agricultural lands for

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3 Federal Emergency Management Agency. 2019. National Flood Hazard Layer FIRMette. April 6. Website: https://msc.fema.gov/portal/search?AddressQuery=6281%20Grant%20Line%20Road%20Tracy%2C%20CA#searchresultsanchor. Accessed April 6, 2020

4 California Department of Conservation, Division of Land Resource Protection. 2018. San Joaquin County Important Farmland 2016. May.

5 The Williamson Act enables local governments to enter contracts with private landowners to restrict specific parcels to agricultural or related open space use. In return, landowners receive lower property tax assessments.

6 City of Tracy. 2019. TRACER Route Map. October.

7 San Joaquin Regional Transit District. 2014. Route 90 Map. August 10.

8 San Joaquin Regional Transit District. 2013. Route 97 Map. August 11.

9 Mintier Harnish Planning Consultants (prepared for San Joaquin County). 2016. San Joaquin County General Plan: Policy Document. December.

10 Design, Community & Environment (prepared for the City of Tracy). 2011. City of Tracy General Plan. February 1.

continuation of commercial agricultural enterprises.[11] The project site is not within city limits, accordingly, the City of Tracy does not currently provide a zoning designation for the project site; the applicant has requested pre-zoning to a designation of NEI Specific Plan (and annexation into the boundaries of the NEI Specific Plan) as part of the application for development.

Project Description

1.1.2 - Land Uses

The proposed project includes demolition of 11 existing residential and agricultural structures on 4 acres located at the southwestern corner of the Tracy Alliance parcels, removal of all crops, and construction of the following primary components:

- Multiple warehouse buildings totaling up to 3,352,320 square feet that support industrial uses and associated offices;
- A 13.01-acre City-owned and managed stormwater detention basin with pump station;
- Approximately 110,000 square feet of landscaped areas associated with the site plan for the Tracy Alliance parcels; and
- Approximately 948 automobile parking spaces and approximately 572 trailer parking spaces provided within the site plan for the Tracy Alliance parcels.

Although development plans for the Suvik and Zuriakat parcels are not specified, these properties will be required to meet the minimum standards for landscaping and parking when a specific Site Plan is processed for those parcels. Based on the site acreage, the City has estimated the theoretical maximum square footage for development and has identified a minimum number of required parking spaces for the based on City code requirements.

The proposed site plan for all parcels is shown on Exhibit 6a and Exhibit 6b depicts a detailed site plan for the Tracy Alliance parcels. Table 2 summarizes locations and square footage for each project component.

[11] San Joaquin County. 2001. Ordinance Code of San Joaquin County. Section 9-600.1.

Table 2: Proposed Development Summary

Tracy Alliance Parcels (APN 213-170-27, -48)				
Land Use (NEI Specific Plan)		**Area (square feet)**	**Total gross square feet**	**Total acres**
Light Industrial (LI)				
Building A	Warehouse	948,500	**978,500**	**22.46**
	Office	30,000		
Building B	Warehouse	62,000	**64,000**	**1.47**
	Office	2,000		
Building C	Warehouse	782,000	**807,000**	**18.52**
	Office	25,000		
	Total	**1,849,500**	**-**	
Basin Area		-	-	**13.01**
			Total	**55.46**
Suvik Farms Parcels (APNs 213-170-24, -25, -26)				
Land Use (NEI Specific Plan)		**Maximum Building (gross square feet)[1]**		
Light Industrial (LI)		1,023,660		
Zuriakat Parcel (APN 213-170-14)				
Land Use (NEI Specific Plan)		**Maximum Building (gross square feet)[2]**		
Light Industrial (LI)		479,160		
Total Maximum Building Gross Square Footage = 3,352,320				

Notes:
[1] The maximum building square footage is calculated from the maximum allowable FAR (50 percent) as set forth in the NEI Specific Plan. The total land area is approximately 2,047,320 square feet (47 acres).
[2] The maximum building square footage is calculated from the maximum allowable FAR (50 percent) as set forth in the NEI Specific Plan. The total land area is approximately 958,320 square feet (22 acres).
Source: Tracy Alliance Group. 2020.

Light Industrial

The buildings would support warehouse and office uses. Based on the proposed uses described below, it is expected that approximately 1,871 employees would work on-site.[12]

Warehouse

Multiple warehouse buildings are proposed, totaling up to 3,352,320 square feet. Three warehouse buildings are proposed on the Tracy Alliance parcels, totaling 1,849,500 square feet. The number of buildings to be constructed on the Suvik Farms parcels and Zuriakat parcel is not specified at this time. For purposes of analysis in the Draft EIR, it is assumed that buildout on the Suvik Farms parcels

[12] Conversation between Victoria Lombardo, Senior Planner and with Barbara Harb, Economic Development Analyst, City of Tracy in May 2020. Employment data collected by conversations with business owners for various industrial businesses, including warehousing, manufacturing, and employee-intensive (Amazon) warehousing, and existing building square footage data, averaged.

and Zuriakat parcel would be to the maximum allowable FAR of 0.5, which provides the most conservative impact estimates. Although future occupants are unknown at this time, the buildings would be utilized for light industrial uses as defined by the NEI Specific Plan, which is most commonly warehouse and distribution operations with low employee densities. Using the maximum FAR allowed, and accounting for setbacks, parking, access, circulation, and landscaping requirements, the Suvik Farms parcels could support up to 1,023,660 square feet, while the Zuriakat parcel could support up to 479,160 square feet.

Office

Office use is permitted within the Light Industrial (LI) designation under the NEI Specific Plan. Each warehouse would include office space for the purpose of facilitating and administering operations of each building and their company occupants. It is assumed that the buildings on the Suvik Farms and Zuriakat parcels would also include office space.

Parking

Parking would be provided pursuant to parking requirements of Tracy Municipal Code Chapter 10.08 Article 26. The required automobile and bicycle parking per parcel are shown in Table 3.

Table 3: Required Parking

Tracy Alliance Parcels (APN 213-170-27, -48)				
Site Area	**Building A**	**Building B**	**Building C**	**Total**
AUTO PARKING REQUIRED	377	44	316	**737**
AUTO PARKING PROVIDED	470	57	421	**948**
TRAILER PARKING PROVIDED	319	0	253	**572**
MINIMUM BICYCLE PARKING REQUIRED	19[1]	3[1]	16[1]	**38**
Suvik Farms Parcels (APNs 213-170-24, -25, -26)				
AUTO PARKING REQUIRED	276			
MINIMUM BICYCLE PARKING REQUIRED	14[1]			
Zuriakat Parcel (APN 213-170-14)				
MINIMUM AUTO PARKING TO BE REQUIRED	140			
MINIMUM BICYCLE PARKING REQUIRED	7[1]			
TOTAL AUTO PARKING REQUIRED = 1,153			***TOTAL AUTO PARKING PROVIDED = 1,364***	***TOTAL BICYCLE PARKING REQUIRED = 59[1]***

Notes: 1. Number of spaces is rounded up.
Source: Tracy Alliance Group, 2020.

There will be trailer parking provided on the Suvik Farms and Zuriakat parcels, but the count and location of these spaces is not known at this time.

1.1.3 - Proposed Land Use Designation and Zoning

Land Use Designation

General Plan

As described above and shown on Exhibit 5, the City of Tracy General Plan designates the site Industrial. The project site would be annexed into the City of Tracy (as shown in Exhibit 7a) and the current San Joaquin County General Plan designation (A/UR) would no longer apply to the site. Because the proposed project is already designated Industrial by the City of Tracy General Plan, no land use redesignation would be required. Primary land uses allowed under this designation consist of flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs (e.g. restaurants, parks, consumers services, etc.). The maximum FAR is 0.5.[13]

Northeast Industrial Specific Plan

The project site would be annexed into the NEI Specific Plan area, and the NEI Specific Plan would be amended to designate the site LI. Primary land uses allowed within this designation include warehouse and distribution operations with low employee densities. The LI designation also allows for general commercial uses such as automotive supply or plumbing stores.[14] The proposed NEI Specific Plan land use designation is shown in Exhibit 7b.

Zoning

The project site is currently zoned General Agriculture with a minimum parcel size of 40 acres (AG-40) by the Ordinance Code of San Joaquin County. The San Joaquin County Local Agency Formation Commission (LAFCo) will require the City to pre-zone the site in conjunction with the proposed annexation. The project site would be pre-zoned NEI Specific Plan, which would take effect upon annexation into the City. Allowable uses within this zoning district are governed by the NEI Specific Plan and light industrial uses, as described in the NEI Specific Plan, would be allowed.[15] The proposed zoning is shown in Exhibit 7c.

1.1.4 - Circulation and Access

Vehicle

Primary vehicle access to the project site would be provided from four access points on Grant Line Road and four access points on Paradise Road; the northerly access point along Paradise Road would be for Emergency Vehicle Access (EVA) only. Once the future I-205 Interchange at Paradise Road is complete, the two northmost access points along Paradise Road (including the EVA) would be slightly modified to accommodate the interchange. A second EVA may be added along California Avenue to provide emergency access to the Zuriakat parcel. The decision to include or not include this EVA would occur during site plan review for any future development on the Zuriakat parcel.

A new signalized intersection on Grant Line Road would provide access to a New Private Drive that would facilitate on-site circulation for the warehouses on the Tracy Alliance parcels as well as access to the Suvik Farms and Zuriakat parcels as shown in Exhibit 6a. The New Private Drive, located along

[13] Design, Community & Environment (prepared for the City of Tracy). 2011. City of Tracy General Plan. February 1.
[14] City of Tracy. 2012. Northeast Industrial Specific Plan. Pages 10-11. July 17.
[15] City of Tracy. 2016. Tracy Municipal Code Section 10.08.3022 – Northeast Industrial Specific Plan. October 18.

the Tracy Alliance parcels' eastern boundary, would also provide access to the detention basin area. Since no site plan is being processed on the Suvik Farms and Zuriakat parcels, the exact location(s) of access points from the New Private Drive to the Suvik and Zuriakat parcels have not been identified at this time.

Future Interchange

The City of Tracy Transportation Master Plan includes improvements to Chrisman Road, which are planned as part of improvements to the City's expressway system, as well as a future I-205/Paradise/Chrisman interchange. The schedule for implementation of the improvements is not known as this time. The proposed project would set aside 13.36 acres in the northwest corner of the project site, which would be sufficient to accommodate the future interchange. The proposed project includes annexation of this land into the city, but does not include any design, analysis, or construction of the future interchange. Therefore, the Draft EIR includes an evaluation of potential impacts of annexing the future interchange area into the City but does not include evaluation of any future construction.

Future design of the interchange would undergo a separate environmental review process pursuant to CEQA and NEPA once funding is programmed and available.

1.1.5 - Design, Landscaping, and Lighting

The NEI Specific Plan includes design guidelines and development standards that regulate site planning and architecture within the NEI Specific Plan area. Specific design details are not known at this time, but the proposed project would be required to conform to the design guidelines set forth in the NEI Specific Plan, subject to review and approval by the City's Development Services Director.

Building Design and Height

The NEI Specific Plan requires that attention be given to parts of any buildings visible from adjacent roadways or public parking. Large buildings should have facades that include variations in massing, form, and texture. Continuous surface treatments of a single material should be minimized. Architecture should be used to highlight building entries. Any accessory buildings and enclosures, whether attached or detached from the main building, shall be of similar compatible design and materials.[16]

The maximum height for LI uses under the NEI Specific Plan is 60 feet. Buildings would not exceed this height.

Landscaping

Within parking areas on-site, landscaping would conform to the requirements for Off-Street Parking established by Municipal Code Chapter 10.08, Article 26, except where modified by the NEI Specific Plan. Landscaping requirements as set forth in the NEI Specific Plan are summarized in Table 4. Table 4 assumes parking lot landscaping would be decreased by 50 percent, and that a corresponding increase in perimeter landscaping of 50 percent would be provided to compensate, as allowed in the

[16] City of Tracy. 2012. Northeast Industrial Specific Plan. Page 32. July 17.

Municipal Code.[17] These requirements include designing landscapes as extensions of adjacent public right-of-way landscaping as applicable and completing on-site landscaping simultaneous to completion of buildings and other improvements. Additionally, landscaping shall not obstruct sight lines at street or driveway intersections, and parking areas and project frontages shall be screened from public rights-of-way.[18] Additional landscaping guidelines are available in the NEI Specific Plan.

Table 4: Summary of City Landscaping Requirements

Landscaping Requirement	Industrial Use
Landscaped frontage setback	10 feet
Minimum number of trees in parking area	1 tree per 5 spaces
Percentage of landscaping in parking areas for over: 0-15 cars 16-30 cars 31-60 cars Over 60 cars	 5 percent 5 percent 7.5 percent 10 percent
Source: City of Tracy. 2012. Northeast Industrial Specific Plan. July 17.	

Lighting and Signage

Light fixtures would meet all safety standards pursuant to the latest adopted edition of the California Building Code and would be installed throughout the length of the New Private Drive pursuant to the Municipal Code. The NEI Specific Plan recommends that one lighting fixture style be used on all streets. Where possible, light standards would be located in roadway medians.[19]

Signage would be required to conform to the requirements of Municipal Code Chapter 10.08, Article 35, except as modified by the NEI Specific Plan. A site sign program would be prepared and integrated into the total design concept for the proposed project, and all signs would be approved prior to installation. Project signage may be illuminated provided that no flashing, traveling, animated, or intermittent illumination would be used. Such illumination would be confined to the area of the sign except when such illumination is back lighting for an otherwise non-illuminated sign. No sign illumination would cast a glare which is visible from any street.

1.1.6 - Infrastructure Improvements

Domestic Water

The City's Public Works Department would supply potable water to the project. In the City's 2012 Water System Master Plan, 12-inch water lines were proposed for continuation north on Paradise Road until West Arbor Avenue, and within the project site along the perimeter of the Suvik Farms parcels.[20]

[17] City of Tracy. 2019. Tracy Municipal Code Section 10.08.3560(g).
[18] City of Tracy. 2012. Northeast Industrial Specific Plan. Pages 33 and 34. July 17.
[19] City of Tracy. 2012. Northeast Industrial Specific Plan. Page 24. July 17.
[20] West Yost Associates. 2012. City of Tracy Citywide Water System Master Plan, Figure 8-2 on Page 8-25. December.

The 12-inch water line in Paradise Road has been extended as planned; planned water lines that would traverse through the project site have not yet been installed**.**

The project proposes to install 10-inch lines to accommodate the level of development proposed on the Tracy Alliance parcels. These lines would connect to the buildings on the Tracy Alliance parcels at several locations (as shown in Exhibit 8). Several fire hydrants would be installed surrounding the buildings on the Tracy Alliance parcels and would connect to the 10-inch water lines. Since no site plan is being processed for either the Suvik Farms or Zuriakat parcels at this time, the location and sizing of water lines will be identified and reviewed by the City as part of subsequent engineering plans when development applications are submitted for these parcels.

Stormwater Drainage

The project site drains generally toward the northeast and has its own sub-basin (E65) within the Eastside Industrial future service area, one of the future development areas where the City anticipates new development. There are no existing stormwater drainage facilities near the project site.[21]

The proposed project includes construction of a stormwater detention basin on-site as identified in the City of Tracy Citywide Storm Drainage Master Plan.[22] The proposed 13.01-acre stormwater detention basin with a pump station would be located along the northeast site boundary. Following its construction, the basin would be dedicated to and managed by the City. Construction of this stormwater detention basin would also support future development within the Eastside Industrial service area and the applicant would be awarded a fee credit against the stormwater impact fee required for the project.

The proposed project would construct a 12-inch forced main storm drain line along the corner of I-205 east and Paradise Road (see Exhibits 8, 9a, and 9b) to connect the proposed on-site detention basin to the City's NEI detention basin adjacent to the western boundary of the project site. Project discharge into the on-site detention basin would be held until the NEI detention basin is drained enough to accept inflow; all stormwater would eventually discharge into the Eastside Channel.

Bio-retention treatment areas would intermittently surround the buildings on the Tracy Alliance parcels and be interspersed throughout the parking lots (Exhibit 9b). On-site storm drain lines within the Tracy Alliance parcels would be 12 inches and would connect bio-retention treatment areas to the proposed on-site detention basin.

Should the NEI detention basin not be finished by the time the proposed project is operational and not able to accommodate flow from the proposed project, the applicant would work with the City to modify the proposed on-site detention basin to ensure stormwater drainage for the project site would be sufficient.

Since no site plans are being processed for the Suvik Farms or Zuriakat parcels at this time, the exact location and sizing of on-site stormwater drainage facilities and how they connect to the on-site

[21] Stantec. 2012. City of Tracy Citywide Storm Drainage Master Plan. November.
[22] Stantec. 2012. City of Tracy Citywide Storm Drainage Master Plan. Figure 5-1a. November.

stormwater detention basin will be identified and reviewed as part of subsequent engineering plans when development applications are submitted for these parcels.

Sanitary Sewer

The proposed project is anticipated to include connections to the existing City sanitary sewer system operated by the Public Works Department via the existing wastewater line beneath Paradise Road (see Exhibit 8).[23] An existing 15-inch sanitary sewer line is located within the Paradise Road right-of-way and an existing 10-inch sanitary sewer line is located within Grant Line Road and have sufficient capacity to accommodate the development as proposed. The development of the Tracy Alliance parcels would be served as follows:

- **Building A:** would be served via two proposed 8-inch sanitary sewer lines that would each connect to the existing 15-inch sanitary sewer line in Paradise Road.
- **Building B:** would be served by a proposed 6-inch sanitary sewer line that would traverse the northern side of Building A, connecting to the existing 15-inch sanitary sewer line in Paradise Road.
- **Building C:** would be served by two sanitary sewer lines: (1) a proposed 6-inch sanitary sewer line that would connect to an existing 10-inch sanitary sewer line in Grant Line Road, and (2) a proposed 8-inch sanitary sewer line that would connect to the existing 15-inch sanitary sewer line in Paradise Road.

Since no site plans are being processed for the Suvik Farms and Zuriakat parcels, the exact location and sizing of an on-site sanitary sewer system will be identified and reviewed by the City of Tracy as part of subsequent engineering plans when development applications are submitted for these parcels.

Solid Waste and Recycling Collection

The City Public Works Department provides solid waste and recycling services for areas within city limits and certain surrounding County areas. The Public Works Department has a partnership with Tracy Disposal Service Company to provide residential and commercial solid waste collection and disposal, including recycling and organics services.[24,25] Garbage is collected once a week, and recycling and yard waste are collected on alternating weeks.[26]

Solid waste generated by the proposed project would be accommodated at the Tracy Material Recovery Facility & Solid Waste Transfer (MRF), and then hauled to the Foothill Sanitary Landfill on North Waverly Road east of Tracy. On a designated day, Tracy Disposal Service Company collects and transports solid waste to the MRF.

[23] De Novo Planning Group. 2019. Tracy Municipal Services Review. July.
[24] City of Tracy. 2020. Recycling & Solid Waste. Website: https://www.ci.tracy.ca.us/?navId=688. Accessed April 9, 2020.
[25] Tracy Delta Solid Waste Management, Inc. Website: https://www.tdswm.com/. Accessed April 9, 2020.
[26] City of Tracy. 2020. Garbage & Recycling Schedule. Website: https://www.ci.tracy.ca.us/?navId=700. Accessed April 16, 2020.

Power and Telecommunications

Electricity and natural gas services for the proposed project would be provided by Pacific Gas and Electric Company (PG&E). There is a natural gas pipeline under Grant Line Road (the southern project site boundary), as well as an electric transmission line above ground.[27,28]

Phone and internet services could be provided by various private companies, including AT&T, Xfinity, Comcast, and Verizon.

1.1.7 - Discretionary and Ministerial Actions

Discretionary approvals and permits are required by the City for implementation of the proposed project. The project application would require the following discretionary approvals and actions:

- EIR certification;
- Annexation and Prezoning; final approval action for annexation would be required by San Joaquin Local Agency Formation Commission;
- Northeast Industrial Specific Plan Amendment;
- Development review permit;
- Tentative Parcel Maps or Lot Line Adjustment as needed to create final development lots; and
- Cancellation of the Williamson Act contract on the Suvik Farms parcels (if required).

Subsequent ministerial actions would be required for implementation of the proposed project, including issuance of demolition, grading, and building permits.

1.1.8 - Responsible and Trustee Agencies

Several other agencies in addition to the City of Tracy will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. The Draft EIR will provide environmental information to these agencies and other public agencies, which may be required to grant approvals or coordinate with other agencies, as part of project implementation. These agencies may include, but are not limited to, the following:

- United States Army Corps of Engineers
- United States Fish and Wildlife Service
- California Department of Fish and Wildlife
- California Department of Transportation (Caltrans)
- California Public Utilities Commission
- Central Valley Regional Water Quality Control Board (Central Valley RWQCB)
- County of San Joaquin
- San Joaquin Local Agency Formation Commission (San Joaquin LAFCo)

[27] Pacific Gas and Electric Company (PG&E). 2020. Gas Transmission Pipelines. Website: https://www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/gas-transmission-pipeline/gas-transmission-pipelines.page. Accessed April 9, 2020.

[28] California Energy Commission. California Electric Infrastructure App. Website: https://cecgis-caenergy.opendata.arcgis.com/app/ad8323410d9b47c1b1a9f751d62fe495. Accessed April 9, 2020.

- San Joaquin County Airport Land Use Commission
- San Joaquin Valley Air Pollution Control District (Valley Air District)

Actions that are necessary to implement the project that must be taken by other agencies are:

- Annexation, with Prezoning, of the Project into the City of Tracy (San Joaquin LAFCo)
- Detachment from Tracy Rural Fire District (San Joaquin LAFCo)
- Coverage under General Construction Stormwater Permit (California State Water Resources Control Board/Central Valley RWQCB)
- Approval of Indirect Source Review (Valley Air District)

Issuance of Encroachment Permits for roadway, trail, or utility improvements within facilities under the jurisdiction of Caltrans or the County of San Joaquin may also be necessary.

Environmental Review

1.1.9 - Potential Environmental Effects

The Draft EIR will evaluate potentially significant environmental impacts associated with the approval and implementation of the proposed project. Consistent with the CEQA Guidelines (Appendix G), the following environmental resource categories will be analyzed in relation to the Project:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

- **Aesthetics—**The Draft EIR will include an evaluation of aesthetic impacts related to the conversion of the site from agricultural to industrial uses.
- **Agriculture and Forestry Resources—**There are three active Williamson Act contract parcels within the project site. The Draft EIR will include an evaluation of converting the project site from active agriculture to industrial uses.
- **Air Quality—**The Draft EIR will include an evaluation of construction-period toxic air contaminants to assess potential construction health risks for area employees. The Draft EIR will also include an evaluation of operational air quality effects.
- **Biological Resources—**There is potential for special-status species on the project site including song sparrow, tricolored blackbird, burrowing owl, San Joaquin kit fox, Swainson's hawk, and

roosting bats. The site contains aquatic features, potentially qualifying as jurisdictional waters of the United States and/or waters of the State. The Draft EIR will include analysis of potential impacts on relevant special-status species and sensitive habitats, including a project specific Biological Resources Assessment.

- **Cultural and Resources—**The Draft EIR will include a summary of a Phase I Cultural Resources Assessment to confirm whether the implementation of the project would result in impacts to cultural resources. The Draft EIR will include mitigation, where needed, to reduce potential impacts.
- **Energy—**The Draft EIR will include an evaluation of energy use to assess consistency with the City's Sustainability Action Plan.
- **Geology and Soils—**The project site is not located within in an Alquist-Priolo Earthquake Fault Zone. However, the applicant-prepared geotechnical report includes several recommendations. The Draft EIR will include an evaluation of site soils and geology and recommendations from the geotechnical report will be included as mitigation measures.
- **Greenhouse Gas Emissions—**The Draft EIR will include an evaluation of construction-period greenhouse gas emissions to assess consistency with the City's Sustainability Action Plan. The Draft EIR will also include an evaluation of operational-period emissions to assess compliance with Valley Air District thresholds.
- **Hazards and Hazardous Materials**—The Draft EIR will identify impacts and mitigation for hazards and hazardous materials. The Draft EIR will summarize the applicant-prepared Phase I and Phase II ESAs for the Tracy Alliance parcels as well as the Phase I for the Suvik Farms and Zuriakat parcels and include recommendations provided in those reports. Emergency response and evacuation impacts will be reviewed, including the proposed emergency vehicle access road off Paradise Road.
- **Hydrology and Water Quality—**The proposed project would involve grading and creation of new impervious surfaces that have potential to create runoff. The Draft EIR will include an evaluation of increased development and impervious surfaces on water quality, stormwater drainage, and other hydrology issues. The Draft EIR will also include an evaluation of constructing and dedicating a new on-site detention basin to the City.
- **Land Use and Planning—**As previously described, the proposed project would include annexation of land into the City and a NEI Specific Plan amendment. Conformity with City policies will be evaluated as part of the analysis.
- **Noise—**The Draft EIR will include an evaluation of construction-period noise based on the estimated equipment list and duration of construction activities. Operational traffic noise impacts will also be evaluated.
- **Public Services—**The proposed project would include development of new warehouse and office buildings that would increase demand for public services, including police and fire services. The Draft EIR will include an evaluation of public service impacts related to the new industrial operations.

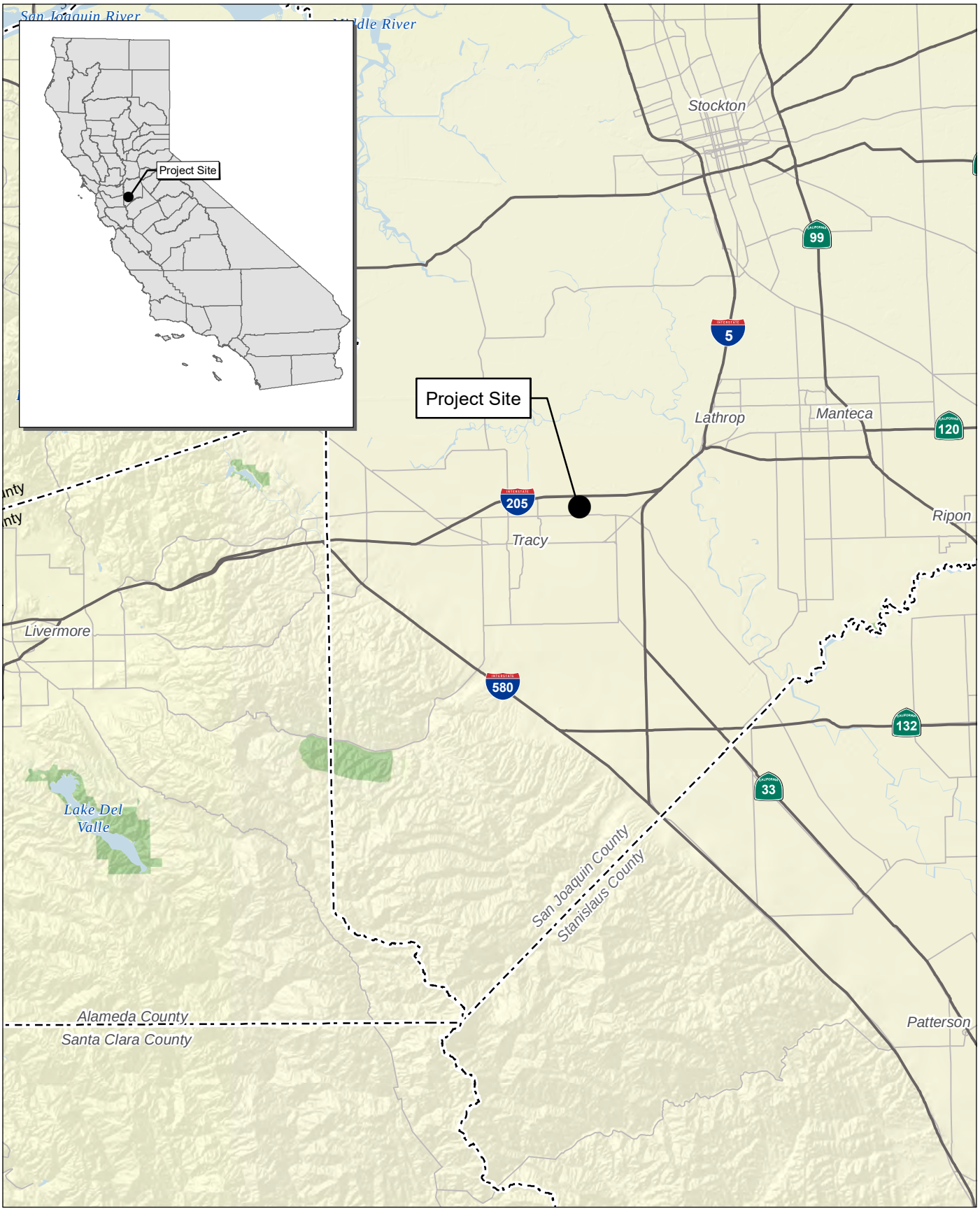
- **Transportation—**The CEQA analysis will include a comprehensive traffic analysis that considers aspects such as roadway design and safety, effects on increased traffic volumes on Grant Line Road and Paradise Road as well as other roadways, and analysis of proposed improvements. A vehicle miles traveled analysis will also be provided.
- **Tribal Cultural Resources—**The Draft EIR will include analysis of tribal cultural resources and a summary of tribal coordination to confirm whether the proposed project would potentially affect any resources of importance to local tribes.
- **Utilities and Service Systems—**The proposed project would require extension of public water and wastewater systems on-site. The Draft EIR will evaluate potential impacts associated with construction of the proposed utility extensions, as well as operational components of the City water supply, stormwater, wastewater, solid waste collection systems, and private power and telecommunications provision.
- **Wildfire—**The Draft EIR will include an evaluation of wildfire risk in the City and identify impacts, if any, associated with implementation of the proposed project, including mitigation, if required.

It is anticipated that the following environmental topics will not require detailed analysis, and instead will be addressed under an Effects Found not to be Significant chapter of the Draft EIR:

- **Mineral Resources—**There are no known mineral resources located on or adjacent to the project site. As such, the proposed project would not result in significant effects related to mineral resources.
- **Population and Housing—**The proposed project would require removal of one occupied residential structure and prezoning of agricultural land. Although the project would displace the existing occupied residence and associated structures, the proposed project would not necessitate construction of replacement housing elsewhere not already anticipated by the City.

  It is expected that employees from the local labor force would be the primary source for workers, however, the possibility exists for individuals to relocate to the City to work at the proposed warehouses. Based on the light industrial nature of the proposed project, it is expected that approximately 1,871 employees would work on-site. Because the population of the City is currently estimated at 95,931, the total number of employees that may work at the project site represents approximately 2 percent of the current population of the City. Therefore, proposed project implementation would not displace any individuals or significantly increase population, and less than significant impacts related to population and housing would occur.

- **Recreation–**Because the proposed project is not located within or adjacent to any designated natural or open space areas and would not significantly increase City population, the project would not impact park usage. Furthermore, because the proposed project is not expected to result in a significant increase in population, the ratio of parks to residents would be unchanged by the project. As such, the proposed project would not result in significant effects related to recreation.



Source: Census 2000 Data, The CaSIL, FCS GIS 2016.

FIRSTCARBON SOLUTIONS™

5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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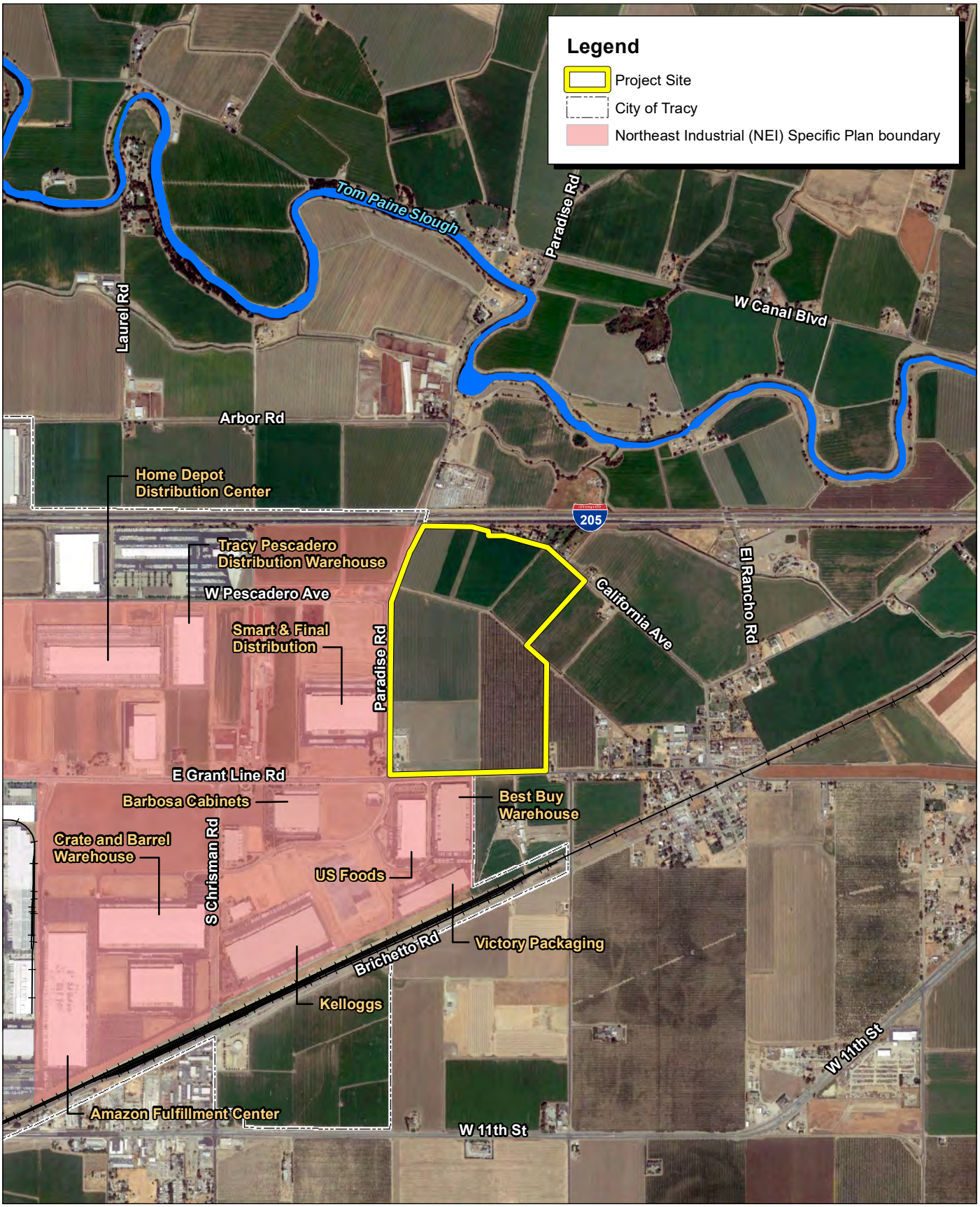
CITY OF TRACY
TRACY ALLIANCE PROJECT
NOTICE OF PREPARATION



Source: Google Earth Aerial Imagery, August 2018.

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Exhibit 2
Local Vicinity Map

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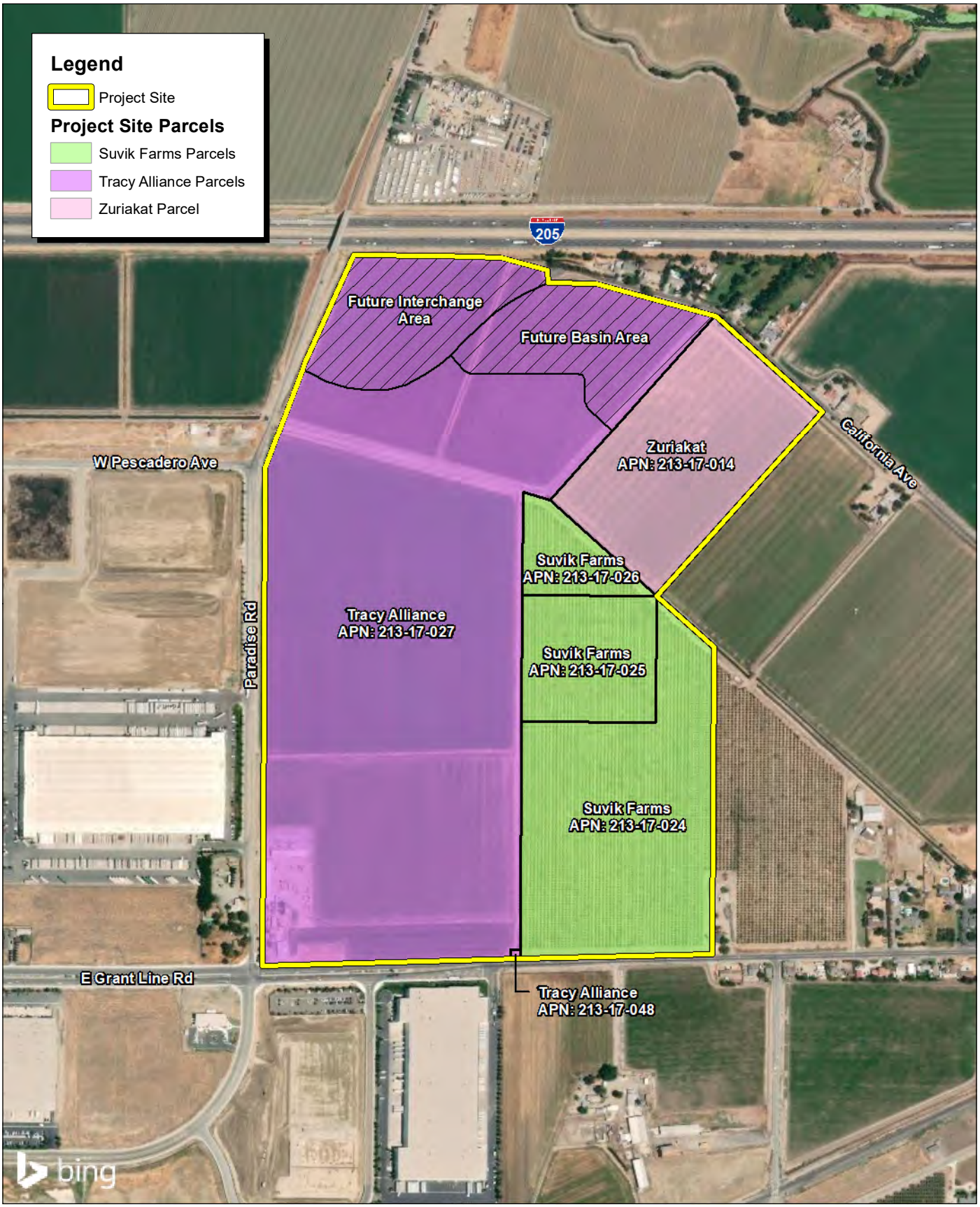
CITY OF TRACY
TRACY ALLIANCE PROJECT
NOTICE OF PREPARATION



Source: Bing Aerial Imagery. County of San Joaquin.

FIRSTCARBON SOLUTIONS™

700 350 0 700 Feet

Exhibit 3
Project Parcel Map

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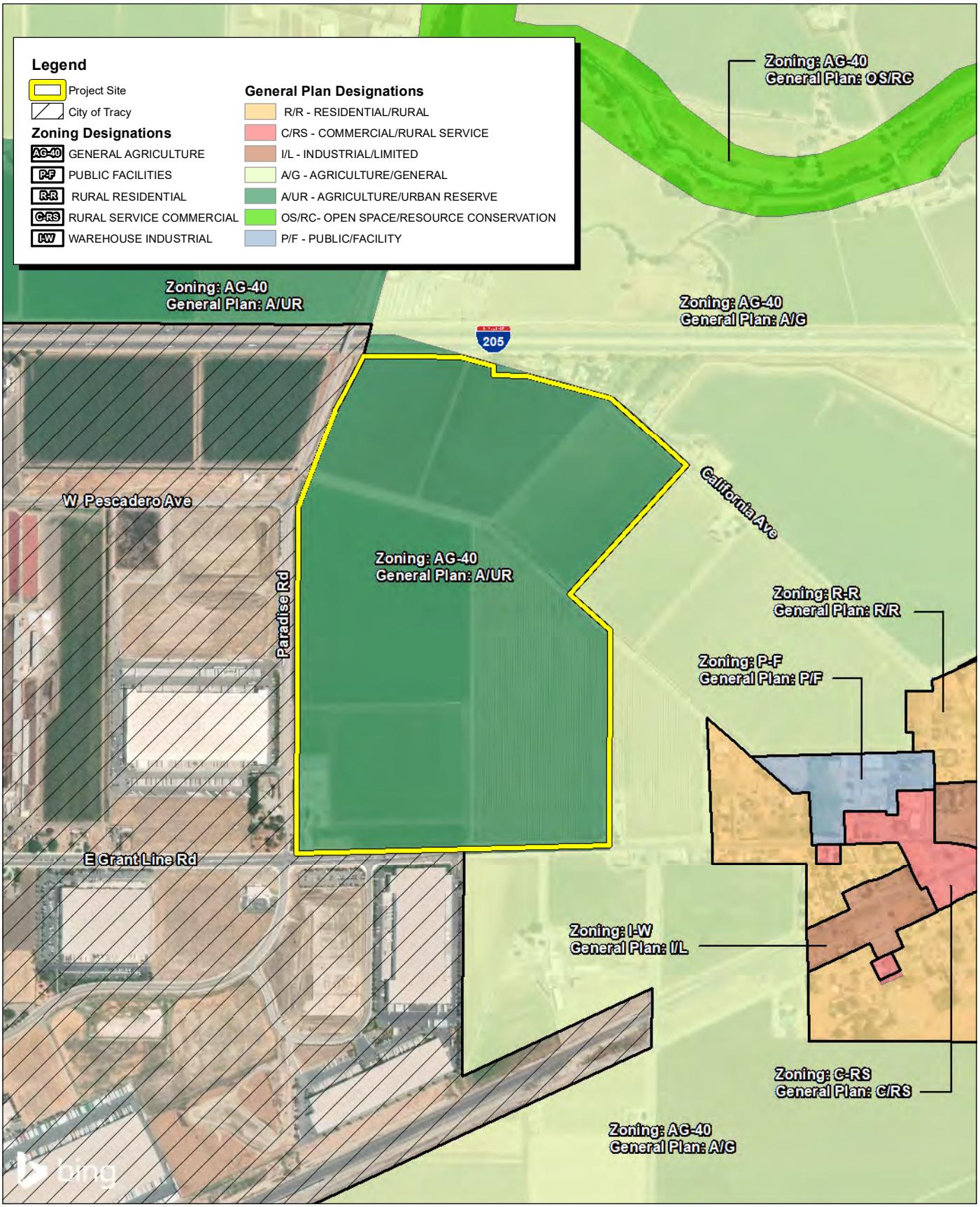
CITY OF TRACY
TRACY ALLIANCE PROJECT
NOTICE OF PREPARATION

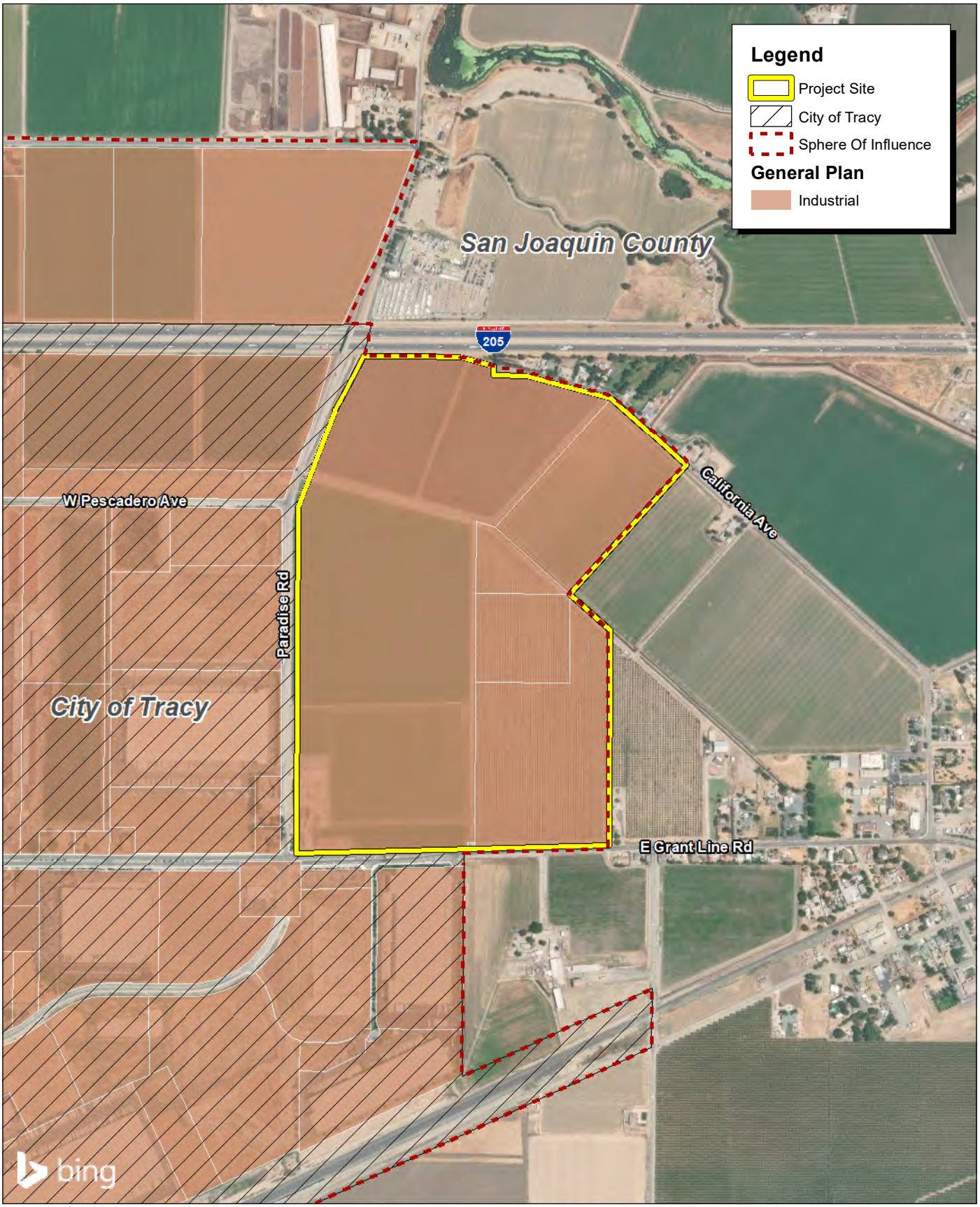


Source: Bing Aerial Imagery. San Joaquin County GIS Data, 2020.

FIRSTCARBON SOLUTIONS™

1,000 500 0 1,000 Feet

Exhibit 4
San Joaquin County General Plan
Land Use and Zoning Designations



Source: Bing Aerial Imagery. City of Tracy. County of San Joaquin.

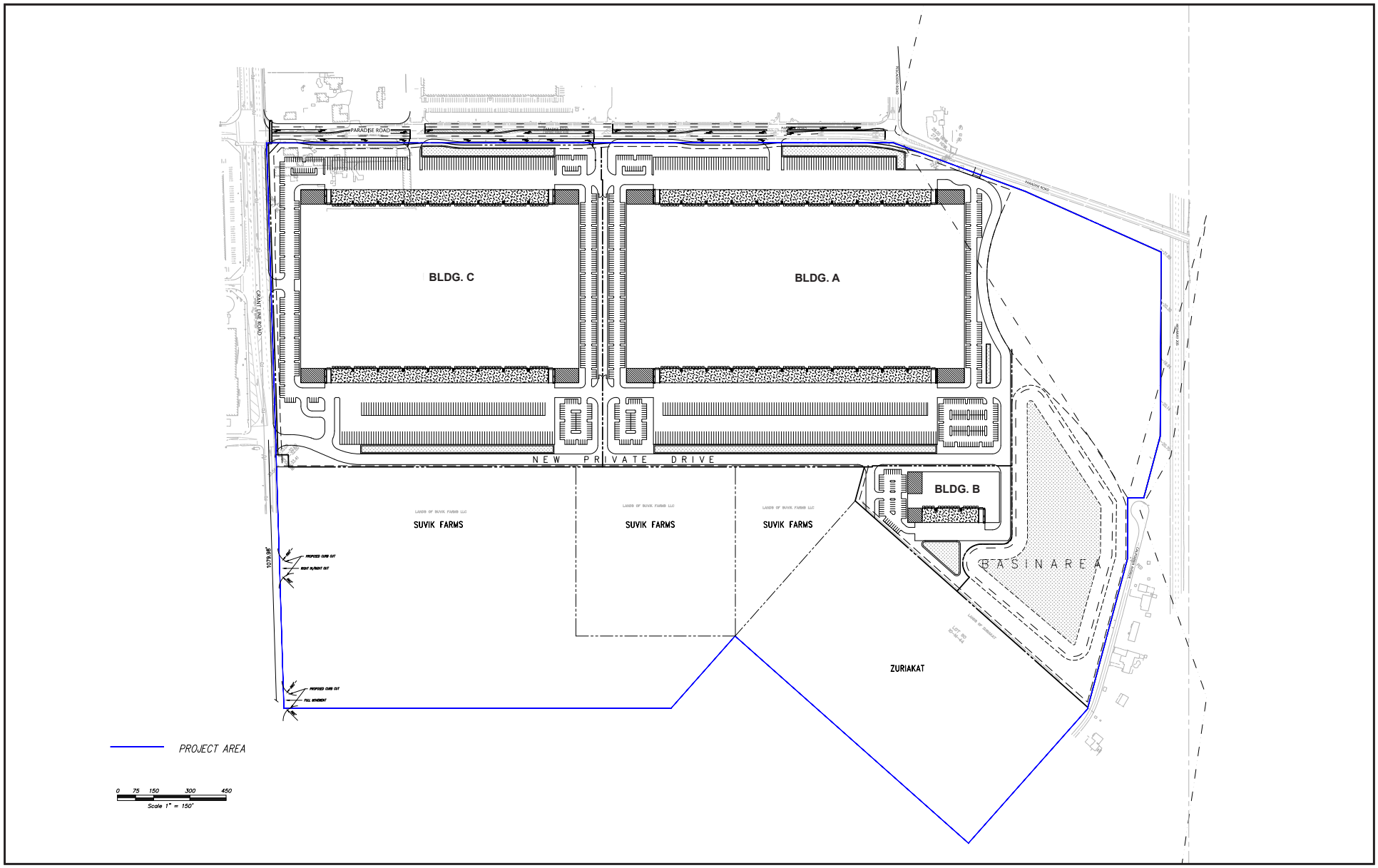
FIRSTCARBON SOLUTIONS™

1,000 500 0 1,000 Feet

Exhibit 5
City of Tracy
General Plan Designation

17260011 • 08/2020 | 5_city_general_plan.mxd

CITY OF TRACY
TRACY ALLIANCE PROJECT
NOTICE OF PREPARATION



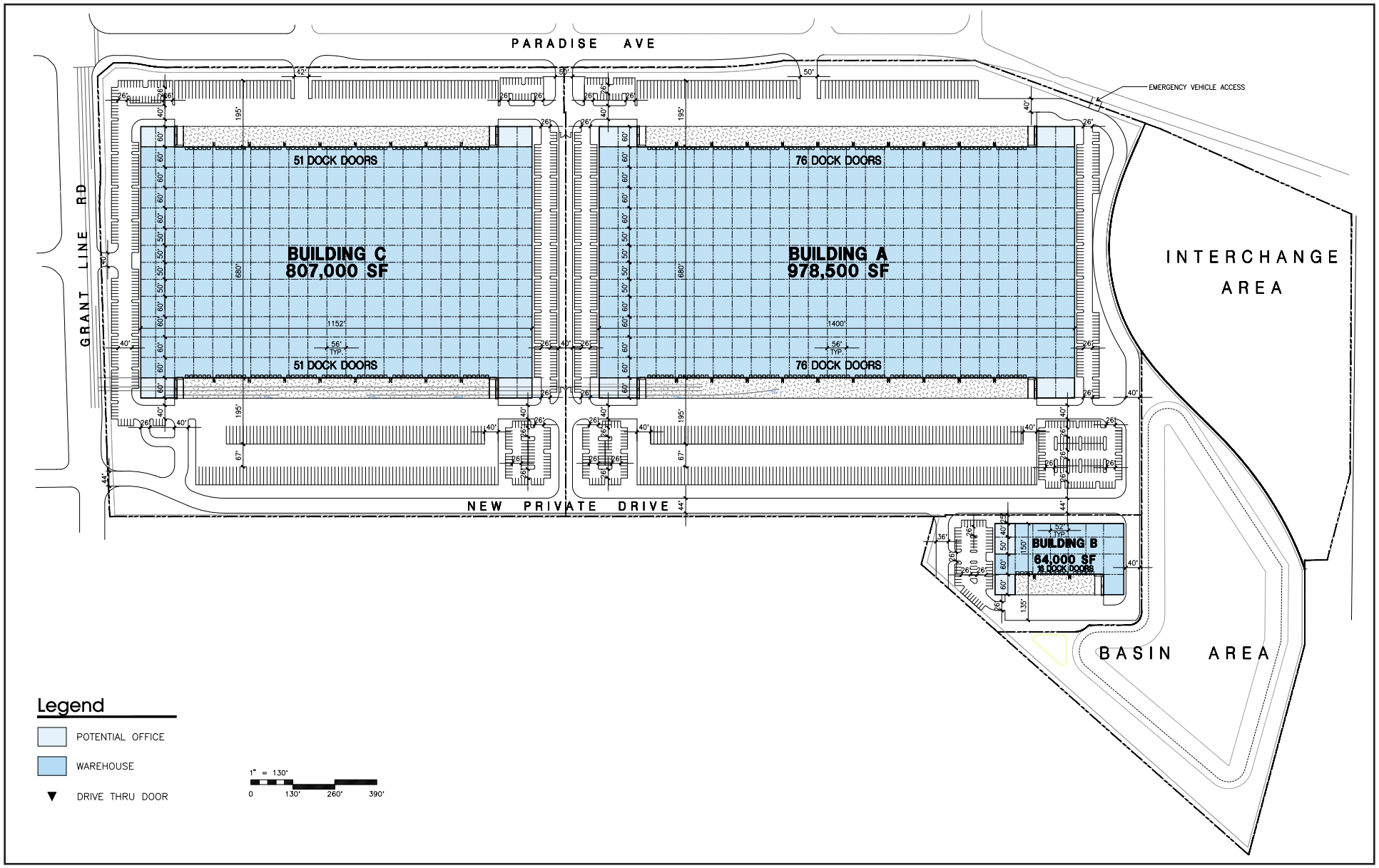
Source: Kier & Wright Civil Engineers & Surveyors Inc., 9/12/2019.

FIRSTCARBON SOLUTIONS™

Exhibit 6a
Comprehensive Site Plan

17260011 • 08/2020 | 6a_comprehensive_site_plan.cdr

CITY OF TRACY
TRACY ALLIANCE PROJECT
NOTICE OF PREPARATION



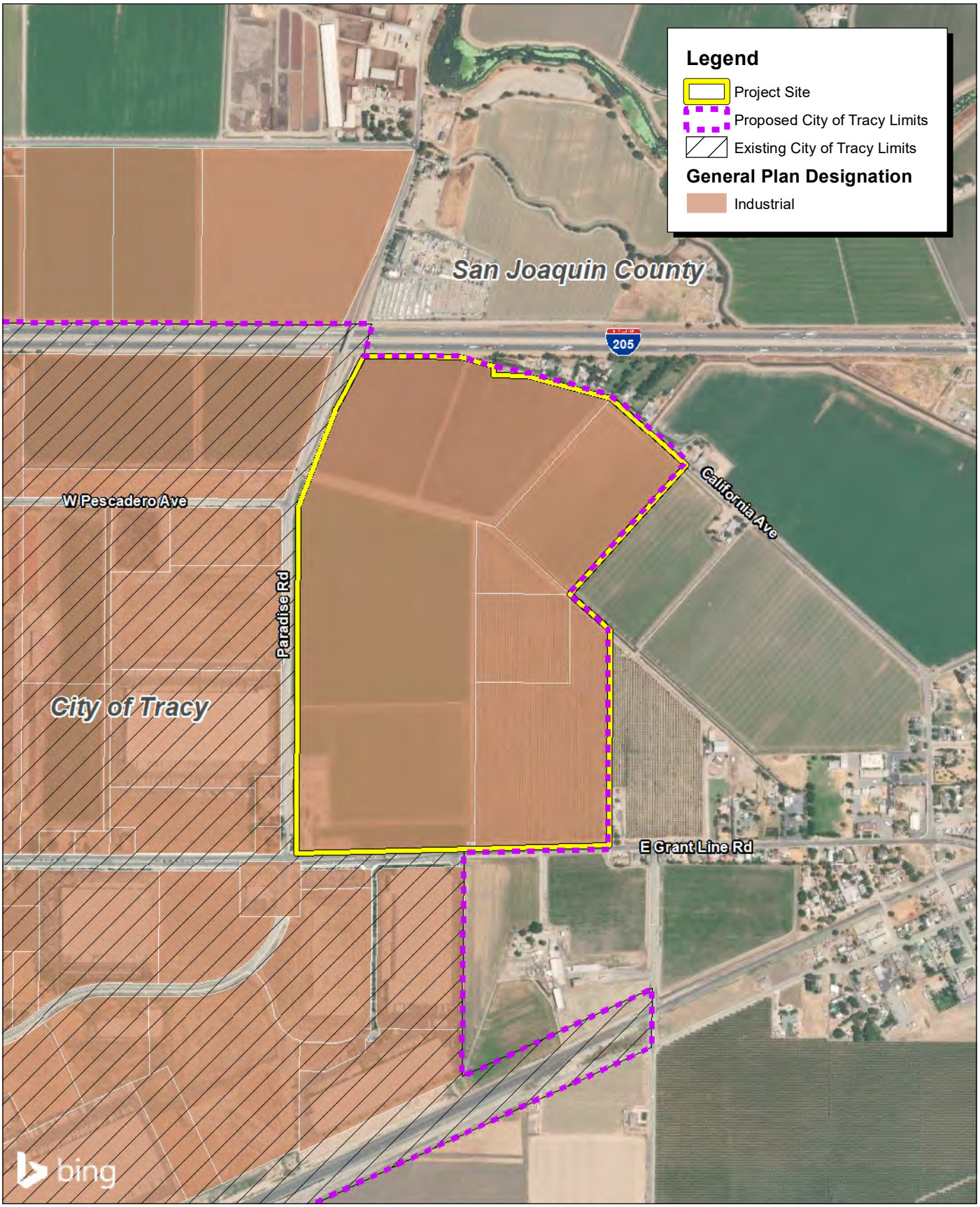
Source: HRA Architecture, June 20, 2020.

FIRSTCARBON SOLUTIONS™

Exhibit 6b
Tracy Alliance Parcels Site Plan

17260011 • 08/2020 | 6b_Tracy_Alliance_Parcels_Site_Plan.cdr

CITY OF TRACY
TRACY ALLIANCE PROJECT
NOTICE OF PREPARATION



Source: Bing Aerial Imagery. City of Tracy. County of San Joaquin.

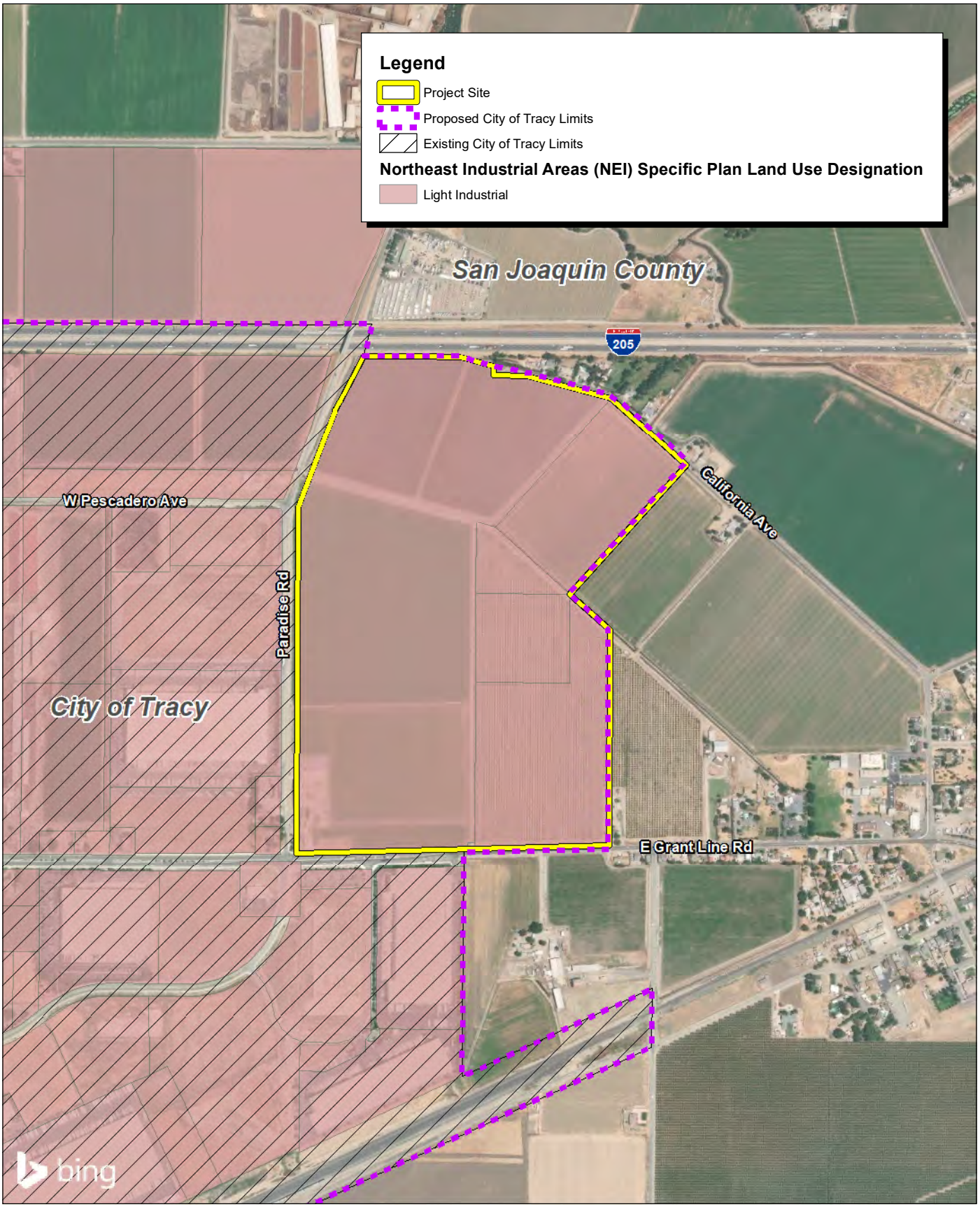
FIRSTCARBON SOLUTIONS™

1,000 500 0 1,000 Feet

Exhibit 7a
Proposed Annexation

17260011 • 08/2020 | 7a_proposed_annexation.mxd

CITY OF TRACY
TRACY ALLIANCE PROJECT
NOTICE OF PREPARATION



Source: Bing Aerial Imagery. City of Tracy. County of San Joaquin.

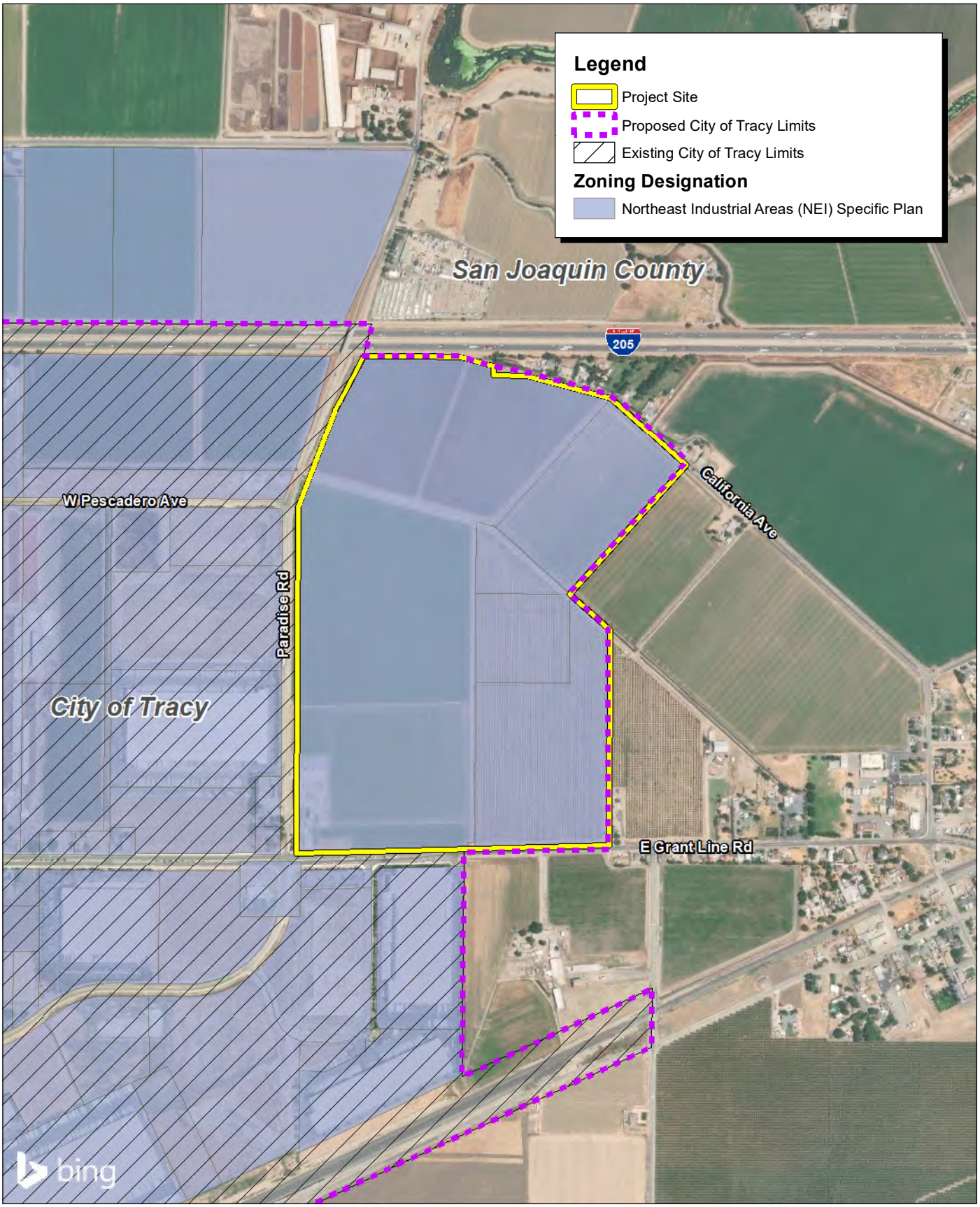
FIRSTCARBON SOLUTIONS™

1,000 500 0 1,000 Feet

Exhibit 7b
Proposed NEI Specific Plan Land Use Designation

17260011 • 08/2020 |7b_proposed_NEI_SP_LU.mxd

CITY OF TRACY
TRACY ALLIANCE PROJECT
NOTICE OF PREPARATION



Source: Bing Aerial Imagery. City of Tracy. County of San Joaquin.

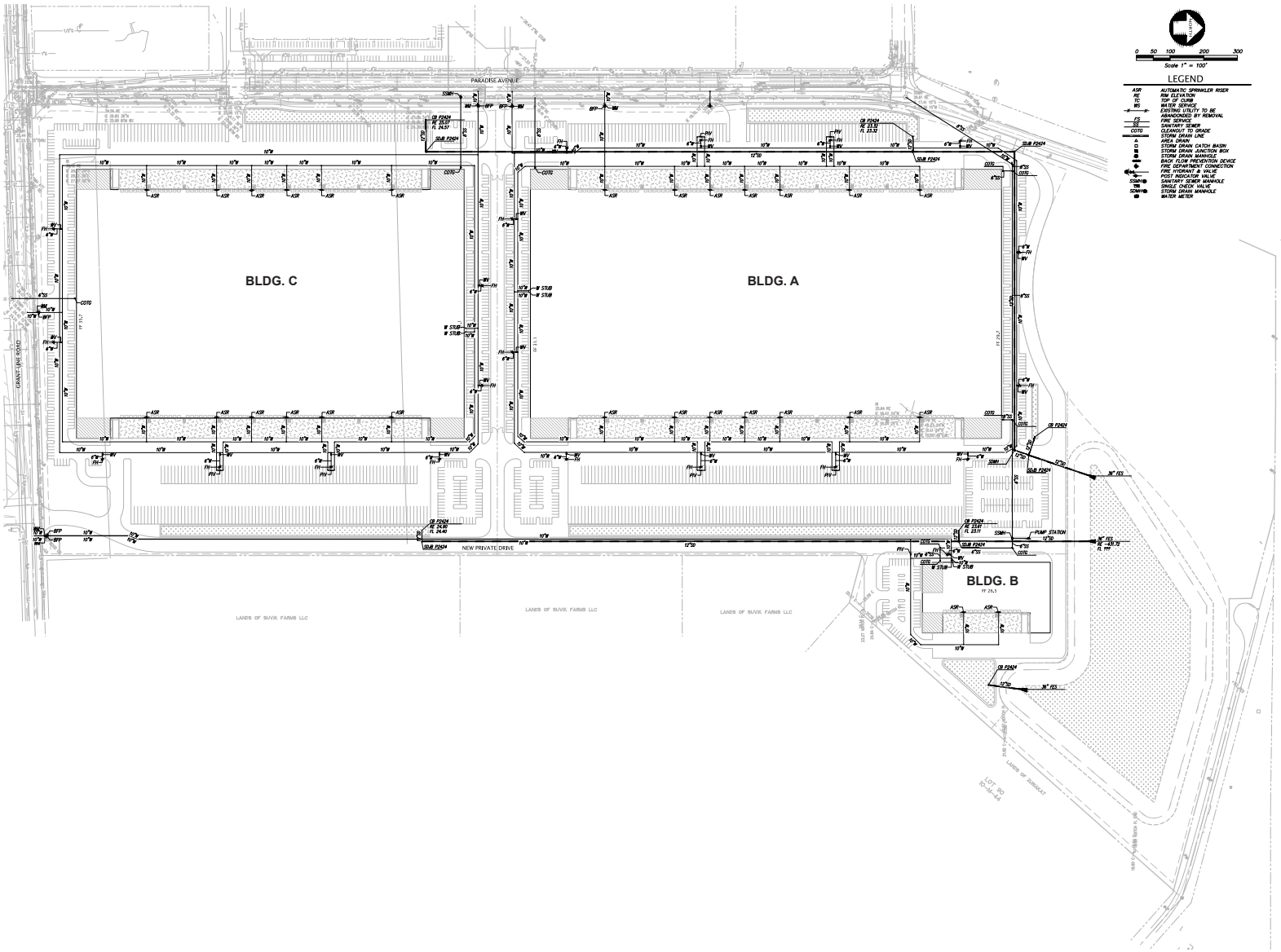
FIRSTCARBON SOLUTIONS™

1,000 500 0 1,000 Feet

Exhibit 7c
Proposed City of Tracy Zoning Designation

17260011 • 08/2020 | 7c_proposed_city_zoning.mxd

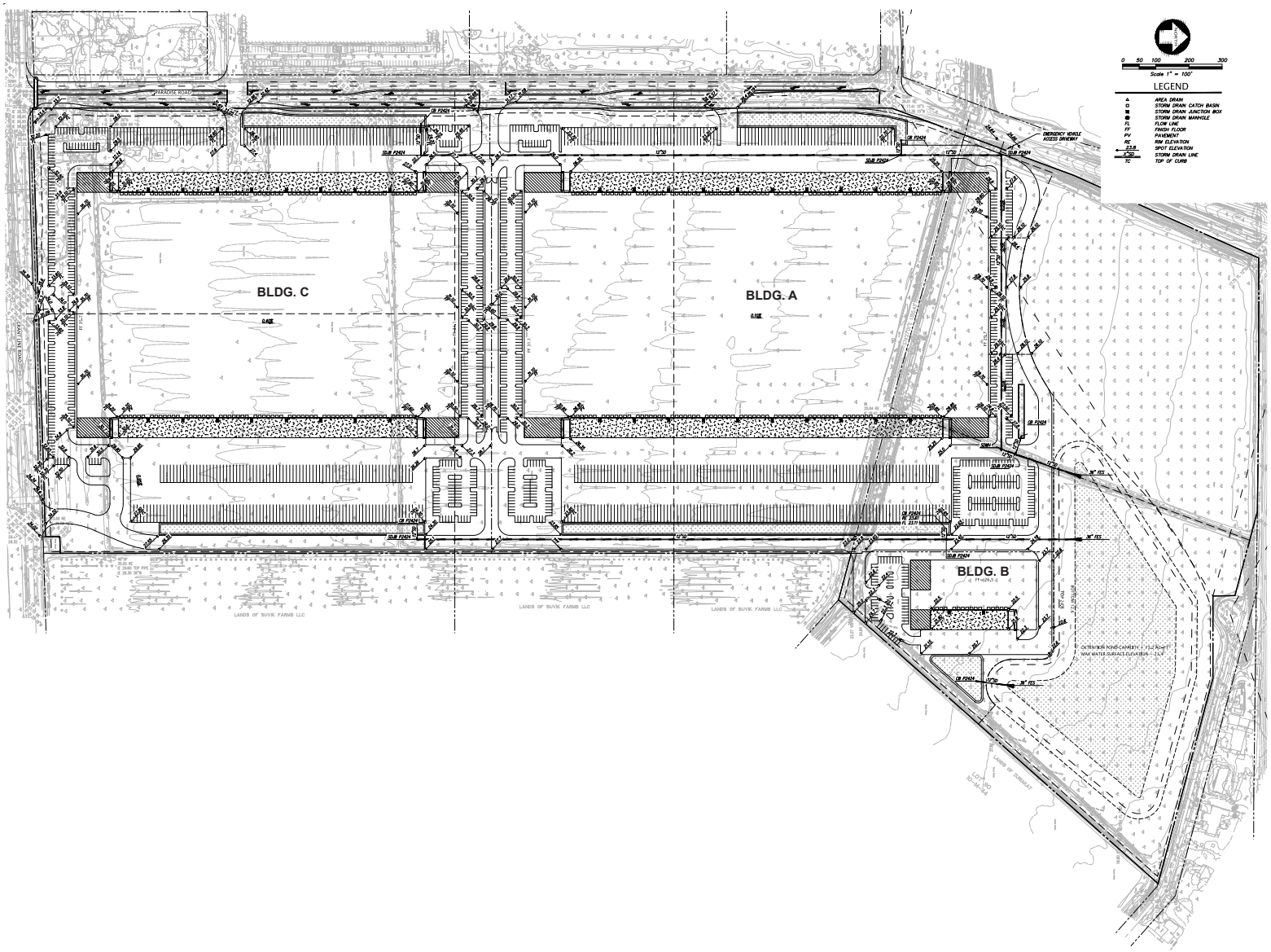
CITY OF TRACY
TRACY ALLIANCE PROJECT
NOTICE OF PREPARATION



Source: Kier & Wright Civil Engineers & Surveyors Inc., 07/09/2020.

FIRSTCARBON SOLUTIONS™

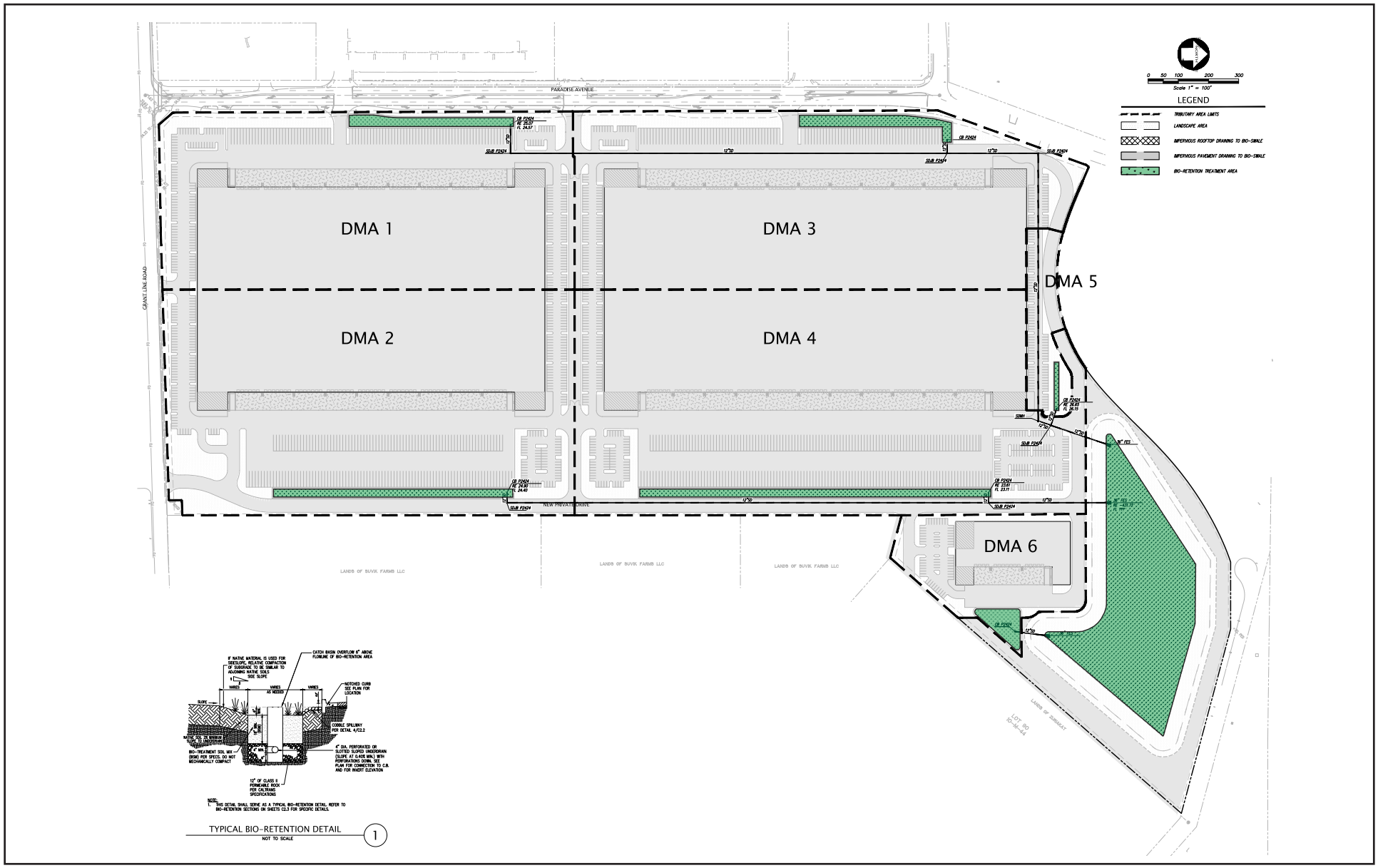
Exhibit 8
Tracy Alliance Parcels - Preliminary Utility Plan



Source: Kier + Wright, July 9, 2020.

FIRSTCARBON SOLUTIONS™

Exhibit 9a
Tracy Alliance Parcels - Preliminary Grading and Drainage Plan



Source: Kier + Wright, July 9, 2020.

FIRSTCARBON SOLUTIONS™

Exhibit 9b
Tracy Alliance Parcels - Preliminary Storm Water Control Plan

17260011 • 08/2020 | 9b_tracy_alliance_parcels_preliminary_storm_water_control_plan.cdr

CITY OF TRACY
TRACY ALLIANCE PROJECT
NOTICE OF PREPARATION

FIRSTCARBONSOLUTIONS™

Attachment E

FINAL
Environmental Impact Report
Tracy Alliance Project
City of Tracy, San Joaquin County, California

State Clearinghouse Number 2020080524

Prepared for:
City of Tracy
Development Services Department
333 Civic Center Plaza
Tracy, CA 95376
209.831.6428

Contact: Victoria Lombardo, Senior Planner

Prepared by:
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
925.357.2562

Contacts: Mary Bean, Project Director
Tsui Li, Project Manager

Date: March 27, 2023
Updated: July 19, 2023

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SECTION 1: INTRODUCTION

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15088, the City of Tracy (Lead Agency) has evaluated the comments received on the Tracy Alliance Project Draft Environmental Impact Report (Draft EIR). Pursuant to CEQA Guidelines Section 15132, the Draft EIR (and appendices attached thereto), a list of persons, organizations, and agencies that provided comments on the Draft EIR, the responses to comments and errata (along with the related appendices) as well as late comments received after the close of the public comment period and responses thereto, all of which are included in this document, together with the Mitigation Monitoring and Reporting Program (MMRP), comprise the Final EIR for use by the City of Tracy during its review and to ensure proper implementation of the mitigation measures described in the Final EIR. This document is organized into three sections:

- **Section 1—Introduction.** Provides an introduction to the Final EIR.
- **Section 2—Master Responses.** Provides a single, comprehensive response to similar comments about a particular topic.
- **Section 3—Responses to Written Comments.** Provides a list of the agencies, organizations, and individuals who commented on the Draft EIR. Copies of all of the letters received providing comments on the Draft EIR and responses thereto are included in this section. This includes late comments received after the close of the public comment period and responses thereto.
- **Section 4—Errata.** Includes an addendum listing refinements, amplifications and clarifications on the Draft EIR, which have been incorporated.

The Final EIR is comprised of the following contents:

- Draft EIR (provided under separate cover)
- Draft EIR Appendices (provided under separate cover)
- Responses to Written Comments on the Draft EIR and Errata (Sections 2 and 3 of this document)
- Mitigation Monitoring and Reporting Program (provided under separate cover)

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SECTION 2: MASTER RESPONSES

Master responses address similar comments made by multiple public agencies, organizations, or individuals through written comments submitted to the City of Tracy (City).

2.1 - Master Responses

Master Response 1—Orderly development of industrial uses within or immediately adjacent to the Northeast Industrial Specific Plan

A number of comments stated that the proposed project would result in significant, unplanned growth within the City; loss of prime farmland; land use compatibility concerns relating to industrial development near sensitive receptors; and that the proposed project was not envisioned in the Northeast Industrial (NEI) Specific Plan.

Consistent with the long-term land use vision for the City and its planning area, the City adopted the NEI Specific Plan to implement a balanced growth strategy. The NEI Specific Plan directs growth as envisioned by the City in an efficient and cost-effective manner, and balances appropriate land uses with well-planned supporting infrastructure.[1] The NEI Specific Plan is intended to improve the jobs/housing balance by encouraging the development of industrial, retail, and service-related employment opportunities in proximity to existing freeway interchanges, while taking into appropriate account land use compatibility considerations.

As part of the NEI Specific Plan, the northeastern sector of the City has been identified for industrial growth. With direct access to Interstate 205 (I-205) and rail transportation, the NEI Specific Plan area is ideally situated to attract and support business without the need for major infrastructure expenditures, and directing industrial uses to be sited in proximity to other similar uses and appropriately distanced from sensitive receptors. This enables the City to facilitate goals of economic development and employment generation, while also helping to ensure the availability of lands in other locations in the City (and its Sphere of Influence [SOI]) for non-industrial uses; this encourages an appropriately diverse and balanced approach to land use consistent with the City of Tracy General Plan (General Plan).

The NEI Specific Plan area is intended for high-quality industrial and commercial sites that would attract businesses to the City. It provides a flexible phasing program that allows market forces to dictate reasonable growth increments, while ensuring that agricultural properties remain devoted to agricultural uses until ready to develop.[2]

The project site is immediately adjacent to the NEI Specific Plan area, which boundary runs along Paradise Road and Grant Line Road, as shown in Exhibit 2-2 of the Draft EIR. The proposed project is consistent with its existing General Plan land use designation of Industrial; this reflects the long-planned urban development vision for the project site, which contemplates a variety of light

[1] City of Tracy. Amended 2012. Northeast Industrial Specific Plan.
[2] City of Tracy. 1996.Northeast Industrial Plan Draft EIR.

industrial uses including warehousing and distribution. The project site would be annexed into the NEI Specific Plan, representing a logical expansion of the NEI Specific Plan vision. The proposed project has been designed to incorporate applicable NEI development standards and design guidelines; accordingly, the proposed project would be consistent with the urban, industrial character of the NEI Specific Plan area.

Master Response 2–Incorporation of Suggested Measures to Further Reduce Impacts

A number of comments requested additional measures that aim to reduce the project's air quality and greenhouse gas (GHG) emissions impacts. A response to each suggested measure is provided in Section 3, Responses to Comments.

The Draft EIR and Final EIR for the proposed project (1) properly assume compliance with a robust regulatory framework (including, without limitation, citing relevant General Plan policies as well as guidance from the California Air Resources Board (ARB) and the San Joaquin Valley Air Pollution Control District (Valley Air District) and set forth a thoughtful consistency analysis related thereto; (2) fully disclose all significant impacts; (3) identify all feasible mitigation measures to mitigate, avoid or reduce the identified significant impacts; and (4) include a summary of all such measures that will be incorporated into the MMRP that will be adopted by the City Council in connection with its certification of the EIR and thereafter imposed as enforceable conditions of approval.

In addition, the project applicants have voluntarily agreed to implement additional measures as well as other enforceable conditions of approval to further reduce impacts related to air quality and GHG emissions, to the extent feasible. Collectively, these measures are consistent with many of the suggested measures and are included in the updated MMRP and discussed in Section 3, Responses to Comments, and Section 4, Errata. These conditions of approval will implement the requirements of the Draft EIR, including both the Draft EIR mitigation measures and the additional, voluntary measures agreed to by the project applicants.

SECTION 3: RESPONSES TO WRITTEN COMMENTS

3.1 - List of Authors

A list of public agencies, organizations, and individuals that provided comments during the public review period, which ran from April 20, 2022, to June 3, 2022, on the Tracy Alliance Project Draft Environmental Impact Report (Draft EIR) is presented below. Each comment has been assigned a code. Individual comments within each communication have been numbered so comments can be cross-referenced with responses. Following this list, the text of the communication is reprinted and followed by the corresponding response.

After the close of the public comment period, five additional comment letters were received. The letter from Advocates for the Environment was received by the City on August 16, 2022. The letter from Genna McIntosh (shown as MCINTOSH-3, below) was received by the City of Tracy (City) on August 29, 2022. The letters from Sierra Club were received by the City on February 8 and February 22, 2023. The letter from Shute, Mihaly, and Weinberger LLP was received by the City on April 13, 2023. Although not required to do so under CEQA, the City provided responses to all of these late comment letters as though they had been submitted during the regular public comment period.

A lead agency is required to consider comments on the Draft EIR and to prepare written responses if a comment is received within the public comment period. (Public Resources Code [PRC] § 21091(d); CEQA Guidelines § 15088). When a comment letter is received after the close of the public comment period, however, a lead agency does not have an obligation to respond. (PRC § 21091(d)(1); PRC § 21092.5(c)). Accordingly, although the City is not required to provide a written response to late comment letters, the City has elected to respond to these late letters, but without waiving its position that written responses to late comment letters are not required by law.

Author **Author Code**

State Agencies

California Department of Transportation ..... CALTRANS

Local Agencies

Central Valley Regional Water Quality Control Board ..... CVRWQCB
San Joaquin Council of Governments, Laurel Boyd ..... SJCOG
San Joaquin Valley Air Pollution Control District ..... Valley Air District-1
San Joaquin Valley Air Pollution Control District ..... Valley Air District-2

Organizations

Blum Collins and Ho, Attorneys at Law GSEJAIndividuals

McIntosh, Genna MCINTOSH-1

Comments received at the public hearing held May 25, 2022

McIntosh, Genna MCINTOSH-2

Late Comments

Advocates for the Environment ..... AENV
Sierra Club SIERRA-1
Sierra Club SIERRA-2
Shute, Mihaly, and Weinberger LLP ..... SHUTE
McIntosh, Genna MCINTOSH-3

3.2 - Responses to Comments

3.2.1 - Introduction

In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15088, the City of Tracy, as the Lead Agency, evaluated the comments received on the Draft EIR (State Clearinghouse [SCH] No. 2020080524) for the Tracy Alliance Project (proposed project), and has prepared the following responses to the comments received. This Response to Comments document is part of the Final EIR for the proposed project in accordance with CEQA Guidelines Section 15132.

3.2.2 - Comment Letters and Responses

The comment letters reproduced in the following pages follow the same organization as used in the List of Authors.

CEQA requires recirculation of a Draft EIR when the lead agency adds “significant new information” to an EIR after public notice is given of the availability of a Draft EIR for public review, but before EIR certification (State CEQA Guidelines California Code of Regulations [CCR] § 15088.5). Recirculation is not required unless the EIR is changed in a way that would deprive the public of the opportunity to comment on significant new information, including a new significant impact for which no feasible mitigation is available to fully mitigate the impact (thus resulting in a significant and unavoidable impact), a substantial increase in the severity of a disclosed environmental impact, or development of a new feasible alternative or mitigation measures that would clearly lessen environmental impacts but which the project proponent declines to adopt (State CEQA Guidelines CCR § 15088.5(a)). Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR (State CEQA Guidelines CCR § 15088.5(b)).

These Responses to Comments include discussion providing clarification, amplification and/or additional information. Neither the clarifications, amplifications nor the additional information constitutes “significant new information” requiring recirculation.

CALIFORNIA STATE TRANSPORTATION AGENCY
GAVIN NEWSOM, GOVERNOR

California Department of Transportation

OFFICE OF THE DISTRICT 10 DIRECTOR
P.O. BOX 2048 | STOCKTON, CA 95201
(209) 948-7943 | FAX (209) 948-7179 TTY 711
www.dot.ca.gov

June 2, 2022

10-SJ-205-PM R009.500
Tracy Alliance Project
Suvik, Zuriakat
SCH#2020080524

Victoria Lombardo
City of Tracy
333 Civic Center Plaza
Tracy, CA 95376

Dear Ms. Lombardo:

The California Department of Transportation appreciates the opportunity to review the proposed Mountain House Apartments. The project is located south of Interstate 205, east of Paradise Road, and north of Grant Line Road. The proposed project consists of the development of up to 3,352,320 square feet of warehouse and distribution and related uses on a total of approximately 191.18 acres. The site consists of six parcels under ownership by three separate parties: the Tracy Alliance Group owns two parcels (totaling approx. 122.44 acres), Suvik Farms, LLC owns three parcels (totaling approx. 46.61 acres), and Zuriakat owns one parcel (approx. 22.17 acres). The Department has the following comments: 1

1. There is a future project 205/Chrisman Road interchange currently in PA&ED. Please continue to work with Caltrans to ensure this warehouse proposal will not conflict with the ultimate build out of the 205/Chrisman Road interchange footprint. 2

2. Please submit a revised Traffic Impact Study (TIS) report with the following changes to Caltrans for review and comment prior to project approval. 3
   a. The TIS should include the following Analysis Scenarios.
      i. Existing Conditions.
      ii. Project Only Condition.
      iii. Existing Conditions plus Project.
      iv. Cumulative Conditions (Existing Conditions plus Other Approval and Pending Project without this project).
      v. Cumulative Conditions with this project.

vi. Synchro/Simtraffic version 10 electronic files should be included with the submittal. 3 CONT

b. The TIS shows I-205/MacArthur interchange is the only access from freeway to this facility. At this time the south site of the interchanges is signed for STAA however, with the significant truck use of this facility, the 95th Percentile queue length analysis using Simtraffic (Simtraffic 5 runs, four 15-minute intervals with 10-minute seeding period) is required to review for all scenarios above to ensure no traffic spillback to the mainline. It is the project proponent's responsibility to provide mitigations to avoid negative impacts to the mainline operation. 4

c. Please ensure the revised study clearly explains how the City's draft VMT per employee threshold is developed and is being met. 5

d. The study should explain how all the project trip distributions are derived. 6

e. The study should provide the supporting analysis documenting how the project's VMT per employee is derived. 7

f. Please clarify how the City's travel demand model is utilized in developing the cumulative volumes. 8

g. The revised study should cite the source of the Office of Planning and Research (OPR) guidance which allows the exclusion of truck trips from VMT impact analysis for clarification. 9

3. From the perspective of goods movement there exists concern with the access to the proposed project. The traffic study identifies a daily truck traffic volume of 1510 vehicles to and from the proposed project. This volume is anticipated to access the proposed project by the MacArthur Road / I-205 interchange, then travel south on MacArthur Road to Grant Line Road to the project. MacArthur Road is a terminal access route consistent with the standards of the Surface Transportation Assistance Act (STAA) of 1984. However, Grant Line Road is not, according to a 2019 map of truck routes in Tracy. As the proposed project is a warehouse, it will likely require access by STAA class truck, and the City of Tracy and the project proponent must address this. The applicant will be responsible for making the needed improvements to the highway and acquiring the appropriate STAA Terminal Access approvals. Terminal Access application procedures can be found at the following link: https://dot.ca.gov/programs/traffic-operations/legal-truck-access/ta-process 10

4. Since on-site mitigation measures are not able to significantly reduce the Vehicle Miles Traveled (VMT) impacts, off-site mitigation measures should be considered and implemented as these may be acceptable as an exchange. The City could collect fees and use toward offsite mitigations such as public transit, bicycle, and pedestrian improvements to help reduce VMT impacts. 11

5. The developer needs to ensure that the existing State drainage facilities will not be significantly impacted by the project. If historical undeveloped topography shows drainage from this site flowed into the State Right-of-Way, it may continue to do so with the conditions that peak flows may not be increased from the pre-construction quantity and the site runoff be treated to meet present storm water quality standards. Please submit to Caltrans would for review and comment the pre and post construction runoff calculations, basin calculations, and drainage plans to understand flow patterns prior to project approval. 12

6. An Encroachment Permit will be required for work (if any) done within Caltrans's right of way (ROW). This work is subject to the California Environmental Quality Act. Therefore, environmental studies may be required as part of the encroachment permits application. A qualified professional must conduct any such studies undertaken to satisfy Caltrans' environmental review responsibilities. Ground disturbing activities to the site prior to completion and/or approval of required environmental documents may affect Caltrans' ability to issue a permit for the project. 13

If you have any questions, please contact me at 209-483-2582 or Nicholas Fung at (209) 986-1552.

Sincerely,

Tom Dumas
Chief, Office of Metropolitan Planning

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State Agencies

California Department of Transportation (CALTRANS)

Response to CALTRANS-1
This comment is a brief summary of the proposed project. It does not raise any specific project-related environmental issues under CEQA and therefore no further response is required.

Response to CALTRANS-2
The commenter notes there is a future Interstate 205 (I-205)/Chrisman Road interchange project currently in the California Department of Transportation (Caltrans) review process known as Project Approval and Environmental Document (PA&ED), and requests continued coordination with Caltrans to ensure the proposed project would not conflict with the ultimate buildout of the future I-205/Chrisman Road interchange footprint. The comment is noted and acknowledged. Because it does not raise any specific project-related environmental issues under CEQA, no further response is required.

Although the comment does not raise any environmental questions regarding the adequacy of the Draft EIR, the following response provides additional clarification and information. None of the additional information requires recirculation or revision of the Draft EIR.

The City of Tracy staff and the applicants met with the City's engineering consultant Dokken Engineering to discuss the proposed footprint of the aforementioned interchange project and to continue coordination per the email from Juann Ramos of Dokken Engineering on September 28, 2020, indicating the 2028 Geometric Approval Drawing for the I-205/Chrisman Road Interchange. The City of Tracy staff and the applicants also met with Caltrans' engineering consultant Kimley-Horn to discuss the preliminary footprint of the I-205 Managed Lanes project and to resolve potential conflicts (if any). See Appendix A.1 for an exhibit from those meetings, which shows that the project's proposed right-of-way boundary would accommodate the future footprint of the interchange.

Response to CALTRANS-3
The commenter requests that the project Traffic Impact Analysis (TIA) be updated to reflect the commenter's requested changes and to include the following analysis scenarios: (1) Existing Conditions, (2) Project Only Conditions, (3) Existing Conditions Plus Project, (4) Cumulative Conditions (Existing Conditions Plus Other Approval and Pending Projects without the proposed project), and (5) Cumulative Conditions with the proposed project. The commenter also requests that Synchro or SimTraffic Version 10 modeling files be included in the TIA.

The TIA was updated to reflect queueing conditions at the I-205/MacArthur Interchange for Existing and Existing Plus Project Conditions. See Responses to CALTRANS-4 through CALTRANS-9 that address each of the commenter's requested changes to the TIA.

Response to CALTRANS-4
The commenter requests that a 95th Percentile Ramp Queueing Analysis be prepared at the I-205/MacArthur interchange for all scenarios to ensure no traffic spillback to the mainline freeway. In accordance with CEQA, the Draft EIR and related TIA considered site design and off-site

improvements with respect to potential hazards that could be substantially increased as a result of the proposed project and concluded that there would be no significant impacts requiring mitigation.

However, for purposes of being responsive to this comment, the City elected to have a supplemental analysis conducted and included in the Errata. Ramp queues were analyzed at the off-ramps for the I-205 and MacArthur Interchange under Existing and Existing Plus Full Project Conditions. The Ramp Queueing Analysis is attached as Appendix A.2 of this Final EIR. All project trips at the I-205 and MacArthur Interchange under Existing Plus Full Project Conditions are anticipated to move to the future I-205 and Chrisman Interchange under Cumulative Conditions and are assumed to be included in the Final Traffic Operations Analysis Report (TOAR) published by Fehr and Peers. Therefore, the proposed project would not cause a queueing deficiency at the MacArthur interchange under Cumulative Conditions.

Consistent with the commenter's request, the analysis utilized SimTraffic 11 with a 10-minute seeding period, four 15-minute periods and 5 runs. The 95th-percentile queues for each of the five runs were averaged and are shown in Table 1 and Table 2 of the Ramp Queueing Analysis (Appendix A.2). The Existing Conditions queues were calibrated based on field-verified queueing. All ramp queueing under Existing Conditions and Existing Plus Full Project Conditions is within each ramp's storage capacity and would not extend to the freeway mainline. Therefore, no significant project impacts would occur in this regard and therefore no mitigation is required. The comment does not identify any additional mitigation measures or a significant impact that requires additional mitigation.

As such, this information merely provides clarification and amplification and does not affect the impact analyses and the environmental determination of the Draft EIR.

Response to CALTRANS-5
The commenter asks for explanation on how the City's draft Vehicle Miles Traveled (VMT) per employee threshold is developed and is being met. The commenter raises a general question with respect to a VMT threshold but does not raise any specific project-related environmental issues under CEQA*;* therefore*,* no further response is required.

For informational purposes, the following is noted. The VMT thresholds determination is thoroughly discussed in the City's 2022 Citywide Roadway and Transportation Master Plan (TMP) (Chapter 2.6).[1] The VMT analysis and thresholds remain unchanged between the 2020 TMP and the 2022 TMP Update.

Response to CALTRANS-6
The commenter requests that the updated TIA explain how all the project trip distributions were derived.

[1] City of Tracy. 2022. Citywide Roadway and Transportation Master Plan. Website: https://www.cityoftracy.org/home/showpublisheddocument/13757. Accessed September 6, 2022.

The project trip distribution was primarily based on existing traffic patterns and supplemented with the City of Tracy travel demand model. See the project TIA for a detailed discussion of trip distribution and assignment. Therefore, no update to the TIA is required.

Response to CALTRANS-7
The commenter requests that the updated TIA provide supporting analysis documenting how the project's VMT per employee was derived.

Section 3.14, Transportation, of the Draft EIR as well as the TIA, provide a detailed discussion in this regard. As explained more fully therein, the VMT per employee used for the transportation analysis is derived from Table 3.4: FARs and Employment Densities of the TMP, which includes floor area ratios and employee densities used in the Tracy Travel Demand Model.[2] For all uses other than retail and office uses, the proposed project is assumed to generate one employee per 1,000 square feet of use. No update to the TIA is required.

Response to CALTRANS-8
The commenter requests that the updated TIA clarify how the City's travel demand model was utilized in developing the cumulative volumes.

Section 3.14, Transportation, of the Draft EIR as well as the TIA, provide a detailed discussion in this regard. As explained more fully therein, Year 2035 turning movement volumes were extrapolated from the TMP 2035 Horizon Year turning movement figures. For intersections without 2035 data, volumes were estimated using the intersection turning movement volumes provided in the TMP. Adjustments to the 2035 Horizon Year turning movement figures were made for the new Northeast Industrial (NEI) Phase 3 project proposed along Grant Line Road. No update to the TIA is required.

Response to CALTRANS-9
The commenter requests the updated TIA cite the source of the Governor's Office of Planning and Research (OPR) guidance which allows the exclusion of truck trips from VMT impact analysis.

The comment is noted and acknowledged. The commenter makes a request to include a citation to OPR guidance with respect to the methodology used in conducting the VMT analysis, but does not raise any specific project-related environmental issues under CEQA; therefore, no further response is required.

For informational purposes, the Technical Advisory on Evaluating Transportation Impacts in CEQA published by the OPR in December 2018 provides the following methodology guidance for the exclusion of heavy trucks from VMT calculations:[3]

> Proposed Section 15064.3, subdivision (a), states, "For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel

[2] City of Tracy. 2022. Citywide Roadway and Transportation Master Plan. Website: https://www.cityoftracy.org/home/showpublisheddocument/13757. Accessed September 6, 2022.
[3] Governor's Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December. Website: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed September 6, 2022.

attributable to a project." Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks.

The TIA was prepared in accordance with the methodology guidance above.

Response to CALTRANS-10
The commenter raises issues concerning access to the proposed project; notes that while MacArthur Road is a terminal access road consistent with Surface Transportation Assistance Act (STAA) standards, Grant Line Road is not; and states that the project applicant would be responsible for making the needed improvements to the highway and acquiring the appropriate STAA Terminal Access approvals.

This comment is noted and acknowledged. The commenter indicates a potentially applicable approval process but does not raise any specific project-related environmental issues under CEQA; therefore, no further response is required.

For informational purposes, the following is noted. STAA truck routes are discussed in Impact Trans-2, Section 3.14, Transportation, of the Draft EIR. The City of Tracy is actively seeking approvals for additional STAA truck routes within the NEI Specific Plan area. See Figure 4.41: Future Truck Routes of the TMP for the proposed interim and future STAA routes.[4] Grant Line Road between MacArthur Drive and the eastern boundary of the project site (Paradise Road) is a planned STAA truck route. The conversion of Grant Line Road to a STAA route, and the construction of new STAA routes in the project vicinity, would further improve both access and roadway safety. Since the City has already planned for improvement of Grant Line Road, the applicants would not be required to make further improvements.

Response to CALTRANS-11
The commenter states that since on-site mitigation measures are not able to significantly reduce VMT impacts, off-site mitigation measures should be considered and implemented as these may be acceptable as an exchange. The commenter suggests that the City could collect fees and use toward off-site mitigation such as public transit, bicycle, and pedestrian improvements to help reduce VMT impacts.

As discussed in detail in Section 3.14, Transportation, the proposed project would implement the following Transportation Demand Management (TDM) measures:

- Communication and Information Strategies–4 percent reduction
- Telecommuting for administrative staff (5 percent of staff population)–1 percent reduction
- Designated parking spaces for carpool vehicles–1 percent reduction
- Provide a transit stop along the project frontage on Grant Line Road (if agreed to by the City)–2 percent reduction

[4] City of Tracy. 2022. Citywide Roadway and Transportation Master Plan. Website: https://www.cityoftracy.org/home/showpublisheddocument/13757. Accessed September 6, 2022.

- Provide bike lanes and sidewalks along the project frontage–1 percent reduction
- Provide on-site bike racks and showers–1 percent reduction

These include both on-site and off-site VMT mitigation measures for a total VMT reduction of 10 percent.

In addition, the proposed project would pay toward the City's VMT Mitigation Banking Fee Program (which is pending as of this writing) for a further VMT reduction of an additional 5 percent. The City's Draft Senate Bill (SB) 743 policy requires a minimum of 15 percent VMT reduction, and the proposed project would achieve this mitigation threshold. As noted in the VMT study, the VMT impact would remain significant and unavoidable even with the 15 percent minimum reduction because the VMT impact is only partially mitigated by the TDM measures identified for the proposed project.

If the City Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, then the relevant applicant shall implement additional VMT reduction measures in order to meet the minimum VMT reduction requirement of 15 percent. Mitigation Measure (MM) TRANS-1(b) is revised to reflect this clarification (see Section 4, Errata).

Response to CALTRANS-12
The commenter states that the applicants need to ensure that State drainage facilities will not be significantly impacted by the project. The commenter also notes that if historical undeveloped topography shows drainage from the project site flowed into the State Right-of-Way, it may continue to do so as long as the applicants ensure that drainage peak flows do not increase from the pre-construction condition and that the site runoff be treated in accordance with present stormwater quality standards. The commenter also requests to review the project's pre- and post-construction runoff calculations, basin calculations, and drainage plans.

Impacts related to stormwater runoff are discussed at length in Section 3.10, Hydrology, of the Draft EIR. The proposed project includes mitigation measures requiring preparation of a Storm Water Pollution Prevention Plan (SWPPP) (MM HYD-1-a), a Storm Water Management Plan (SWMP) (MM HYD-1-b), and final Drainage Plan (MM HYD-3), which would confirm that the proposed project's on-site stormwater detention basin and bioretention treatment areas could accommodate project flows to the satisfaction of the City and that post-development stormwater flow rates would not substantially exceed predevelopment rates pursuant to the applicable C.3 requirements and all other applicable laws and regulations. The aforementioned plans will be provided to Caltrans for review when available.

Response to CALTRANS-13
The commenter states that an Encroachment Permit will be required for work (if any) done within Caltrans' right-of-way, and that any such work would be subject to CEQA review. Therefore, environmental studies may be required as part of the Encroachment Permit application, which would need to be conducted to satisfy Caltrans' environmental review responsibilities. The commenter also notes that ground-disturbing activities on the project site prior to completion

and/or approval of the required environmental documents may affect Caltrans' ability to issue a permit for the proposed project.

The comment is noted and acknowledged. No work within Caltrans' right-of-way is anticipated in connection with the proposed project. However, the applicants would be required to comply with the Encroachment Permit process if any work within Caltrans' right-of-way was necessary to implement the proposed project. For informational purposes, while it is not anticipated that the proposed project would encroach onto any Caltrans right-of-way, the applicants have offered to set aside approximately 12.51 acres in the northwest corner of the project site, which would be sufficient to accommodate the future planned interchange.

CALIFORNIA Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

3 June 2022

Victoria Lombardo
City of Tracy
33 Civic Center Plaza
Tracy, CA 95376
victoria.lombardo@cityoftracy.org

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, TRACY ALLIANCE PROJECT, SCH#2020080524, SAN JOAQUIN COUNTY

Pursuant to the State Clearinghouse's 20 April 2022 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request 0for Review for the Draft Environmental Impact Report* for the Tracy Alliance Project, located in San Joaquin County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore, our comments will address concerns surrounding those issues. 1

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38. 2

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of

Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

2 CONT

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

3

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process. 4

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml 5

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250. 6

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic 7

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/ 7 CONT

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/ 8

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge. 9

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf 9 CONT

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf 10

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/ 11

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Peter Minkel

Peter Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

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Local Agencies

Central Valley Regional Water Quality Control Board (CVRWQCB)

Response to CVRWQCB-1
This comment is a brief summary of the proposed project. It does not raise any specific project-related environmental issues under CEQA and therefore no further response is needed.

Response to CVRWQCB-2
This comment provides a summary of the regulatory setting, including the Basin Plans, the federal requirements for each state to adopt water quality standards to protect the public health or welfare, and the State's water quality standards (including antidegradation considerations). The commenter also states that the potential impacts to both surface and groundwater quality should be evaluated.

These topics were fully evaluated in Section 3.10, Hydrology and Water Quality, of the Draft EIR. As detailed more fully in Section 3.10, the existing hydrology and water quality setting (both surface and groundwater) and potential effects from implementation of the proposed project on the project site and its surrounding area with respect to potential construction and operation-related impacts on both surface and water quality were fully evaluated. No further response is required.

Response to CVRWQCB-3
The commenter identifies the requirements for a Construction Storm Water General Permit and development and implementation of a SWPPP.

The comment is noted and acknowledged, and the commenter is referred to the Regulatory Framework of Section 3.10, Hydrology and Water Quality, of the Draft EIR, where these requirements were included. As noted in Section 3.10 (e.g., Impact HYD-1, Impact HYD-3, Impact HYD-5, MM HYD-1a), along with other requirements and standards, to the extent applicable, each project applicant, as part of its individual development proposal, would be required to comply with these mandates. No further response is required.

Response to CVRWQCB-4
The commenter identifies the requirements of Phase I and II Municipal Separate Storm Sewer System (MS4) permits.

The comment is noted and acknowledged, and the commenter is referred to the Regulatory Framework of Section 3.10, Hydrology and Water Quality, of the Draft EIR, where these requirements are included. As noted in Section 3.10, to the extent applicable, each project applicant as part of its individual development proposal would be required to comply with Phase I and II MS4 permit mandates (e.g., Impact HYD-1, Impact HYD-3, Impact HYD-5, MM HYD-1b, MM HYD-3), along with other requirements and standards. No further response is required.

Response to CVRWQCB-5
The commenter indicates that industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit.

The comment is noted and acknowledged, and the commenter is referred to the Regulatory Framework of Section 3.10, Hydrology and Water Quality, of the Draft EIR, where these

requirements were included. Along with other requirements and standards, to the extent applicable, each project applicant, as part of its individual development proposal, would be required to comply with the mandates of Industrial Storm Water General Permit Order No. 2014-0057-DWQ. No further response is required.

Response to CVRWQCB-6
The commenter describes the requirement for compliance with Section 404 of the Clean Water Act (CWA) if the project will involve the discharge of dredged or fill material in navigable waters or wetlands. The commenter also notes the requirements for a streambed alteration agreement if the project will involve surface water drainage realignment.

The comment is noted and acknowledged, and the commenter is referred to the Regulatory Framework of Section 3.3, Biological Resources, of the Draft EIR, where these requirements were included. As discussed in Section 3.3, a preliminary assessment of potentially jurisdictional features was conducted as part of the literature review and reconnaissance-level survey for the project site. As described in more detail therein, there is a ditch wetland/cattail marsh located on the Zuriakat parcel along California Avenue. Development details for the Zuriakat parcel are unknown at this time. In addition, there are several irrigation/drainage channels throughout the project site, which appear to have a potential hydrological connection to the San Joaquin River, a traditional navigable water of the United States. The man-made channels on the project site have all been excavated within upland habitat for the purpose of on-site agricultural irrigation and drainage, and as explained more in Section 3.3, these features are generally not considered jurisdictional. However, if the proposed project's construction would result in the placement of fill that would potentially result in impacts to any regulated aquatic resources, MM BIO-3 would be implemented, which requires delineation of potentially jurisdictional aquatic resources and obtaining permits pursuant to Sections 404 and 401 of the CWA as well as compliance with Section 1600 of the California Fish and Game Code (to the extent applicable). See also discussion in Impact BIO-3 for further information in this regard.

Response to CVRWQCB-7
The commenter describes the requirement for compliance with Section 401 – Water Quality certification of the CWA.

The comment is noted and acknowledged, and the commenter is referred to the Regulatory Framework of Section 3.3, Biological Resources, of the Draft EIR, and Section 3.10, Hydrology and Water Quality, of the Draft EIR, where these requirements are included. As noted in the above response, to the extent required under applicable laws and regulations, each project applicant would be required to comply with Sections 404 and 401 of the CWA in connection with its individual development proposal. No further response is required.

Response to CVRWQCB-8
The commenter describes the requirement for a Waste Discharge Requirement permit.

The comment is noted and acknowledged, and the commenter is referred to the Regulatory Framework of Section 3.10, Hydrology and Water Quality, of the Draft EIR, where these requirements were noted. If applicable, each project applicant would be required to comply with

these mandates in connection with its individual development proposal. No further response is required.

Response to CVRWQCB-9
The commenter describes the permit requirements for dewatering projects.

This comment is noted and acknowledged, and the commenter is referred to the Regulatory Framework of Section 3.10, Hydrology and Water Quality, of the Draft EIR, where these requirements are noted; however, the proposed project does not include groundwater dewatering. No further response is required.

Response to CVRWQCB-10
The commenter describes the general National Pollutant Discharge Elimination System (NPDES) permit requirements for dewatering projects that would discharge groundwater to waters of the United States but would be considered a low or limited threat to water quality (Limited Threat General Order).

This comment is noted and acknowledged; however, the proposed project does not include groundwater dewatering. No further response is required.

Response to CVRWQCB-11
The commenter describes the requirements for an NPDES permit.

The comment is noted and acknowledged. Each project applicant, in connection with its individual development proposal, would be required to comply with applicable NPDES mandates. No further response is required.

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S J C O G, Inc.

555 East Weber Avenue • Stockton, CA 95202 • (209) 235-0600 • FAX (209) 235-0438

San Joaquin County Multi-Species Habitat Conservation & Open Space Plan (SJMSCP)

SJMSCP RESPONSE TO LOCAL JURISDICTION (RTLJ)
ADVISORY AGENCY NOTICE TO SJCOG, Inc.

To: Victoria Lombardo, City of Tracy, Development Services Department

From: Laurel Boyd, SJCOG, Inc. Phone: (209) 235-0574 Email: boyd@sjcog.org

Date: April 27, 2022

-Local Jurisdiction Project Title: Notice of Availability of Draft Environmental Impact Report for the Tracy Alliance Project

Assessor Parcel Number(s): 213-170-14, -24 to -27, -48

Local Jurisdiction Project Number: N/A

Total Acres to be converted from Open Space Use: Unknown

Habitat Types to be Disturbed: Agricultural Habitat Land

Species Impact Findings: Findings to be determined by SJMSCP biologist.

Dear Ms. Lombardo:

SJCOG, Inc. has reviewed the project referral for the Notice of Availability of Draft Environmental Impact Report for the Tracy Alliance Project. This project consists of the development of up to 3,352,320 square feet of warehouse and distribution and related development. Development on the two Tracy Alliance parcels would consists of approximately 1,849,500 square feet of warehouse and distribution space located in three buildings, as well as an approximately 12.44 acre stormwater detention basin with pump station. Development plans for the Suvik Farms, LLC parcels and Zuriakat parcel are not specified at this time. For the purposes of analysis in the DEIR, buildout fo these parcels was estimated to consist of a total of approximately 1,502,820 square feet of warehouse and distribution development.

The proposed project includes demolition of 11 existing residential and agricultural structures on approximately 4 acres located at the southwestern corner of the Tracy Alliance parcels, removal of all crops and some existing trees, grading of approximately 500,000 cubic yards, and the construction of the following primary components: 1

- Multiple warehouse buildings totaling up to 3,352,320 square feet that support industrial uses and associated offices;
- An approximately 12.44 acre City owned and managed stormwater detention basin with pump station;
- Ample landscaping consistent with all applicable City requirements; for example, in connection with the individual development proposal for the Tracy Alliance parcels, the relevant site plan reflects approximately 110,000 square feet of landscaped areas; and
- Sufficient on-site parking for both vehicles and trailer spaces consistent with all applicable City requirements; for example, in connection with the individual development proposal for the Tracy Alliance parcels, the relevant site plan reflects approximately 1,134 automobile parking spaces and approximately 572 trailer parking spaces.

The project site is located at the northeast corner of Grant Line Road and Paradise Road, Tracy (APN: 213-170-14, -24 to -27, -48).

The City of Tracy is a signatory to San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Participation in the SJMSCP satisfies requirements of both the state and federal endangered species acts, and ensures that the impacts are mitigated below a level of significance in compliance with the California Environmental Quality Act (CEQA). The LOCAL JURISDICTION retains responsibility for ensuring that the appropriate Incidental Take Minimization Measure are properly implemented and monitored and that appropriate fees are paid in compliance with the SJMSCP. Although participation in the SJMSCP is voluntary, Local Jurisdiction/Lead Agencies should be aware that if project applicants choose against participating in the SJMSCP, they will be required to provide alternative mitigation in an amount and kind equal to that provided in the SJMSCP. 2

This Project is subject to the SJMSCP. This can be up to a 30 day process and it is recommended that the project applicant contact SJMSCP staff as early as possible. It is also recommended that the project applicant obtain an information package. http://www.sjcog.org

Please contact SJMSCP staff regarding completing the following steps to satisfy SJMSCP requirements:

- Schedule a SJMSCP Biologist to perform a pre-construction survey ***prior to any ground disturbance***
- SJMSCP Incidental take Minimization Measures and mitigation requirement:

1. Incidental Take Minimization Measures (ITMMs) will be issued to the project and must be signed by the project applicant prior to any ground disturbance but no later than six (6) months from receipt of the ITMMs. If ITMMs are not signed within six months, the applicant must reapply for SJMSCP Coverage. Upon receipt of signed ITMMs from project applicant, SJCOG, Inc. staff will sign the ITMMs. This is the effective date of the ITMMs.
2. Under no circumstance shall ground disturbance occur without compliance and satisfaction of the ITMMs.
3. Upon issuance of fully executed ITMMs and prior to any ground disturbance, the project applicant must:
    a. Post a bond for payment of the applicable SJMSCP fee covering the entirety of the project acreage being covered (the bond should be valid for no longer than a 6 month period); or
    b. Pay the appropriate SJMSCP fee for the entirety of the project acreage being covered; or
    c. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
    d. Purchase approved mitigation bank credits.
4. Within 6 months from the effective date of the ITMMs or issuance of a building permit, whichever occurs first, the project applicant must:
    a. Pay the appropriate SJMSCP for the entirety of the project acreage being covered; or
    b. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
    c. Purchase approved mitigation bank credits.

Failure to satisfy the obligations of the mitigation fee shall subject the bond to be called.

- Receive your Certificate of Payment and release the required permit

It should be noted that if this project has any potential impacts to waters of the United States [pursuant to Section 404 Clean Water Act], it would require the project to seek voluntary coverage through the unmapped process under the SJMSCP which could take up to 90 days. It may be prudent to obtain a preliminary wetlands map from a qualified consultant. If waters of the United States are confirmed on the project site, the Corps and the Regional Water Quality Control Board (RWQCB) would have regulatory authority over those mapped areas [pursuant to Section 404 and 401 of the Clean Water Act respectively] and permits would be required from each of these resource agencies prior to grading the project site.

2 CONT

If you have any questions, please call (209) 235-0600.

S J C O G, Inc.

San Joaquin County Multi-Species Habitat Conservation & Open Space Plan

555 East Weber Avenue • Stockton, CA 95202 • (209) 235-0600 • FAX (209) 235-0438

SJMSCP HOLD

TO: Local Jurisdiction: Community Development Department, Planning Department, Building Department, Engineering Department, Survey Department, Transportation Department, Other: _____

FROM: Laurel Boyd, SJCOG, Inc.

DO NOT AUTHORIZE SITE DISTURBANCE
DO NOT ISSUE A BUILDING PERMIT
DO NOT ISSUE _____ FOR THIS PROJECT

The landowner/developer for this site has requested coverage pursuant to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). In accordance with that agreement, the Applicant has agreed to:

1) SJMSCP Incidental Take Minimization Measures and mitigation requirement:

1. Incidental Take Minimization Measures (ITMMs) will be issued to the project and must be signed by the project applicant prior to any ground disturbance but no later than six (6) months from receipt of the ITMMs. If ITMMs are not signed within six months, the applicant must reapply for SJMSCP Coverage. Upon receipt of signed ITMMs from project applicant, SJCOG, Inc. staff will sign the ITMMs. This is the effective date of the ITMMs.
2. Under no circumstance shall ground disturbance occur without compliance and satisfaction of the ITMMs.
3. Upon issuance of fully executed ITMMs and prior to any ground disturbance, the project applicant must:
   a. Post a bond for payment of the applicable SJMSCP fee covering the entirety of the project acreage being covered (the bond should be valid for no longer than a 6 month period); or
   b. Pay the appropriate SJMSCP fee for the entirety of the project acreage being covered; or
   c. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
   d. Purchase approved mitigation bank credits.
4. Within 6 months from the effective date of the ITMMs or issuance of a building permit, whichever occurs first, the project applicant must:
   a. Pay the appropriate SJMSCP for the entirety of the project acreage being covered; or
   b. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
   c. Purchase approved mitigation bank credits.

   Failure to satisfy the obligations of the mitigation fee shall subject the bond to be called.

3

Project Title: NOA of DEIR for the Tracy Alliance Project

Assessor Parcel #s: 213-170-14, -24 to -27, -48

T _____, R_____, Section(s): _____

Local Jurisdiction Contact: Victoria Lombardo

The LOCAL JURISDICTION retains responsibility for ensuring that the appropriate Incidental Take Minimization Measures are properly implemented and monitored and that
appropriate fees are paid in compliance with the SJMSCP.

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San Joaquin Council of Governments (SJCOG)

Response to SJCOG-1
The comment provides introductory remarks, including a summary of the project description.

It does not raise any specific project-related environmental issues under CEQA and therefore no further response is required.

Response to SJCOG-2
The commenter notes that the proposed project is subject to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP); summarizes the local jurisdiction's compliance obligations; and recommends that the project applicant contact SJMSCP staff as early as possible. The commenter also notes the steps required to satisfy SJMSCP requirements, including a pre-construction survey by a qualified Biologist and implementation of incidental take minimization measures. It also notes that Section 404 requirements would apply if the proposed project would impact any waters of the United States.

SJMSCP requirements are detailed in Section 3.3, Biological Resources, of the Draft EIR (e.g., Section 3.4.4 (Regulatory Framework), Impact BIO-6, MM BIO-1). As analyzed more fully therein, each applicant, in connection with its individual development proposal, would be required to implement mitigation mandated under the SJMSCP and minimization measures (as identified above in Impact BIO-1) in conjunction with required compliance with the SJMSCP, which would reduce specific impacts to listed species to a less than significant level under CEQA. Pursuant to the foregoing, no permit for site clearance, grading, or construction would be issued until all requirements under applicable laws and regulations, including those of the SJMSCP, have been satisfied. See also discussion in Section 3.3 (e.g., Impact BIO-3) with respect to potential impacts to jurisdictional features.

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From: Diana Walker <Diana.Walker@valleyair.org>
Sent: Wednesday, May 4, 2022 2:14 PM
To: Victoria Lombardo <Victoria.Lombardo@cityoftracy.org>
Subject: SJVAPCD Information Request for DEIR Tracy Alliance Project

Hello Victoria,

The District is currently reviewing the DEIR for the Tracy Alliance Project. I noticed that an ambient air quality analysis and health risk assessment was completed for the project. May you please request the electronic modeling (AERMOD) and HARP2 files for both analyses from the consultant/applicant and submit them to the District as soon as possible. We will need them in order to complete our review of the DEIR. 1

Best regards,

Diana Walker
San Joaquin Valley Air Pollution Control District
Air Quality Specialist II
(559) 230- 5820
Diana.Walker@valleyair.org

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San Joaquin Valley Air Pollution Control District (Valley Air District-1)

Response to Valley Air District-1-1

The commenter states that they are reviewing the Draft EIR and requests the American Meteorological Society/United States Environmental Protection Agency (EPA) Regulatory Model (AERMOD) and Hotspots Analysis and Reporting Program (HARP2) files be sent to the Valley Air District in order to complete their review.

This comment is noted and acknowledged. FirstCarbon Solutions (FCS), on behalf of the City, submitted the requested files to the Valley Air District on May 10, 2022.

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San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

June 2, 2022

Victoria Lombardo
City of Tracy
Development Services Department
333 Civic Center Plaza
Tracy, CA 95376

Project: Draft Environmental Impact Report for Tracy Alliance Project

District CEQA Reference No: 20220531

Dear Ms. Lombardo:

The San Joaquin Valley Air Pollution Control District (District) has reviewed the Draft Environmental Impact Report (DEIR) for the Tracy Alliance Project for City of Tracy (City). Per the DEIR, the proposed project consists of the construction and operation of approximately 3,352,320 square feet of warehouse and distribution development (Project), located at the northeast corner of Grant Line Road and Paradise Road in Tracy CA. 1

The District offers the following comments regarding the Project:

1) Project Related Emissions

1a) Project Trip Length Assumption for Operational Off-Site Heavy Heavy-Duty Truck Travel

Per Appendix B (*Air Quality and Greenhouse Gas Emissions Supporting Information*) of the DEIR, the California Emissions Estimator Model (CalEEMod) analysis includes a 6.9-mile trip length for quantifying Project operational emissions from heavy heavy-duty (HHD) truck travel. However, warehouse development projects typically result in a high volume of HHD truck trips that generally travel further distances (e.g. trip length) for distribution. Without sufficient justification in the DEIR to support the 6.9-mile trip length, the analysis may be underestimating the Project's operational emissions. Therefore, the District recommends the DEIR be revised to either justify the use of a 6.9-mile trip length for this Project or reflect an appropriate trip length distance that is supported 2

Samir Sheikh
Executive Director/Air Pollution Control Officer

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by project-specific factors and include a qualitative discussion in the DEIR for consistency. 2 CONT

1b) Recommended Mitigation to Reduce Operational Air Quality Impacts

Per the DEIR, specifically Table 3.3-12 (Unmitigated *Annual Operational Emissions*) demonstrates Project operational emissions are expected to exceed the District's significance thresholds. Therefore, the District recommends the DEIR be revised to include a Voluntary Emission Reduction Agreement (VERA) for this Project.

A VERA is a mitigation measure by which the project proponent provides pound-for-pound mitigation of emissions increases through a process that develops, funds, and implements emission reduction projects, with the District serving a role of administrator of the emissions reduction projects and verifier of the successful mitigation effort. To implement a VERA, the project proponent and the District enter into a contractual agreement in which the project proponent agrees to mitigate project specific emissions by providing funds for the District's incentives programs. The funds are disbursed by the District in the form of grants for projects that achieve emission reductions. Thus, project-related impacts on air quality can be mitigated. Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors. 3

In implementing a VERA, the District verifies the actual emission reductions that have been achieved as a result of completed grant contracts, monitors the emission reduction projects, and ensures the enforceability of achieved reductions. After the project is mitigated, the District certifies to the Lead Agency that the mitigation is completed, providing the Lead Agency with an enforceable mitigation measure demonstrating that project-related emissions have been mitigated. To assist the Lead Agency and project proponent in ensuring that the environmental document is compliant with CEQA, the District recommends the environmental document includes an assessment of the feasibility of implementing a VERA. 4

2) <u>Health Risk Assessment</u>

Per the DEIR, the Project-related health impacts are expected to exceed the District's significance threshold of 20 in a million for cancer risk for new developments under CEQA. Therefore, the District recommends that the Project not be approved unless the DEIR is revised to include additional mitigation measures to reduce the Project-level health impacts to below the District's significance thresholds. 5

3) District Rule 9510 - Indirect Source Review

The Project is subject to District Rule 9510 because it will receive a project-level discretionary approval from a public agency and will equal or exceed 25,000 square feet of light industrial space.

The purpose of District Rule 9510 is to reduce the growth in both NOx and PM emissions associated with development and transportation projects from mobile and area sources; specifically, the emissions associated with the construction and subsequent operation of development projects. The Rule encourages clean air design elements to be incorporated into the development project. In case the proposed project clean air design elements are insufficient to meet the targeted emission reductions, the rule requires developers to pay a fee to fund projects to achieve off-site emissions reductions.

Per Section 5.0 of the ISR Rule, an Air Impact Assessment (AIA) application is required to be submitted no later than applying for project-level approval from a public agency. As of the date of this letter, the District has not received an AIA application for this Project. Please inform the project proponent to immediately submit an AIA application to the District to comply with District Rule 9510. One AIA application should be submitted for the entire Project. It is preferable for the applicant to submit an AIA application as early as possible in the public agency's (City of Tracy) approval process so that proper mitigation and clean air design under ISR can be incorporated into the public agency's analysis. 6

Information about how to comply with District Rule 9510 can be found online at: http://www.valleyair.org/ISR/ISRHome.htm.

The AIA application form can be found online at: http://www.valleyair.org/ISR/ISRFormsAndApplications.htm.

District staff is available to provide assistance, and can be reached by phone at (559) 230-5900 or by email at ISR@valleyair.org.

4) Recommended Emissions Reductions Strategies to Reduce Project Air Quality Impacts

4a) Industrial/Warehouse Emission Reduction Strategies

The District recommends the City consider the feasibility of incorporating emission reduction strategies that also reduce potential harmful health impacts, such as those listed below: 7

- Ensure solid screen buffering trees, solid decorative walls, and/or other natural ground landscaping techniques are implemented along the property line of adjacent sensitive receptors
- Ensure all landscaping be drought tolerant
- Orient loading docks away from sensitive receptors unless physically impossible
- Locate loading docks a minimum of 300 feet away from the property line of sensitive receptor unless dock is exclusively used for electric trucks
- Incorporate signage and “pavement markings” to clearly identify on-site circulation patterns to minimize unnecessary on-site vehicle travel
- Locate truck entries on streets of a higher commercial classification.
- Ensure all building roofs be solar-ready
- Ensure all portions of roof tops that are not covered with solar panels are constructed to have light colored roofing material with a solar reflective index of greater than 78 7
- Ensure rooftop solar panels are installed and operated to supply 100% of the power needed to operate all non-refrigerated portions of the development project
- Ensure power sources at loading docks for all refrigerated trucks have “plugin” capacity, which will eliminate prolonged idling while loading and unloading goods
- Incorporate bicycle racks and electric bike plug-ins
- Require the use of super-compliant volatile organic compounds (VOC) architectural and industrial maintenance coatings
- Prohibit the use of non-emergency diesel-powered generators during construction
- Inform the project proponent of the incentive programs (e.g., Carl Moyer Program and Voucher Incentive Program) offered to reduce air emissions from the Project

4b) Truck Routing

Truck routing involves the assessment of which roads HHD trucks take to and from their destination, and the emissions impact that the HHD trucks may have on residential communities and sensitive receptors.

Per the DEIR, the Project will result in increased HHD truck trips. Therefore, the District recommends the City evaluate HHD truck routing patterns for the Project, with the aim of limiting exposure of residential communities and sensitive receptors to emissions. This evaluation would consider the current truck routes, the quantity and type of each truck (e.g., Medium Heavy-Duty, HHD, etc.), the destination and origin of each trip, traffic volume correlation with the time of day or the day of the week, overall Vehicle Miles Traveled (VMT), and associated exhaust emissions. The truck routing evaluation would also identify alternative truck routes and their impacts on VMT and air quality. 8

4c) Reduce Idling of Heavy-Duty Trucks

The goal of this strategy is to limit the potential for localized PM2.5 and toxic air contaminant impacts associated with the idling of Heavy-Duty trucks. The diesel exhaust from idling has the potential to impose significant adverse health and environmental impacts.

Since the Project is expected to result in HHD truck trips, the District recommends the DEIR be revised to include measures to ensure compliance of the state anti-idling regulation (13 CCR § 2485 and 13 CCR § 2480) and discuss the importance of limiting the amount of idling, especially near sensitive receptors. In addition, the District recommends the City consider the feasibility of implementing a more stringent 3-minute idling restriction and requiring appropriate signage and enforcement of idling restrictions. 9

4d) Electric On-Site Off-Road and On-Road Equipment

Since the Project will result in industrial development, it has the potential to result in increased use of off-road equipment (e.g., forklifts) and on-road equipment (e.g., mobile yard trucks with the ability to move materials). The District recommends that the DEIR include requirements for project proponents to utilize electric or zero emission off-road and on-road equipment. 10

4e) Vegetative Barriers and Urban Greening

There are residential units located northeast and southeast of the Project. The District suggests the City consider the feasibility of incorporating vegetative barriers and urban greening as a measure to further reduce air pollution exposure on sensitive receptors (e.g., residential units).

While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, vegetative barriers have been shown to be an additional measure to potentially reduce a population's exposure to air pollution through the interception of airborne particles and the update of gaseous pollutants. Examples of vegetative barriers include, but are not limited to the following: trees, bushes, shrubs, or a mix of these. Generally, a higher and thicker vegetative barrier with full coverage will result in greater reductions in downwind pollutant concentrations. In the same manner, urban greening is also a way to help improve air quality and public health in addition to enhancing the overall beautification of a community with drought tolerant, low-maintenance greenery. 11

4f) On-Site Solar Deployment

It is the policy of the State of California that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045. While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, the production of solar energy is contributing to improving air quality and public health. The District suggests that the City consider incorporating solar power systems as an emission reduction strategy for the Project. 12

4g) Electric Vehicle Chargers

To support and accelerate the installation of electric vehicle charging equipment and development of required infrastructure, the District offers incentives to public agencies, businesses, and property owners of multi-unit dwellings to install electric charging infrastructure (Level 2 and 3 chargers). The purpose of the District's Charge Up! Incentive program is to promote clean air alternative-fuel technologies and the use of low or zero-emission vehicles. The District recommends that the City and project proponents install electric vehicle chargers at project sites, and at strategic locations. 13

Please visit www.valleyair.org/grants/chargeup.htm for more information.

5) District Rules and Regulations

The District issues permits for many types of air pollution sources, and regulates some activities that do not require permits. A project subject to District rules and regulations would reduce its impacts on air quality through compliance with the District's regulatory framework. In general, a regulation is a collection of individual rules, each of which deals with a specific topic. As an example, Regulation II (Permits) includes District Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 2520 (Federally Mandated Operating Permits), and several other rules pertaining to District permitting requirements and processes. 14

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm. To identify other District rules or regulations that apply to future projects, or to obtain information about District permit requirements, the project proponents are strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (209) 557-6446.

5a) District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. 15

District Rule 2010 (Permits Required) requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 (New and Modified Stationary Source Review) requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology (BACT).

This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits. Prior to construction, the Project proponent should submit to the District an application for an ATC. For further information or assistance, the project proponent may contact the District's SBA Office at (209) 557-6446. 15 CONT

5b) District Rule 9410 (Employer Based Trip Reduction)

The Project may be subject to District Rule 9410 (Employer Based Trip Reduction) if the project would result in employment of 100 or more "eligible" employees. District Rule 9410 requires employers with 100 or more "eligible" employees at a worksite to establish an Employer Trip Reduction Implementation Plan (eTRIP) that encourages employees to reduce single-occupancy vehicle trips, thus reducing pollutant emissions associated with work commutes. Under an eTRIP plan, employers have the flexibility to select the options that work best for their worksites and their employees. 16

Information about District Rule 9410 can be found online at: www.valleyair.org/tripreduction.htm.

For additional information, you can contact the District by phone at 559-230-6000 or by e-mail at etrip@valleyair.org

5c) District Rule 4002 (National Emissions Standards for Hazardous Air Pollutants)

The Project will be subject to District Rule 4002 since the Project will include demolition of existing structures. To protect the public from uncontrolled emissions of asbestos, this rule requires a thorough inspection for asbestos to be conducted before any regulated facility is demolished or renovated. Any asbestos present must be handled in accordance with established work practice standards and disposal requirements. 17

Information on how to comply with District Rule 4002 can be found online at: http://www.valleyair.org/busind/comply/asbestosbultn.htm.

5d) District Rule 4601 (Architectural Coatings)

The Project will be subject to District Rule 4601 since it is expected to utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of this rule is to limit VOC emissions from architectural coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements. Additional information on how to comply with District Rule 4601 requirements can be found online at: http://www.valleyair.org/rules/currntrules/r4601.pdf . 18

5e) District Regulation VIII (Fugitive PM10 Prohibitions)

The Project will be required to submit a Construction Notification Form and submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in Regulation VIII, specifically Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities.*

Since the Project will result in at least 1-acre in size, the project proponent shall provide written notification to the District at least 48 hours prior to the project proponents intent to commence any earthmoving activities pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). Also, should the project result in the disturbance of 5-acres or more, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials, the project proponent shall submit to the District a Dust Control Plan pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). For additional information regarding the written notification or Dust Control Plan requirements, please contact District Compliance staff at (559) 230-5950. 19

The application for both the Construction Notification and Dust Control Plan can be found online at:
https://www.valleyair.org/busind/comply/PM10/forms/DCP-Form.docx

Information about District Regulation VIII can be found online at:
http://www.valleyair.org/busind/comply/pm10/compliance_pm10.htm

5f) Other District Rules and Regulations

The Project may also be subject to the following District rules: Rule 4102 (Nuisance) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). 20

6) District Comment Letter

The District recommends that a copy of the District's comments be provided to the Project proponent. 21

If you have any questions or require further information, please contact Diana Walker by e-mail at Diana.Walker@valleyair.org or by phone at (559) 230-5820.

Sincerely,

Brian Clements
Director of Permit Services

Mark Montelongo
Program Manager

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San Joaquin Valley Air Pollution Control District (Valley Air District-2)

The following responses include discussion of new mitigation measures that the City and the property owners have agreed to adopt and implement to address comments from the Valley Air District. The mitigation measures are appropriately discussed in this Final EIR and are incorporated into the Mitigation Monitoring and Reporting Program (MMRP) because the new mitigation measures would result in further emission reductions; they would not themselves involve new significant effects or substantially increase the severity of previously analyzed significant effects that would require the recirculation of the Draft EIR.

Under *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal*. (1993) 6 C4th 1112 and CEQA Guidelines Section 15088.5(a)(3)), when information added to the Final EIR consists of a suggested new mitigation measure, recirculation is only required if the mitigation measure meets each of the following criteria (*South County Citizens for Smart Growth v. County of Nevada* (2013) 221 CA4th 316, 330):

- It is feasible;
- It is considerably different from the alternatives or mitigation measures already evaluated in the Draft EIR;
- It would clearly lessen the project's significant environmental impacts; and
- It is not adopted.

These new mitigation measures are accepted by the applicants and will be adopted and implemented with the construction of the proposed project, as applicable. Therefore, recirculation is not required.

Response to Valley Air District-2-1
The commenter states that the Valley Air District has reviewed the Draft EIR for the proposed project and notes that the proposed project consists of the construction and operation of approximately 3,352,320 square feet of warehouse and distribution development.

This comment is noted and acknowledged. Because it does not raise any specific project-related environmental issues under CEQA, no further response is required.

Response to Valley Air District-2-2
The commenter identifies that Appendix B of the Draft EIR includes a 6.9-mile trip length for quantifying heavy heavy-duty (HHD) truck traffic, but notes that warehouse development projects typically result in a high volume of HHD truck trips that generally travel distances further than 6.9 miles. Therefore, the commenter requests either (1) justification for the use of this metric, or (2) revisions to the analysis that reflect an appropriate trip length distance that is supported by project-specific factors and include a qualitative discussion for consistency.

The average HHD truck travel distance utilized in the CalEEMod modeling to support the Air Quality Analysis of the Draft EIR is 11.35 miles rather than the 6.9-mile distance referred to by the commenter. As shown in Appendix B of the Draft EIR, the California Emissions Estimator Model

(CalEEMod) utilizes three separate travel distance metrics by default. In this case, the model's truck trips were divided, with 41 percent assigned to a "H-O or C-NW" trip type with a default distance of 6.6 miles per trip and 59 percent assigned to a "H-W or C-W" trip type with a default distance of 14.7 miles per trip. Therefore, the model's default truck travel distance would be an average 11.35 miles per trip ((14.7 x 0.59) + (6.6 x 0.41) = 11.35).

Based on available information, the proposed project's co-applicants (the three owners of the six parcels that comprise the project site; see Draft EIR, Chapter 1, Introduction (page 1-1); hereafter, the "applicants") have identified three regionally located intermodal facilities as the most likely origins and destinations for much of their operations: an intermodal facility located at 1000 East Roth Road, Lathrop, California 95231, approximately 12.1 miles from the project site; an Amazon distribution center, located along East Paradise Road approximately 1 mile from the project site; and a UPS distribution center, located along West Shulte Road approximately 10.9 miles from the project site. Considering an even distribution between the three listed product origins and destinations, trucks traveling to and from the project site during operation would travel an average of 8 miles per trip. As the CalEEMod default results in an average truck travel distance of 11.35 miles, as shown in Appendix B of the Draft EIR, the proposed project's trucking activity was conservatively captured in the modeling contained in Appendix B of the Draft EIR and no revisions to the analysis are necessary in order to comply with CEQA.

Response to Valley Air District-2-3
The commenter recommends that the Draft EIR be revised to include a Voluntary Emission Reduction Agreement (VERA) for the project and describes that a VERA is a contractual agreement between the project proponent and the Valley Air District.

A VERA is a voluntary recommendation, it is not a requirement. In addition, because the project would result in the development of greater than 25,000 square feet of light industrial building space, the project would be required to pay emission reduction fees associated with its Indirect Source Review application, consistent with the requirements contained in District Rule 9510. The Indirect Source Review application and fees to the Valley Air District would reduce project emissions since the Air District would direct the fees to fund other air quality improvement measures throughout the District. Although the proposed project would not include a VERA, the incorporation of Indirect Source Review application measures and payment of fees would further offset proposed project air pollutant emissions. No further response is required.

Response to Valley Air District-2-4
The commenter describes that through a VERA, the Valley Air District verifies emission reductions achieved by complete grant contracts, monitors the emission reduction projects, and ensures the enforceability of achieved reductions.

No further response is required.

Response to Valley Air District-2-5
The commenter states that the project-related health impacts are anticipated to exceed the Valley Air District's significance threshold of 20 in one million for cancer risk for new developments under CEQA. The commenter recommends that the proposed project not be approved unless the Draft EIR

is revised to include additional mitigation measures to reduce the project-level health impacts to below the Valley Air District's significance thresholds.

To the extent the commenter is expressing an opinion on the merits of the proposed project, the comment will be noted and included in the administrative record for consideration by the City's decision-makers. The City, as Lead Agency, has the authority to approve the proposed project even if significant and unavoidable impacts would occur so long as the City's basis for doing so is supported by the required CEQA findings, including, if necessary, a Statement of Overriding Considerations. As noted in Section 3.3, Air Quality, of the Draft EIR, while the final determination of whether a project would have a significant impact is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, the City, in its discretion, has acted in accordance with Valley Air District's recommendation that its quantitative air pollution thresholds be used to determine the significance of project emissions. The applicable Valley Air District thresholds and methodologies are contained under each impact statement in Section 3.3, as the City, in its discretion, has determined to utilize these thresholds and methodologies, which are based on robust scientific and factual data appropriately considered and incorporated therein by the Valley Air District, as the expert public agency charged with addressing air quality and greenhouse gas (GHG) emissions within Valley Air District boundaries, which include the project site.

For purposes of conducting the health risk impact analysis, the Draft EIR's analysis properly identified the closest sensitive receptors to the proposed project; it also noted that the Maximally Impacted Sensitive Receptor (MIR) during each construction phase of the proposed project may be different since the MIR during pollutant-generating activity is influenced by the distance of that receptor to the pollutant source(s), the amount and type of pollutants generated by each source, the topography and direction of the MIR as it relates to the pollutant source(s), and the prevailing meteorological conditions. As discussed under Impact AIR-3 in Section 3.3, Air Quality, the Draft EIR analyzed the health risk impacts during operation of Phase 1 of the proposed project as that is the only phase for which project-specific information was available, such as specific local truck travel routes, possible locations of on-site vehicle and equipment idling, and general building design and orientation on the project site. Nevertheless, it is reasonable to conclude that the health risk impacts resulting from operation of Phase 1 would be generally representative of and thus adequately identify and disclose operational impacts at full buildout. As discussed under Impact AIR-3 in Section 3.3, Air Quality, Phase 1 of the proposed project would constitute approximately 55 percent of total trucking activities for the proposed project and operation of Phase 1 would result in approximately 13.13 excess cancer cases per one million people, which is less than the 20 in a million threshold. However, because Phase 1 of the proposed project would represent 55 percent of potential trucking activities, the Draft EIR determined that Phases 2 and 3 could result in operational trucking activity that would generate significant toxic air contaminant (TAC) emissions and the overall project could exceed the 20 in a million threshold. MM AIR-1d would result in reductions of diesel particulate matter (DPM) from the operation of a clean truck fleet to the maximum extent feasible during operation of all phases of the proposed project; however, the potential DPM emission reductions resulting from implementation of MM AIR-1d cannot be quantified at this time due to unknown engine emission factors for trucks meeting the California Air Resources Board (ARB) low oxides of nitrogen (NO_X) emission standards. Furthermore, the Draft EIR could not reasonably quantify the

health risk impacts from the operation of Phases 2 and 3 because no information about those phases was available at the time the analysis was prepared and no further information is currently available. Because the health risk impacts analyzed conclude that the proposed project could result in potentially significant health impacts and the efficacy of implementation of MM AIR-1d for DPM emission reductions cannot be quantified, the Draft EIR's analysis conservatively concluded that Impact AIR-3 would be significant and unavoidable.

Nonetheless (and although not required as mitigation for any impact) to further reduce potential health risk impacts to the nearest sensitive receptors to the project site (the residences and school along Grant Line Road and El Rancho Road), the City has agreed to adopt and the project applicants have agreed to implement MM AIR-1e, which has been added to Section 3.3, Air Quality, of the Draft EIR to require that trucks accessing the project site are prohibited from using Grant Line Road east of the project site. These changes can be seen in Section 3.1 of the Errata and have been incorporated into the updated MMRP. In addition, the project applicants are willing to voluntarily implement signage along project frontage on Grant Line Road to prohibit trucks from traveling on Grant Line Road east of the project site and would agree to voluntarily implement routine communications between property managers and tenants to ensure tenant understanding that trucks accessing the project site are prohibited from using Grant Line Road east of the project site. These measures would be incorporated as enforceable conditions of approval into any development review permit issued for development on the project site. In addition, the project applicants have also voluntarily agreed to the incorporation of additional enforceable conditions of approval to further address air quality and health risk issues (see updated MMRP). See also multiple Responses to SHUTE.

When information added to the Final EIR consists of an additional mitigation measure, recirculation is required only if the new mitigation measure is considerably different from the alternatives or mitigation measures already evaluated in the Draft EIR; would clearly lessen the proposed project's significant environmental impacts; and is not adopted. Recirculation is required only if each of the above criteria is met. (*South County Citizens for Smart Growth v. County of Nevada* (2013) 221 CA4th 316, 330). Here, the applicants have voluntarily accepted the inclusion of additional mitigation measures (as well as the incorporation of additional conditions of approval); therefore, recirculation is not required. These changes can be seen in Section 3.1 of the Errata as well as the updated MMRP.

Response to Valley Air District-2-6

The commenter notes that the proposed project is subject to District Rule 9510 Indirect Source Review. The commenter also summarizes the purposes and requirements under District Rule 9510, including the need to prepare an Air Impact Assessment (AIA).

This comment is noted and acknowledged, and the commenter is referred to the Regulatory Framework of Section 3.3, Air Quality, of the Draft EIR, where these requirements were noted. Specifically, the Valley Air District's rules and regulations that could apply to the proposed project, including District Rule 9510–Indirect Source Review, are listed in Section 3.3, Air Quality, on page 3.3-20 through 3.3-21 of the Draft EIR. Page 3.3-21 of the Draft EIR states that the proposed project would be required to comply with Rule 9510 because it would develop more than 25,000 square feet of light industrial uses, including submittal of the required AIA application. See also the Impact Discussion in Impact AIR-1. No further response is required.

Response to Valley Air District-2-7
The commenter states that the City should consider the feasibility of a list of provided measures to reduce emissions and health impacts.

As identified in Section 3.3, Air Quality, and in accordance with the requirements under CEQA, a series of feasible mitigation measures have been identified, which would be imposed on the proposed project to reduce emissions and health risk impacts to the extent practicable. As requested by the commenter, the City and its consultants have considered the feasibility of incorporating the suggested additional measures. As detailed more fully in multiple Responses to SHUTE, those listed by the commenter, such as the inclusion of a screen buffer of trees, solid decorative walls, and/or other natural ground landscaping techniques around the project site eastern property line adjacent to sensitive receptors; ensuring all landscaping is drought tolerant; or signage/pavement markings identifying on-site circulation, would not result in sufficient reductions in emissions to ensure that emissions and subsequent health risk impacts would not exceed the District's significance thresholds. The reason these additional mitigation measures would not reduce emissions below the Valley Air District thresholds is because the majority of operational emissions are due to the use of HHD truck fleets. Signage/pavement marking identifying on-site circulation would not reduce the number of trucks visiting the project site on any given day or substantially change or reduce the amount of time trucks would spend idling or traveling on or near the project site. However, additional mitigation measures were included in the Final EIR that would reduce the project's potential to expose sensitive receptors to elevated levels of TACs. These measures include MM AIR-1f (idling limitation), MM AIR-1g (electric on-site off-road and on-road equipment), and MM AIR-1h (vegetated project site buffer). These mitigation measures align with the intent of the mitigation measures suggested by the commentor. Specifically, MM AIR-1-h requires each individual development proposal within the project site to demonstrate inclusion of a vegetative buffer. See also additional enforceable conditions of approval that the project applicants have voluntarily agreed to implement and/or otherwise incorporate to further address air quality, health risk and buffer issues (see updated MMRP).

Furthermore, a number of the measures listed by the commenter are already incorporated into the project as design features, such as providing bicycle parking consistent with City requirements, or have already been identified as mitigation; i.e., MM AIR-1b and -1c, which require low volatile organic compound (VOC) architectural coating and paints during construction which do not exceed 10 grams of reactive organic gas (ROG) per liter of paint and Zero VOC consumer products during operation.

Nevertheless, as described further below, although not required to do so, the City has agreed to adopt and the project applicants have agreed to incorporate the following additional measures: MM AIR-1e (operational truck fleet routing), MM AIR-1f (idling limitation), MM AIR-1g (electric on-site off-road and on-road equipment), MM AIR-1h (vegetated project site buffer), and MM AIR-1i (Tier 2 CALGreen electric vehicle charging infrastructure). These mitigation measures have been included in this Final EIR (as shown in Section 3.1 of the Errata) as well as in the updated MMRP and would result in additional emission reductions during project operation beyond what was identified in the Draft EIR. Furthermore, the project applicants have voluntarily agreed to incorporate additional measures/design features as conditions of approval to address the foregoing issues (see updated

MMRP). Nonetheless, the quantified emission reductions that would result from implementation of these new mitigation measures (as well as other identified conditions of approval) cannot be identified at this time due to the limitations of emissions modeling, such as CalEEMod. However, such quantification is not required because as mentioned previously, the vast majority of emissions would be due to HHD truck use during operation and impacts would remain significant and unavoidable.

Response to Valley Air District-2-8
The commenter notes that truck routing involves the assessment of which roads HHD trucks will use during project operation. The commenter indicates that the truck routing patterns can result in impacts to nearby residential communities and sensitive receptors and states that truck routing for the project should be identified, with the aim of limiting exposure to emissions. The commenter then notes the recommended methodology in conducting this assessment.

As identified in Chapter 2, Project Description, of the Draft EIR, approximately 12.51 acres of the Tracy Alliance parcel would be reserved to accommodate a portion of a planned interchange at Paradise Road and Interstate 205 (I-205) where future trucks would access the project site once built. This future interchange has been identified by the project applicants as the primary truck route for trucks accessing the project site during operation once it is constructed and the interchange is assumed to be in place as part of the cumulative conditions within the Transportation Impact Analysis prepared by Kimley-Horn. As illustrated in Appendix B of the Draft EIR, the operational Health Risk Assessment (HRA) prepared for the proposed project to support the analysis under Impact AIR-3 in Section 3.3, Air Quality, accounted for all possible local arterials that could support the future trucking activities of the proposed project. This consideration in the HRA accounted for known trucking information including the possible local route network (i.e., current and future truck routes), the quantity, type, and volume of truck trips and VMT, and associated exhaust emissions. For example, the CalEEMod operational scenarios used project-specific truck trip lengths based on applicant information of three points of origin for truck trips, which provided an accurate representation of the potential exhaust emissions associated with operations. Nonetheless, and although not required as mitigation for any impact, the City has agreed to adopt and the project applicants have agreed to implement MM AIR-1e, which has been added to this Final EIR to prohibit trucks that are accessing the project site from using Grant Line Road east of the project site. See also additional enforceable conditions of approval that the project applicants have voluntarily agreed to implement and/or otherwise incorporate to further address signage and traffic pattern issues (see updated MMRP).

When information added to the Final EIR consists of an additional mitigation measure, recirculation is required only if the new mitigation measure is considerably different from the alternatives or mitigation measures already evaluated in the Draft EIR; would clearly lessen the proposed project's significant environmental impacts; and is not adopted. Recirculation is required only if each of the above criteria is met. (*South County Citizens for Smart Growth v. County of Nevada* (2013) 221 CA4th 316, 330). Here, the applicants have voluntarily accepted the inclusion of this mitigation measure (as well as other identified conditions of approval); therefore, recirculation is not required. These changes can be seen in Section 3.1 of the Errata as well as the updated MMRP.

Response to Valley Air District-2-9
The commenter summarizes the goal of the idling reduction strategy. Because of the volume of truck traffic anticipated for the proposed project the commenter recommends that the Draft EIR be revised to include measures to ensure compliance with the State anti-idling regulation; to discuss the importance of limiting idling near sensitive receptors; and to include a more stringent 3-minute idling restriction for on-site trucks accessing the site (along with related signage and enforcement) to reduce associated exhaust emissions.

Consistent with the comment, Section 3.3, Air Quality, of the Draft EIR addresses the State anti-idling regulation as well as the impacts of idling on sensitive receptors absent restrictions (see, e.g., pages 3.3-16 and 3.3-47 through -49).

In addition, although not required as mitigation for any impact, in response to this comment, the City has agreed to adopt and the project applicants have agreed to implement MM AIR-1f, which would restrict on-site vehicle idling to no greater than 3 minutes. These changes can be seen in Section 3.1 of the Errata as well as the updated MMRP. When information added to the Final EIR consists of an additional mitigation measure, recirculation is required only if the new mitigation measure is considerably different from the alternatives or mitigation measures already evaluated in the Draft EIR; would clearly lessen the proposed project's significant environmental impacts; and is not adopted. Recirculation is required only if each of the above criteria is met. (*South County Citizens for Smart Growth v. County of Nevada* (2013) 221 CA4th 316, 330). Here, the applicants have voluntarily accepted the inclusion of this mitigation measure; therefore, recirculation is not required. These changes can be seen in Section 3.1 of the Errata as well as the updated MMRP.

Response to Valley Air District-2-10
Because of the industrial nature of the proposed project, the commenter notes that it has the potential to result in increased use of on-site and off-road equipment. Therefore, the commenter recommends the use of on-site on- and off-road equipment (e.g., forklifts, pallet jacks) be limited to only electric equipment and vehicles.

Consistent with the comment, Section 3.3, Air Quality, of the Draft EIR evaluates the potential impact of project operations in terms of DPM emissions due to HHD trucks and passenger vehicles. Although the Draft EIR did not specifically evaluate the impacts of the use of on-site and off-road equipment, the Draft EIR discusses the primary source of DPM and TAC emissions from the project operation, which is the use of HHD trucks.

In addition, although not required as mitigation for any impact, in response to this comment, the City has agreed to adopt and the project applicants have agreed to implement MM AIR-1g, which would require the use of electric on-site and on- and off-road equipment in place of non-electric alternatives. Furthermore, the project applicants have voluntarily agreed to a condition of approval that would prohibit the use of diesel-powered generators during project operation. These changes can be seen in Section 3.1 of the Errata as well as the updated MMRP. When information added to the Final EIR consists of an additional mitigation measure, recirculation is required only if the new mitigation measure is considerably different from the alternatives or mitigation measures already evaluated in the Draft EIR; would clearly lessen the proposed project's significant environmental

impacts; and is not adopted. Recirculation is required only if each of the above criteria is met. (*South County Citizens for Smart Growth v. County of Nevada* (2013) 221 CA4th 316, 330). Here, the applicants have voluntarily accepted the inclusion of this mitigation measure (as well as other identified conditions of approval); therefore, recirculation is not required. These changes can be seen in Section 3.1 of the Errata as well as the updated MMRP.

Response to Valley Air District-2-11
Because of the industrial nature of the proposed project and its proximity to nearby sensitive receptors, the commenter suggests that the City consider the feasibility of incorporating vegetative barriers and urban greening around the project site to further reduce air pollution exposure to sensitive receptors. The commenter also notes the purpose of these measures.

Consistent with the comment, Section 3.3, Air Quality, of the Draft EIR evaluates the potential impact of project operations on sensitive receptors; see page 3.3-47.

In addition, although not required as mitigation for any impact, in response to this comment, MM AIR-1h has been added to Section 3.3, Air Quality, of the Draft EIR to require the installation of a vegetative barrier at the eastern boundary of the project site, between I-205 and Grant Line Road. See also additional enforceable conditions of approval that the project applicants have voluntarily agreed to implement and/or otherwise incorporate to further address air quality, health risk and buffer issues (see updated MMRP). These changes can be seen in Section 3.1 of the Errata as well as the updated MMRP. When information added to the Final EIR consists of an additional mitigation measure, recirculation is required only if the new mitigation measure is considerably different from the alternatives or mitigation measures already evaluated in the Draft EIR; would clearly lessen the proposed project's significant environmental impacts; and is not adopted. Recirculation is required only if each of the above criteria is met. (*South County Citizens for Smart Growth v. County of Nevada* (2013) 221 CA4th 316, 330). Here, the applicants have voluntarily accepted the inclusion of additional mitigation measures (as well as other identified conditions of approval); therefore, recirculation is not required. These changes can be seen in Section 3.1 of the Errata as well as the updated MMRP.

Response to Valley Air District-2-12
The commenter states that it is the policy of the State of California to increase renewable and zero-carbon energy resources in the procurement of electricity sold in-state to reach 100 percent by December 31, 2045, and notes that the production of solar energy is contributing to improving air quality and public health. The commenter suggests that the City consider incorporating solar power systems as an emission reduction strategy for the proposed project.

Consistent with the comment, as discussed in the Draft EIR (see Chapter 3-6 Energy and 3-8 Greenhouse Gas Emissions), the proposed project would be required to be designed in compliance with the applicable California Building Standards Code (CBC), which reflect some of the most stringent requirements in the nation. Currently, the CBC requires that nonresidential projects construct their roofs to be solar-ready to accommodate the future installation of solar panels. The proposed project would be required to comply with the foregoing, thereby contributing to improved air quality and public health through facilitating the production of solar energy.

Response to Valley Air District-2-13
The commenter states that the Valley Air District offers a Charge Up! Incentive program to public agencies, businesses, and property owners to install electric vehicle (EV) charging infrastructure and recommends that the City and project proponents install EV chargers at the project site and at strategic locations.

Although not required as mitigation for any impact, in response to this comment, the City has agreed to adopt and the project applicants have agreed to implement MM AIR-1i, which would require the installation of EV charging stations which meet the Tier 2 standards set forth in Section A5.106.5.3 of Appendix A5–Nonresidential Voluntary Measures of the California Green Building Standards Code (CALGreen) of the 2019 CBC. The inclusion, and acceptance of this additional measure by the project applicants, would further reduce emissions through support for the use of electric vehicles. See also additional enforceable conditions of approval that the project applicants have voluntarily agreed to implement and/or otherwise incorporate to further address air quality, GHG emissions and energy issues (see updated MMRP). When information added to the Final EIR consists of an additional mitigation measure, recirculation is required only if the new mitigation measure is considerably different from the alternatives or mitigation measures already evaluated in the Draft EIR; would clearly lessen the proposed project's significant environmental impacts; and is not adopted. Recirculation is required only if each of the above criteria is met. (*South County Citizens for Smart Growth v. County of Nevada* (2013) 221 CA4th 316, 330). Here, the applicants have voluntarily accepted the inclusion of additional mitigation measures (as well as other identified conditions of approval); therefore, recirculation is not required. These changes can be seen in Section 3.1 of the Errata as well as the updated MMRP.

Response to Valley Air District-2-14
The commenter notes that the District issues permits for many different types of air pollution sources and indicates that such projects may be subject to a variety of District rules and regulations including, for example, Regulation II, Rules 2010, 2201, and 2520.

The comment is noted. It does not raise any specific project-related environmental issues under CEQA, and therefore no further response is needed.

Response to Valley Air District-2-15
The commenter summarizes the definition of stationary source emissions, notes relevant District Rules 2010 and 2201, and states that the proposed project may be subject to these rules; the commenter also recommends that the project applicant apply for an Authority to Construct (ATC) prior to construction.

Section 3.3, Air Quality, of the Draft EIR discusses at length the Valley Air District's authority to regulate air pollution sources and confirms that the proposed project would be required to comply with all applicable District rules and regulations. See, e.g., page 3.3-25; see also discussion for Impact AIR-1. For purposes of further clarifying and amplifying the analysis, the Valley Air District's Regulation II, Rules 2010 and 2201 have been added to Section 3.3, Air Quality, page 3.3-20 of the Draft EIR, and corresponding edits are reflected in Section 3.1 of the Errata.

Response to Valley Air District-2-16
The commenter states that the proposed project may be subject to Valley Air District Rule 9410.

Section 3.3, Air Quality, of the Draft EIR discusses at length the Valley Air District's authority to regulate air pollution sources and confirms that the proposed project would be required to comply with all applicable District rules and regulations. See, e.g., page 3.3-20; see also discussion for Impact AIR-1. For purposes of further clarifying and amplifying the analysis, the Valley Air District's Rule 9410 has been added to Section 3.3, Air Quality, page 3.3-21 of the Draft EIR, and corresponding edits are reflected in Section 3.1 of the Errata.

Response to Valley Air District-2-17
The commenter states that the proposed project will be subject to Valley Air District's Rule 4002.

Section 3.3, Air Quality, of the Draft EIR discusses at length the Valley Air District's authority to regulate air pollution sources and confirms that the proposed project would be required to comply with all applicable District rules and regulations. In particular, the analysis considers impacts associated with the proposed demolition. See the discussion for Impact AIR-1 and -2. For purposes of further clarifying and amplifying the analysis, the Valley Air District's Rule 4002 has been added to Section 3.3, Air Quality, page 3.3-20 of the Draft EIR, and corresponding edits are reflected in Section 3.1 of the Errata.

Response to Valley Air District-2-18
The commenter notes that the proposed project would be subject to Valley Air District Rule 4601 Architectural Coatings.

Section 3.3, Air Quality, of the Draft EIR discusses at length the Valley Air District's authority to regulate air pollution sources and confirms that the proposed project would be required to comply with all applicable District rules and regulations, including, among others, District Rule 4601. See, e.g., pages 3.3-20 through 3.3-21 of the Draft EIR; see also discussion for Impact AIR-1.

Response to Valley Air District-2-19
The commenter notes that the proposed project would be subject to Valley Air District Regulation VIII, specifically Rule 8021 (Fugitive PM_{10} Prohibitions), and summarizes the requirements for same.

Section 3.3, Air Quality, of the Draft EIR discusses at length the Valley Air District's authority to regulate air pollution sources, and confirms that the proposed project would be required to comply with all applicable District rules and regulations, including, among others, Regulation VIII. See, e.g., pages 3.3-20 through 3.3-21 of the Draft EIR; see also discussion for Impact AIR-1.

Response to Valley Air District-2-20
The commenter notes that the proposed project may be subject to Valley Air District Rules 4102 (Nuisance) and 4641 (Cutback, Slow Cure, and Emulsified Asphalt). This comment is noted.

Section 3.3, Air Quality, of the Draft EIR discusses at length the Valley Air District's authority to regulate air pollution sources and confirms that the proposed project would be required to comply with all applicable District rules and regulations, including, among others, Rules 4102 and 4641. See, e.g., pages 3.3-20 through 3.3-21 of the Draft EIR; see also discussion for Impact AIR-1.

Response to Valley Air District-2-21
The commenter states that the Valley Air District recommends that a copy of the District's comments be provided to the project proponent.

The Valley Air District's comments have been provided to the project applicants.

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June 3, 2022

Victoria Lombardo, Senior Planner
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333 Civic Center Plaza
Tracy, CA 95376

VIA EMAIL TO:
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Subject: Comments on Tracy Alliance EIR (SCH NO. 2020080524)

Dear Ms. Lombardo,

Thank you for the opportunity to comment on the Environmental Impact Report (EIR) for the proposed Tracy Alliance Project. Please accept and consider these comments on behalf of Golden State Environmental Justice Alliance (GSEJA). Also, GSEJA formally requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877. 1

1.0 Summary

The project proposes the construction and operation of 3,352,320 square feet of warehouse and distribution and related development on a total of approximately 191.18 acres. The project site is within unincorporated San Joaquin County adjacent to the City of Tracy's northeastern city limits and adjacent to the City of Tracy Northeast Industrial (NEI) Specific Plan area. The proposed project would require approval of annexation into the City of Tracy, pre-zoning, an amendment to the NEI Specific Plan, and a Tentative Parcel Maps or Lot Line Adjustment(s) to create final development lots. Development on the two Tracy Alliance parcels, as proposed by co-applicant Tracy Alliance Group, would consist of approximately 1,849,500 square feet of warehouse and distribution space located in three buildings. The proposed site plan includes approximately 1,134 automobile parking spaces and approximately 572 truck/trailer parking spaces. Approximately 12.51 acres of the Tracy Alliance land would be reserved to accommodate a portion of a planned interchange at Paradise Road and Interstate 205 (I-205). 2

The San Joaquin County General Plan (County General Plan) designates the site as Agriculture-Urban Reserve (A/UR) and the County Zoning designation is Agriculture-minimum 40 acre lot (AG-40). The City of Tracy General Plan (General Plan) designates the project site as Industrial (I). The City does not have a Zoning designation for the project site because it is not currently within city limits. The project requests approval of a boundary reorganization (to annex the project site into the City of Tracy and detach the project site from the Tracy Rural Fire District), pre-zoning of the project site to a designation of NEI Specific Plan, and an amendment to the boundaries of the NEI Specific Plan to incorporate the project site (as well as any conforming amendments to the NEI Specific Plan to ensure consistency). 2 CONT

3.3 Air Quality, 3.6 Energy, and 3.8 Greenhouse Gas Emissions

The EIR does not include for analysis relevant environmental justice issues in reviewing potential impacts, including cumulative impacts from the proposed project. This is especially significant as the surrounding community is highly burdened by pollution. According to CalEnviroScreen 4.0, CalEPA's screening tool that ranks each census tract in the state for pollution and socioeconomic vulnerability, the proposed project's census tract (6077005202) ranks worse than 97% of the rest of the state overall in pollution burden. The surrounding community, including Banta Elementary School, residences to the south and east, and adjacent SB 535 Census Tracts 6077005119 (east), 6077005122 (east), 6077005302 (west), 6077005206 (west), and 6077003900 (north), bears the impact of multiple sources of pollution and is more polluted than average on every pollution indicator measured by CalEnviroScreen. For example, the project census tract ranks in the 97th percentile for drinking water impacts, 99th percentile for groundwater threats, 97th percentile for hazardous waste impacts, and 87th percentile for impaired waters. The project census tract also ranks in the 60th percentile for ozone burden, the 46th percentile for particulate matter (PM) 2.5 burden, 50th percentile for diesel PM burden, and the 68th percentile for traffic related impacts, which are all typically attributed to heavy vehicular activity in the area. The census tract also bears more impacts from cleanup sites than 89% of the state. Chemicals in the buildings, soil, or water at cleanup sites can move into nearby communities through the air or movement of water. 3

Further, the census tract is a diverse community including 33% Hispanic, 4% African-American, and 14% Asian-American residents, which are especially vulnerable to the impacts of pollution. The community has a high rate of low educational attainment, meaning 60% of the census tract over age 25 has not attained a high school diploma, which is an indication that they may lack health insurance or access to medical care. Medical care is vital for this census tract as it ranks in the 59th percentile for incidence of cardiovascular disease and 58th percentile for incidence of low birth weights.

Additionally, the project's census tract (6077005202) and the census tracts adjacent to the project site (6077005119 (east), 6077005122 (east), 6077005302 (west), 6077005206 (west), and 6077003900 (north)) are identified as SB 535 Disadvantaged Communities, which is not discussed or presented for analysis in the EIR. 3 CONT

The State of California lists three approved energy compliance modeling softwares for non-residential buildings: CBECC-Com, EnergyPro, and IES VE. CalEEMod is not listed as an approved software. The spreadsheet-based and CalEEMod modeling in Appendix E does not comply with the 2019 Building Energy Efficiency Standards and under reports the project's potentially significant GHG and Energy impacts to the public and decision makers. Since the EIR did not accurately or adequately model the energy impacts in compliance with Title 24, a finding of significance must be made. A revised EIR with modeling in one of the approved software types must be circulated for public review in order to adequately analyze the project's potentially significant environmental impacts. This is vital as the EIR utilizes CalEEMod as a source in its methodology and analysis, which is clearly not one of the approved softwares. Additionally, the Energy Use Summary within Appendix E is titled "Sunnyvale FCII Project Energy Use Summary," which does not correspond to the proposed project and further renders the EIR inadequate as an informational document. 4

It must also be noted that the City is not listed as a jurisdiction with local energy standards approved by the CA Energy Commission. According to the CA Energy Commission, "Local jurisdictions are required to apply to the Energy Commission for approval, documenting the supporting analysis for how the local government has determined that their proposed Standards will save more energy than the current statewide Standards and the basis of the local government's determination that the local standards are cost-effective." Therefore, compliance with the City's General Plan and/or Sustainability Action Plan does not comply with CA Energy Commission standards or AB 32/SB 32. The EIR is misleading to the public and decision makers by stating compliance with these standards when the local jurisdiction standards have not been approved by the CA Energy Commission. A revised EIR must be prepared with adequate analysis of project impacts utilizing an approved modeling software in order to be a reliable informational document in compliance with CEQA. 5

3.11 Land Use and Planning

The EIR does not provide any consistency analysis with the San Joaquin County Council of Governments (SJCOG) adopted 2018 RTP/SCS[1]. Due to errors in modeling and modeling without 6

[1] SJCOG 2018 RTP/SCS https://www.sjcog.org/DocumentCenter/View/4156/Final-Compiled-RTPSCS-2018

supporting evidence, as noted throughout this comment letter and attachments, and the project's significant and unavoidable cumulatively considerable Air Quality and Transportation (VMT) impacts, the proposed project has signifiant potential for inconsistency with Policy 1 to enhance the environment for existing and future generations and conserve energy, Strategy 3 to improve air quality by reducing transportation-related emissions, Strategy 4 to improve regional transportation system efficiency, and Strategy 8 to improve major transportation corridors to minimize impacts on rural roads. The EIR must be revised to include accurate Air Quality/HRA, Energy, and GHG modeling and provide an analysis of potential inconsistency with the 2018 RTP/SCS document. 6 CONT

Additionally, the EIR notes that the "City of Tracy prepared a Municipal Services Review (MSR) for the San Joaquin LAFCo in 2019. The MSR provides the required information for project annexation." However, the MSR is not included for public review. CEQA § 15150 (f) states that incorporation by reference is most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of the problem at hand. The MSR contributes directly to the analysis of the problem at hand. Not including the MSR as an attachment for public review is in violation of CEQA § 15150 (f). The EIR must be revised and recirculated for public review including the MSR as an attachment. This is especially vital because the project's employment growth will exceed the MSR 10-Year horizon growth forecast as discussed below in the Population and Housing analysis. The EIR includes a footnote reference with a weblink to the MSR, but the weblink is not functional and a 404 error is returned when the link is entered into a web browser. 7

Table 3.11-3: General Plan Consistency Analysis provides misleading consistency analysis with General Plan goals, policies and objectives adopted with the purpose of avoiding or mitigating an environmental effect, including the following:

Objective LU-8.1 Policy 3: The City shall support existing San Joaquin County agricultural land use designations in the Planning Area and strongly oppose changes that result in increased urbanization.
EIR Analysis
Consistent: The project site would be annexed into the City of Tracy upon approval by LAFCo, and is designated in the City General Plan for industrial uses. Further, the County land use designation for the site of A/UR identifies and reserves this agricultural land for future urban development. 8

The EIR's analysis is misleading as the project site's existing San Joaquin County agricultural land use designations are proposed to be changed to non-agricultural designations. Additionally, the project will result in significant and unavoidable cumulatively considerable impact to agricultural resources due to the conversion of Prime Farmland. This information must be included for analysis as part of a revised EIR.

Goal AQ1 Improved air quality and reduced greenhouse gas emissions.
EIR Analysis
Consistent: The proposed project would be subject to various regulatory measures adopted to ensure ambient air quality standards are met to the extent feasible. The proposed project would not be a source of significant toxic or hazardous air pollutants and odors, and was not found to have a significant impact with respect to GHG. Refer to Section 3.3, Air Quality and Section 3.8, 9

The EIR's analysis is erroneous and misleading as the project will result in significant and unavoidable cumulatively considerable Air Quality impacts related to 1) Cumulatively Considerable Net Increase of reactive organic gases (ROG) and carbon monoxide (CO) During Construction and 2) Exposing Sensitive Receptors to Substantial Pollutant Concentrations. The EIR must be revised to include this information for analysis and include a finding of significance due to the inconsistency. 10

Additionally, the EIR excludes analysis of the following General Plan goals, policies and objectives adopted with the purpose of avoiding or mitigating an environmental effect, including the following:

1. Goal LU-9 Leadership in environmental, economic and social sustainability.
2. Objective LU-9.1 Undertake measures to reduce greenhouse gas emissions and improve the sustainability of actions by City government, residents and businesses in Tracy.
3. Objective AQ-1.1 Improve air quality and reduce greenhouse gas emissions through land use planning decisions.
4. AQ-1.1 P1. The City shall promote land use patterns that reduce the number and length of motor vehicle trips.
5. AQ-1.1 P2. To the extent feasible, the City shall maintain a balance and match between jobs and housing.
6. AQ-1.1 P4. Employment areas should include a mix of support services to minimize the number of trips. 11
7. Objective AQ-1.2 Promote development that minimizes air pollutant and greenhouse gas emissions and their impact on sensitive receptors as a result of indirect and stationary sources.
8. AQ-1.2 P2. The City shall assess through the CEQA process any air quality impacts of development projects that may be insignificant by themselves, but cumulatively significant.
9. AQ-1.2 P3. Developers shall implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects.
10. AQ-1.2 P6. Installation of solar voltaic panels on new homes and businesses shall be encouraged.
11. AQ-1.2 P12. New sources of toxic air pollutants shall prepare a Health Risk Assessment as required under the Air Toxics "Hot Spots" Act and, based on the results of the Assessment, establish appropriate land use buffer zones around those areas posing substantial health risks. AQ-1.2 P13. Dust control measures consistent with San Joaquin Valley Air Pollution Control District rules shall be required as a condition of approval for subdivision maps, site plans, and all grading permits.

12. AQ-1.2 P14. Developments that significantly impact air quality shall only be approved if all feasible mitigation measures to avoid, minimize or offset the impact are implemented.
13. AQ-1.2 P15. Encourage businesses to electrify loading docks or implement idling-reduction systems so that trucks transporting refrigerated goods can continue to power cab cooling elements during loading, layovers, and rest periods.
14. Objective AQ-1.4 Support local and regional air quality improvement efforts.

11 CONT

Due to errors in modeling and modeling without supporting evidence, as noted throughout this comment letter and attachments, and the project's significant and unavoidable cumulatively considerable Air Quality and Transportation (VMT) impacts, the proposed project is directly inconsistent with the goals, policies and objectives listed above adopted with the purpose of avoiding or mitigating an environmental effect. The EIR must be revised to include a consistency analysis with all General Plan goals, policies and objectives in order to provide an adequate and accurate environmental analysis.

12

Further, the NEI SP analysis does not analyze the Project Description's statement that the project requires an amendment to the boundaries of the NEI Specific Plan to incorporate the project site and any conforming amendments to the NEI Specific Plan to ensure consistency, which indicates that the project does not comply with the NEI SP. The EIR must be revised to detail the project's proposed development standards, the applicable standards within the NEI SP, and amendments proposed to the NEI SP in order to accommodate the proposed project.

13

4.0 Effects Found Not to be Significant

4.2.2 Population and Housing

The EIR concludes that "based on the light industrial nature of the proposed project, it is expected that approximately 1,871 employees would work on-site at full buildout." Footnote 5 states that the quantity of employees was generated via "Conversation with Barbara Harb, Economic Development Analyst, City of Tracy-employment data collected by conversations with business owners for various industrial businesses, including warehousing, manufacturing, and employee-intensive warehousing, and existing building square footage data, averaged." The methodology for determining the number of employees generated by the proposed project is not adequate, accurate, or reliable. Further, none of the "conversations" are provided for public review as part of the EIR's methodology and does not comply with CEQA's requirements for incorporation by reference as the "conversations" that created the methodology contribute directly to analysis of the problem at hand (CEQA § 15150 (f)). Appendix J: Transportation utilizes a calculation of 1,000 square feet per employee to conclude that the project will generate 3,354 employees during project operations. All sections of the EIR must be revised to utilize this methodology for analysis in order for the EIR to be an internally consistent document.

14

Table 2-7: Development Anticipated Within Years 1-10 and Within Years 11-30 of the City's 2019 Municipal Services Review[2] (MSR) states that Planning Subarea 16 (which encompasses the proposed project site) will generate 450 jobs during years 1-10 and 3,285 jobs during years 11-30. The 10-Year Horizon of the MSR spans from 2019 to 2029 and the 30-Year Horizon addresses 2029 to 2049. Table 3.3-6: Anticipated Construction Schedule within the EIR states that all phases of the project will be constructed by 2025. Appendix J's calculation of 3,354 employees generated by the proposed project demonstrates that the project vastly exceeds the employment growth anticipated and planned during the 10-Year Horizon. This information is not discussed or presented for analysis in the EIR and must be included as part of a revised and recirculated EIR for public review. A finding of significance must be made as the employment growth generated by the proposed project exceeds the growth capacity of the 2019 Municipal Services Review. 15

The EIR states that "industrial uses on the project site were anticipated by the City in the General Plan, and thus, the City anticipated this number of employees needed for such a project." The EIR concludes "the proposed project would not result in a significant, unplanned change to the population of the City, and impacts would be less than significant." The EIR does not provide any meaningful evidence to support the conclusion that the project will have less than significant impacts. As stated above, the 3,354 employees generated by the proposed project exceeds the growth capacity of the 2019 Municipal Services Review. Therefore, the proposed project will result in a significant, unplanned change to the population of the City, and impacts will be significant and potentially cumulatively considerable. The EIR must be revised to include this information for discuss and analysis in addition to a finding of significance. 16

The EIR must also provide a cumulative analysis discussion of projects approved since 2020 and projects "in the pipeline" to determine if the project will exceed SJCOG's employment growth forecast for the City. The revised EIR must also provide demographic and geographic information on the location of qualified workers to fill these positions in order to provide an accurate environmental analysis. The City's May 2022 Industrial and Commercial Pipeline Report[3] provides updated information on current industrial activity: 17

<u>Under construction</u>
Total NEI: 1,859,000 sf
Overall Total: 3,360,778 sf

[2] City of Tracy 2019 Municipal Services Review https://www.sjgov.org/docs/default-source/local-agency-formation-commission-documents/municipal-services-and-spheres-of-influence/cities/tracy---july-2019.pdf?sfvrsn=aa988a63_2
[3] City of Tracy May 2022 Industrial and Commercial Pipeline Report https://www.cityoftracy.org/home/showpublisheddocument/13056/637882942906530000

Approved, Construction Not Started
Total NEI: 696,343 sf
Overall Total: 702,343 sf

Under Review
Total NEI: 1,574,180 sf
Overall Total: 6,931,854 sf

Cumulative Total NEI: 4,129,523 sf
Cumulative Overall Total: 10,994,975 sf

17 CONT

Utilizing a calculation of 1,000 square feet per employee and the development information provided by the May 2022 report, industrial development in the current pipeline will generate approximately 10,995 employees and approximately 4,130 employees (37.5% of pipeline industrial employees) will be within the NEI Specific Plan. A revised EIR must be prepared to include analysis that demonstrates if the employees generated by the proposed project, current industrial development pipeline, and any industrial projects completed from the date of the City's General Plan adoption that are not listed on the May 2022 pipeline list will exceed the growth forecasts of the General Plan or NEI Specific Plan. This is vital as the Project Description states that the project requires an amendment to the boundaries of the NEI Specific Plan to incorporate the project site and any conforming amendments to the NEI Specific Plan to ensure consistency, which indicates that the project does not comply with the NEI SP.

18

SJCOG's Population, Household, and Employment Projections[4] notes that the City will add approximately 6,102 jobs between 2020 - 2045. Utilizing Appendix J's calculation of 3,354 employees, the project represents 54.9% of the City's employment growth from 2020 - 2045. SJCOG's Growth Forecast notes that the City's population will increase by 42,744 residents between 2020 - 2045. Utilizing Appendix J's calculation of 3,354 employees, the project represents 7.8% of the City's population growth from 2020 - 2045. A single project accounting for this amount of the projected employment and/or population over 29 years represents a significant amount of growth. Further, the May 2022 industrial development pipeline's 10,995 employees represents 180% of the City's employment growth and 25.7% of the City's population growth from 2020 - 2045. Cumulatively, the proposed project and the May 2022 industrial development pipeline will generate 14,349 employees, which represents 235% of the City's employment growth and 33.5% of the City's population growth from 2020 - 2045. The proposed

[4] SJCOG's 2018 RTP/SCS Appendix R- Population, Household, and Employment Projections https://www.sjcog.org/DocumentCenter/View/3722/Final-2018-RTPSCS-Technical-Appendix-R---Population-Household-and-Employment-Projections?bidId=

project in combination with the current industrial development pipeline vastly exceeds the City's projected employment growth and is a significant portion of its population growth. The EIR must be revised to include this analysis and also provide a cumulative analysis of projects approved since 2020 and projects "in the pipeline" to provide an adequate and accurate analysis to determine if the project will exceed SJCOG's employment and population growth forecasts for the City. 18 CONT

Further, the EIR utilizes uncertain language in stating that "given the nature of the proposed project, it would likely be staffed primarily by local employees once operational," without providing local employment data such as the population's interest or qualifications to work in the industrial sector. A revised EIR must be prepared to provide demographic and geographic information on the location of qualified workers to fill these positions in order to provide an adequate and accurate environmental analysis. 19

The EIR states that "the proposed project would help to support the City's jobs-to-housing ratio goal of 1.5, as established by the California Department of Housing and Community Development (HCD), by locating employment-generating uses in relatively close proximity thereby limiting extensive commute times. The City's current jobs-to-housing ratio is 1.3." The applicable footnotes state that "There were 34,710 jobs and 26,964 dwelling units within the City limits in 2018. This represents a jobs-housing ratio of approximately 1.3, which indicated that there are more jobs than homes in the City." The proposed project will add 3,354 employees to the City. This will increase the jobs to housing ratio by further exacerbating the oversupply of jobs. The EIR is nonsensical in its conclusion that adding more jobs will help support the City's jobs-to-housing ratio when the current ratio indicates an existing oversupply of jobs. A revised EIR must be prepared to provide this information for analysis. 20

3.14 Transportation

Appendix J: Transportation states that "Per OPR guidance, the VMT analysis excludes truck trips." However, the EIR does not provide a statutory source of exemption for medium/heavy trucks and/or freight. The EIR sources the OPR's 2018 Technical Advisory[5] which states that "here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks." However, the purpose of the OPR Technical Advisory document is purely advisory, stating in its introduction: 21

"The purpose of this document is to provide advice and recommendations, which agencies and other entities may use at their discretion. This document does not alter lead agency discretion in

[5] Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA https://opr.ca.gov/ceqa/docs/20190122-743_Technical_Advisory.pdf

preparing environmental documents subject to CEQA. This document should not be construed as legal advice."

The OPR document is not a legal interpretation, court decision, or amendment to the CEQA statute that clarifies the definition of automobile. The term "automobile" is not defined in the CEQA statute and application of the OPR interpretation is speculative and does not provide an analysis of the "worst-case scenario" for environmental impacts. Widespread public understanding and perception indicates that trucks, including medium/heavy-duty trucks and freight trips associated with the industrial nature of warehouse operations, are automobiles. The EIR must be revised to remove this misleading information and include all truck/freight activity for quantified VMT analysis. The operational nature of industrial/warehouse uses involves high rates of truck/trailer/freight VMT due to traveling from large regional distribution centers to smaller industrial parks and then to their final delivery destinations. The project's truck/trailer /freight activity is unable to utilize public transit or active transportation and it is misleading to the public and decision makers to exclude this activity from VMT analysis. A revised EIR must be prepared to reflect a quantified VMT analysis that includes all truck/trailer/freight activity to adequately and accurately analyze the potentially significant project transportation impacts. 21 CONT

Additionally, the Project Description states that "approximately 12.51 acres of the Tracy Alliance land would be reserved to accommodate a portion of a planned interchange at Paradise Road and Interstate 205 (I-205). However, the potential impacts of constructing this future interchange would undergo a separate environmental review process pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) once funding is programmed and available and once the ultimate design of the interchange is finalized; accordingly, the construction is not considered part of the proposed project (although the interchange is assumed to be in place as part of the cumulative conditions within the Transportation Impact Analysis prepared by Kimley Horn)." The EIR must be revised to remove the assumption that the I-205 interchange at Paradise Road is completed. There is no meaningful evidence provided that the improvement will be completed by the date of the cumulative conditions analysis. This is an erroneous and misleading representation of transportation impacts and the EIR must be revised. Including the improvement acts as mitigation without providing meaningful evidence that mitigation will actually result and the lead agency has no bearing over the improvement as its under CalTrans jurisdiction. 22

5.0 Other CEQA Considerations

5.3 Growth Inducing Impacts of the Project

The EIR concludes that "the proposed project would not result in direct or indirect growth, negatively alter the existing jobs/housing balance, or be inconsistent with the General Plan, the 23

NEI Specific Plan, or relevant City master infrastructure plans; therefore, growth-inducing impacts would be less than significant." However, as noted throughout this comment letter, the project will result in growth that exceeds the MSR 10-Year Horizon, negatively exacerbate the existing jobs/housing balance by adding to the oversupply of jobs, is inconsistent with the General Plan (including goals, policies, and objectives adopted for purposes of avoiding a negative environmental impacts), and the NEI Specific Plan (amendments required to accommodate the proposed project). The EIR must be revised to provide this information for analysis and include a finding of significance. 23 CONT

The EIR states that "the proposed project would help to support the City's jobs-to-housing ratio goal of 1.5, as established by the California Department of Housing and Community Development (HCD), by locating employment-generating uses in relatively close proximity thereby limiting extensive commute times. The City's current jobs-to-housing ratio is 1.3." The applicable footnotes state that "There were 34,710 jobs and 26,964 dwelling units within the City limits in 2018. This represents a jobs-housing ratio of approximately 1.3, which indicated that there are more jobs than homes in the City." The proposed project will add 3,354 employees to the City. This will increase the jobs to housing ratio by further exacerbating the oversupply of jobs. The EIR is nonsensical in its conclusion that adding more jobs will help support the City's jobs-to-housing ratio when the current ratio indicates an existing oversupply of jobs. A revised EIR must be prepared to provide this information for analysis. 24

The EIR must also include a cumulative analysis discussion here to demonstrate the impact of the proposed project in a cumulative setting. For example, the May 2022 industrial development pipeline's 10,995 employees represents 180% of the City's employment growth and 25.7% of the City's population growth from 2020 - 2045. Cumulatively, the proposed project and the May 2022 industrial development pipeline will generate 14,349 employees, which represents 235% of the City's employment growth and 33.5% of the City's population growth from 2020 - 2045. The proposed project in combination with the current industrial development pipeline vastly exceeds the City's projected employment growth and is a significant portion of its population growth. The EIR must also discuss and analyze that the project's employment growth exceeds the 10-Year Horizon of the MSR. 25

Further, the EIR must be revised to discuss and analyze that implementation of the project will result in significant and unavoidable environmental impacts to Agriculture (cumulatively considerable), Air Quality (cumulatively considerable), and Transportation (VMT) (cumulatively considerable), with the project census tract and adjacent census tracts (all of which are designated as SB 535 Disadvantaged Communities) receiving the most significant impacts. Project implementation will result in growth that does not comply with the AQMP and will have additional 26

environmental impacts that cannot be mitigated. These significant and irreversible environmental changes which caused by the project necessitate a finding of significance in this section. 26 CONT

6.0 Alternatives

The EIR is required to evaluate a reasonable range of alternatives to the proposed project which will avoid or substantially lessen any of the significant effects of the project (CEQA § 15126.6.) The alternatives chosen for analysis include the CEQA required "No Project" alternative and only two others (Existing General Plan Alternative and Reduced Project Alternative). The EIR does not evaluate a reasonable range of alternatives as only two alternatives beyond the required No Project alternative are analyzed. The EIR does not include an alternative that meets the project objectives and also eliminates all of the project's significant and unavoidable impacts. The EIR must be revised to include analysis of a reasonable range of alternatives and foster informed decision making (CEQA § 15126.6). This could include alternatives such as development of the site with a project that reduces all of the proposed project's significant and unavoidable impacts to less than significant levels. 27

Conclusion

For the foregoing reasons, GSEJA believes the EIR is flawed and a revised EIR must be prepared for the proposed project and circulated for public review. Golden State Environmental Justice Alliance requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877. 28

Sincerely,

Gary Ho
Blum Collins & Ho, LLP

Attachments:
1.SWAPE Analysis

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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June 1, 2022

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Los Angeles, CA 90017

Subject: Comments on the Tracy Alliance Project (SCH No. 2020080524)

Dear Mr. Ho,

We have reviewed the April 2022 Draft Environmental Impact Report ("DEIR") for the Tracy Alliance Project ("Project") located in the City of Tracy ("City"). The Project proposes to construct 3,352,320-square-feet ("SF") of warehouse and distribution space, consisting of 1,792,500-SF of warehouse space, 57,000-SF of office space, and 1,502,820-SF of light industrial space, as well as 1,706 parking spaces, on the 191.18-acre site. 29

Our review concludes that the DEIR fails to adequately evaluate the Project's air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An updated EIR should be prepared to adequately assess and mitigate the potential air quality, health risk, and greenhouse gas impacts that the project may have on the environment. 30

Air Quality

Failure to Implement All Feasible Mitigation to Reduce Emissions

The DEIR concludes that the Project would result in a significant-and-unavoidable air quality impact. Specifically, the DEIR estimates that the Project's daily ROG emissions associated with Project construction exceed the applicable San Joaquin Valley Air Pollution Control District ("SJVAPCD") threshold of 100 pounds per day ("lbs/day") (see excerpt below) (p. 3.3-36 – 3.3-37, Table 3.3-9). 31

Table 3.3-9: Mitigated Daily Construction Emissions (Sequential and Concurrent Phasing)

Year	Emissions (Pounds)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Mitigated Project Phase 1						
Construction Year 2022	12.25	71.81	99.34	0.67	24.06	8.22
Construction Year 2023	87.87	59.11	72.80	0.56	17.60	5.45
Maximum Phase 1 Daily Construction Emissions	**87.87**	**71.81**	**99.34**	**0.67**	**24.06**	**8.22**
Valley Air District Daily Thresholds	100	100	100	100	100	100
Do Construction Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
Mitigated Project Phase 2						
Construction Year 2023	3.43	18.41	42.60	0.27	9.51	2.92
Construction Year 2024	48.04	17.27	33.76	0.24	7.32	2.04
Maximum Phase 1 Daily Construction Emissions	**48.04**	**18.41**	**42.60**	**0.27**	**9.51**	**2.92**
Valley Air District Daily Thresholds	100	100	100	100	100	100
Do Construction Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
Mitigated Project Phase 3						
Construction Year 2024	1.13	8.20	13.98	0.11	2.49	0.90
Construction Year 2025	22.43	8.09	13.53	0.11	2.49	0.71
Maximum Daily Construction Emissions (Total for Sequenced Phases)	**22.43**	**8.20**	**13.98**	**0.11**	**2.49**	**0.90**
Valley Air District Daily Thresholds	100	100	100	100	100	100
Do Construction Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
Mitigated Project Construction (All Phases)						
Concurrent Construction (Maximum for All Phases Combined)	**158.34**	**98.42**	**155.92**	**1.05**	**36.06**	**12.04**
Valley Air District Daily Thresholds	100	100	100	100	100	100
Do Construction Emissions Exceed Thresholds?	**Yes**	**No**	**Yes**	**No**	**No**	**No**

31 CONT

Furthermore, the DEIR estimates that the Project's annual ROG and NO_X emissions associated with Project operation exceed the applicable SJVAPCD thresholds of 10 tons per year ("tons/year") (see excerpt below) (p. 3.3-39 – 3.3-40, Table 3.3-12).

Table 3.3-12: Unmitigated Annual Operational Emissions

Emission Source	Emissions (Tons)					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Existing Operations						
Existing Operations Total	*0.15*	*0.12*	*0.22*	*<0.01*	*0.07*	*0.02*
Project Phase 1–Operational Year 2023						
Area	8.58	<0.01	0.03	<0.01	<0.01	<0.01
Energy	0.06	0.58	0.49	<0.01	0.04	0.04
Mobile–Trucks	0.49	18.92	3.36	0.07	1.50	0.43
Mobile–Autos	0.38	0.64	6.40	0.02	2.72	0.73
Phase 1 Operations Total	*9.52*	*20.14*	*10.28*	*0.10*	*4.27*	*1.21*
Phase 1 Operations Net Total (Subtracting Existing Emissions)	**9.36**	**20.02**	**10.06**	**0.10**	**4.20**	**1.19**
Project Phase 2–Operational Year 2024						
Area	4.72	0.00	0.01	0.00	0.00	0.00
Energy	0.03	0.31	0.26	0.00	0.02	0.02
Mobile–Trucks	0.27	10.21	1.82	0.04	0.82	0.23
Mobile–Autos	0.19	0.31	3.24	0.01	1.49	0.40
Phase 2 Operations Total	**5.21**	**10.83**	**5.32**	**0.05**	**2.34**	**0.66**
Project Phase 3–Operational Year 2025						
Area	2.21	0.00	0.01	0.00	0.00	0.00
Energy	0.02	0.14	0.12	0.00	0.01	0.01
Mobile–Trucks	0.12	4.70	0.84	0.02	0.39	0.11
Mobile–Autos	0.08	0.13	1.41	0.01	0.70	0.19
Phase 1 Operations Total	**2.43**	**4.98**	**2.38**	**0.02**	**1.10**	**0.31**
Full Project–Operational Year 2025						
Full Project Buildout (All Phases)	***17.01***	***35.83***	***17.77***	***0.18***	***7.63***	***2.16***
Valley Air District Annual Thresholds	10	10	100	27	15	15
Do Operational Emissions Exceed Thresholds?	**Yes**	**Yes**	**No**	**No**	**No**	**No**

31 CONT

Finally, the DEIR estimates that the Project's daily NO_X emissions associated with Project operation exceed the applicable SJVAPCD threshold of 100 lbs/day (see excerpt below) (p. 3.3-41 – 3.3-42, Table 3.3-14).

Table 3.3-14: Mitigated Daily Operational Emissions

Metric	Emissions					
	ROG	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
Total Tons Per Year	17.01	35.83	17.77	0.18	7.63	2.16
Total Pounds Per Year	34,020	71,660	35,533	357	15,261	4,312
Pounds Per Day	**93.21**	**196.33**	**97.35**	**0.98**	**41.81**	**11.81**
Valley Air District Daily Thresholds	100	100	100	100	100	100
Do Daily Emissions Exceed Thresholds?	**No**	**Yes**	**No**	**No**	**No**	**No**

As a result, the DEIR concludes that the Project's construction-related and operational criteria air pollutant emissions would be significant-and-unavoidable (p. 3.3-36 – 3.3-42). However, while we agree that the Project's criteria air pollutant emissions would result in a significant air quality impact, the DEIR's conclusion that these impacts are "significant and unavoidable" is incorrect. According to CEQA Guidelines § 15096(g)(2):

> "When an EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment."

31 CONT

As you can see, an impact can only be labeled as significant and unavoidable after all available, feasible mitigation is considered. Here, while the DEIR includes Mitigation Measures ("MM(s)") AIR-1a through AIR-1d, the DEIR fails to implement *all* feasible mitigation (p. ES-10 – ES-13). Therefore, the DEIR's conclusion that the Project's air quality impacts are significant-and-unavoidable is unsubstantiated. To reduce the Project's air quality impacts to the maximum extent possible, additional feasible mitigation measures should be incorporated, such as those suggested in the section of this letter titled "Feasible Mitigation Measures Available to Reduce Emissions." Thus, the Project should not be approved until an updated EIR is prepared, incorporating all feasible mitigation to reduce emissions to less-than-significant levels.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The DEIR concludes that the proposed Project would result in a significant-and-unavoidable health risk impact after the implementation of MM AIR-1d (p. 33-49). Specifically, the DEIR states:

> "As shown above in Table 3.3-19, the proposed project's operational DPM emissions during Phase I would not exceed the Valley Air District's cancer risk or chronic non-cancer hazard index thresholds of significance at the maximum impacted receptor for any of the sensitive receptors analyzed. As displayed in Chapter 2, Project Description, Table 2-2, Proposed Development Summary, Phase I of the proposed project would involve the development of approximately 1,849,500 square feet out of a total approximately 3,352,320 square feet across all three project phases, representing approximately 46 percent of the total proposed building space. In addition, as displayed in Table 3.3-10, Phase 1 of the proposed project would generate an estimated 2,611 daily vehicle trips out of the total 4,715 daily trips across all three project phases, representing approximately 55 percent of the total proposed operational vehicle activity. Moreover, the potential emission reductions to DPM from the application of MM AIR-1d, which would require the operation of a clean truck fleet during operation of all phases of the proposed project, was not represented in the cancer risk values during Phase I operation in Table 3.3-19. Because of a lack in operational information for Phases 2 and 3 of the proposed project, such as freight product origin, local truck circulation, or other details necessary to preform a site-specific health risk assessment, Phase 1 of the proposed project was the only project phase modeled for health risk and chronic non-cancer hazard impacts. As Phase 1 represents approximately 55 percent of the potential operational trucking impact, although operation of Phase 1 (Tracy

32

> Alliance) would not result in a significant impact in this regard, operation at full buildout of the proposed project could have a potentially significant health impact on nearby sensitive receptors, particularly the residential MIRs.
>
> The implementation of MM AIR-1d would contribute to the minimization of DPM emissions generated from trucking emissions; however, full implementation of MM AIR-1d cannot be guaranteed. As a result, this impact would be significant and unavoidable after the incorporation of mitigation" (p. 3.3-49).

However, while we agree that the Project would result in a significant health risk impact, the DEIR's conclusion that this impact is "significant and unavoidable" is incorrect. As previously discussed, according to CEQA Guidelines § 15096(g)(2):

32 CONT

> "When an EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment."

As demonstrated above, an impact can only be labeled as significant-and-unavoidable after all available, feasible mitigation is considered. Here, while the DEIR implements MM AIR-1d, the DEIR fails to implement *all* feasible mitigation (p. ES-12 – ES-14). Thus, consistent with the Project's incorrect air quality analysis, the DEIR fails to comply with CEQA, and the significant-and-unavoidable impact conclusion should not be relied upon. To reduce the Project's health risk impact to the maximum extent possible, additional feasible mitigation measures should be incorporated, such as those suggested in the section of this letter titled "Feasible Mitigation Measures Available to Reduce Emissions." Thus, the Project should not be approved until an updated EIR is prepared, incorporating all feasible mitigation to reduce emissions to less-than-significant levels.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The DEIR concludes a less-than-significant greenhouse gas ("GHG") impact, stating:

> "As shown in Tables 3.8-6 through 3.8-8, Phase 1 would achieve a reduction of 49.7 percent from BAU by the year 2023 with regulations and design features incorporated, Phase 2 would achieve a 48.7 percent reduction by 2024, and Phase 3 would achieve a 31.6 percent reduction by 2025. Each phase would achieve more than the 29 percent reduction required by the Valley Air District threshold, and also more than the 21.7 percent average reduction from all sources of GHG emissions now required to achieve AB 32 targets" (p. 3.8-42).

33

As demonstrated above, the DEIR estimates that the Project would achieve emissions reductions beyond the ARB 2020 21.7% target and the SJVAPCD 29% reduction from business-as-usual ("BAU") emissions requirements. Specifically, the DEIR accounts for reductions from the following regulations (see excerpt below) (p. 3.8-29 – 3.8-30, Table 3.8-5).

Table 3.8-5: Summary of Applicable Greenhouse Gas Regulations

Regulation	Project Applicability
Pavley Low Emission Vehicle Standards	Nitrous oxide (laughing gas) is a colorless GHG. It has a lifetime of 114 years. Its global warming potential is 310.
Truck and Bus Regulation	Heavy-duty trucks accessing the site for deliveries and services are subject to the regulation.
Low Carbon Fuel Standard	Vehicles accessing the site would use fuel subject to the LCFS.
Title 24 Energy Efficiency Standards	Project buildings would be required to be constructed to meet the latest version of Title 24 (currently 2019). Reduction applies only to energy consumption subject to the regulation.
Green Building Code Standards	The project would be required to include water conservation features mandated by the standard.
Water Efficient Land Use Ordinance	The project landscaping would be required to comply with the regulation.
Renewable Portfolio Standard	Electricity purchased for use at the project site is subject to the 33 percent RPS mandate.
Solid waste	The solid waste service provider would be required to provide programs to increase diversion and recycling to meet the 75 percent mandate, to which the project would be required to adhere.

33 CONT

However, due to the sheer size of the proposed warehouse development, we recommend that the DEIR incorporate additional project design features ("PDFs") or formal mitigation measures to address the Project's expected GHG emissions. Furthermore, as it is policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045, we emphasize the applicability of incorporating a solar power system into the Project design. Until the feasibility of incorporating on-site renewable energy production is considered to reduce the Project's GHG emissions, the DEIR should not be approved.

Feasible Mitigation Measures Available to Reduce Emissions

34

The DEIR's analysis demonstrates that the Project would result in significant air quality and health risk impacts that should be mitigated further. Furthermore, our updated analysis indicates that the Project would result in a significant health risk impact. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Feasible mitigation measures can be found in the Department of Justice Warehouse Project Best Practices document.[1] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

[1] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice.

- Prohibiting off-road diesel-powered equipment from being in the “on” position for more than 10 hours per day.
- Requiring on-road heavy-duty haul trucks to be model year 2010 or newer if diesel-fueled.
- Providing electrical hook ups to the power grid, rather than use of diesel-fueled generators, for electric construction tools, such as saws, drills and compressors, and using electric tools whenever feasible.
- Limiting the amount of daily grading disturbance area.
- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
- Forbidding idling of heavy equipment for more than two minutes.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees. 34 CONT
- Requiring that all facility-owned and operated fleet equipment with a gross vehicle weight rating greater than 14,000 pounds accessing the site meet or exceed 2010 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Facility operators shall maintain records on-site demonstrating compliance with this requirement and shall make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring all heavy-duty vehicles entering or operated on the project site to be zero-emission beginning in 2030.
- Requiring on-site equipment, such as forklifts and yard trucks, to be electric with the necessary electrical charging stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Forbidding trucks from idling for more than two minutes and requiring operators to turn off engines when not in use.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the air district, and the building manager.
- Installing and maintaining, at the manufacturer’s recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer’s recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project,

and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.

- Constructing electric truck charging stations proportional to the number of dock doors at the project.
- Constructing electric plugs for electric transport refrigeration units at every dock door, if the warehouse use could include refrigeration.
- Constructing electric light-duty vehicle charging stations proportional to the number of parking spaces at the project.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity, such as equal to the building's projected energy needs.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking. 34 CONT
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Achieving certification of compliance with LEED green building standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants to use carriers that are SmartWay carriers.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

Furthermore, to reduce the Project's criteria air pollutant and GHG emissions, we recommend consideration of SCAG's 2020 *RTP/SCS* PEIR's Air Quality Project Level Mitigation Measures ("PMM-AQ-1") and Greenhouse Gas Project Level Mitigation Measures ("PMM-GHG-1"), as described below: [2] 35

[2] "4.0 Mitigation Measures." Connect SoCal Program Environmental Impact Report Addendum #1, September 2020, available at: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_addendum_4_mitigationmeasures.pdf?1606004420, p. 4.0-2 – 4.0-10; 4.0-19 –

SCAG RTP/SCS 2020-2045
Air Quality Project Level Mitigation Measures – PMM-AQ-1: In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:
a) Minimize land disturbance.
b) Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes.
c) Cover trucks when hauling dirt.
d) Stabilize the surface of dirt piles if not removed immediately.
e) Limit vehicular paths on unpaved surfaces and stabilize any temporary roads.
f) Minimize unnecessary vehicular and machinery activities.
g) Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.
h) Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities.
k) Ensure that all construction equipment is properly tuned and maintained.
l) Minimize idling time to 5 minutes—saves fuel and reduces emissions.
m) Provide an operational water truck on-site at all times. Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas. Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.
n) Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.
o) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.
p) As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site.
q) Require projects within 500 feet of residences, hospitals, or schools to use Tier 4 equipment for all engines above 50 horsepower (hp) unless the individual project can demonstrate that Tier 4 engines would not be required to mitigate emissions below significance thresholds.
s) Where applicable, projects should provide information about air quality related programs to schools, including the Environmental Justice Community Partnerships (EJCP), Clean Air Ranger Education (CARE), and Why Air Quality Matters programs.
t) Projects should work with local cities and counties to install adequate signage that prohibits truck idling in certain locations (e.g., near schools and sensitive receptors).

35 CONT

4.0-23; See also: "Certified Final Connect SoCal Program Environmental Impact Report." Southern California Association of Governments (SCAG), May 2020, *available at:* https://scag.ca.gov/peir.

u) Projects that will introduce sensitive receptors within 500 feet of freeways and other sources should consider installing high efficiency of enhanced filtration units, such as Minimum Efficiency Reporting Value (MERV) 13 or better. Installation of enhanced filtration units can be verified during occupancy inspection prior to the issuance of an occupancy permit.

v) Develop an ongoing monitoring, inspection, and maintenance program for the MERV filters.

w) The following criteria related to diesel emissions shall be implemented on by individual project sponsors as appropriate and feasible:

- Diesel nonroad vehicles on site for more than 10 total days shall have either (1) engines that meet EPA on road emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%
- Diesel generators on site for more than 10 total days shall be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
- Nonroad diesel engines on site shall be Tier 2 or higher.
- Diesel nonroad construction equipment on site for more than 10 total days shall have either (1) engines meeting EPA Tier 4 nonroad emissions standards or (2) emission control technology verified by EPA or CARB for use with nonroad engines to reduce PM emissions by a minimum of 85% for engines for 50 hp and greater and by a minimum of 20% for engines less than 50 hp.
- Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
- Diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend approved by the original engine manufacturer with sulfur content of 15 ppm or less.
- The construction contractor shall maintain a list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following:
    i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment.
    ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation.
    iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
- The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
- The contractor shall maintain a monthly report that, for each on road diesel vehicle, nonroad construction equipment, or generator onsite, includes:
    i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
    ii. Any problems with the equipment or emission controls.
    iii. Certified copies of fuel deliveries for the time period that identify:
        1. Source of supply
        2. Quantity of fuel
        3. Quantity of fuel, including sulfur content (percent by weight)

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x) Project should exceed Title-24 Building Envelope Energy Efficiency Standards (California Building Standards Code). The following measures can be used to increase energy efficiency:

- Provide pedestrian network improvements, such as interconnected street network, narrower roadways and shorter block lengths, sidewalks, accessibility to transit and transit shelters, traffic calming measures, parks and public spaces, minimize pedestrian barriers.
- Provide traffic calming measures, such as:
    i. Marked crosswalks

ii. Count-down signal timers
iii. Curb extensions iv. Speed tables
iv. Raised crosswalks
v. Raised intersections
vi. Median islands
vii. Tight corner radii
viii. Roundabouts or mini-circles
ix. On-street parking
x. Chicanes/chokers

- Create urban non-motorized zones
- Provide bike parking in non-residential and multi-unit residential projects
- Dedicate land for bike trails
- Limit parking supply through:
  i. Elimination (or reduction) of minimum parking requirements
  ii. Creation of maximum parking requirements
  iii. Provision of shared parking
- Require residential area parking permit.
- Provide ride-sharing programs
  i. Designate a certain percentage of parking spacing for ride sharing vehicles
  ii. Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles
  iii. Providing a web site or messaging board for coordinating rides
  iv. Permanent transportation management association membership and finding requirement.

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Greenhouse Gas Project Level Mitigation Measures – PMM-GHG-1

In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:

b) Reduce emissions resulting from projects through implementation of project features, project design, or other measures, such as those described in Appendix F of the State CEQA Guidelines.

c) Include off-site measures to mitigate a project's emissions.

d) Measures that consider incorporation of Best Available Control Technology (BACT) during design, construction and operation of projects to minimize GHG emissions, including but not limited to:

i. Use energy and fuel-efficient vehicles and equipment;
ii. Deployment of zero- and/or near zero emission technologies;
iii. Use lighting systems that are energy efficient, such as LED technology;
iv. Use the minimum feasible amount of GHG-emitting construction materials;
v. Use cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production;
vi. Incorporate design measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse;
vii. Incorporate design measures to reduce energy consumption and increase use of renewable energy;
viii. Incorporate design measures to reduce water consumption;
ix. Use lighter-colored pavement where feasible;
x. Recycle construction debris to maximum extent feasible;
xi. Plant shade trees in or near construction projects where feasible; and

xii. Solicit bids that include concepts listed above.	
e) Measures that encourage transit use, carpooling, bike-share and car-share programs, active transportation, and parking strategies, including, but not limited to the following: i. Promote transit-active transportation coordinated strategies; ii. Increase bicycle carrying capacity on transit and rail vehicles; iii. Improve or increase access to transit; iv. Increase access to common goods and services, such as groceries, schools, and day care; v. Incorporate affordable housing into the project; vi. Incorporate the neighborhood electric vehicle network; vii. Orient the project toward transit, bicycle and pedestrian facilities; viii. Improve pedestrian or bicycle networks, or transit service; ix. Provide traffic calming measures; x. Provide bicycle parking; xi. Limit or eliminate park supply; xii. Unbundle parking costs; xiii. Provide parking cash-out programs; xiv. Implement or provide access to commute reduction program;	35 CONT
f) Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, and providing amenities incentivizing their use; and planning for and building local bicycle projects that connect with the regional network;	
g) Improving transit access to rail and bus routes by incentives for construction and transit facilities within developments, and/or providing dedicated shuttle service to transit stations; and	
h) Adopting employer trip reduction measures to reduce employee trips such as vanpool and carpool programs, providing end-of-trip facilities, and telecommuting programs including but not limited to measures that: i. Provide car-sharing, bike sharing, and ride-sharing programs; ii. Provide transit passes; iii. Shift single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services; iv. Provide incentives or subsidies that increase that use of modes other than single-occupancy vehicle; v. Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms; vi. Provide employee transportation coordinators at employment sites; vii. Provide a guaranteed ride home service to users of non-auto modes.	
i) Designate a percentage of parking spaces for ride-sharing vehicles or high-occupancy vehicles, and provide adequate passenger loading and unloading for those vehicles;	
j) Land use siting and design measures that reduce GHG emissions, including: i. Developing on infill and brownfields sites; ii. Building compact and mixed-use developments near transit; iii. Retaining on-site mature trees and vegetation, and planting new canopy trees; iv. Measures that increase vehicle efficiency, encourage use of zero and low emissions vehicles, or reduce the carbon content of fuels, including constructing or encouraging construction of electric vehicle charging stations or neighborhood electric vehicle networks, or charging for electric bicycles; and v. Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse.	

l) Require at least five percent of all vehicle parking spaces include electric vehicle charging stations, or at a minimum, require the appropriate infrastructure to facilitate sufficient electric charging for passenger vehicles and trucks to plug-in.
m) Encourage telecommuting and alternative work schedules, such as: i. Staggered starting times ii. Flexible schedules iii. Compressed work weeks
n) Implement commute trip reduction marketing, such as: i. New employee orientation of trip reduction and alternative mode options ii. Event promotions iii. Publications
o) Implement preferential parking permit program
q) Price workplace parking, such as: i. Explicitly charging for parking for its employees; ii. Implementing above market rate pricing; iii. Validating parking only for invited guests; iv. Not providing employee parking and transportation allowances; and v. Educating employees about available alternatives.

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These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include updated air quality, health risk, and GHG analyses to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The updated EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible. 36

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties. 37

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A: Matt Hagemann CV
Attachment B: Paul E. Rosenfeld CV

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International*

Conferences on Soils Sediment and Water. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 5-14-2021
Trial, October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty, Plaintiff vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK,
Case No.: No. 18-L-6845
Rosenfeld Deposition, 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe, Plaintiff vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail, Defendants
Case No.: No. 17-cv-8517
Rosenfeld Deposition, 5-25-2021

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al., Plaintiff vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case Number CV20127-094749
Rosenfeld Deposition: 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al *Plaintiffs*, vs. CNA Insurance Company et al.
Case Number 1:17-cv-000508
Rosenfeld Deposition: 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, *Plaintiff,* vs. Marathon Petroleum, LP, *Defendant.*
Case No.: 1716-CV10006
Rosenfeld Deposition. 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case No.: 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No.: 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., *Plaintiffs*, vs. International Paper Company, *Defendant*.
Civil Action Number 2:09-cv-232-WHA-TFM
Rosenfeld Deposition: July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., *Plaintiffs*, vs. Drummond Company Inc., et al., *Defendants*
Civil Action No. CV 2008-2076
Rosenfeld Deposition: September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., *Plaintiffs*, vs. Citgo Petroleum Corporation, et al., *Defendants*.
Case Number 2:07CV1052
Rosenfeld Deposition: July 2009

Organization

Blum Collins and Ho, Attorneys at Law (on behalf of Golden State Environmental Justice Alliance [GSEJA])

Response to GSEJA-1
The commenter provides introductory statements and requests to be added to the public interest list. The City will include GSEJA on the public interest list for notification purposes.

This comment does not raise any specific project-related environmental issues under CEQA, and therefore no further response is required.

Response to GSEJA-2
The commenter describes the proposed project objectives, design, and background information such as anticipated approvals.

This comment does not raise any specific project-related environmental issues under CEQA, and therefore no further response is required.

Response to GSEJA-3
The commenter states that the Draft EIR did not include an analysis of the Environmental Justice impacts to nearby communities such as unincorporated Banta, which are overly burdened by and especially burdened by existing sources of pollution as identified by CalEnviroScreen, California Environmental Protection Agency (Cal/EPA's) screening tool. Additionally, the commenter states that the project's census tract and the census tracts adjacent to the project site are identified as SB 535 Disadvantaged Communities, which is not discussed or presented for analysis in the Draft EIR.

The comments are noted and acknowledged. CEQA does not require consideration of Environmental Justice considerations. Of relevance here, neither the ARB nor the Valley Air District, both of which are expert public agencies charged with addressing air quality and GHG emissions, has recommended significance thresholds be adjusted for Environmental Justice considerations, and thus neither entity recommends the evaluation of same as part of the CEQA process. As discussed in more detail in Section 3.3, Air Quality, of the Draft EIR, the analysis utilized the currently recommended Valley Air District significance thresholds to determine health risk impacts resulting from the proposed project in accordance with the mandates of CEQA. The Draft EIR evaluated potential impacts to the Banta community in Section 3.3, Air Quality, through the analysis of cumulatively considerable criteria pollutant emissions and health risks under Impacts AIR-2 and AIR-3. The Draft EIR acknowledged that the project site is adjacent to the existing sensitive receptors identified by the commenter, and therefore the Draft EIR identifies the potential health risk impacts that could occur as a result of project construction and operation and includes feasible mitigation to reduce these impacts.

For purposes of conducting the health risk impact analysis, the Draft EIR's analysis properly identified the closest sensitive receptors to the proposed project in the dispersion modeling; it also identified the MIR during each construction phase of the proposed project, which may be different since the MIR during pollutant-generating activity is influenced by the distance of that receptor to the pollutant source(s), the amount and type of pollutants generated by each source, the

topography and direction of the MIR as it relates to the pollutant source(s), and the prevailing meteorological conditions. As discussed in Section 3.3, Air Quality, Phase 1 of the proposed project would represent 55 percent of potential trucking activities. The Draft EIR determined that Phases 2 and 3 could result in operational trucking activity that would generate significant TAC emissions and the overall project could exceed the 20 in a million threshold. Because the health risk impacts analyzed for Phase 1 of the proposed project can be considered representative in terms of disclosing that full buildout of the proposed project could result in potentially significant health impacts and the efficacy of implementation of MM AIR-1d for DPM emission reductions cannot be quantified, Impact AIR-3 of the Draft EIR was determined to be significant and unavoidable. See also Response to Valley Air District-2-5. Nonetheless, to further reduce potential health impacts to the nearest sensitive receptors to the project site (the residences and school along Grant Line Road and El Rancho Road), the City has agreed to adopt and the applicants have agreed to implement a new MM AIR-1e, which was added to Section 3.3, Air Quality, of the Draft EIR to require that trucks accessing the project site be prohibited from using Grant Line Road east of the project site. These changes can be seen in Section 3.1 of the Errata. See also additional enforceable conditions of approval that the project applicants have voluntarily agreed to implement and/or otherwise incorporate to further address air quality, health risk, and buffer issues (see updated MMRP).

Response to GSEJA-4

The commenter notes that the State of California lists three approved energy compliance modeling software for nonresidential buildings: CBECC-Com, EnergyPro, and IES VE, and that CalEEMod is not listed as an approved software. The commenter also states that the spreadsheet-based and CalEEMod modeling in Appendix E do not comply with the 2019 Building Energy Efficiency Standards and under reports the project's potentially significant GHG emissions and Energy impacts to the public and decision-makers. The commenter states that because the Draft EIR did not utilize an approved energy compliance modeling software and the GHG emissions and energy impacts in the Draft EIR are invalid, a revised EIR with modeling in one of the approved software types is required. Furthermore, the commenter states that Draft EIR Appendix E is incorrectly titled Sunnyvale FCII Project Energy Use Summary.

As detailed more fully in Section 3.3, Air Quality, of the Draft EIR, the City, in its discretion, has determined to utilize the applicable Valley Air District thresholds and methodologies, which are contained under each impact statement in Section 3.3 and which are based on scientific and factual data appropriately considered and incorporated therein by Valley Air District, as the expert public agency charged with addressing air quality and GHG emissions within Valley Air District boundaries. As discussed therein, the Draft EIR utilized an approved emissions estimating model in CalEEMod based on the Valley Air District guidance contained in Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). The GAMAQI provides technical guidance for the review of air quality impacts from projects within the boundaries of the Valley Air District. The Valley Air District has not explicitly approved the use of the CBECC-Com, Energy-Pro, or IES VE, for CEQA analysis of projects within the GAMAQI; furthermore, these models are not alternatives to CalEEMod for estimating emissions and would not be appropriate to estimate GHG or energy impacts. The Draft EIR reflects a robust Air Quality Analysis in accordance with the requirements of CEQA, and no revised modeling is necessary.

The energy calculation summary page in Appendix E has been edited in Section 4.1 of the Errata to correctly show the proposed project title. Contrary to the commenter's statement, this minor typographical error does not impair the Draft EIR as an informational document. As shown in Appendix E, the correct CalEEMod modeling files were used to estimate project energy consumption; a revised EIR is not warranted.

Response to GSEJA-5
The commenter states that the City is not listed as a jurisdiction with local energy standards approved by the California Energy Commission (CEC). The commenter notes that for this reason, compliance with the City's General Plan and/or Sustainability Action Plan does not comply with CEC standards or AB 32/SB 32, and a revised EIR must be prepared.

The CEC approves local energy standards only when a local jurisdiction wishes to enforce a locally adopted energy standard that is more stringent than Statewide Energy Code requirements. CEC approval is not required for local jurisdictions to adopt local standards consistent with CEC energy standards. The City has adopted by reference the State energy code as part of Municipal Code Chapter 9.64–Energy Code. Moreover, the fact that the City is not listed as a jurisdiction with local energy standards approved by the CEC does not preclude a project from being consistent with applicable CEC standards or Assembly Bill (AB) 32/SB 32. As stated in Section 3.6 Energy, proposed project buildings would be required to be designed in accordance with all applicable laws and regulations including the provisions of Title 24, California's Energy Efficiency Standards for Nonresidential Buildings and Title 24, Green Building Code Standards. As stated on the CEC website,[5] the CEC regularly updates the building energy efficiency standards (for example, Title 24) and as such, compliance with then-current Title 24 and Green Building Code standards ensures compliance with CEC standards and AB 32/SB 32. As described in Impact ENER-2, these standards are some of the most stringent in the nation and include minimum energy efficiency requirements with which the proposed project must comply and would ensure the proposed project would not conflict with or obstruct the applicable State plans and policies for renewable energy and energy efficiency.

Response to GSEJA-6
The commenter states that the Draft EIR does not provide any consistency analysis with the SJCOG-adopted 2018 RTP/SCS and is not consistent with several strategies set forth therein. The commenter then concludes that the Draft EIR must be revised to include accurate Air Quality/HRA modeling results, energy and GHG impact analyses and to provide an analysis of potential inconsistency with the 2018 RTP/SCS document.

For a discussion of modeling and modeling results, please see Responses to GSEJA-4, GSEJA-30, and GSEJA-31 through GSEJA-36.

State CEQA Guidelines Section 15125 requires an EIR to discuss "any inconsistencies" with plans; no analysis is required if the project is consistent. The Draft EIR discusses consistency with the RTP/SCS as part of the impact analysis in Chapter 3.6 Greenhouse Gas Emissions and summarizes that compliance with VMT targets adopted by the City to comply with SB 375 and the RTP/SCS would

[5] California Energy Commission (CEC). 2022. Website: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards. Accessed July 14, 2022.

adequately address GHG emissions from passenger cars and light-duty trucks. In addition, Chapter 3.6 also discusses the relationship between SB 375 and the RTP/SCS in the context of consistency with California's post 2020 GHG reduction targets. The Draft EIR describes that the RTP/SCS implements the goals of SB 375 and anticipates an increase in development density and intensity that would result in shorter vehicle, transit, bicycle, and pedestrian trips.

With respect to the 2018 RTP/SCS, significant and unavoidable impacts related to air quality and VMT do not necessarily equate to the proposed project conflicting with the policies and strategies outlined in the 2018 RTP/SCS. Furthermore, the policies and strategies listed by the commenter would only be possible for the City of Tracy and other cities within San Joaquin County to initiate and complete and are not possible for an individual development project to do so. However, the proposed project would support these policies and strategies to the maximum extent feasible at the project level. For example, Strategy 1 is to enhance the environment for existing and future generations and conserve energy. The Draft EIR evaluates the proposed project's impacts on the environment and provides feasible mitigation to address identified significant impacts. As analyzed in Section 3.6, Energy, the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation (Impact ENER-1) or conflict with or obstruct a State or local plan for renewable energy or energy efficiency (Impact ENER-2). Strategy 3 is to improve air quality by reducing transportation-related emissions. Though the proposed project would result in significant and unavoidable impacts with respect to air quality and VMT, the project would be required to implement feasible mitigation (MM AIR-1d, MM AIR-1e, MM AIR-1f, MM AIR-1i, MM TRANS-1a, MM TRANS-1b), which would reduce transportation-related emissions to the maximum extent feasible thereby improving air quality, consistent with Strategy 3. Strategy 4 is to improve the regional transportation system efficiency. As described in Chapter 2, Project Description, and throughout the Draft EIR, among other things, the proposed project would set aside approximately 12.51 acres in the northwest corner of the project site, which would be sufficient to accommodate improvements to the City's expressway system, as well as a future I-205/Paradise Road/Chrisman Road interchange as shown in Exhibit 2-7c in Chapter 2, Project Description of the Draft EIR, consistent with the City of Tracy TMP. The TMP provides a comprehensive review of the City's transportation system and serves as a blueprint that can be utilized to identify and implement required improvements to the existing roadway system, as well as expand upon the system to accommodate future development consistent with the General Plan.[6] As an interstate, I-205 serves the region, and, therefore, the future I-205/Paradise Road/Chrisman Road interchange would improve the regional transportation system and support Strategy 4. Similarly, Strategy 8 requires the improvement of major transportation corridors to minimize impacts on rural roads. While the interchange project is not part of the proposed project, the 12.51 acres of land set aside would facilitate opportunities for the City and Caltrans to move forward with these planned improvements to the City's expressway system and the future I-205/Paradise Road/Chrisman Road interchange would result in such improvements, by providing regionally-focused infrastructure for automobiles and trucks entering and exiting the project site and the vicinity. For clarification and amplification purposes, the above text and discussions regarding project consistency with the RTP/SCS have been

[6] City of Tracy. 2022. Citywide Roadway and Transportation Master Plan. Website: https://www.cityoftracy.org/home/showpublisheddocument/13757. Accessed September 6, 2022.

added to Section 3.8, Greenhouse Gas Emissions, Impact GHG-2 of the Draft EIR, see Section 4, Errata of this document.

Response to GSEJA-7
The commenter states that the Draft EIR should have included the City of Tracy Municipal Services Review (MSR) as an attachment for public review pursuant to CEQA Guidelines Section 15150(f) and not simply have incorporated this document by reference, and for this reason, the commenter concludes that the Draft EIR must be revised and recirculated. The commenter also states that the Draft EIR includes a footnote reference to the MSR that no longer is valid.

Pursuant to applicable provisions of Local Agency Formation Commission (LAFCo) law, in 2019, the City prepared and San Joaquin LAFCo approved the MSR, which is a comprehensive study designed to better inform LAFCo, the City, other local agencies, and the community about the provision of municipal services. MSRs attempt to capture and analyze information about the governance structures and efficiencies of service providers, and to identify opportunities for greater coordination and cooperation between providers.[7] The City of Tracy MSR covers all lands within its municipal boundaries as well as its sphere of influence. Similar to other planning documents, the MSR is a long, technical document that provides general background information regarding the foregoing topics. Therefore, it is appropriate for the MSR to be incorporated by reference. The Draft EIR briefly described the MSR and its relationship to the analysis contained in the Draft EIR in accordance with Section 15150(c). CEQA requires that all documents incorporated by reference in an EIR be available for inspection together with the EIR; Section 15148 does not contain such a requirement for documents that are cited in an EIR. Section 1.5 of Chapter 1, Introduction, indicates a number of documents incorporated by reference, and also confirms where the incorporated documents will be available for inspection. While the MSR was not expressly referenced in Section 1.5, it, along with other documents incorporated by reference, have been and will continue to be available for inspection. In addition, the MSR is easily accessible to the public online at the following link: https://www.sjgov.org/commission/lafco/municipal-service under "Cities." For purposes of clarification, Section 4, Errata, updates the footnote and provides a live link to the MSR. No revision to or recirculation of the Draft EIR is required under CEQA.

Response to GSEJA-8
The commenter asserts that Table 3.11-3 in the Draft EIR contains a misleading consistency analysis and includes Objective LU-8.1, Policy 3 as an example. For this reason, the commenter states that a revised EIR should be prepared.

The law gives deference to the City's interpretation of its General Plan. The City and its consultants, based on substantial evidence in the record, provided a thoughtful and robust consistency analysis, as set forth in detail in Impact LAND-2. As explained therein, the project site is designated as A/UR by San Joaquin County, which is designed to identify existing agricultural land intended for future urban development, and therefore the proposed project is consistent in this regard. In addition, this is consistent with the existing City of Tracy General Plan land use designation of Industrial for the

[7] California Association of Local Agency Formation Commission (CalLAFCo). What are Municipal Service Reviews? Website: https://calafco.org/lafco-law/faq/what-are-municipal-service-reviews#:~:text=Service%20reviews%20attempt%20to%20capture,coordination%20and%20cooperation%20between%20providers.

project site; this reflects the long-planned urban development vision for the project site, which contemplates a variety of light industrial uses including warehousing and distribution. Once the project site is annexed into the City of Tracy upon approval by LAFCo, the current San Joaquin County General Plan designation would no longer apply to the project site as described in Chapter 2, Project Description. One of the factors LAFCo must consider when reviewing a proposal for reorganization is the effect of the proposal on maintaining the physical and economic integrity of agricultural lands, as defined by Government Code Section 56016. Although the proposed project would result in a reduction of agricultural land, it is consistent with the City of Tracy General Plan land use designation of Industrial for the project site and reflects the planned urban development vision for the project site as set forth in both the City's and County's respective General Plans. See also Section 3.2, Agriculture and Forestry Resources, of the Draft EIR for additional information in this regard.

Response to GSEJA-9
The commenter describes analysis from Table 3.11-3 related to Goal AQ1 and how the analysis is incorrect because the proposed project would result in a significant and unavoidable impact related to a cumulatively considerable increase in ROGs and carbon monoxide (CO) during construction.

The law gives deference to the City's interpretation of its General Plan. The City and its consultants, based on substantial evidence in the record, provided a thoughtful and robust consistency analysis, as set forth in detail in Impact LAND-2. As explained therein, the proposed project would be subject to applicable regulatory measures adopted to ensure ambient air quality standards are met to the extent feasible. The proposed project would be required to implement MMs AIR-1a through AIR-1i to directly reduce pollutant emissions, such as ROG and CO generated during construction and operation to the extent feasible. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant emissions (see updated MMRP). The proposed project would not be a source of significant toxic or hazardous air pollutants and odors and was not found to have a significant impact with respect to GHG. Refer to Section 3.3, Air Quality and Section 3.8, Greenhouse Gas, of the Draft EIR, and Section 4, Errata of this Final EIR for further discussion.

Response to GSEJA-10
The commenter states that a revised EIR must be prepared to address the inconsistencies identified in Table 3.11-3.

See Response to GSEJA-9.

Response to GSEJA-11
The commenter lists other General Plan goals and policies that the Draft EIR did not evaluate in the project's consistency analysis.

The law gives deference to the City's interpretation of its General Plan, which often involves a balancing of competing interests. The City and its consultants, based on substantial evidence in the record, provided a thoughtful and robust consistency analysis, as set forth in detail in Impact LAND-2. This is sufficient for purposes of satisfying CEQA. For purposes of further clarifying and amplifying the analysis, the following provides additional information as to the City's determination of the

proposed project's consistency with the goals, objectives, and action items noted by the commenter. The following discussion has been added to Section 4, Errata.

AQ-1.2 P3 Developers shall implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects:

Consistent Section 3.3, Air Quality, in the Draft EIR and Section 4, Errata, include mitigation measures that the proposed project would be required to implement to reduce air pollutant emissions to the extent feasible. In addition, as described in Section 3.3, Air Quality, the proposed project would adhere to the applicable federal, State, and local laws and regulations, which include BMPs to reduce air pollutant emissions associated with the construction and operation of the proposed project. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant emissions (see updated MMRP).

AQ-1.2 P6 Installation of solar voltaic panels on new homes and businesses shall be encouraged.

Consistent The installation of solar voltaic panels is not a City of Tracy requirement for industrial development. As described in Chapter 6 Energy page 24, the proposed project would be required to design the proposed buildings according to Subchapter 6, Part 6 of the Title 24 standards, to structurally accommodate future installation of a rooftop solar system. As such, the design of the proposed project would facilitate the future commitment to renewable energy resources. The Draft EIR was prepared based on Valley Air District guidance and, with the implementation of BMPs and MMs AIR-1a through 1i, the proposed project would reduce air quality and GHG emissions to the maximum amount feasible. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant and GHG emissions (see updated MMRP).

AQ-1.2 P12 New sources of toxic air pollutants shall prepare a Health Risk Assessment as required under the Air Toxics "Hot Spots" Act and based on the results of the Assessment, establish appropriate land use buffer zones around those areas posing substantial health risks.

Consistent A Health Risk Assessment is provided in Section 3.3, Air Quality, of the Draft EIR, and the Draft EIR concluded that the proposed project would exceed the San Joaquin Valley Air Pollution Control District's

(Valley Air District's) significance thresholds, resulting in significant and unavoidable impacts. However, with the implementation of BMPs and MMs AIR-1a through 1i, the proposed project would reduce air quality and GHG emissions to the maximum amount feasible. For purposes of clarification and amplification, in terms of a land use buffer zone, MM AIR-1h, as provided in Section 4, Errata of the Final EIR, requires a vegetated project site buffer in the area of the sensitive receptors in compliance with this policy. The City has agreed to adopt, and the project applicants have agreed to implement this additional mitigation measure. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant emissions (see updated MMRP).

AQ-1.2 P13 Dust control measures consistent with the San Joaquin Valley Air Pollution Control District rules shall be required as a condition of approval for subdivision maps, site plans, and grading permits.

Consistent Valley Air District Rule 8021 includes basic dust control measures as noted in Section 3.3, Air Quality in the Draft EIR. In compliance with this policy, these measures would be included as an enforceable condition of approval for the proposed project.

AQ-1.2 P14 Developments that significantly impact air quality shall only be approved if all feasible mitigation measures to avoid, minimize or offset the impact are implemented.

Consistent As described in Section 3,3, Air Quality, of the Draft EIR there are several significant, unavoidable air quality impacts. However, the proposed project would be required to implement all feasible MM AIR-1a through MM AIR-1i. The basis for these determinations is detailed more fully in Section 3.3, Air Quality. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant emissions (see updated MMRP).

AQ-1.2 P15 Encourage businesses to electrify loading docks or implement idling reduction systems so that trucks transporting refrigerated goods can continue to power cab cooling elements during loading, layovers, and rest periods.

Consistent The proposed project would not include refrigerated units or cold storage uses, and the project applicants have voluntarily agreed to incorporate a condition of approval to this effect. Therefore, no

trucks transporting refrigerated goods would be accessing the site. In addition, the City has agreed to adopt, and the project applicants have agreed to implement MM AIR-1f, which would restrict on-site vehicle idling in any event to no greater than 3 minutes. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant and GHG emissions (see updated MMRP).

Response to GSEJA-12
The commenter states that due to errors in the modeling and the significant and unavoidable impacts related to air quality and VMT, the proposed project would conflict with the listed General Plan goals and policies. The commenter requests that a revised EIR include a consistency analysis with all General Plan goals, policies, and objectives.

The commenter does not present specific errors in the modeling; see also Response to GSEJA-4. Additionally, the fact that there may be significant and unavoidable impacts under CEQA does not necessarily result in a local agency's finding of General Plan inconsistency. As described in Responses to GSEJA-8, GSEJA-9, GSEJA-10, and GSEJA-11, the law provides the City with substantial deference in making consistency determinations. There is substantial evidence in the record supporting the City's determination that the proposed project would be consistent with relevant General Plan provisions. No revision to the Draft EIR or recirculation is required.

Response to GSEJA-13
The commenter states that the NEI Specific Plan analysis contained in the Draft EIR does not analyze the Project Description statement that the project requires an amendment to the NEI Specific Plan boundaries in order to incorporate the proposed project. The commenter states that the Draft EIR must be revised to detail the project's proposed development standards, the applicable standards within the NEI SP, and amendments proposed to the NEI SP in order to accommodate the proposed project.

Chapter 2, Project Description, of the Draft EIR provides a detailed project description, and confirms that an NEI Specific Plan Amendment is being requested (see Section 2.5). As described on page 3.11-29 of the Draft EIR, when a project seeks a plan amendment as a component of the project itself, to rectify inconsistency with the existing designation or other provisions therein, or in this case the boundary of the NEI Specific Plan as well as other conforming revisions, the amendment necessitates a legislative policy decision by the City and does not signify a potential environmental effect. As such, the proposed Specific Plan Amendment and pre-zoning, if approved, constitute a self-mitigating aspect of the proposed project that would serve to correct what would otherwise be a conflict.

In addition, the proposed project has been designed to be fully consistent with all applicable development standards and design guidelines in the NEI Specific Plan and would be required to comply with these provisions. This information has been fully analyzed in the Draft EIR. For example, as described in Section 3.11, Land Use, of the Draft EIR, each individual development proposal for

the project site would be required to adhere to the following development standards: a maximum floor area ratio (FAR) of 0.5; a maximum height of 60 feet; and a minimum setback of 10 feet. No revisions to the Draft EIR are required.

Response to GSEJA-14
The commenter states that footnote 5 and the methodology used to determine the number of employees the proposed project would generate is not adequate, accurate or reliable. The commenter also asserts it was improper not to provide the conversations with City staff for public review. The commenter notes an alternative method to calculate the number of employees during operations and asserts that the Draft EIR must be revised to utilize the commenter's methodology.

The City, in its discretion as the Lead Agency, has the authority in the context of an EIR to choose the methodologies and assumptions to be utilized in the analysis, as well as to choose which experts it will rely upon in conducting the CEQA review, so long as these decisions are based on substantial evidence in the record. The City, as Lead Agency, has discretion to determine the appropriate method to analyze environmental impacts in an EIR. Disagreements with an EIR's impact analysis will be resolved in favor of the Lead Agency if there is any substantial evidence in the record supporting the approach used. *See, e.g.*, *Laurel Heights Improvement Ass'n v*. *Regents of Univ. of Cal*. (1988) 47 C3d 376, 409; *City of Hayward v*. *Board of Trustees of Cal. State Univ*. (2015) 242 CA4th 833, 840; *Rialto Citizens for Responsible Growth v*. *City of Rialto* (2012) 208 CA4th 899; *Eureka Citizens for Responsible Gov't v*. *City of Eureka* (2007) 147 CA4th 357, 372; *State Water Resources Control Bd. Cases* (2006) 136 CA4th 674, 795; *Anderson First Coalition v*. *City of Anderson* (2005) 130 CA4th 1173.

Here, the City utilized a methodology which determined that the proposed project would generate a total of approximately 1,871 employees during operations. The estimated employment was calculated using the employment amount of these existing industrial uses and their building square footage data. This figure is used consistently throughout the Draft EIR as the most accurate employee projection based on the best available data. As described in the Project Description and as otherwise reflected in the administrative record, the City of Tracy made reasonable assumptions as to the estimated employment that would be generated by the proposed project by, among other things, surveying various industrial businesses, including warehousing, manufacturing, and distribution centers. The Draft EIR used the appropriate employment generation factor based on project-specific characteristics, other reasonable information and best available data and assumed one employee for every 1,792 square feet, resulting in 1,871 employees at buildout.

For the purpose of transportation analysis, the City has adopted the TMP and the associated City travel demand model that contain employee generation factors to analyze transportation impacts, which does not account for project-specific characteristics such as the type of industrial uses. Therefore, the transportation analysis and technical analyses that rely on the transportation report utilized a different set of employee generation factors in accordance with the TMP guidelines and represents a more conservative estimation of impacts. Based on data provided by the City, the Draft EIR clarifies these assumptions to provide the most accurate evaluation of environmental impacts. Therefore, the analysis provided in the Draft EIR is internally consistent and no revisions are required.

Response to GSEJA-15
The commenter states that the proposed project's employment would exceed the amount planned for in the 10-year horizon from the MSR. The commenter requests that this information be discussed in a revised EIR, and that a finding of significance be made in this regard.

As discussed in Response to GSEJA-14, it is anticipated that the proposed project would employ a total of approximately 1,871 employees at buildout. Therefore, the anticipated employment projections associated with the proposed project are within the projections provided in Table 2-7 of the MSR for 2029 to 2049. The commenter notes the construction schedule provided in the Draft EIR assumes project operation commencing in 2025. However, this schedule was utilized to provide a conservative analysis, and, given that demolition has not occurred by April 28, 2022, as provided in the schedule, it is unlikely that the proposed project would be operational by 2025. Moreover, see Response to GSEJA-7, which explains the purpose of the MSR (which relates to LAFCo decisions about boundary changes). For example, there is a note included under Table 2-7 that states "this table is intended to demonstrate the potential pace of growth in the City and Sphere of Influence (SOI) and is not intended to place limitations on growth or otherwise be used to control the rate, type, or location of growth."

The Draft EIR properly evaluated the potential impacts of this growth utilizing the planning and land use assumptions reflected in the City's General Plan. As discussed in more detail in Section 4, Effects Found not to be Significant, of the Draft EIR, the industrial uses on the project site were anticipated by the City in the General Plan, and thus, the City anticipated this number of employees needed for such a project. Therefore, the proposed project would not result in a significant, unplanned change to the population of the City.

Response to GSEJA-16
The commenter states that the proposed project's estimate of 3,354 employees exceeds the capacity of the 2019 MSR, which indicates that the proposed project would result in a significant, unplanned change to the population of the City resulting in a significant and potentially cumulatively significant impact. For this reason, the commenter states that the Draft EIR must be revised.

See Responses to GSEJA-14 and GSEJA-15. The City, in its discretion as the Lead Agency, utilized 1,871 employees consistently throughout the Draft EIR as the most accurate employee projection based on the best available data, and as explained in GSEJA-15, the proposed project would not result in unplanned growth. Though the proposed project would generate employment, as explained in Chapter 4, Effects Found not to be Significant, the proposed project is industrial in nature (consistent with the long-planned vision for the project site and vicinity as reflected in the Industrial land use designation) and would not develop single-family or multi-family residential uses, and no direct population growth would be expected. With respect to indirect population growth, the project would create substantial employment opportunities, and therefore, could lead to indirect growth inducement. As discussed in Section 4 of the Draft EIR, according to the U.S. Census data, it is estimated that approximately 45,000 of the City's labor force is employed.[8] In addition, the average

[8] United States Census. 2020. Tracy, CA, Employment Data. Accessed: September 15, 2022.

travel time to work for Tracy's employed residents is 44.5 minutes, which strongly suggests that most residents travel a significant distance out of the City to work.

As detailed more fully in Section 4 of the Draft EIR, the General Plan assumes employment growth to improve the jobs-to-housing balance and provide more employment opportunities for the City's residents. Therefore, it is reasonably foreseeable that many of the employees of the project would come from the labor pool within Tracy, and the proposed project would not induce unplanned indirect population growth.

Response to GSEJA-17
The commenter requests that the Draft EIR should provide an analysis of the projects approved since 2020 and in the pipeline to determine consistency with the SJCOG employment growth forecast. The commenter then provides examples of planned projects as of May 2022 and requests that a revised EIR determine whether the proposed project employees would exceed growth forecasts in the General Plan or NEI Specific Plan.

CEQA Guidelines Section 15125, Environmental Setting, requires that an EIR include a description of the physical environmental conditions in the vicinity of the project site viewed from a "local and regional perspective." This environmental setting will normally constitute the baseline physical conditions by which a lead agency measures the changes to the environment that would result from a project and for determining whether those environmental effects would be significant. The purpose of this requirement is to give the public and the decision-makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts.

In general, consistency in the description of the environmental setting is critical to ensure an accurate evaluation of environmental impacts. In other words, to provide the impact assessment that is a fundamental purpose of an EIR, the EIR must delineate environmental conditions absent the project, thereby defining a "baseline" against which predicted effects can be described and quantified.[9] An EIR's description of this environmental setting should be sufficiently comprehensive to allow the project's significant impacts "to be considered in the full environmental context" (CEQA Guidelines *§* 15125(c)). However, the description should be no longer than necessary to provide an understanding of the significant effects of the project and of the alternatives analyzed in the EIR (CEQA Guidelines *§* 15125(a)). CEQA provides the lead agency with significant discretion in determining the appropriate "existing conditions" baseline.[10] As indicated in CEQA Guidelines Section 15125(a)(1), generally, the lead agency should describe the physical environmental conditions as they exist at the time the notice of preparation is published. This is consistent with the related CEQA provision addressing the evaluation of a project's environmental effects. Under CEQA Guidelines Section 15126.2(a), in assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published.

The Draft EIR is consistent with the foregoing requirements. The Draft EIR's notice of preparation was published on August 28, 2020, and thus the environmental setting reflected in the Draft EIR

[9] See, e.g., *Neighbors For Smart Rail v. Exposition Metro Line Constr. Auth*. (2013) 57 Cal.4th 439, 447.
[10] See, e.g., *Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 336.

includes a sufficiently comprehensive description of the physical environmental conditions in the vicinity of the project as of August 28, 2020.

See also Responses to GSEJA-14 through GSEJA-16.

The commenter also notes that the cumulative analysis discussion should determine whether the proposed project, in conjunction with cumulative development, would exceed SJCOG's employment growth forecasts for the City. As explained in the MSR, the SJCOG projection for jobs within the City is well below the City's employment levels and below the U.S. Census jobs data for the City. As the governing body, the City's General Plan provides the most accurate assessment for purposes of this proposed project, and the population projections in the General Plan are used in the analysis. The General Plan is the City's basic planning document and establishes the blueprint for development. Accordingly, the California Supreme Court has held the General Plan to be "the constitution for all future development." (*Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal.3d 531, 540.) Other land use documents, such as zoning ordinances, tentative maps, and development agreements are all subordinate to the General Plan.

Response to GSEJA-18
The commenter states that the proposed project in combination with current pipeline industrial development as of May 2022 exceeds SJCOG's projected employment growth for the City, utilizing the commenter's methodology in calculating employees, and would account for a significant portion of the City's population growth, which warrants the preparation of a revised EIR.

See Response to GSEJA-17 regarding the proper point in time to be used for purposes of conducting the analysis.

See also Responses to GSEJA-14 through GSEJA-16. No further response is required.

For informational purposes, the following is noted.

As described in Response to GSEJA-14, the proposed project would employ approximately 1,871 people. Therefore, the proposed project would represent approximately 30 percent of the employment growth between 2020-2045. As shown in Response to GSEJA-16, the amount of employment within the City of Tracy for the proposed project would be well below the amount anticipated in the General Plan and would help improve the jobs-to-housing ratio within the City.

The commenter states that the proposed project represents 7.8 percent of the City's population growth from 2020-2045. However, this assumes that the proposed project would result in direct population growth and that 100 percent of the employees for the project would originate from outside the City of Tracy. As described in Response to GSEJA-16, the proposed project would not result in direct population growth and would not induce unplanned indirect population growth.

The commenter states that the cumulative projects included in the May 2022 Industrial and Commercial Development Pipeline Report in conjunction with the proposed project would vastly exceed the City's projected employment growth and a significant portion of its population growth. The commenter's calculations do not accurately reflect the project-specific characteristics of the

proposed project. For the reasons described in GSEJA-17, the proposed project, in combination with the current industrial development pipeline would be within the City employment projections as included in the General Plan.

Response to GSEJA-19
The commenter disagrees with the Draft EIR's assertion that the proposed project would be staffed primarily by local employees and states that a revised EIR should be prepared to provide demographic and geographic information about the prospective workers such as the local population's interest or qualifications to work in the industrial sector.

As described in Response to GSEJA-14, the proposed project would employ approximately 1,871 people, representing approximately 30 percent of the employment growth between 2020-2045. Further, as explained in Response to GSEJA-16, the proposed project's contribution to employment in the City is consistent with the forecasted employment anticipated in the General Plan.

The City has the discretion, under CEQA, to weigh the evidence relating to the accuracy and sufficiency of the information in the Draft EIR and to decide whether to accept it. The City may adopt the environmental conclusions reached by the experts who prepared the Draft EIR even though others may disagree with the underlying data, analysis, or conclusions. (*Laurel Heights Improvement Ass'n v*. *Regents of Univ. of Cal*. (1988) 47 C3d 376, 408; *State Water Resources Control Board Cases* (2006) 136 CA4th 674, 795). Disagreements or discrepancies in results arising from different methods for assessing environmental issues do not undermine the validity of the Draft EIR's analysis as long as a reasonable explanation supporting the Draft EIR's analysis is provided. (*Planning and Conserv. League v. Castaic Lake Water Agency* (2009) 180 CA4th 210, 243). The commenter's implication that local employees would not be sufficient to staff the proposed project is not based on a different method for assessing impacts; it is conclusory and not supported by any evidence. No revisions to the Draft EIR are required.

Response to GSEJA-20
The commenter claims that the proposed project would exacerbate an oversupply of jobs within the City, utilizing the commenter's proposed method of calculating the number of employees. The commenter asserts that the Draft EIR should be revised accordingly.

See Responses to GSEJA-14 and GSEJA-16.

As discussed in Chapter 4, Effects Found not to be Significant, of the Draft EIR, the City has a jobs-to-housing ratio goal of 1.5 but currently only has a jobs-to-housing ratio of 1.3. This means there are not enough jobs within the City to meet the jobs-to-housing ratio goal of 1.5. Therefore, many employees must commute outside of the City for employment, which is further supported by the average commute time for the City's employed residents of over 40 minutes. The proposed project would generate approximately 1,871 jobs within the City and would help the City achieve its jobs-to-housing ratio goal.

Contrary to the assertion this is "nonsensical," the Draft EIR was correct in its conclusion that the proposed project would help provide more jobs for the employed residents of the City and thus assist the City in meeting its goal with respect to the jobs-housing balance.

Response to GSEJA-21
The commenter states that the VMT analysis mischaracterizes the term "automobiles" by not including medium/heavy-duty trucks and freight trips; asserts that the City should not rely on OPR guidance on this point characterizing it as "purely advisory" and its interpretation being "speculative"; and asserts that a revised EIR and VMT analysis should be prepared that include all trucks, tractor trailers, and freight activity.

The comment is noted and acknowledged. However, the State of California's guidance specifically specifies the term "automobile" used in CEQA Section 15063.2, subdivision (a) as on-road passenger vehicles, specifically cars and light trucks.[11]

Pursuant to Public Resources Code Section 21099(b)(1), CEQA directed the OPR to propose revisions to the CEQA Guidelines to reflect the goals of SB 743. The criteria to be used by the OPR "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, [OPR] shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, VMT, VMT per capita, automobile trip generation rates, or automobile trips generated. [OPR] may also establish criteria for models used to analyze transportation impacts to ensure the models are accurate, reliable, and consistent with the intent of this section."

As noted in the comment, the OPR guidance states that, "the purpose of this document is to provide advice and recommendations, which agencies and other entities may use at their discretion. This document does not alter Lead Agency discretion in preparing environmental documents subject to CEQA." This means that the City of Tracy has discretion in setting VMT analysis methodologies and in this instance, the City has chosen in its draft guidelines to exclude heavy vehicles, consistent with OPR's guidance in this regard. In addition, consistent with the guidance and the industry standard methodology for analyzing VMT, there is a like-for-like comparison between industrial uses for both threshold setting and project analysis.

It should be noted that while heavy vehicles are excluded from a VMT analysis for CEQA purposes, this does not preclude the City from considering heavy vehicles when reviewing potential non-CEQA operational deficiencies to the surrounding roadway network. Moreover, while medium/heavy trucks/freight trips are not considered in the VMT analysis, they are not excluded from consideration from an environmental perspective with respect to their potential impacts on air quality, noise, and greenhouse gas emissions. No revisions to the Draft EIR are required.

Response to GSEJA-22
The commenter states that the inclusion of the I-205 interchange in the Cumulative Condition is not appropriate because there is no "meaningful evidence" that the improvement will be completed by the date of the cumulative conditions analysis. Therefore, the commenter asserts that this results in an erroneous and misleading representative of the transportation impacts of the proposed project and the Draft EIR must be revised.

[11] California Governor's Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. April. Website: https://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf. Accessed January 12, 2023.

The Paradise Road/I-205 Interchange is a planned improvement in SJCOG's Regional Transportation Plan; therefore, it is both reasonable and customary based on industry standards to include Regional Transportation Plan improvements in the Cumulative Conditions scenario for CEQA purposes. Also, LOS is no longer a CEQA transportation impact evaluation metric. The VMT analysis is based on existing vehicle-miles traveled thresholds and using the existing road network; therefore, the future implementation of the Paradise Road/I-205 Interchange does not affect the proposed project's VMT analysis. No revisions to the Draft EIR are required.

Response to GSEJA-23
The commenter states that a revised EIR should be prepared because the conclusions set forth in the Other CEQA Considerations section of the Draft EIR are incorrect because the proposed project would exceed 10-year horizon growth projections considered by the MSR, is inconsistent with the General Plan and NEI Specific Plan and would negatively exacerbate the existing jobs/housing balance by adding to the oversupply of jobs. The commenter asserts that the Draft EIR must be revised to provide this information for analysis and include a finding of significance.

With respect to assertions related to purported inconsistencies with the growth projections included the MSR, please refer to Response to GSEJA-15. With respect to issues related to the jobs/housing balance, please refer to GSEJA-20; regarding claims of inconsistency with the General Plan, please refer to Response to GSEJA-11. With respect to inconsistency with the NEI Specific Plan, please see Response to GSEJA-13.

Response to GSEJA-24
The commenter repeats its prior comment regarding how the proposed project would not exacerbate the oversupply of jobs and states that a revised EIR must be prepared.

Please refer to Response to GSEJA-20.

Response to GSEJA-25
The commenter repeats its prior comment regarding the need to modify the cumulative analysis to reflect additional cumulative developments because the commenter asserts that a significant cumulative impact would occur due to employment increases and population growth.

With respect to a cumulative analysis in Chapter 5, Other CEQA Considerations, please see Responses to GSEJA-17 and GSEJA-18.

Response to GSEJA-26
The commenter repeats its prior comment regarding the need to revise the Draft EIR to analyze the cumulatively significant impacts to Agriculture, Air Quality, and Transportation, especially with respect to nearby disadvantaged communities.

For discussions related to disadvantaged communities and sensitive receptors, please see Responses to GSEJA-3 and MCINTOSH-3-3.

It is also noted that as set forth in Chapter 5, Other CEQA Considerations, of the Draft EIR, the analysis discloses that the proposed project would result in significant and unavoidable impacts with respect to the following:

- Project-level conversion of Prime Farmland.
- Cumulative conversion of Prime Farmland.
- Project-level impact related to Implementation of the applicable Air Quality Plan.
- Project-level impact related to cumulatively considerable net increase of ROG and CO during construction, and ROG and NO_X during operation.
- Project-level impact related to exposing sensitive receptors to substantial pollutant concentrations.
- Cumulative air quality impact.
- Project-level VMT impact.
- Cumulative VMT impact.

Those significant and unavoidable impacts are discussed in further detail in the applicable topical sections in the Draft EIR and related appendices. As discussed in Response to GSEJA-3, neither the ARB nor the Valley Air District, both of which are expert public agencies charged with addressing air quality and GHG emissions, has recommended significance thresholds adjusted for Environmental Justice considerations; therefore, the Draft EIR utilized the currently recommended Valley Air District significance thresholds to determine health risk impacts resulting from the proposed project. The City, in its authority as Lead Agency, is utilizing the questions in Appendix G of the State CEQA Guidelines to establish thresholds of significance for the proposed project. There are no recommended significance thresholds for these analyses with respect to Environmental Justice. Therefore, the Draft EIR correctly evaluated the proposed project based on existing thresholds.

As described in Section 3.1, Air Quality, the development of the Air Quality Plan (AQP) is based in part on the land use General Plan projections of the various cities and counties that constitute the Air Basin. The City's General Plan designates the project site as Industrial, which is intended to accommodate flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs. Therefore, the proposed project, which involves the development of light industrial, warehouse and distribution and related uses is considered consistent with the project site's General Plan land use designation and its traffic would be included in volumes projected for analysis of the General Plan. Therefore, the inconsistency with the AQP is not due to unplanned growth.

As part of the certification of the Final EIR and prior to approval of the proposed project, the City would need to adopt a Statement of Overriding Considerations that identifies the benefits of the proposed project that outweigh its unavoidable environmental risks.

Response to GSEJA-27
The commenter states that the Draft EIR does not evaluate a reasonable range of alternatives because it did not include an alternative that meets all the project objectives and eliminates all of

the project's significant and unavoidable impacts. The comment states that a revised EIR should be prepared to address this alternative.

The commenter states that the alternatives analysis only provides two alternatives beyond the No Project alternative. However, the alternatives analysis includes an initial consideration of two other alternatives (including a maximum decreased intensity reduction and alternative location), which were both eliminated from further consideration for the reasons described in Chapter 6, Alternatives in the Draft EIR.

The commenter also states that the alternatives analysis should include an alternative that meets all of the project objectives and also eliminates all of the project's significant and unavoidable impacts. While the commenter incorrectly posits that such an alternative exists, it does not provide an example of such an alternative. There is no evidence in the record that such a feasible alternative satisfying both of the foregoing criteria exists. For example, the maximum decreased intensity reduction was initially considered to reduce air quality impacts to less than significant levels. However, to result in less than significant air quality impacts, an extreme reduction in NO_X emissions during operation would be required, from a maximum 35.83 annual tons to a level below the applicable threshold of 10 annual tons, which would require a building square footage reduction of 72.9 percent. Given the substantial decrease in intensity, such an alternative would not be feasible, would not accomplish any of the project objectives, and was therefore rejected from further consideration.

As described in Chapter 6, Alternatives, of the Draft EIR, analysis of alternatives to the proposed project provides full disclosure and allows decision-makers to consider the proposed project in light of hypothetical alternative development scenarios. This analysis is guided by the following considerations set forth under CEQA Guidelines Section 15126.6:

- An EIR need not consider every conceivable alternative to a project.
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process.
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects.

Consistent with the foregoing requirements, the Draft EIR evaluates two alternatives (aside from the No Project Alternative) that meet at least some of the basic objectives of the proposed project while lessening one or more of its significant impacts, consisting of the Outside Storage Allowable Use Alternative and the Agricultural Protection Alternative. It should be noted that both alternatives include a reduction in building footprint. Pursuant to CEQA Guidelines Section 15126.6(e)(2), a Draft EIR must identify an environmentally superior alternative aside from the No Project Alternative. The Draft EIR identifies the Outside Storage Allowable Use Alternative as the environmentally superior alternative because it has the potential to yield the greatest reductions in the severity of the proposed significant and unavoidable impacts because it would preserve approximately 48 acres of

the existing agricultural operations including Prime Farmland. However, this alternative would not achieve the project objective of developing approximately 3.3 million square feet of employment-generating industrial uses. It also would not be as effective at achieving the employment-generating opportunity objective, as it would not provide as many local and regional employment opportunities and take advantage of the proposed project area's high level of accessibility; allow for the expansion of the City's economic base; help improve the jobs/housing balance; or reduce the commute for regional residents.

Response to GSEJA-28
The commenter (as reflected in a report attached to the comment letter prepared by a consultant, SWAPE) provides conclusionary statements and reaffirms the request to be added to the public interest list.

The comment is noted and acknowledged. See Response to GSEJA-1. No further response is required.

Response to GSEJA-29
The commenter provides introductory statements and describes the project. It does not raise any specific project-related environmental issues under CEQA, and therefore no further response is required.

Response to GSEJA-30
The commenter states that a revised EIR should be prepared because the Draft EIR did not adequately evaluate the air quality, health risk, and greenhouse gas impacts of the proposed project.

The comment is noted and acknowledged. Because it is conclusory in nature and does not identify any specific project-related environmental issues under CEQA, no further response is required.

For informational purposes, the following is noted.

The Air Quality, GHG, and Energy analyses in the Draft EIR were prepared according to the City of Tracy and Valley Air District requirements and followed the guidance described in the GAMAQI, the Valley Air District's recommended set of modeling, and analysis guidance for CEQA land use projects. This comment does not specifically indicate how the Draft EIR underrepresents emissions and health risk impacts. In addition, as shown in Responses to Valley Air District-1 through Valley Air District-21, and as presented in the Errata, the proposed project would include additional mitigation measures requested by the Valley Air District aimed at reducing air pollutant emissions and associated health risks. Furthermore, the project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant emissions and associated health risks (see updated MMRP).

Response to GSEJA-31
The commenter presents Table 3.3-9, Table 3.3-12, and Table 3.3-14 from the Draft EIR and summarizes the Draft EIR impacts related to construction ROG emissions, annual operational ROG and NO_X emissions, and daily operational NO_X emissions, respectively. The commenter states that the Draft EIR's conclusion that air quality impacts associated with construction-related ROG

emissions and operational-related ROG and NO_X emissions cannot be fully mitigated is inadequate because it did not consider all feasible mitigation measures to reduce impacts from construction ROG emissions, annual operational ROG and NO_X emissions, and daily operational NO_X emissions. The commenter suggests additional mitigation measures as provided in GSEJA-34.

As detailed more fully in Section 3.3, Air Quality, the Draft EIR has considered all feasible mitigation based on project proponent-provided information as well as other available data and expert opinion and in some cases already includes some of the mitigation measures suggested by the commenter. See the table below for a comparison of which mitigation measures the commenter suggests, which mitigation measures the proposed project's EIR includes, and reasons for why commenter-suggested mitigation would not be able to be feasibly implemented and/or would not clearly lessen any identified significant impact, as applicable. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant emissions (see updated MMRP). See also Errata.

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.	COA No. 1.	For the reasons set forth in the Final EIR, it is reasonable to conclude that this measure could not be implemented in a manner that would effectively result in overall construction emissions reductions. Should the construction contractor be limited to utilizing equipment for only 10 hours per day, that contractor could instead rent multiple pieces of equipment for concurrent operation or lengthened construction schedules and times, resulting in the same or greater construction emissions than was analyzed. The suggested mitigation would not clearly lessen any significant environmental impact. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.
Requiring on-road heavy-duty haul trucks to be model year 2010 or newer if diesel-fueled.	MM AIR-1d, MM AIR-1i .	On-road heavy-duty haul trucks are regulated by the ARB under the California State On-Road Heavy-Duty Vehicle Program. As described in Section 3.3, Air

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
		Quality and these Responses, by January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. The suggested mitigation would not clearly lessen any significant environmental impacts and would not be feasible as detailed in Response to SHUTE-6. See MM AIR-d (Clean Truck Fleet) for the feasible mitigation measure that would be imposed on the proposed project to address this issue. See also MM AIR-1i.
Providing electrical hook ups to the power grid, rather than use of diesel-fueled generators, for electric construction tools, such as saws, drills and compressors, and using electric tools whenever feasible.	MM AIR-1a.	MM AIR-1a regulates the use of diesel-powered generators and limits the use of such generators. The suggested mitigation would not clearly lessen any significant environmental impacts, nor is the suggested mitigation considerably different from the mitigation measure already evaluated in the Draft EIR.
Limiting the amount of daily grading disturbance area.	None.	This measure is not specific enough to include as a MM in the Draft EIR, and as such would not be feasible. In addition, limiting the daily grading area would not reduce overall emissions. This measure would only limit the progress of construction on a daily basis and extend the construction period, resulting in air quality impacts over a longer period.
Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.	MM AIR-1b.	MM AIR-1b would significantly reduce the generation of ozone precursor pollutants, such as ROGs, during project construction. In addition, the incorporation of MM AIR-1a would reduce another ozone precursor pollutant, NO_X, generated during construction. These two measures combined would significantly reduce the generation of particulates or ozone generating pollutants. Moreover, as illustrated in Section 3.3, Air

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
		Quality, project construction would not result in an exceedance of particulate emissions. The suggested mitigation would not clearly lessen any significant environmental impacts, would not be feasible given likely substantial impacts on the construction schedule (both in terms of timing and mobilization efforts), nor is the suggested mitigation considerably different from the mitigation measure already evaluated in the Draft EIR.
Forbidding idling of heavy equipment for more than two minutes.	MM AIR-1f.	MM AIR-1f would require on-site trucks to limit idling to no greater than 3 minutes. The suggested mitigation would not clearly lessen any significant environmental impacts, nor is the suggested mitigation considerably different from the additional mitigation measure already incorporated in the Final EIR (see Errata).
Keeping on-site and furnishing to the Lead Agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.	MM AIR-1a.	MM AIR-1a would require the construction contractor to maintain equipment records for the construction fleet utilized for project construction. The suggested mitigation would not clearly lessen any significant environmental impacts, nor is the suggested mitigation considerably different from the mitigation measure already evaluated in the Draft EIR.
Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.	MMs AIR-1 and AIR-1b.	This would be required by the Lead Agency prior to issuance of grading permits. The suggested mitigation is not considerably different from the mitigation measure already evaluated in the Draft EIR.
Providing information on transit and ride sharing programs and services to construction employees.	COA No. 2.	The information that the commenter is referencing is available on the City of Tracy's website. Additionally, as it would be difficult to assess the effectiveness of this type of

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
		temporary TDM measure or confirm any quantifiable emission reductions that could reasonably be expected to occur, the suggested mitigation would not clearly lessen any significant environmental impacts. Moreover, the feasibility of effectively implementing this type of temporary TDM measure to result in actual trip reductions is questionable because ride sharing applications have been publicly available for over a decade and transit information is accessible on the City's website as well as provided in map-based phone applications, such as Google maps. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.
Requiring that all facility-owned and operated fleet equipment with a gross vehicle weight rating greater than 14,000 pounds accessing the site meet or exceed 2010 model year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Facility operators shall maintain records on-site demonstrating compliance with this requirement and shall make records available for inspection by the local jurisdiction, air district, and State upon request.	None.	On-road heavy-duty haul trucks are regulated by the ARB under the California State On-Road Heavy-Duty Vehicle Program. As described in Section 3.3, Air Quality and these Responses, by January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. The suggested mitigation would not clearly lessen any significant environmental impacts and would not be feasible as detailed in Response to SHUTE-6. See MM AIR-d (Clean Truck Fleet) for the feasible mitigation measure that would be imposed on the proposed project to address this issue. See also MM AIR-1i.
Requiring all heavy-duty vehicles entering or operated on the	MMs AIR-1g and AIR-1i.	MM AIR-1g would require future on-site on- and off-road equipment to be electric powered, and MM

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
project site to be zero-emission beginning in 2030.		AIR-1i would require the installation of Tier 2 EV charging infrastructure, facilitating the future use of electric trucks and vehicles. Because of the volume of trucks anticipated to access the site, practical limitations on the owner's ability to regulate this item, and the current cost and availability of electric trucks, the suggested mitigation is not feasible.
Requiring on-site equipment, such as forklifts and yard trucks, to be electric with the necessary electrical charging stations provided.	MM AIR-1g.	The suggested mitigation measure is similar to recommended measures already identified in the Draft EIR as well as the Final EIR, as reflected in the updated MMRP. MM AIR-1g would require all on-site off-road and on-road equipment to be electric powered, including but not limited to forklifts and pallet jacks. The suggested mitigation is not considerably different from the additional mitigation measure already incorporated in the Final EIR (see Errata), and therefore the suggested mitigation is not required under CEQA.
Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.	MMs AIR-1g.	MM AIR-1g would require future on-site on- and off-road equipment to be electric powered. The suggested mitigation would not clearly lessen any environmental impacts, nor is the suggested mitigation considerably different from the mitigation measure already evaluated in the Draft EIR. Finally, given the volume of light- and medium-duty vehicles that would be involved as part of the tenants' business operations, practical limitations on the owner's ability to control and enforce such an obligation, along with the current substantial cost and concerns regarding widespread availability of electric vehicles, the

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
		suggested mitigation is not feasible.
Forbidding trucks from idling for more than two minutes and requiring operators to turn off engines when not in use.	MM AIR-1f.	MM AIR-1f would require on-site trucks to limit idling to no greater than 3 minutes. The suggested mitigation would not clearly lessen any significant environmental impacts, nor is the suggested mitigation considerably different from the additional mitigation measure already incorporated in the Final EIR (see Errata).
Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to California Air Resources Board (ARB), the air district, and the building manager.	MM AIR-1f.	MM AIR-1f would require on-site trucks to limit idling to no greater than 3 minutes and would require the installation of signage throughout the site regarding the idling limitation. The suggested mitigation would not clearly lessen any significant environmental impacts, nor is the suggested mitigation considerably different from the additional mitigation measure already incorporated in the Final EIR (see Errata).
Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.	None.	The operations of private homes surrounding the project site are not under the purview of the owner or operator of the proposed project; therefore, there is no mechanism available to ensure that filtration systems would be installed and maintained at sensitive receptor locations near the project site. In addition, the effectiveness of air filtration systems heavily relies on continued maintenance and replacing filters. The suggested mitigation is not feasible.
Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air	None.	The suggested measure of installing one open-source air quality monitoring station near the project site would not reduce any air quality or GHG impact, since monitoring in and of itself does not reduce emissions. Furthermore, the commenter does not provide

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.		any information on why monitoring would be beneficial to the community. Because the suggested measure would not reduce an environmental impact caused by the proposed project, there is no legal nexus of this measure to any identified impacts of the proposed project. Therefore, the suggested mitigation is not feasible, would not be effective to reduce any impact from the proposed project, and is not required under CEQA.
Constructing electric truck charging stations proportional to the number of dock doors at the project.	MM AIR-1i.	The suggested mitigation measure is similar to recommended measures already identified in the Draft EIR as well as the Final EIR, as reflected in the updated MMRP. The proposed project would be required to comply with MM AIR-1i, which would require the inclusion of EV charging infrastructure pursuant to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2, in all parking areas during operation. Therefore, the proposed project would provide EV charging infrastructure that would support passenger vehicles and the future use of electric trucks. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as the Final EIR, the suggested mitigation would be duplicative and is not required under CEQA.
Constructing electric plugs for electric transport refrigeration units at every dock door, if the warehouse use could include refrigeration.	None.	The proposed project would not include cold storage uses; therefore, the suggested mitigation is not applicable and would not clearly lessen any significant environmental impact.
Constructing electric light-duty vehicle charging stations	MM AIR-1i.	MM AIR-1i would require the installation of EV chargers to

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
proportional to the number of parking spaces at the project.		support the future use of electric trucks and vehicles. The suggested mitigation is not considerably different from the additional mitigation measure already incorporated in the Final EIR (see Errata).
Installing solar photovoltaic systems on the project site of a specified electrical generation capacity, such as equal to the building's projected energy needs.	COA No. 9(A-C). See Responses to GSEJA-31 and Valley Air District 2-12.	The Final EIR addresses the topic of solar panels on each building as part of the Responses to GSEJA-31 and Valley Air District 2-12. As described therein, the California Building Standards Code (CBC) requires that nonresidential projects construct their roofs to be solar-ready to accommodate the future installation of solar panels. The proposed project would be required to comply with the foregoing, thereby contributing to improved air quality and making progress toward reducing greenhouse gas emissions through the facilitation of the future production of solar energy. Furthermore, the use of solar panels would not substantially reduce air pollutant emissions on-site, because energy source emissions described in the Air Quality Analysis (see Section 3.3 of the Draft EIR) are limited to those generated from the on-site combustion of natural gas due to the inter-regional relationship between land use development projects and the facility generating the electricity. As such, the consideration of electricity-related energy source emissions is limited to GHGs. Moreover, the proposed project would not result in any significant impact related to GHG emissions, as discussed in Section 3.8 of the Draft EIR, and thus the City does not have the legal authority under CEQA to impose this measure. Therefore, based on the foregoing reasons and as further documented in Sections 3.3

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
		and 3.8 of the Draft EIR as well as this Final EIR, the suggested mitigation is not required under CEQA. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.
Requiring all stand-by emergency generators to be powered by a non-diesel fuel.	None.	The proposed project would not include stand-by emergency generators. Accordingly, the proposed mitigation is not applicable and would not clearly lessen any significant environmental impact.
Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queueing and idling of trucks.	None.	It is reasonable to assume that in the ordinary course of business, tenant managers would need to train facility operators to minimize queueing, to the extent feasible, as part of running a successful business, which would financially incentivize the efficient scheduling and loading of goods. The suggested mitigation would not clearly lessen any significant environmental impacts.
Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.	MM TRANS-1a and TRANS-1b.	MM TRANS-1a and TRANS-1b of the Draft EIR would establish a TDM plan, which would establish similar measures that the commenter is requesting. The suggested mitigation is not considerably different from the mitigation measures already evaluated in the Draft EIR.
Meeting CALGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, EV charging, and bicycle parking.	MM AIR-1i.	MM AIR-1i would require the installation of EV chargers to support the future use of electric trucks and vehicles, consistent with Tier 2 voluntary CALGreen standards. The suggested mitigation is not considerably different from the additional

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
		mitigation measure already incorporated in the Final EIR (see Errata).
Achieving certification of compliance with LEED® green building standards.	None.	The suggested mitigation would not clearly lessen any significant environmental impacts. Furthermore, the proposed project would adhere to existing Green Building Code requirements contained in City of Tracy Municipal Code Article 6.
Providing meal options on-site or shuttles between the facility and nearby meal destinations.	COA No. 6, No. 8(h).	The suggested mitigation would not clearly lessen any significant environmental impacts. Construction worker vehicle trips would represent a minuscule amount of the overall construction emissions because the majority of emissions are generated by the use of off-road construction equipment. Moreover, any use involving commercial-grade kitchens or the like would be beyond the scope of the proposed project and contemplated uses, and thus not feasible in this regard. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of enforceable conditions of approval consistent with the commenter's request.
Posting signs at every truck exit driveway providing directional information to the truck route.	MM AIR-1e.	The suggested mitigation would be included as part of MM AIR-1e Operational Truck Fleet Routing contained in Section 4: Errata. MM AIR-1e would prohibit trucks from accessing Grant Line Road east of the project site. In addition, the project applicants have agreed to voluntarily implement a signage program along project frontage on Grant Line Road to deter trucks from accessing Grant Line Road east of the project site.

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
Improving and maintaining vegetation and tree canopy for residents in and around the project area.	MM AIR-1h.	The suggested mitigation would not lessen any significant environmental impacts. However, the proposed project includes MM AIR-1h-Vegetated Project Site Buffer which would include a vegetative buffer along the project boundary to the east. The addition of MM AIR-1h can be seen in Section 3.1 of the Errata as well as the updated MMRP.
Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with ARB regulations, by attending ARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and State upon request.	None.	As discussed at length in Section 3.3, the project applicants would be required to adhere to all applicable laws and regulations, including those set forth by ARB and Valley Air District. The suggested mitigation would not clearly lessen any significant environmental impacts.
Requiring tenants to enroll in the EPA's SmartWay program, and requiring tenants to use carriers that are SmartWay carriers.	COA No. 10(f).	The commenter does not provide evidence for why or how this program would reduce emissions. Smartway programs aim to make supply chains more efficient by reducing fuel consumption and energy costs. The suggested mitigation would not result in quantitative reductions in air pollutant or GHG emissions and would be infeasible because it would limit the types of carriers the future tenants could work with. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.
Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher	None.	Providing tenants with information on incentive programs with goals to reduce emissions from heavy-

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
Incentive Program, to upgrade their fleets.		duty trucks would not ensure that the tenants could or would apply for any of the programs, as applying for programs would be a voluntary action. In addition, the information would not be relevant to tenants that use third-party carriers, further limiting the potential benefit of including this suggestion mitigation. The suggested mitigation would not clearly lessen any significant environmental impacts.

See also Responses to SHUTE-13 and SHUTE-14.

Response to GSEJA-32
The commenter disagrees with the Draft EIR's determination that impacts related to a significant health risk, specifically DPM emissions, would be significant and unavoidable. Therefore, the commenter asserts that additional mitigation measures should be incorporated and the Draft EIR be revised accordingly.

The comment is noted and acknowledged. The Draft EIR considered potential mitigation measures when the analysis was prepared; however, based on known project information and other considerations including expert opinion and other available data, many of these measures would be neither feasible nor enforceable, such as, for example, the use of a zero-emission trucking fleet. Furthermore, as described in the Response to GSEJA-31 and multiple Responses to SHUTE, the proposed project includes additional new mitigation measures that would further reduce DPM emissions; these new measures are substantially similar to or the same as many of the measures noted in the list shown in the comment letter. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant emissions (see updated MMRP).

Response to GSEJA-33
The commenter asserts that due to the large size of the proposed project, the Draft EIR should incorporate additional project design features that reduce GHG emissions, such as the use of zero-carbon resource electricity supplies and an on-site renewable energy production system, such as solar. Until the feasibility of incorporating on-site renewable energy production is considered to reduce the proposed project's GHG emissions, the commenter claims that the Draft EIR should not be approved.

The comment is noted and acknowledged. The commenter does not question the GHG impact analysis or less than significant conclusions referenced in its comment letter. The City is not permitted under CEQA to impose mitigation measures or require applicants to incorporate project

design features for impacts that have been determined to be less than significant. Draft EIR Chapter 2, Project Description, sets forth a detailed description of the proposed project. No further response is required.

For informational purposes, the following is noted. The Draft EIR was prepared based on Valley Air District guidance and as such, by achieving a 29 percent reduction from Business as Usual (BAU) threshold and the ARB 2020 21.7 percent threshold, the Draft EIR's determination is valid. Moreover, the analysis appropriately considered whether any renewable energy features (such as on-site solar) could be incorporated into the proposed project. In addition, the inclusion of new MM AIR-1f, MM AIR-1g, and MM AIR-1i (which the City has agreed to adopt and the applicants have agreed to implement) would further reduce GHG emissions (as well as pollutant emissions) by reducing truck idling, requiring all electric on-site equipment, and installing EV charging stations consistent with the voluntary Tier 2 CALGreen standards. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant and GHG emissions (see updated MMRP).

Response to GSEJA-34
The commenter states that the Draft EIR's analysis related to air quality and health risk impacts should be mitigated and suggests certain mitigation measures from the California Department of Justice Warehouse Best Practices document (see pgs. 6-8 of the comment letter).

See Responses to GSEJA-31 and -GSEJA-32. See also multiple Responses to SHUTE.

Response to GSEJA-35
The commenter recommends the Draft EIR consider the Southern California Association of Governments (SCAG) 2020 RTP/SCS PEIR Air Quality-level mitigation measures and greenhouse gas project-level mitigation measures.

See Responses to GSEJA-31, -GSEJA-32, and GSEJA-36. See also multiple Responses to SHUTE.

Response to GSEJA-36
The commenter states that SCAG's 2020 RTP/SCS PEIR Air Quality-level mitigation measures and GHG project-level mitigation measures would be a feasible way to reduce the proposed project's pollutant and GHG emissions. The commenter states that a revised EIR should be provided that demonstrates the inclusion of these measures.

As described in Response to GSEJA-31, the Draft EIR already includes mitigation similar to measures that are presented in this comment. See also the Table below for further discussion in this regard with respect to SCAG's 2020 RTP/SCS PEIR measures. Moreover, the Draft EIR now includes new mitigation measures recommended by Valley Air District in its comment letter. This new mitigation, as shown in Section 4, Errata, includes measures identical or similar to measures that the commenter presents. For example, new MM AIR-1f and -1g require signage to be posted limiting idling times to 3 minutes or less and the use of all electric on-road and off-road equipment. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant

emissions (see updated MMRP). See also Response to GSEJA-33 related to the less than significant GHG impacts, and also multiple Responses to SHUTE. No revisions to the Draft EIR are required.

SCAG 2020 RTP/SCS PEIR GHG Project Level Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
PMM GHG-1: In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to greenhouse gas emissions. Such measures may include the following or other comparable measures identified by the Lead Agency: a) Integrate green building measures consistent with CALGreen (California Building Code Title 24), local building codes and other applicable laws, into project design including: i) Use energy-efficient materials in building design, construction, rehabilitation, and retrofit. ii) Install energy-efficient lighting, heating, and cooling systems (cogeneration); water heaters; appliances; equipment; and control systems. iii) Reduce lighting, heating, and cooling needs by taking advantage of light-colored roofs, trees for shade, and sunlight. iv) Incorporate passive environmental control systems that account for the characteristics of the natural environment. v) Use high-efficiency lighting and cooking devices. vi) Incorporate passive solar design. vii) Use high-reflectivity building materials and multiple glazing. viii) Prohibit gas-powered landscape maintenance equipment. ix) Install electric vehicle charging stations. x) Reduce wood burning stoves or fireplaces. xi) Provide bike lanes accessibility and parking at residential developments. b) Reduce emissions resulting from projects through implementation of project features, project design, or other measures, such as those described in Appendix F of the State CEQA Guidelines c) Include off-site measures to mitigate a project's emissions. d) Measures that consider incorporation of Best Available Control Technology (BACT) during design, construction and operation of projects to minimize GHG emissions, including but not limited to:	MM AIR-1e through -1i	The proposed project would be designed according to CALGreen standards as well as the City of Tracy Building Code standards, as required for all development projects. Project design features such as drought tolerant landscaping and bicycle parking would further ensure the proposed project would reduce operational GHG emissions. In addition, MM AIR-1e through -1i, while not required to reduce a GHG impact, would provide a co-benefit of reducing operational GHG emissions. For example, the inclusion of EV charging infrastructure consistent with Tier 2 CALGreen standards would facilitate the use of EVs and reduce the use of fossil fuel-powered vehicles. Furthermore, MM AIR-1g would require zero-emission on-site equipment, which would be consistent with the SCAG measure. In conclusion, the adherence to Title 24 and existing City standards along with project design features and mitigation measures would ensure the proposed project would be consistent with SCAG PEIR project-level mitigation measure PMM GHG-1.

SCAG 2020 RTP/SCS PEIR GHG Project Level Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
i) Use energy and fuel-efficient vehicles and equipment; ii) Deployment of zero- and/or near zero-emission technologies; iii) Use lighting systems that are energy-efficient, such as LED technology; iv) Use the minimum feasible amount of GHG-emitting construction materials; v) Use cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production; vi) Incorporate design measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse; vii) Incorporate design measures to reduce energy consumption and increase use of renewable energy; viii) Incorporate design measures to reduce water consumption; ix) Use lighter-colored pavement where feasible; x) Recycle construction debris to maximum extent feasible; xi) Plant shade trees in or near construction projects where feasible; and xii) Solicit bids that include concepts listed above. e) Measures that encourage transit use, carpooling, bike-share and car-share programs, active transportation, and parking strategies, including, but not limited to the following: i) Promote transit-active transportation coordinated strategies; ii) Increase bicycle carrying capacity on transit and rail vehicles; iii) Improve or increase access to transit; iv) Increase access to common goods and services, such as groceries, schools, and day care; v) Incorporate affordable housing into the project; vi) Incorporate the neighborhood electric vehicle network; vii) Orient the project toward transit, bicycle and pedestrian facilities; viii) Improve pedestrian or bicycle networks, or transit service; ix) Provide traffic calming measures; x) Provide bicycle parking; xi) Limit or eliminate park supply; xii) Unbundle parking costs;		

SCAG 2020 RTP/SCS PEIR GHG Project Level Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
xiii) Provide parking cash-out programs; xiv) Implement or provide access to commute reduction program; f) Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, and providing amenities incentivizing their use; and planning for and building local bicycle projects that connect with the regional network; g) Improving transit access to rail and bus routes by incentives for construction of transit facilities within developments, and/or providing dedicated shuttle service to transit stations; and h) Adopting employer trip reduction measures to reduce employee trips such as vanpool and carpool programs, providing end-of-trip facilities, and telecommuting programs including but not limited to measures that: i) Provide car-sharing, bike sharing, and ride sharing programs; ii) Provide transit passes; iii) Shift single-occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services; iv) Provide incentives or subsidies that increase that use of modes other than single-occupancy vehicle; v) Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms; vi) Provide employee transportation coordinators at employment sites; vii) Provide a guaranteed ride home service to users of non-auto modes. i) Designate a percentage of parking spaces for ride sharing vehicles or high-occupancy vehicles, and provide adequate passenger loading and unloading for those vehicles; j) Land use siting and design measures that reduce GHG emissions, including: i) Developing on infill and brownfields sites; ii) Building compact and mixed-use developments near transit; iii) Retaining on-site mature trees and vegetation, and planting new canopy trees; iv) Measures that increase vehicle efficiency, encourage use of zero and low emissions		

SCAG 2020 RTP/SCS PEIR GHG Project Level Mitigation Measure	Which EIR Mitigation Measure addresses the Commenter's request?	Explanation
vehicles, or reduce the carbon content of fuels, including constructing or encouraging construction of electric vehicle charging stations or neighborhood electric vehicle networks, or charging for electric bicycles; and v) Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse		

See also Responses to SHUTE-13 and SHUTE-14.

Response to GSEJA-37
The commenter provides legal and conclusionary statements.

The commenter does not raise any project-specific CEQA issues, and therefore no further response is required.

From: Genna McIntosh <gennamcintosh15@gmail.com>
Sent: Friday, June 3, 2022 5:03 PM
To: Victoria Lombardo <Victoria.Lombardo@cityoftracy.org>
Subject: DEIR comment

I believe the amount of farmland that would be lost to this project is too great to justify continuing. I noticed that Tracy's logo has an agricultural aspect to it, I would assume that the City of Tracy highly values it's agricultural community and will do whatever It can to support it. And taking away almost 191 acres of farmland doesn't seem to be in line with those views. Our farmland is precious resource, especially California farmland, and we should be doing everything we can to maintain these resources, this project seems to unnecessarily take away from that. 1

The air quality impacts are also greatly concerning, especially for the people who live on California Avenue. We already have the freeway behind us and all the air quality issues that come with that. To put warehouses on the other side of our homes would significantly and negatively change the air quality. In addition to the homes, there is a school less than a mile away where children play outside daily, those children do not deserve to have their air quality reduced. 2

The traffic is also a major concern, the small community of Banta has so much traffic from commuters and warehouse employees already, in addition to the large trucks that pass through illegally. This community does not deserve to have all of that increased. 3

Something that I didn't notice on the DEIR is the amount of water that would be used. As I'm sure we all know, California is in a drought, we have our governor talking about aggressive water conservation, how much water would be used on the construction of this project? 4

These issues are too great to ignore and do not justify moving forward with this project, and I strongly encourage the City of Tracy to consider the impacts of this project, and negative strongly outnumber any benefit this would bring. 5

Thank you,
Genna McIntosh

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Individuals

Genna McIntosh (MCINTOSH)

Response to MCINTOSH-1
This comment is related to the loss of 191 acres of farmland, and the commenter states that the City should support and maintain agricultural uses and thus not approve the conversion of these 191 acres.

The comment sets forth a personal opinion on the merits of the proposed project. The commenter's opinion is noted and will be included in the administrative record for consideration by the City decision-makers. No further response is required.

For informational purposes, the following is provided. The proposed project's potential impacts on agricultural resources are discussed at length in Section 3.2, Agriculture and Forestry Resources, of the Draft EIR. Among other things, Section 3.2 acknowledges that the project site contains approximately 188 acres of Prime Farmland and approximately 4 acres of Semi-Agricultural and Rural Commercial Land, as classified by the Farmland Mapping and Monitoring Program (FMMP). The Draft EIR details in the Regulatory Framework the relevant laws and regulations, including relevant City General Plan goals and policies, the City's local Agricultural Mitigation Fee Program, as well as those under LAFCo law. The analysis also analyzes the impacts of the proposed conversion of Important Farmland to industrial uses. As detailed more fully therein, the conversion of the project site from agricultural land to industrial uses is consistent with the City's long-term planning vision. The proposed project is consistent with the land use designation and densities and intensities established by the General Plan and conversion of the project site to industrial use was envisioned as part of buildout under the General Plan. Nevertheless, for purposes of a conservative analysis, this Draft EIR acknowledges that the proposed project would result in the loss of Prime Farmland as a result of its conversion of Prime Farmland to urban uses and discloses this as a significant and unavoidable impact. The City addresses the need to balance agricultural resource and open space preservation goals with urban development needs by focusing industrial development in the NEI Specific Plan area, for which the project site is adjacent. In so doing, this helps to ensure the preservation of other agricultural resources and open space. In addition, in accordance with Chapter 13.28 of the Municipal Code, Agricultural Mitigation Fee, the developers of the Suvik Farms, Zuriakat, and Tracy Alliance parcels would each be required to pay applicable Agricultural Mitigation fees in connection with their respective individual development proposals, as implemented by MM AG-1. In addition, the SJMSCP works at a regional level to promote the permanent preservation of agricultural lands in San Joaquin County. The SJMSCP calls for the preservation of about 100,000 acres, including 57,000 agricultural acres, over a 50-year period for the protection of a variety of biological species. Most agricultural conservation easements in the County are the product of the SJMSCP. The proposed project would be required to comply with applicable provisions of the SJMSCP (see Section 3.4, Biological Resources, of the Draft EIR for more information), which may include payment of development fees for conversion of lands. See also Section 3.2.6 for the Draft EIR's cumulative analysis with respect to agricultural resources.

Response to MCINTOSH-2
The comment is related to air quality impacts, especially to residents who live on California Avenue, adjacent to an existing air pollution source, like I-205. The commenter states that the proposed project would further impact air quality of nearby sensitive land uses including homes and a school that is less than a mile away.

The comment sets forth a personal opinion on the merits of the proposed project. The commenter's opinion is noted and will be included in the administrative record for consideration by the City decision-makers. No further response is required.

For informational purposes, the following is provided. The Draft EIR fully analyzed the potential air quality and health risk impacts resulting from construction and operation of the proposed project, which was performed consistent with the guidance and methodologies provided by the Valley Air District's GAMAQI. Potential impacts on sensitive uses, including nearby homes and Banta Elementary School, were specifically evaluated (see, e.g., Impact AIR-3). As discussed in Section 3.3, Air Quality, of the Draft EIR, the project site has been long planned for industrial uses and is located adjacent to the NEI Specific Plan area. The proposed project would be required to incorporate technically and financially feasible mitigation measures (MM AIR-1a through MM AIR-1d) to reduce emissions generated during project construction and operation. In addition, the project applicants have agreed to incorporate additional measures (see MM AIR-1e, MM AIR-1f, MM AIR-1g, MM AIR-1h, and MM AIR-1i), which have been included in the Final EIR and which would result in additional emission reductions during project operation. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant emissions and health risk issues (see updated MMRP). See Responses to Valley Air District-2 through 5 for additional information in this regard.

Response to MCINTOSH-3
This comment is related to project traffic impacts to the Banta community, which currently experiences traffic impacts from commuters, warehouse employees, and illegal truck traffic.

The comment sets forth a personal opinion on the merits of the proposed project. The commenter's opinion is noted and will be included in the administrative record for consideration by the City decision-makers. No further response is required.

For informational purposes, the following is provided. Section 3.14, Transportation, of the Draft EIR evaluates the proposed project's potential transportation-related impacts as required under CEQA. As detailed more fully therein, the analysis considers and discloses any potentially significant impacts with respect to VMT; any conflicts relating to alternative transportation, bicycle facilities, pedestrian facilities, and transit facilities; any design hazard features; and any impairment on emergency access. The Draft EIR also identifies feasible mitigation measures to reduce identified impacts (i.e., MM TRANS-1a, MM TRANS-1b). In addition, the Draft EIR includes (for informational purposes) a non-CEQA operational analysis, utilizing a level-of-service evaluation of the study area identified by the City.

Specifically, with respect to truck traffic during operations, the Draft EIR evaluated this issue and acknowledged that the proposed project would result in new truck trips both to and from the project site. The Draft EIR discussed the relevance of Section 3.08.290 of the Tracy Municipal Code, which establishes truck routes throughout the City, restricting vehicle routes within the City for vehicles with a gross vehicle weight of 5 tons or more or that are licensed commercially as a truck in the state of origin and used for carrying goods for pickup and delivery. Vehicles meeting this requirement would be restricted to specific truck routes and designated streets, except when necessary for egress and ingress by direct route to and from restricted streets for the purpose of loading or unloading. The Draft EIR also detailed the findings of a relevant STAA truck route study. Specifically, an NEI Truck Route Map defines STAA truck routing (both interim and ultimate) and identifies new improvements (e.g., truck route signage, conversion of existing roads to STAA routes), which would further improve roadway safety by providing appropriate and adequate roadway infrastructure for the trucks that would access the project site. As a result, existing and planned roadways would be able to support proposed STAA trucks that would access the project site consistent with applicable provisions of the Municipal Code. Therefore, truck trips during operation would result in less than significant impacts.

Furthermore, the City has agreed to adopt, and the project applicants have agreed to implement MM AIR-1e to require that trucks accessing the project site are prohibited from using Grant Line Road east of the project site. See Section 3, Errata.

Nevertheless and although not required as mitigation for any impact, in an effort to further address concerns about truck traffic through the Banta community, the project applicants are willing to voluntarily implement signage along project frontage on Grant Line Road to deter trucks from traveling on Grant Line Road east of the project site, and voluntarily implement routine communications between property managers and tenants to ensure tenant understanding that trucks accessing the project site are prohibited from using Grant Line Road east of the project site. These measures will be incorporated as conditions of approval (see updated MMRP). The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further address signage and traffic pattern issues (see updated MMRP).

Response to MCINTOSH-4
The commenter notes that California is in a drought and questions the amount of water use during construction.

The comment sets forth a personal opinion on the merits of the proposed project but does not raise any specific significant environmental issues. The commenter's opinion is noted and will be included in the administrative record for consideration by the City decision-makers. No further response is required.

For informational purposes, the following is provided. Section 3.16 of the Draft EIR contains the water impact analysis required under CEQA (see, e.g., Impacts UTIL-1, UTIL-2, MM UTIL-1a). In connection therewith and pursuant to SB 610, a Water Supply Assessment (WSA), consistent with the City's recently adopted 2020 Urban Water Management Plan (UWMP), was prepared for the

proposed project (Appendix K of the Draft EIR). The WSA evaluates the adequacy of the total project water supplies of the City (as the water purveyor to the proposed project), including existing water supplies and future planned water supplies, to meet the City's existing and projected future water demands, including those future water demands associated with the proposed project, under all hydrological conditions (Normal Years, Single Dry Years, and Multiple Dry Years). As detailed more fully therein, sufficient water supplies are available to serve the proposed project, as well as other existing and reasonably foreseeable future uses, during normal, dry, and multiple dry year scenarios with reliance on existing and additional supplies from future planned projects, including Aquifer Storage and Recovery Program Expansion, Recycled Water Distribution Network and Exchange Program for additional Central Valley Project water supplies, and recycled water distribution for nonpotable use. The Draft EIR also considered construction-related impacts on water supply. Construction of the proposed project would result in a relatively nominal amount of water use for dust control, mixing concrete, washing equipment and vehicles, and other activities, such as personal consumption. Because construction would require a minimal, limited quantity of water, it is reasonable to conclude that the City would have adequate water supply capacity to serve construction demands in addition to its other existing and planned uses, and new or expanded entitlements would not be necessary. Therefore, construction impacts in this regard would be less than significant.

Response to MCINTOSH-5
The commenter states that the City should consider the issues reflected in the comment letter and states an opinion that such issues outnumber any benefits of the proposed project.

The comment sets forth a personal opinion on the merits of the proposed project but does not raise any specific significant environmental issues. The commenter's opinion is noted and will be included in the administrative record for consideration by the City decision-makers. No further response is required.

Comments provided at public hearing held May 25, 2022

MCINTOSH-2

Response to MCINTOSH-2-1

The commenter resides on California Avenue and expressed concern about project impacts such as air pollution, light, traffic, and loss of farmland. The commenter noted that the Draft EIR is very large and that there did not seem to be enough time to allow for review. The commenter also noted that there is a school very close to the project site, and that many properties already exist for industrial warehouses. The commenter stated that there are many Tesla and Amazon (industrial) jobs nearby and does not think there is a need for more jobs. The commenter is concerned about farmland impacts.

The comments are noted and acknowledged. To the extent the commenter is expressing an opinion on the merits of the proposed project, the comment will be noted and included in the administrative record for consideration by the City's decision-makers.

The City published a Notice of Availability/Notice of Completion of the Draft EIR on April 20, 2022. The 45-day public comment period extended from April 20, 2022, to June 3, 2022. In addition, although not required to do so under the law, the City accepted late comment letters, including, among others, one submitted more than two months after the close of the comment period from the commenter, and responded to those comments. (See Responses to MCINTOSH-3-1 through MCINTOSH 3-5.)

The Draft EIR included a careful analysis of the proposed project's potential effects related to air quality (Section 3.3, Air Quality), light pollution (Section 3.1, Aesthetics), traffic (Section 3.14, Transportation), and farmland (Section 3.2, Agriculture and Forestry Resources). Chapter ES, Executive Summary, provides an abbreviated summary of all of the potential impacts of the proposed project along with the recommended mitigation measures.

Regarding air quality, as discussed in Section 3.3, Air Quality, of the Draft EIR, the proposed project would incorporate technically and financially feasible mitigation measures to reduce emissions generated during project operation. In addition, MM AIR-1e, MM AIR-1f, MM AIR-1g, MM AIR-1h, and MM AIR-1i have been added to the Draft EIR and would result in additional emission reductions during project operation beyond what was identified in the Draft EIR. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further reduce pollutant emissions (see updated MMRP). Nonetheless, the quantified emission reductions from these new mitigation measures (as well as those from conditions of approval) cannot be identified with certainty at this time. Therefore, the impact conclusions of Section 3.3, Air Quality, of the Draft EIR remain appropriate under CEQA.

Regarding light pollution, as discussed in Section 3.1, Aesthetics, of the Draft EIR, light and glare during the construction phase would be temporary and limited to the duration of construction. The proposed project would be required to comply with Section 4.12.820 of the Municipal Code, which limits construction activities to between 7:00 a.m. and 10:00 p.m. on weekdays.

The Draft EIR discloses that the proposed project would increase the amount of light and glare on the project site. However, the light fixtures used for the proposed project would be required to meet all applicable standards pursuant to the latest adopted edition of the California Building Code and all applicable development standards and design guidelines provided in the NEI Specific Plan to reduce daytime glare and nighttime lighting.

Any window glare would be partially obscured by landscaping. Glare may also occur from on-site vehicles; however, such glare would be transient. Because of the proposed project's location adjacent to other existing urban development, the proposed project would not be adding significant nighttime lighting or glare in an area with no existing lighting impacts. As such and as detailed more fully in Section 3.1, Aesthetics, of the Draft EIR, project impacts related to light and glare were found to be less than significant.

Regarding transportation, the Draft EIR contains a detailed analysis of the proposed project's potential transportation-related impacts and identified feasible mitigation measures. As discussed therein, the proposed project is anticipated to add approximately 96 passenger cars during the morning peak-hour and approximately 142 passenger cars during the evening peak-hour along Grant Line Road through Banta. All trucks would be directed to use the existing or future truck route to the west of the proposed project and not east on Grant Line Road. Furthermore, the City has agreed to adopt, and the applicants have agreed to implement MM AIR-1e, which would require that trucks accessing the project site be prohibited from using Grant Line Road east of the project site. See Section 3, Errata. Nevertheless and although not required as mitigation for any identified impact, in an effort to further address concerns about truck traffic through the Banta community, the project applicants are willing to voluntarily implement signage along project frontage on Grant Line Road to deter trucks from traveling on Grant Line Road east of the project site, and voluntarily implement routine communications between property managers and tenants to ensure tenant understanding that trucks accessing the project site are prohibited from using Grant Line Road east of the project site. These measures will be incorporated as conditions of approval. Finally, the City of Tracy is currently implementing STAA truck routes in the NEI Specific Plan area that connect to the I-205 and MacArthur Interchange. The City of Tracy is actively coordinating with the SJCOG and the County of San Joaquin on truck route planning.

Regarding loss of farmland, the Draft EIR contains a detailed analysis of the proposed project's potential impacts to agricultural resources as well as identified mitigation measures. As discussed therein, conversion of the project site to industrial use has long been envisioned by the City as part of buildout under the General Plan and evaluated and disclosed under the General Plan EIR; this is reflected in the project site's existing Industrial General Plan land use designation. Nevertheless, for purposes of a comprehensive conservative analysis, the Draft EIR acknowledged that the proposed project would result in the loss of Important Farmland as a result of its conversion of Prime Farmland to urban uses. On June 7, 2005, the City Council adopted Chapter 13.28 Agricultural Mitigation Fee to its Municipal Code. In addition, the City Council adopted a resolution approving the Central Valley Farmland Trust as a qualifying agency to receive funds for purposes of preserving identified areas of Important Farmland. This program serves as mitigation to the extent feasible for the conversion of Prime Farmland. In accordance with Chapter 13.28 of the Municipal Code, Agricultural Mitigation Fee, the developers of the Suvik Farms, Zuriakat, and Tracy Alliance parcels would each be required

to pay applicable Agricultural Mitigation fees in connection with individual development proposals as implemented by MM AG-1. In addition, the proposed project would be required to comply with applicable provisions of the SJMSCP. Even with the payment of City mitigation fees and adherence to the SJMSCP, the proposed project would result in significant and unavoidable impacts related to the conversion of Farmland as identified by the FMMP mapping to nonagricultural use, since the foregoing would not fully avoid the impacts of this conversion (Draft EIR, Page 3.2-8–9).

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Late Comments

Under CEQA Guidelines Section 15105, the City of Tracy was legally required to provide a 45-day public review period on the Draft EIR. The public comment period for the Draft EIR began on April 20, 2022, and ended on June 3, 2022. All comment letters received after expiration of the public review and comment period ending on June 3, 2022 are considered late comments.

A lead agency is required to consider comments on the Draft EIR and to prepare written responses if a comment is received within the public comment period (PRC § 21091(d); CEQA Guidelines § 15088). When a comment letter is received after the close of the public comment period, however, a lead agency does not have an obligation to respond (PRC § 21091(d)(1); PRC § 21092.5(c)). Accordingly, the City of Tracy is not required to provide a written response to late comment letters, including those five letters listed in Section 3.1 of this Responses to Comments (See CEQA Guidelines § 15088(a)).

Accordingly, the following comment letters are considered late letters that do not require a written response. Nonetheless, for information purposes, the City of Tracy has elected to respond to these late letters, but without waiving its position that written responses to late comment letters are not required by law.

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August 16, 2022

Advocates for the Environment
A non-profit public-interest law firm
and environmental advocacy organization

Victoria Lombardo, Planner
City of Tracy
Development Services Department
333 Civic Center Plaza
Tracy, CA 95376

Via U.S. Mail and email to victorialombardo@cityoftracy.org

re: Comments on Tracy Alliance Project, SCH Number 2020080524

Dear Ms. Lombardo:

Advocates for the Environment submits the comments in this letter regarding the Draft Environmental Impact Report (**DEIR**) for the proposed Comments on Tracy Alliance Project (**Project**). The Project site is located on undeveloped prime farmland, but it is zoned for industrial development and located at the northeast corner of Grant Line Road and Paradise Road. The site is within unincorporated San Joaquin County, adjacent to the northeastern city limits and within the City of Tracy's Sphere of Influence (**SOI**). The project site is directly east of the City's NEI Specific Plan boundary. The site is bound by I-205 to the north, California Avenue to the northeast, Grant Line Road to the south, and Paradise Road to the west. The Project proposes to construct up to 3,352,320 square feet of warehouse and distribution and related uses on a total of approximately 191.18 acres, 98% of which would be converted farmland.[1] 1

Advocates for the Environment is a public interest law firm and advocacy organization with the mission to educate the public about the law as it pertains to the environment and provide legal services in support of environmental causes. Therefore, it is within the scope of Advocates for the Environment's mission to provide comments on the development of this project, especially because the DEIR reflects potential issues of non-compliance with CEQA.

Greenhouse Gases

The Project anticipates employing 1,871 people and creating operational emissions of 19,672 MTCO2e annually, starting in the year 2030.[2] The DEIR quantified greenhouse gas (**GHG**) emissions in three phases, corresponding to the three Phases of the Project 2

[1] 188 acres of farmland ÷191.18 acres of Project = 0.9834 = approximately 98%
[2] Total Emissions Estimates taken from DEIR P. 3.8-43 to 3.8-45
10,962 MTCO2e (Phase 1) + 5,964 MTCO2e (Phase 2) + 2,746 MTCO2e (Phase 3) = 19,672 MTCO2e

development. Phase 1 is planned to start in 2023 and contribute to 10,962 MTCO2e; Phase 2 in 2024 with 5,964 MTCO2e; and Phase 3 in 2025 with 2,746 MTCO2e. 2 CONT

The City Should Require the Project to be Net-Zero

Greenhouse gas emissions from buildings, including indirect emissions from offsite generation of electricity, direct emissions produced onsite, and from construction with cement and steel, amounted to 21% of global GHG emissions in 2019. (IPCC Sixth Assessment Report, Climate Change 2022, WGIII, Mitigation of Climate Change, p. 9-4.) This is a very large portion of global GHG emissions. It is much less expensive to construct new building projects to be net-zero than to obtain the same level of GHG reductions by retrofitting older buildings. Climate damages will keep increasing until we reach net zero GHG emissions, and there is a California state policy requiring the state to be net-zero by 2045. It therefore makes no sense to construct new buildings that are not net-zero. 3

Two of the largest mixed-use development projects in the history of California, Newhall Ranch (now FivePoint Valencia), and Centennial (part of Tejon Ranch) decided, after environmental groups sued and won under CEQA, to move forward as net-zero communities. This proves it is feasible. The Applicant for this project should do the same. We urge the City to adopt net-zero as the GHG significance threshold for this project, and require full fair-share litigation. The CARB 2017 Scoping Plan states that "achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." (p. 101.)

Moving this Project forward as a net-zero project would be the right thing for the City to do, and would also protect the City and the Applicant from CEQA GHG litigation.

The EIR's GHG Analysis

The City analyzed GHG significance using the Appendix G guidelines as the thresholds, determining, under the first threshold, that the Project would not contribute to any significant direct or indirect GHG emissions, given 43.3 to 44 percent reduction from business as usual. Analyzing consistency with the 2008 and 2017 Scoping Plans under the second threshold, the DEIR concluded that the Project would not conflict with any applicable GHG-reduction plan, policy, or regulation. As discussed below, both these conclusions are unsupported by substantial evidence. 4

Significance Finding Violates Newhall

In analyzing the Project's GHG impacts under the first threshold, the DEIR made no attempt to reconcile the percent reduction below business-as-usual (**BAU**) with Statewide goals. Simply allowing a margin for error, and nothing more, is not sufficient to be compliant

with the holding in *Center for Biological Diversity v. Dept. of Fish and Wildlife* (2015) 62 Cal.4th 204 (***Newhall***), which held that, when using a reduction from BAU as a significance threshold, lead agencies must affirmatively provide some demonstration that the reduction is consistent with the required statewide reductions, not just that it is "likely" to be consistent, as the DEIR suggests. In fact, the DEIR suffers the same problem as in *Newhall*, which is that despite making a demonstration of adherence to the 40% reduction goal, there was no substantial evidence to support the claim that the statewide emissions goal of 40% would necessarily translate to the equivalent goal in the local regime. 4 CONT

Inconsistent with Applicable Plans

The DEIR incorrectly assumes that the only applicable plans, policies, and regulations are the CARB Scoping Plans. The Project is not only inconsistent with the 2017 Scoping Plan, but also conflicts with other applicable plans, policies, and regulations adopted for the purposes of reducing GHGs.

The EIR's analysis of consistency with the 2017 CARB Scoping Plan is highly flawed. The threshold used in the analysis appears to be 22% below BAU. (EIR p. 3.8-34.) The BAU is the 2017 CARB Scoping Plan is called the "Reference Scenario" and represents "what GHG emissions look like if we did nothing beyond the existing policies that are required and already in place to achieve the 2020 limit. BAU includes the existing renewables requirements, advanced clean cars, the 10 percent reduction in carbon intensity Low Carbon Fuel Standard, and the SB 375 program for sustainable communities, among others." BAU thus represents the emissions path that would occur of no new regulations were adopted after 2017. But the EIR for this Project uses a contrived BAU, apparently based on 2005 levels and the 2008 CARB Scoping Plan. Since the 2008 Scoping Plan was developed to implement AB 32, which required emissions to be reduced to 1990 levels by 2020, and that goal has been achieved, it is irrelevant to GHG analysis now. The Project must be consistent with the 2017 CARB Scoping Plan, not the 2008 CARB Scoping Plan, and a contrived BAU based on 2005 levels is not appropriate for that analysis. The portion of the EIR analyzing consistency with SB 32 and the CARB 2017 Scoping Plan should be rewritten to use the correct BAU baseline. The Project is also inconsistent with the CARB 2017 Scoping Plan in several other ways. 5

First, the Project would be inconsistent with the emissions targets laid out by the 2017 CARB Scoping Plan, including annual emissions of 6 MTCO2e/capita by 2030, and 2 MTCO2e/capita by 2050 (CARB Scoping Plan, p. 99). Here, the Project anticipates 1,871 employees, resulting in per-capita emissions of about 10.51 MTCO2e/capita each operating year.[3] As this is nearly double the 2030 goal of 6 MTCO2e/capita, there is an inconsistency. 6

[3] 19,672 MTCO2e ÷ 1,871 people = 10.51 MTCO2e/capita

Second, the GHG significance analysis compared the Project with AB32 and the CARB 2008 Scoping Plan, but these policies cannot be applicable because the AB32 goal was for 2020 and it has already passed; the goal has been achieved, so that policy is irrelevant. Likewise, the San Joaquin Valley Air District Climate Change Action Plan (**CCAP**) is not applicable to the project, because the goals have been achieved. 7

Third, for the Project's impacts to be insignificant, the Project must be consistent with B-55-18, because it is an applicable policy which aims to achieve carbon neutrality by 2045. As this Project requires industrial storage and transportation using large vehicles, with no plans of reducing or offsetting emissions to zero by 2045, the Project is inconsistent with B-55-18. 8

Since the Project is inconsistent with applicable policies to reduce GHG emissions, its GHG impacts are significant.

Fair Share Mitigation

The Project's GHG emissions are significant and, because those emissions must be analyzed as a cumulative impact, the heightened requirement of "fair share" mitigation applies. (*Napa Citizens for Honest Gov't v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 364.) For this Project, the fair share is the entirety of the Project's emissions. The City must 9

Because the DEIR concluded that the Project will have less-than-significant GHG impacts, no mitigation measures were identified. Yet, once the analysis is updated according to the above comments, the agency will need to analyze all feasible mitigation to reduce to the fair share level.

Here are some ideas for feasible mitigation measures for GHG emissions: install solar panels on the entire available roof space, prohibit natural-gas appliances, install energy-efficient lighting and temperature controls, require zero-emission vehicles, purchase offsets or sponsor local-energy projects, and utilize low-GHG construction materials. There are many more options for feasible mitigation to reduce the Project's significant GHG impact. 10

CalEEMod Deficiencies

The criteria air pollutant and GHG emissions generated by the operational land uses on the Project site were estimated using the California Emissions Estimator Model (**CalEEMod**). CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type, and typical equipment associated with a particular project type. If more specific project information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence. 11

Here, the population parameter is not supported by substantial evidence. Although the Project intends to employ 1,871 people on the premises, the inputs indicate a population size of zero for all CalEEMod runs. CalEEMod should be re-run to reflect an accurate population size for the project. 11 CONT

Additionally, certain runs changed the default land use parameters to zero. For example, Phase 3 changed from the default of 422,967.60 square feet to a user-inputted value of 0 square feet. This parameter is not supported by substantial evidence, because the Project to be built on the Zuriakat Parcel is predicted to use 479,160 square feet of space. The model should be re-run to reflect the accurate square footage of Phase 3. 12

And the Project-associated vehicle miles traveled (**VMT**) as analyzed in the DEIR is not accurately reflected in the CalEEMod parameters. The DEIR indicated a VMT of 16.9 per employee, which amounts to 11,541,263.5 annual miles of vehicle travel associated with the Project.[5] However, CalEEMod Trip Summary Information (4.2), indicates that the total VMT for all three phases amounts to 7,343,938 annual miles, or an average of 10.75 per employee.[6] This is roughly 36% less VMT than indicated in the DEIR, and no justification has been made regarding the CalEEMod parameters. Therefore, this estimate lacks substantial evidence and contributes to an underestimation of GHG significance due to the resulting reduced quantification of emissions. 13

Additionally, the various assumptions, user-inputted values, and modifications in the CalEEMod simulation should be explained such that a decision-makers and the public can adequately assess the environmental impact, because without such analysis, the CalEEMod summaries are confusing and misleading. 14

Air Quality Significance Analysis

The DEIR concluded that the Project may have potentially significant air-quality impacts, and identifies four mitigation measures. The EIR states that the Project may have significant and unavoidable air quality impacts even after mitigation, because there are no guarantees that the identified air quality mitigation measures will be implemented due to technical or financial feasibility (DEIR ES-4). But these are not the only feasible mitigation measures, so the conclusion that the air quality impact would be unavoidable is without merit. There are several mitigation strategies, in addition to the ones proposed, that could ensure air quality emissions reductions regarding the Project operations, which the lead agency should consider adopting as part of its mitigation efforts to reduce air quality significance. 15

[5] 16.9 × 1,871 employees × 365 days = 11,541,263.5 annual miles
[6] 2,483,351 (Phase 1) + 2,510,413 (Phase 2) + 2,350,174 (Phase 3) = 7,343,944 annual VMT

First, the Project could require that any machinery (including but not limited to: forklifts, dock equipment, conveyors, and carousels) to be used during the operation of the Project is powered by rechargeable battery or otherwise powered by electricity. Second, the Project could encourage future tenants to adopt incentives for carpools and alternative transportation such as public transport, bicycling, and zero emission vehicles, to reduce the amount of vehicle trips per person, and likewise reduce the associated air quality pollutants that are emitted by conventional vehicles. Third, the Project could require and enforce a strict no-idling policy on the premises. Fourth, the Project could require future tenants' vehicle fleet to be maintained with zero-emission or hybrid vehicles to the extent feasible, as zero-emission and hybrid heavy-duty vehicles and semi-trucks are already available for consumer purchase and use. 15 CONT

The DEIR also contemplates a scenario in which all three project phases were constructed concurrently, in which case the impact would exceed significant levels even with all mitigation incorporated (DEIR ES-4). Therefore, to avoid this consequence, one mitigation measure could be the implementation of a plan which specifically precludes the development of multiple project phases simultaneously. 16

Agriculture Resources

The City adopted Appendix G guidelines to determine whether agricultural and forestry impact was significant. Threshold a asks whether the Project would Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. Threshold b asks whether the Project would conflict with existing zoning for agricultural use or a Williamson Act Contract. The DEIR concluded significant unavoidable impact as to agricultural resources, based on significant impact under Threshold a, despite a finding of insignificance as to Threshold b. This analysis is inaccurate because the Project would be significant under Threshold b, and there are feasible mitigation strategies beyond those identified to reduce the significant impact of conversion of agricultural land. 17

Inconsistent with the Williamson Act Contract

The EIR concluded the Project would have a less than significant impact under Threshold b, although Agricultural and Forestry Resources in its entirety was deemed to have a significant and unavoidable impact. 46.61 acres of land located on the three Suvik Farms parcels are currently under Williamson Act contracts (DEIR p. 3.2-3). In 2017, Suvik Farms landowners initiated a Notice of Nonrenewal for the contract, beginning a nine-year process to formally expire the contract. Based on the date of the Notice of Nonrenewal, the contract will expire on August 21, 2026 (DEIR 3.2-10). Yet, "since the contract term automatically renews 18

annually, the actual term is essentially indefinite" (DEIR p. 3.2-2). The DEIR made no showing that the process for expiring the contract guarantees that the contract will expire in 2026.

Even if it will expire in 2026, the Project anticipates that the Suvik parcels will be developed before the term is set to expire: "Phase 2 is the Suvik Farms parcels, with construction assumed to occur in 2023 through 2024 and operation assumed to begin in 2024." (DEIR 3.8-35). The Williamson Act Contract provides that the covered land is not to be used for non-agricultural purposes for "the duration of the contract" (Gov. Code Section 51243 (a).) Further, the existing contract remains in effect for the entire period after the notice of intent to not renew (Gov. Code Section 51246 (a).) Thus, if the plan to develop the Suvik Farms parcels is carried out before the Williamson Act contract expiration date, it would amount to a material breach of the Williamson Act Contract pursuant to Gov. Code Section 51250. 18 CONT

The lead agency argues that the applicant can avoid such a breach by requesting cancellation of the contract if they are to build it before the contract ends; but the cancellation of a Williamson Act contract is inconsistent with the Williamson Act if the "objectives to be served by cancellation should have been predicted and served by nonrenewal at an earlier time" (*Sierra Club v. City of Hayward* (1981) 28 Cal. 3d 840, 855.) This is the precise situation here, because the objectives served by cancellation (i.e., the development of projects such as this one), was anticipated in 2017, which is when the landowners initiated a Notice of Nonrenewal for the Suvik Farms Williamson Act Contract. Therefore, it is not appropriate here for an applicant to request cancellation of contract simply because they want to develop the land before the contractual term is scheduled to end. Therefore, the Project, if carried out as set forth in the EIR, would violate the Williamson Act and therefore be inconsistent with it, demonstrating significant impact under Threshold b.

Mitigation to Reduce Agricultural Impact to Less Than Significant

There are three mitigation strategies that could reduce the significance of agricultural impact. First, the Project should modify its plans so that Phase 2 (involving the development of the Suvik Farms parcels) is not initiated until after the Williamson Act contract expires. Second, in addition to the proposed agricultural mitigation fee program, the Project could develop a plan to restore agricultural land after the lifespan of the Project, which was upheld as a valid mitigation measure (*e.g., King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 876.) Third, the Project could limit the size of the warehouse to reduce the amount of conversion of agricultural land. 19

Inadequate Discussion of Alternatives

To be compliant with CEQA, "the EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." 20

(CEQA Guidelines § 15126.6 (c)). Here the City discussed two alternatives, the No Project Alternative and the Agricultural Protection Alternative, which proposes preserving 11 acres of farmland. Here, the range of alternatives is unreasonable, and there are several suggestions for alternatives to analyze. 20 CONT

Range of Alternatives Is Unreasonable

The DEIR did not include a reasonable range of feasible alternatives. (See *Laurel Heights Improvement Assn. v. Regents of Univ. of California* (1988) 47 Cal. 3d 376, 407; CEQA Guidelines § 15126.6(a)). The standard for determining reasonability is "whether the alternatives discussion encourages informed decision-making and public participation" (Cal. Oak Found. v. Regents of Univ. of Cal. (2010) 188 Cal.App.4th 227, 276).

The DEIR contemplated two project alternatives, including a "No Project Alternative" and an "Agricultural Protection Alternative," would result in protecting 11 acres of prime agricultural land. This is insufficient because there are other feasible alternatives that would be able to achieve certain project goals while also reducing the impact on the environment. Particularly, several unique resources exist on the site which are identified but not accounted for to the feasible extent in the range of alternatives, including wetland habitat and prime farmland, discussed below.

Wetland Preservation Alternative 21

There is a 0.07 acre ditch wetland/cattail marsh that supports Northern Pacific tree frogs. The alternatives discussion should include an alternative that aims to preserve wetland and riparian habitat, to the extent feasible. Most project objectives could still be met in an alternative that aimed to achieve habitat preservation goals or otherwise avoided to develop on the wetland portions of the Project site. Not only would this reduce biological impact, potentially below significant impact, it could also reduce GHG impact because healthy wetlands have the ability to sequester GHGs.

Farmland Preservation Alternative

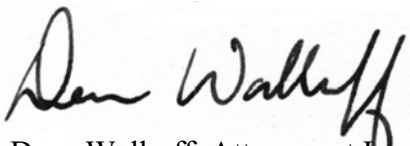
The Project would result in the loss of 188 acres of Prime Farmland. The DEIR concluded that this was a significant and unavoidable impact, but this does not necessarily mean that an alternative is infeasible. Given this unique environmental resource, and the vast extent of Prime Farmland on the Project Site, it would be reasonable and feasible to have more than one alternative that accounts for the loss of farmland, especially because the only alternative proposed, Agricultural Protection Alternative, only sets aside about 5% of farmland. The Outside Storage Allowable Use Alternative was deemed infeasible but this infeasibility determination lacks substantial evidence because it would be reasonable to analyze another

Farmland Preservation Alternative which could propose to reserve more farmland, perhaps by reducing the Project size, to ensure that the Project is contributing to California's long-term agricultural production and soil health stability, as well as consistency with the General Plan's goal of preserving and protecting significant agricultural resources. 21 CONT

Conclusion

To conclude, the DEIR should be updated to reflect a finding of significant GHG impact, and mitigated to the "fair share" extent (*Napa Citizens for Honest Gov't v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 364). Please put Advocates for the Environment on the list of interested parties to receive updates about the progress of this potential project approval. 22

Sincerely,



Dean Wallraff, Attorney at Law
Executive Director, Advocates for the Environment

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Organization

Advocates for the Environment (AENV)

Response to AENV-1
This comment summarizes the proposed project and provides introductory statements.

The comment is noted and acknowledged. The commenter does not raise any project-specific issues related to CEQA, and therefore no further response is required.

Response to AENV-2
This comment describes the proposed project's estimated employees and amount of GHGs that would be generated.

The comment is noted and acknowledged. The commenter does not raise any project-specific issues related to CEQA, and therefore no further response is required.

Response to AENV-3
This comment describes the benefits of net-zero construction and states that the proposed project should be built to result in net-zero GHG emissions. The commenter cites two Southern California projects that have purportedly implemented "net-zero communities" as a basis for the commenter's claim of feasibility.

The comment is noted and acknowledged. The commenter does not question the GHG impact analysis or less than significant conclusions referenced in its comment letter. The City is not permitted under CEQA to impose mitigation measures or require applicants to incorporate project design features for impacts that have been determined to be less than significant. Chapter 2, Project Description, of the Draft EIR sets forth a detailed description of the proposed project. Imposing an obligation to be "net-zero" would not be permitted under the law. Therefore, no further response is required.

For informational purposes, the following is noted. Section 3.8, Greenhouse Gas Emissions, of the Draft EIR robustly evaluates the proposed project's GHG impacts, both from a quantitative and qualitative perspective. Section 3.8.4 describes the significance criteria, assumptions and methodologies used by the City, in its discretion, to conduct this impact analysis. CEQA does not require the City to utilize achieving net-zero GHG emissions as a significance threshold to evaluate the proposed project. Moreover, as described in the ARB 2017 Scoping Plan, "achieving net-zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net-zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State's long-term GHG goals, and climate change science."

As discussed in Section 3.6 Greenhouse Gas Emissions, under CEQA and as held in the California Supreme Court's decision in *Center for Biological Diversity v. California Department of Fish and Wildlife*, GHG impacts would be considered significant if the proposed project would:

- Conflict with a compliant GHG Reduction Plan if adopted by the lead agency;
- Exceed the San Joaquin Valley Air Pollution Control District (Valley Air District) GHG Reduction Threshold; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs.

These thresholds are consistent with the Appendix G Environmental Checklist questions of the CEQA Guidelines. The City of Tracy does not currently have a formal GHG emissions reduction plan or recommended emissions thresholds for determining significance associated with GHG emissions from development projects. Therefore, the Draft EIR used the most appropriate thresholds to evaluate GHG impacts as determined by the City in its discretion. No revisions to the Draft EIR are required. See also multiple Responses to SHUTE.

Response to AENV-4
This comment states the Draft EIR's significance determination related to GHGs and that these conclusions are not supported by substantial evidence. This comment states that the Draft EIR did not analyze the proposed project's GHG emissions against the percent reduction below BAU consistent with Statewide goals. This comment further states that the Draft EIR did not provide substantial evidence that the Statewide emissions goal of 40 percent would translate to the equivalent local goal.

As discussed in Section 3.6 Greenhouse Gas Emissions, under CEQA and as held in the California Supreme Court's decision in *Center for Biological Diversity v. California Department of Fish and Wildlife* (the "*Newhall Ranch*" decision) GHG impacts would be considered significant if the proposed project would:

- Conflict with a compliant GHG Reduction Plan if adopted by the lead agency;
- Exceed the San Joaquin Air Pollution Control District (Valley Air District) GHG Reduction Threshold; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs.

These thresholds are consistent with the Appendix G Environmental Checklist questions of the CEQA Guidelines. The City of Tracy does not currently have a formal GHG emissions reduction plan or recommended emissions thresholds for determining significance associated with GHG emissions from development projects. Therefore, the first impact criterion, "conflict with a compliant GHG Reduction Plan if adopted by the lead agency," cannot be applied to the proposed project. Moreover, the other two impact criteria presented closely align with the two Appendix G Environmental Checklist questions for GHG emissions. Therefore, the City, in its discretion and consistent with the

Newhall Ranch decision, is utilizing Appendix G of the State CEQA Guidelines as thresholds for the proposed project.

The City of Tracy has not adopted its own GHG thresholds or prepared a Climate Action Plan that can be used as a basis for determining project significance, although it has adopted a Sustainability Action Plan, which is a non-qualifying GHG Reduction Plan. The Valley Air District Guidance for Valley Land use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA includes thresholds based on whether the project would reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels. This level of GHG reduction is based on the target established by ARB's AB 32 Scoping Plan, approved in 2008.

Consistent with the *Newhall Ranch* court decision and as further detailed in the robust analysis set forth in Section 3.8, Greenhouse Gas Emissions, a project BAU analysis based on substantial evidence in the record was prepared for the proposed project, which assesses "consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities." Therefore, the Draft EIR evaluated project GHG emissions against an appropriate threshold that also evaluates consistency with Statewide GHG emissions reduction goals. See also multiple Responses to SHUTE. No revisions to the Draft EIR are required.

Response to AENV-5
This comment states that the Draft EIR did not analyze consistency with the correct applicable plans, policies, and regulations related to GHG emissions, and in addition it criticizes the analysis with the 2017 ARB Scoping Plan as being flawed. The comment also states that the Draft EIR used an incorrect threshold of 22 percent below BAU, consistent with the 2008 ARB Scoping Plan, which the commenter states is incorrect and instead the Draft EIR should have utilized the 2017 ARB Scoping Plan.

See Response to AENV-4 as well as multiple Responses to SHUTE. As explained in more detail in Section 3.8, Greenhouse Gas Emissions, of the Draft EIR, the proposed project is expected to become operational in phases beginning in 2023 and assumes full buildout in 2025, which is beyond the AB 32 target year. As a result, until a new threshold is identified for projects constructed after 2020, the only threshold to address significance is based on making continued progress toward the SB 32 2030 goal.

As discussed more fully in Section 3.8, Greenhouse Gas Emissions, the Valley Air District "Guidance for Valley Land use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA," includes thresholds based on whether the project will reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels. This level of GHG reduction is based on the target established by ARB's AB 32 Scoping Plan, which was approved in 2008. The ARB recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels." The Valley Air District guidance recommends using emissions in 2002–2004 in the baseline scenario to represent conditions—as if regulations had not been adopted—to allow the

effect of projected growth on achieving reduction targets to be clearly defined. Thus, the BAU scenario is based on 2005 levels.

The Draft EIR analyzed the proposed project's consistency with SB 32 and the 2017 ARB Scoping Plan as described in the impact analysis for Impact GHG-1 and GHG-2. As described in Impact GHG-2, Executive Order B-30-15 establishes an interim goal to reduce GHG emissions to 40 percent below 1990 levels by 2030. The 2030 goal was codified under SB 32 and is now addressed by the 2017 Scoping Plan Update.

With respect to the 21.7 percent reduction threshold referenced by the commenter, as explained more fully in Section 3.8.4, the 2010 Cap and Trade Inventory Update provided revised inventory projections to reflect slower growth in emissions during the recession and lower future year projections. The State's 2020 BAU inventory was reduced from 596 million metric tons (MMT) carbon dioxide equivalent (CO_2e) to 545 MMT CO_2e. The new GHG reduction level for the State to reach 1990 emission levels by 2020 is 21.7 percent from BAU in 2020. The First Update to the Climate Change Scoping Plan confirmed that the State is on track to achieve the 2020 target and to maintain and continue reductions beyond 2020 as required by AB 32. In addition, the State has reported that the 2016 greenhouse gas inventory was below the 2020 target for the first time. Furthermore, the 2017 Scoping Plan states that California is on track to achieve the 2020 target.

In summary, the project analysis also addresses consistency with the SB 32 targets and the 2017 Scoping Plan Update with an assessment of the project's reduction from BAU levels based on emissions in 2030 compared with the 21.7 percent reduction. The Valley Air District's *Guidance for Valley Land use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* includes thresholds based on whether the project will reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels.

In conclusion, each of the project phases would achieve reductions beyond the ARB 2020 21.7 percent target and the Valley Air District 29 percent reduction from BAU requirements from adopted regulations in their respective operational years. The emission estimates presented in Table 3.8-9 through 3.8-11 demonstrate that the proposed project would achieve greater reductions than the Valley Air District-established threshold of 29 percent, resulting in annual reductions ranging from 43.3 to 44 percent. Based on this progress and the 2017 Scoping Plan Update, it is reasonable to conclude that the proposed project would be consistent with the 2017 Scoping Plan and would make a reasonable fair share contribution to achieving the 2030 target. Furthermore, Table 3.8-12 describes how the proposed project would be consistent with the 2017 Scoping Plan Update measures. The GHG analysis in the Draft EIR complies with CEQA, and therefore no revisions are required.

Response to AENV-6

This comment states that the Draft EIR should use the 2017 ARB Scoping Plan threshold of 6 metric tons of carbon dioxide equivalent (MT CO_2e)/capita by 2030 and 2 MT CO_2e/capita by 2050. The comment states that the proposed project would result in an estimated 10.51 MT CO_2e/capita each operating year and would conflict with the 2017 ARB Scoping Plan.

The thresholds that the commenter is suggesting are intended for Plan-level Greenhouse Gas Emissions reduction goals, such as a Climate Action Plan, not project-specific thresholds. As such, this threshold would not apply to the proposed project. See Responses to AENV-4 and AEVN-5, as well as multiple Responses to SHUTE for additional discussion as to the methodologies used in, and the adequacy of, the GHG impact analysis.

Response to AENV-7
This comment states that the Draft EIR incorrectly compared the project with AB 32, the 2008 Scoping Plan, and the San Joaquin Valley Air District Climate Change Action Plan, because the goals of these policies have already been achieved.

As described in Section 3.8, Greenhouse Gas Emissions, since no other local or regional Climate Action Plan is in place, the proposed project is assessed for its consistency with ARB's adopted Scoping Plans: the 2008 Scoping Plan and the 2017 Scoping Plan Update. In addition, See Responses to AENV-4 and AENV-5, as well as multiple Responses to SHUTE.

Response to AENV-8
This comment states that the proposed project would not be consistent with B-55-18 because the proposed project would not plan to reduce or offset emissions to zero by 2045 and impacts would be significant.

As described in Response to AENV-3, as well as multiple Responses to SHUTE, CEQA does not require an evaluation of impacts against a threshold that requires net-zero GHG emissions. The Draft EIR evaluated GHG impacts against the appropriate threshold as required by CEQA. See Responses to AENV-4 and AENV-5. Moreover, as detailed in Section 3.8, Greenhouse Gas Emissions, each of the project phases would achieve reductions beyond the ARB 2020 21.7 percent target and the Valley Air District 29 percent reduction from BAU requirements from adopted regulations in their respective operational years. The emission estimates presented in Tables 3.8-9 through 3.8-11 demonstrate that the proposed project would achieve greater reductions than the Valley Air District-established threshold of 29 percent, resulting in annual reductions ranging from 43.3 to 44 percent. Based on this progress and the 2017 Scoping Plan Update, it is reasonable to conclude that the proposed project would be consistent with the 2017 Scoping Plan and would make a reasonable fair share contribution to achieving the 2030 target. Furthermore, Table 3.8-12 describes how the proposed project would be consistent with the 2017 Scoping Plan Update measures. Therefore, the City has properly determined that the proposed project would not prohibit or prevent the State of California from achieving the goals set in Executive Order B-55-18 because it would not result in barriers to achieving net-zero emissions.

Response to AENV-9
This comment states that the proposed project GHG emissions are significant and must be mitigated with fair share mitigation consistent with the findings of *Napa Citizens for Honest Gov't v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 364.

As described in Section 3.8 Greenhouse Gas Emissions, as shown in Tables 3.8-6 through 3.8-8, Phase 1 of the proposed project would achieve a reduction in GHG emissions of 49.7 percent from BAU by the year 2023 with regulations and design features incorporated, Phase 2 would achieve a

48.7 percent reduction by 2024, and Phase 3 would achieve a 31.6 percent reduction by 2025. Each phase would achieve more than the 29 percent GHG emission reductions required by the Valley Air District threshold, and also more than the 21.7 percent average reduction from all sources of GHG emissions now required to achieve AB 32 targets. Therefore, the Draft EIR demonstrates that the proposed project would not exceed applicable thresholds set by the Valley Air District and mitigation would not be required. The City is not permitted under CEQA to impose mitigation measures or require applicants to incorporate project design features for impacts that have been determined to be less than significant. Chapter 2, Project Description, of the Draft EIR sets forth a detailed description of the proposed project.

See also Responses to AENV-4 and AENV-5, as well as multiple Responses to SHUTE.

Response to AENV-10
This comment presents potential mitigation measures to include in the Draft EIR with the purpose of reducing GHG emissions. The commenter suggested the following GHG reduction measures: install solar panels on the entire available roof space, prohibit natural gas appliances, install energy-efficient lighting and temperature controls, require zero-emission vehicles, purchase offsets or sponsor local energy projects, and utilize low GHG construction materials.

As described in Response to AENV-9, the Draft EIR describes that the proposed project would not exceed GHG emission thresholds set by the Valley Air District and mitigation would not be required. The City is not permitted under CEQA to impose mitigation measures or require applicants to incorporate project design features for impacts that have been determined to be less than significant. Chapter 2, Project Description, of the Draft EIR sets forth a detailed description of the proposed project. Moreover, the analysis appropriately considered whether any renewable energy features (such as on-site solar) could be incorporated into the proposed project. The commenter's proposed mitigation measures are discussed below, along with why each of them would not be feasible or result in significant GHG emissions reductions.

The proposed project would be required to comply with existing City and Title 24 requirements to include solar-ready rooftop infrastructure, which would allow for the future installation of solar panels and thus facilitate future on-site renewable energy production. The proposed project would not preclude the use of natural gas appliances, but the overall GHG emissions during project operation from energy sources, such as natural gas appliance, would be relatively nominal. The proposed project would be required to include the use of energy-efficient lighting and heating, ventilation, and air conditioning (HVAC) systems consistent with City building code and Title 24 standards. As part of MM AIR-1i, the proposed project would be required to include EV charging infrastructure consistent with Tier 2 CALGreen requirements, which would allow for future EV vehicles to use the site for vehicle recharging. The proposed project would not exceed GHG threshold set by the applicable Air District, the San Joaquin Valley Air District, and as such would not need to purchase carbon offsets or fund local energy projects. The proposed project's construction activity would not need to utilize low GHG construction materials, because no significant impact would occur during construction. Furthermore, as described in Section 4: Errata, the proposed project would include MM AIR-1a, -1f, and -1g that would require a clean truck fleet, limit truck idling, and zero-emission on-site equipment. The project applicants have also voluntarily agreed to

incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further address air quality, GHG emissions, and energy efficiency issues (see updated MMRP). These mitigation measures (as well as other identified conditions of approval), while not intended to reduce GHG emissions, would substantially reduce GHG emissions because they would address the primary project source of GHG emissions, HHD trucks and on-site off-road equipment that utilize diesel fuel.

No further response is required. Also, see Response to AENV-15 and multiple Responses to SHUTE for a description of mitigation measures included in the Draft EIR to reduce GHG emissions.

Response to AENV-11
This comment states the purpose of CalEEMod and how default values can be replaced by project-specific information. This comment describes that the population parameter in CalEEMod was changed to 0 but the total project population would be 1,871 employees and should be changed to the total project buildout population. Therefore, the commenter asserts that CalEEMod should be re-run to reflect an accurate population size for the project.

The Draft EIR's modeling is accurate for the purposes of this analysis. The population parameter is associated with permanent residents that would inhabit residential land uses, such as apartments. As described in the CalEEMod Guidance Manual Appendix D, the population data is used to estimate emissions associated with solid waste generation for residential land uses. However, the population parameter is not appropriate for this proposed project's modeling because it would not include residential uses. Therefore, no changes to the modeling approach or evaluation are required.

Response to AENV-12
This comment states that certain CalEEMod modeling files had the default land use parameters changed to 0 but should be changed to show the project land use sizes. In particular, the comment points to the Phase 3 CalEEMod operational model.

The Draft EIR's modeling is accurate for the purposes of this analysis. The CalEEMod Notes Document contained in Appendix B of the Draft EIR explains the adjustments made to the CalEEMod modeling files. The operational runs were adjusted to include the following two land uses: Commercial > User Defined Commercial > 1 x User Defined Metric and Industrial > User Defined Industrial > 4 x User Defined Metric. The reason the operational runs include these land uses with 0 square feet of building space is to separately model the mobile emissions associated with the use of passenger vehicles and HHD trucks. CalEEMod emissions results do not identify the source of emissions except for general sources such as Area, Energy, and Mobile. By modeling the two types of mobile sources separately it allows the City's technical consultant to better differentiate types of mobile sources from the building sources of emissions (Area, Energy, Waste, and Water). Furthermore, as shown in the CalEEMod Notes Document, the correct land use parameters were included in the CalEEMod modeling runs. Therefore, no changes to the modeling approach or evaluation are required.

Response to AENV-13
This comment states that the operational CalEEMod results show a reduction in VMT compared to the VMT estimated in the Draft EIR. The comment states that the Draft EIR indicated a VMT of 16.9

per employee with a total VMT of 11,541,263 whereas the CalEEMod file indicated a total VMT of 7,343,938 and an average employee VMT of 10.75.

The Draft EIR's modeling is accurate for the purposes of this analysis. As explained in the CalEEMod Notes Document, Note 7, Kimley-Horn and Associates produced a TIA for the proposed project (Appendix J of the Draft EIR), that analyzes the trip generation rates for the proposed project. As contained therein, Project Phase 1 (Tracy Alliance Parcel) would generate an estimated 1,775 daily passenger vehicle trips and 836 daily truck trips. Project Phase 2 (Suvik Farms Parcels) would generate an estimated 974 daily passenger vehicle trips and 459 daily truck trips. Project Phase 3 (Zuriakat Parcels) would generate an estimated 456 daily passenger vehicle trips and 215 daily truck trips. Therefore, the vehicle trips generated by the proposed project were adjusted in the operational models to match the estimated daily vehicle trips disclosed in the TIA.

As shown in Appendix B of the Draft EIR, each of the three phases of development would result in a total of 19,529,323 VMT. See Section 4.2 in Phase 1 Unmitigated 2023 Passenger Vehicle Mobile Emissions; Phase 1 Unmitigated 2023 Truck Mobile Emissions; Phase 2 Unmitigated 2024 Passenger Vehicle Mobile Emissions; Phase 2 Unmitigated 2024 Truck Mobile Emissions; Phase 3 Unmitigated 2025 Passenger Vehicle Mobile Emissions; and Phase 3 Unmitigated 2025 Truck Mobile Emissions.

The VMT that the commenter identified is from the Phase 1 Passenger Vehicles Only results file shown on page B-506. As a result, the CalEEMod modeling prepared for the Draft EIR overestimates the VMT generated by the proposed project and presents a conservative analysis. Therefore, the adjustments made to the CalEEMod operational modeling files were based on substantial evidence and the estimated VMT is consistent. Thus, no changes to the modeling approach or evaluation are required.

Response to AENV-14
This comment states that the adjustments to the default CalEEMod values are not explained adequately.

The comment is noted and acknowledged. The CalEEMod Notes Document contained in Appendix B of the Draft EIR explains the adjustments made to the CalEEMod modeling files. No revisions are necessary.

Response to AENV-15
This comment states that the Air Quality Analysis did not fully consider all feasible mitigation measures to reduce impacts. This comment states that the Draft EIR should include new mitigation such as: requiring on-site machinery be all electric, encourage tenants to incentivize carpools and alternative transportation, require a no-idling vehicle policy, and require future tenants' vehicle fleet be zero-emission.

As discussed in more detail in Section 3.4, Air Quality, of the Draft EIR, there are numerous mitigation measures that would be imposed on the proposed project. In addition, as described in Response to GSEJA-31 and multiple Responses to SHUTE, the City has agreed to adopt, and the project applicants have agreed to implement, additional mitigation measures, such as, among others, MM AIR-1g that requires all on-site off-road equipment and on-road equipment be electric

powered. This equipment includes types of equipment the commenter mentions, such as forklifts. Furthermore, as described in Section 3.14 Transportation, the Draft EIR includes MM TRANS-1a, which requires the implementation of TDM measures to reduce operational vehicle trips. The first such measure requires future tenants to communicate information and strategies to employees about reducing vehicle trips. MM TRANS-1a also includes the encouragement of telecommuting for administrative staff, as well as the provision of designated parking spaces for carpool vehicles, a transit stop along the project frontage with Grant Line Road, bicycle lanes and sidewalks along the project frontages, and on-site bicycle racks and showers for employees to use. MM TRANS-1a already includes measures that the commenter requests, such as incentivizing carpools.

As described in Section 3.3 Air Quality, the Draft EIR includes MM AIR-1d, which requires the use of a clean truck fleet to the maximum extent feasible, which meets the ARB's adopted 2013 Optional Low-NO_X Standard of 0.02 gram of nitrogen oxide (NO_X) per brake horsepower-hour for all heavy-duty trucks during operation of the proposed project. Moreover, existing extensive regulations already govern idling restrictions for heavy-duty vehicles. For example, the ARB On-Road Heavy-Duty Vehicle Program would require heavy-duty truck owners to limit idling to five minutes. In addition, the new ARB Advanced Clean Cars II Regulations Resolution 22-12 would require new gasoline powered cars purchased in the State to be zero-emission, which would lead to future tenants' vehicle fleets containing some zero-emission vehicles. See also Response to AENV-3 and multiple Responses to SHUTE regarding the commenter's proposed net-zero emissions requirement. Therefore, the Draft EIR includes many of the mitigation measures the author is calling for and provides the most feasible and applicable mitigation. In addition, the City has agreed to adopt, and the project applicants have agreed to implement, additional mitigation measures that would further reduce emissions in this regard. The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further address air quality, health risk issues and GHG emissions (see updated MMRP). No revisions to the Draft EIR are required.

Response to AENV-16
This comment suggests mitigation that limits the amount of construction that could occur at one time to just one phase of the project to limit air quality emission impacts.

As described in Section 3.4, Air Quality, the analysis presents a reasonable worst-case scenario where all development occurs concurrently and overlaps; this is consistent with the project description and related project objectives, and is particularly necessary and relevant here given there are three different property owners/applicants, each of which would independently develop its respective specific individual development proposal with timing based on numerous considerations. Restricting other property owners from developing their respective portions of the project site in the manner suggested by the commenter would not be feasible from a practical, economic or legal standpoint. See also Response to SHUTE-15.

Response to AENV-17
This comment opines that the impact conclusions in Impact AG-1 and Impact AG-2 are inconsistent and then states that the proposed project would have significant impacts related to conflict with existing zoning for agricultural use or a Williamson Act Contract (Impact AG-2).

Impacts related to conflict with existing zoning for agricultural use or a Williamson Act Contract were thoroughly analyzed in Section 3.2, Agriculture and Forestry Resources, Impact AG-2. See Response to AENV-18. No revisions to the Draft EIR are required.

Response to AENV-18
This comment claims the proposed project would violate the Williamson Act Contract and would therefore result in significant and unavoidable impacts. This is based on the assertion that although the Notice of Nonrenewal of Suvik Farm parcels' Williamson Act Contract was initiated in 2017, since the contract term automatically renews annually, the actual term is essentially indefinite. The comment then states that even if the contract expires in 2026, the Suvik Farm parcels would be developed by 2024, before contract expiration, which would violate the Williamson Act Contract. Lastly, the comment states that requesting to cancel the Williamson Act Contract would be inconsistent with the Williamson Act if the "objectives to be served by cancellation should have been predicted and served by nonrenewal at an earlier time."

The Draft EIR's analysis of impacts to agricultural resources, including any potential conflicts with Williamson Act Contracts, is discussed at length in Section 3.2 and the Draft EIR's analysis is accurate for purposes of this analysis. The comment cited selected text from Section 3.2, Agriculture and Forestry Resources, out of context. As presented in Section 3.2, a Notice of Nonrenewal was initiated in 2017, and the contract will expire on August 21, 2026. The nonrenewal process is provided for under the enabling statute for the Williamson Act.

Section 3.2 also presents analysis that, should development of the Suvik Farms parcels be pursued prior to the Williamson Act Contract expiration date, then pursuant to applicable provisions of the Williamson Act, the applicant for the development of the Suvik Farms parcels would be required to take specific steps to cancel the contract (rather than waiting for the contract to expire as a result of the nonrenewal) to petition the City Council for cancellation consistent with the requirements of Government Code Section 51282(a), or agree to the incorporation of a condition of approval such that no permit for development on the Suvik Farms parcels would be issued prior to the August 21, 2026 expiration date. Accordingly, because the Suvik Farms parcels applicant would be required to follow applicable provisions of State law related to Williamson Act Contracts, the proposed project would not result in any conflicts with the Williamson Act Contract and impacts would be less than significant.

The landowners of the Suvik Farm parcels properly initiated a Notice of Nonrenewal in 2017, anticipating future development of the parcels. Because a Notice of Nonrenewal was already initiated, if the landowners need to request cancellation in advance of the contract's expiration date (August 21, 2026), the cancellation request would be consistent with the Williamson Act.

As demonstrated thoroughly in Section 3.2, Agriculture and Forestry Resources, the proposed project would be required to comply with all relevant Williamson Act regulations related to nonrenewal cancellation, and impacts related to the Williamson Act Contract would be less than significant. Accordingly, the Draft EIR's conclusions were accurate and no revisions are required.

Response to AENV-19
This comment includes three mitigation strategies the commenter suggests would reduce impacts to agricultural resources: (1) modify development plans so that development of the Suvik Farm parcels would not occur until after the Williamson Act Contract expires, (2) restore the agricultural land after the lifespan of the project, and (3) limit the size of the warehouses to reduce the amount of agricultural land conversion.

Section 3.2, Agriculture and Forestry Resources, contains a detailed discussion of impacts and feasible mitigation, as required under CEQA. In terms of the mitigation measures suggested by the commenter:

1. As discussed in Impact AG-2 of the Draft EIR, in order for development of the Suvik Farms parcels to occur prior to the August 21, 2026 expiration date of the Williamson Act Contract, the applicant would be required to petition the City Council for cancellation, or agree to the incorporation of a condition of approval such that no permit for development on the Suvik Farms parcels would be issued prior to the August 21, 2026, expiration date. These requirements would ensure consistency with the Williamson Act Contract and would avoid related project impacts. Satisfaction of these requirements would be assured by the applicable statutory and regulatory framework. Therefore, the suggested mitigation of modifying development plans to delay development of the Suvik Farms parcels is not necessary and would not clearly result in a lessening of significant impacts.
2. Regarding the suggestion that agricultural use of the land be required to be restored after the lifespan of the project, as a general matter, nothing prevents this transition from occurring (at least in theory). The court in *King and Gardiner Farms v. County of Kern* (2020) 45 Ca.App.5th 814, 876-77, found that restoration of farmland to productive use could be mitigation; however, as suggested by the court in its discussion, such a mitigation measure is feasible when the project is temporary or has an identified lifespan. For a large industrial project such as the one at hand, which involves significant economic investment from the property owners/applicants to develop and operate substantial public and private infrastructure and improvements with no inherent lifespans, the commenter's suggested mitigation measure is not feasible. There is no specified end date for the industrial land uses that would be approved by the requested entitlements that would provide the basis for this type of restoration measure; moreover, given the intensity of proposed urban industrial uses, the ability to restore the project site to Important Farmland appears speculative at best.
3. Reduction of the proposed development in order to reduce agriculture impacts was analyzed as one of the project alternatives. The Draft EIR provided two alternatives (aside from the No Project Alternative) that would meet at least some of the basic objectives of the proposed project while lessening impacts to agricultural land conversion, including the Outside Storage Allowable Use Alternative and the Agricultural Protection Alternative. It should be noted that both alternatives include a reduction in building footprint. Pursuant to CEQA Guidelines Section 15126I(2), a Draft EIR must identify an environmentally superior alternative aside from the No Project Alternative. The Draft EIR identifies the Outside Storage Allowable Use Alternative as the environmentally superior alternative because it has the potential to yield the greatest reductions in the severity of the proposed significant and unavoidable impacts,

as it would preserve approximately 48 acres of the existing agricultural operations including Prime Farmland. However, as discussed more fully in the Draft EIR, this alternative would not meet the project objectives to the same extent of the proposed project; e.g., it would not achieve the project objective of improving local and regional employment opportunities by taking advantage of the project site's high level of accessibility to the same degree as the proposed project. Nor would this alternative allow for the expansion of the City's economic base and help improve the jobs/housing balance to the same degree (the proposed project quantifiably achieves the City's project objectives by developing a maximum of 3,352,210 square feet of employment-generating industrial uses.) This alternative also would not be as effective at achieving the employment-generating opportunity objective, as it would not provide as many local and regional employment opportunities or reduce the commute for regional residents.

Prior to approving the proposed project, the City, as the Lead Agency, would be required to adopt a Statement of Overriding Consideration explaining its reasoning to approve the proposed project.

Response to AENV-20
This comment claims that the Draft EIR did not analyze a range of reasonable alternatives.

See Responses to GSEJA-27 and AENV-19.

Response to AENV-21
This comment states the Draft EIR should include an alternative with the aim of preserving the on-site cattail marsh.

Impacts related to riparian habitat were thoroughly analyzed in Section 3.4, Biological Resources, of the Draft EIR. Impacts to potential jurisdictional features were found to be less than significant with the implementation of MM BIO-3 (Conduct Delineation of Potentially Jurisdictional Aquatic Resources [Channels and Wetlands]). Therefore, it is not necessary to analyze a project alternative that would reduce such impacts. See also Response to GSEJA-27.

This comment claims that the Draft EIR only analyzed one project alternative (aside from the No Project Alternative) that would reduce agricultural land impacts. The comment claims that the Draft EIR found the Outside Storage Allowable Use to be infeasible without providing justification.

The Draft EIR provided two alternatives (aside from the No Project Alternative) that meet some of the basic objectives of the proposed project while lessening impacts to agricultural land conversion, including the Outside Storage Allowable Use Alternative and the Agricultural Protection Alternative. It should be noted that both alternatives include a reduction in building footprint. Contrary to the commenter's claims, the Draft EIR fully analyzed the Outside Storage Allowable Use Alternative and determined it to be the environmentally superior alternative because it has the potential to yield the greatest reductions in the severity of the proposed significant and unavoidable impacts, as it would preserve approximately 48 acres of the existing agricultural operations including Prime Farmland.

As discussed in Section 6, Alternatives, of the Draft EIR, the Outside Storage Allowable Use Alternative would have a somewhat lower level of impacts for aesthetics, agriculture and forest

resources, air quality, biological resources, cultural resources, energy, GHG emissions, hydrology and water quality, noise, public services, tribal cultural resources, utilities and service systems, and wildfire. Overall, the impacts would be reduced due to a smaller square footage of the buildings and the reduced number of employees. However, the impact conclusions would remain the same and the proposed project's mitigation measures would still be required under this alternative. Furthermore, this alternative would not meet quantitative objectives for employment-generating industrial uses, and would also not meet the other project objectives at all and/or to the same degree as the proposed project.

Therefore, the Draft EIR evaluated a reasonable range of project alternatives that would reduce agricultural impacts. Even then, impacts to agricultural land conversion are still found to be significant and unavoidable.

See also Responses to GSEJA-27 and AEVN-19.

Response to AENV-22
This comment claims that the Draft EIR should be updated to reflect the author's finding of a significant GHG impact and mitigated as such. The commenter provides closing statements.

The comment is noted and acknowledged. Because no project-specific CEQA issues were raised, no further response is required.

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February 22, 2023

Tracy City Council
333 Civic Center Plaza
Tracy, California
Via e-mail

Re: Additional Comments on Tracy Alliance warehouse project and Final Environmental Impact Report

Dear Tracy City Council:

The Sierra Club submitted extensive comments on the Tracy Alliance warehouse project and Final Environmental Impact Report (Final EIR) in our letter of February 9, 2023.

Since then, we have met with a representative of the Tracy Alliance Group (Dermody Properties) and have upcoming meetings with individual members of the Tracy City Council. We also expect to meet with Mike Souza who is representing the Suvik Farms parcels, which are approximately 47 acres of the total 191 acres of the proposed annexation project (see attached exhibit). 1

We are attempting to negotiate a successful outcome so that this project can move forward without our strong objections and possible litigation.

We have heard that this item is scheduled for the March 7 Tracy City Council meeting.

<u>We respectfully request that the hearing be opened and testimony taken but that the matter be continued for one month so that we can continue our negotiations with the applicants and with the City.</u>

New Concerns about the Final EIR and Future Approvals for Unknown Building on the Suvik and Zuriakat Parcels: Will There be Further CEQA Analysis and Public Hearings?

After we have more closely studied the Final EIR we have discovered the following major issues regarding future approvals of the Suvik and Zuriakat parcels. 2

The Final EIR studies the impacts due to development of the Tracy Alliance parcels (122 acres).in detail. The Tracy Alliance Group has provided conceptual site designs and

infrastructure plans of three separate buildings. The applicant has also shared with us plans of truck circulation improvements at the main driveway and Grant Line Road, ensuring that trucks entering and exiting that portion of the site are prohibited from turning left (eastward) onto Grant Line Road, which is a major issue for the Banta community. The applicant is considering whether to agree with our specific additional measures and conditions, summarized below and in our previous letter. 2 CONT

However, a major shortcoming of his Final EIR is that there is NO similar project description information for the 69 acres known as the Suvik and Zuriakat parcels, which make up roughly 45% of the assumed development potential of the entire annexation area

The Final EIR contains NO discussion of how this FEIR is to be used in assessing impacts and leading to approvals for future buildings on these parcels. This future analysis and recommended detailed mitigation measures are key since the Suvik parcel is closer to the main Banta community (and Banta Elementary School) than the Tracy Alliance parcels.

The California Environmental Quality Act (CEQA) allows for the preparation of "program"-level and "project"–level impact reports (see Sections 15168 of the CEQA Guidelines). However, a document that is being approved as a "program" level assessment (or a hybrid EIR that is being prepared as a "program" level analysis for part of the project and a "project" level document for another part) must clearly specify and describe this in the project description.

This Final EIR contains no such discussion and so we and the residents of Banta are left with the following question:

Will the City Council require the applicants for the Suvik and Zuriakat parcels to submit detailed development plans to the community that will be subject to CEQA review, e.g. a project level EIR, followed by public hearings scheduled before the Planning Commission and City Council? Or will the City Council allow city staff to administratively approve site and building plans with no further environmental review and public hearings?

To clarify this issue, we request that the following condition of approval be added to any approval for the annexation project:

> The applicants for future development of the Suvik and Zuriakat parcels shall be required to submit detailed development plans to the community that will be subject to CEQA review, e.g. a project level EIR, followed by public hearings scheduled before the Planning Commission and City Council

The Final EIR Fails to Adequately Analyze and Mitigate the Project's Air Quality Impacts

Air pollution from significant activities in the San Joaquin Valley Air Basin includes a variety of industrial-based sources as well as on- and off-road mobile sources. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of 3

unhealthy air. San Joaquin County is in non-attainment of Ozone, PM10 and PM2.5 State air quality standards. Breathing in particulate matter (PM10 and PM2.5) and ground-level ozone can trigger a variety of health problems. Heavy-duty trucks are key sources of diesel pollution and toxic air contaminants (TACs) and are therefore a focus of air quality impacts. Diesel trucks emit large volumes of particulate matter (a.k.a. diesel particulate matter, or DPM), therefore contributing to health problems that include cardiovascular problems, cancer, asthma, decreased lung function and capacity, reproductive health problems, and premature death.[1] 3 CONT

The public health risks associated with these pollutants are severe. As the Draft EIR for the pending Costco warehouse project states:

> The reactivity of O3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion. (Costco DEIR page 3.3-4)

Also from the Costco warehouse Draft EIR:

> Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10- year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Costco DEIR page 3.3-22)

Given these existing air quality problems and severe public health consequences, the City needs to do everything in its power to ensure new development does not exacerbate the problem. Unfortunately, the DEIR does not adequately analyze or mitigate this project's impacts.

[1] Storing Harm: the Health and Community Impacts of Goods Movement Warehousing and Logistics, January 2012, available at: https://envhealthcenters.usc.edu/wp-content/uploads/2016/11/Storing-Harm.pdf; accessed June 2, 2021.

The Final EIR's evaluation of potential mitigation measures is deeply flawed. CEQA requires that (1) a project's significant impacts be fully disclosed in detail, (2) mitigation be fully enforceable and not improperly deferred, (3) the City adopt all feasible mitigation to mitigate a project's impacts, and (4) the Final EIR provide for an adequate mitigation monitoring and reporting program. Here, Tracy's General Plan provides sound guidance as well: Developments that significantly impact air quality shall only be approved if all feasible mitigation measures to avoid, minimize or offset the impact are implemented." (General Plan Policy AQ-1.2-P14). And to confirm conformity with the Air District's Air Quality Attainment Plan, the California Air Resources Board requires that any new project "contain in its design all reasonably available and feasible air quality control measures." 4

Summary of Our Requested Additional Mitigation Measures and Conditions of Approval

As we noted in our previous letter, we are requesting that the Council not approve this large warehouse project unless the following specific air quality, greenhouse gas emissions, project setback, circulation, and other measures are included in the project's conditions of approval. The California Environmental Quality Act (CEQA) requires lead agencies to adopt all feasible mitigation measures to reduce impacts of a development project, even if the environmental analysis finds that the impacts are "significant and unavoidable." 5

These conditions have been recommended by the State Attorney General as well as other State agencies such as the California Air Resources Board: 6

- construct sufficient solar panels on each building to provide power for the project, to be completed prior to the issuance of the first occupancy permit for the building
- utilize a "clean fleet" of light vehicles/delivery vans/trucks (Class 2 through 6) as part of business operations for all buildings
- The property owners/tenants/lessees shall ensure that all heavy-duty trucks (Class 7 and 8) domiciled on the project site are model year 2014 or later from start of operations and shall expedite a transition to zero-emission vehicles, with the fleet fully zero-emission by December 31, 2025 or when commercially available for the intended application, whichever date is later.
- At all times during project operation, owners, operators or tenants shall be required to provide electric charging facilities on the project site sufficient to charge all electric trucks domiciled on the site and such facilities shall be made available for all electric trucks that use the project site.
- design the project to include a setback of at least 1,000 feet from the nearest homes
- provide a community benefits fund to assist Banta residents and the Banta elementary school in upgrading air ventilation systems

- provide funding to install large signs along Grant Line Road in multiple locations that state trucks are prohibited on the road east of the project site, and design all phases of the project to prohibit left turns on to Grant Line Road 6 CONT

In our December 6 letter we attached the executed Settlement Agreement between the Sierra Club, the City of Stockton, and Greenlaw Development, LLC (developer of the 203-acre Mariposa Industrial Park in the South Stockton area which will be occupied by Walmart).

In addition, the State Attorney General (AG) signed a separate Memorandum of Understanding with the City of Stockton and the developer which includes the same measures that were included in the Sierra Club settlement. 7

We have also recently commented to the City on the pending Costco warehouse project and DEIR. We incorporate by reference our two letters on the Costco project and DEIR, as they are very germane and applicable to this Tracy Alliance project and FEIR.

We also incorporate by reference the comments submitted on the Tracy Alliance Draft EIR by the Golden State Environmental Justice Alliance.

Th City Must Require Setbacks from the Nearest Residences for All Phases of the Project

The issue of requiring adequate mitigation for local distribution warehouse projects has recently come to the attention of the State Attorney General's Office (AG). The office has recently published a very helpful guide, updated in 2022, called "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act" (Attachment B to this letter). 8

The Guidelines recommend the following regarding setbacks between planned warehouse projects and the nearest "sensitive receptors" (defined by the State as collections of residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, hospitals, retirement homes, senior centers, and other sensitive land uses):

> Examples of best practices when siting and designing warehouse facilities include:
>
> Per California Air Resources Board (CARB) guidance, siting warehouse facilities so that their property lines are <u>at least 1,000 feet from the property lines of the nearest sensitive receptor</u> (footnote) (pages 5-6 of the Guidelines, emphasis added)

The footnote to this guidance cites the CARB documents and states:

> CARB, Air Quality and Land Use Handbook: A Community Health Perspective (April 2005), at ES-1. CARB staff has released draft updates to this siting and design guidance which suggests a greater distance may be warranted in some scenarios. CARB, Concept Paper for the Freight Handbook (December 2019), available at

https://ww2.arb.ca.gov/sites/default/files/2020-03/2019.12.12%20-%20Concept%20Paper%20for%20the%20Freight%20Handbook_1.pdf (last accessed September 18, 2022). 8 CONT

The Tracy Alliance Final EIR notes on page 3.3-42 that the closest sensitive receptors to the project site are single-family residences and Banta Elementary School. The closest sensitive receptors to the project site are located at the following distances: 9

- Residences as close as 145 feet west of the project site across Paradise Road;
- Residences immediately adjacent to the project site to the east along Grant Line Road;
- Residences as close as 120 feet south of the project site across Grant Line Road;
- Residences as close as 60 feet north of the project site across California Avenue; and
- Banta Elementary School approximately 1,500 feet to the east at its closest outside area.

The Final EIR must include the following mitigation measure, which is available and feasible: 10

> The site plans for all phases of the project shall ensure a minimum setback from the nearest residence of at least 1,000 feet. The setback area shall be landscaped with an earthen berm and mature trees and shrubs

Adopt a Warehouse Ordinance

In addition to the above measures, the Sierra Club is requesting that the City of Tracy draft and consider a comprehensive Warehouse Sustainability Ordinance for future projects that establishes development standards for the construction of industrial warehousing and distribution facilities that exceed 100,000 square feet before December 31, 2023. The City of Stockton has agreed to this timeline. 11

Conclusion

We are formally requesting that the above mitigation measures be included as part of the Tracy Alliance project approval. 12

As we noted in our previous letter, the Sierra Club will continue to monitor and comment on every proposed warehouse project in the City of Tracy (as well as in the Cities of Manteca, Lathrop, Stockton, and San Joaquin County). If future projects fail to incorporate the measures as recommended by the Attorney General and CARB, the Sierra Club will consider litigation to enforce inclusion of these measures in project approvals.

The City of Tracy, along with the other jurisdictions in San Joaquin County, must address the very serious health, air pollution, and energy impacts of the rapidly growing distribution

warehouse development in our communities. Applicants must do all that is possible to minimize the very real environmental impacts that warehouse development projects pose.

12 CONT

We are available to meet with your staff and applicants at any time to further discuss the programs that may be implemented to achieve our mutual goals.

If you have any questions about these comments, you may contact Eric Parfrey at parfrey@sbcglobal.net or (209) 641-3380.

Sincerely,

s/s Margo Praus, Chair
Delta-Sierra Group, Sierra Club

cc: Scott Lichtig, California Attorney General's Office
Stanley Armstrong, California Air Resources Board
Patia Siong and Harout Sagherian, San Joaquin Valley Air Pollution Control District
Heather Minner and Winter King, Shute, Mihaly, Weinberger
Aaron Isherwood and Harrison Beck, Sierra Club Environmental Law Program
Manteca City Council
Lathrop City Council
Dermody Properties
Mike Souza

Attachment A: Tracy Alliance exhibit
Attachment B: Attorney General's report "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act"

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Sierra Club (SIERRA-1)

Response to SIERRA-1-1

The commenter references a separate comment letter on the proposed project and Final EIR, dated February 9, 2023. The commenter noted a meeting with one of applicant teams (Dermody) had already occurred, referenced upcoming meetings with individual Council Members and a representative from another applicant team (Suvik), and requested that the hearing be opened and testimony be taken, but that the matter be continued for one month.

The comment is noted and acknowledged. CEQA comments raised in the referenced February 9 letter are addressed in Responses to SIERRA-2-1 through SIERRA-2-11, below.

This comment does not raise any specific project-related environmental issues under CEQA, and therefore no further response is required. For informational purposes, it is noted that the proposed project is scheduled for consideration by the City Council at its hearing on August 15, 2023.

Response to SIERRA-1-2

The commenter claims that the proposed project's Final EIR does not contain discussion of how the Draft EIR is to be used in assessing impacts and leading to approvals for future buildings on the Suvik and Zuriakat parcels because there is no "conceptual site plan and infrastructure plans" that are specific to the Suvik and Zuriakat parcels, unlike the Tracy Alliance parcels. In addition, the commenter refers to CEQA requirements related to EIRs that involve program-level and project-level review, and requests "future analysis and recommended detailed mitigation measures" (particularly given the proximity of the Suvik parcels to the Banta community). The commenter requests that a condition of approval be added to require CEQA review for the individual development proposal on the Suvik and Zuriakat parcels to ensure these parcels submit detailed development plans that will be subject to CEQA review.

As a preliminary matter, it is noted that the commenter concedes that the "Final EIR studies the impacts due to development of the Tracy Alliance parcels (122 acres) . . . in detail." However, the commenter takes issue with the fact that unlike the Tracy Alliance portion of the proposed project, which included a description of a conceptual site plan and related features, the Draft EIR does not include a similarly detailed project description for the Suvik and Zuriakat parcels. Contrary to the commenter's assertion, the assumed development parameters, the basis for those assumptions, and the related impact conclusions for these portions of the proposed project were discussed in detail throughout the Draft EIR.

The methodology, approach to analysis, and process of evaluating the potential impacts of future development on the Suvik and Zuriakat parcels were thoroughly discussed in Chapter 1, Introduction, of the Draft EIR.

Specifically, Chapter 1.2, Environmental Review Process, of the Draft EIR states:

> This Draft EIR provides a project-level analysis for the proposed project. For the purposes of analysis in this Draft EIR, because the applicant for the Tracy Alliance parcels has submitted an individual development proposal for these parcels, this

> Draft EIR evaluates, as required under CEQA, the specific aspects of that proposal. With respect to the remaining portions of the project site, individual development proposals have not yet been submitted. Accordingly, this Draft EIR evaluates at a project-level full buildout of the project site as contemplated under the proposed project, based on information that is reasonably available and reflects reasonable assumptions of maximum development potential that could occur on the remaining parcels (Suvik Farms and Zuriakat). This is estimated to consist of up to 1,502,820 square feet of warehouse and distribution development, consistent with the maximum allowable density per acre identified in the NEI Specific Plan (see Table 2-2 in the Project Description for a summary of the proposed development). The level of analysis for Suvik Farms and Zuriakat parcels reflects the level of detail available at the time of preparation of this Draft EIR. The environmental impacts of the proposed project are analyzed in the Draft EIR to the degree of specificity appropriate, in accordance with CEQA Guidelines Section 15146.

Therefore, impacts from future development of Suvik and Zuriakat parcels in accordance with all applicable City development standards and design guidelines are appropriately analyzed and disclosed throughout the Draft EIR and Final EIR, based on the best information available at the time when environmental review commenced. Future development of Suvik and Zuriakat parcels would be subject to all mitigation measures identified in the MMRP, except certain measures that expressly apply only to the Tracy Alliance parcels as noted in the MMRP. All mitigation measures would be imposed as enforceable conditions of approval on all individual specific development proposals for the proposed project that are submitted to the City, including those for the Suvik and Zuriakat parcels. In addition, these parcels would be subject to the additional conditions of approval which the project applicants voluntarily agreed to accept, as detailed in the updated MMRP. All parcels within the project site would be required to submit and obtain approval of site-specific applications pursuant to the City's Municipal Code and the City's standard entitlement process including Development Review, which is a discretionary process, including a public hearing before the appropriate decision maker and subject to appeal. Therefore, at such time as the owners of the Suvik and/or Zuriakat parcels apply to the City for Development Review Permits (as they must before any development can occur on those parcels), the City would evaluate those application(s) and determine, in accordance with all applicable CEQA requirements, the required form of CEQA compliance as it does with all Development Review Permit applications.

Other procedural requirements related to the City's Development Review Permit process (as well as other potential subsequent approvals) are set forth in detail in the City's Municipal Code and other applicable laws and regulations. All future individual development proposals for the proposed project, including those for the Suvik and Zuriakat parcels, would be required to adhere to these and all other applicable legal mandates in connection with the subsequent entitlement process.

Based on the foregoing, and further because only legislative approvals (i.e., pre-zoning, NEI Specific Plan Amendment) are currently being considered, there is no basis for imposing the condition of approval requested by the commenter.

No further response is required.

Response to SIERRA-1-3
The commenter states that significant sources of air pollution in the San Joaquin Valley Air Basin include industrial type land uses which operate with on- and off-road mobile vehicles. The commenter lists the pollutants in the San Joaquin Valley Air Basin that are in nonattainment and states that the primary source of TACs is from the operation of heavy-duty trucks because they emit a large volume of DPM. The commenter lists the health risks from DPM emissions and cites a Draft EIR for a Costco development. The commenter states that the City should prevent further health risks due to new development and that the Draft EIR does not properly analyze or mitigate the entire project impacts.

The commenter summarizes information regarding the air quality in the San Joaquin Valley Air Basin, as well as noting generally the sources of air pollution and impacts related thereto, including health concerns related to heavy-duty diesel trucks.

The commenter also cited conclusions from an EIR for an unrelated Costco development regarding public health risks associated with air pollution. The commenter then goes on to assert that, given the foregoing, the City "needs to do everything in its power to ensure new development does not exacerbate the problem" and claims that the Draft EIR for the proposed project does not adequately analyze or mitigate its impacts. However, the commenter does not provide any specific comments related to the analysis or specific mitigation measures in the Draft EIR and Final EIR for the proposed project.

CEQA requirements make clear that comments on an EIR should focus on the sufficiency of the document's identification and analysis of significant environmental impacts, and measures to avoid or mitigate those impacts. (See CEQA Guidelines Section 15204(a)). Reviewers and commenters should explain the basis for their comments and provide data, references, or other evidence to support their comments. (See CEQA Guidelines Section 15204(c)).

CEQA requires that the Final EIR address comments submitted during the 45-day public comment period that raise significant environmental issues on the adequacy of the Draft EIR (PRC § 21091(d)(2)(B); CEQA Guidelines § 15088(c)). CEQA considerations are limited to significant issues as these relate to potential physical impacts of the project on the environment.

A good faith effort at full disclosure to facilitate informed decision-making is the primary focus of CEQA. Thus, the lead agency must evaluate comments on the Draft EIR and prepare written responses for inclusion in the Final EIR. (See PRC § 21091(d); CEQA Guidelines §§ 15088(a) and 15132). The written responses must describe the disposition of any "significant environmental issues" raised by commenters. (See PRC § 21091(d)(2)(B); CEQA Guidelines §§ 15088(c) and 15132(d), 15204(a)). There must be good faith, reasoned analysis in response. While conclusory statements by the lead agency unsupported by factual information will not suffice, the level of detail in the response may correspond to the level of detail in the comment. A general response may be appropriate when a comment does not contain or specifically refer to readily available information, or does not explain the relevance of evidence submitted with the comment. (See CEQA Guidelines § 15088(c)). Also, CEQA does not require that the lead agency respond to every comment submitted to it. The lead agency generally has considerable leeway regarding responses to comments, and

need not respond to comments that do not raise a significant environmental issue.[12] The lead agency also need not respond to general reference materials submitted in support of comments, comments that repeat those already considered, or comments that are clearly irrelevant, and has the discretion to reject comments that are not focused as provided by the CEQA Guidelines. (See CEQA Guidelines §§ 15204(e)). Responses to comments need not be exhaustive; they need only to demonstrate a good faith, reasoned analysis. (See CEQA Guidelines §§ 15088(c)). As noted above, the commenter's assertions about air quality in the San Joaquin Valley, its comments regarding the environmental review for the unrelated Costco project, and its generalized assertion that the proposed project may pose similar air quality concerns, do not address any specific aspects of the Draft EIR for this project, nor do they otherwise identify any flaws or defects in the Draft EIR for this project. Because no specific issues cognizable under CEQA are raised, no further response is required.

Nonetheless, for informational purposes, the following is noted. As described in this Final EIR Response to Comments (including, without limitation, Responses to Valley Air District-2, and multiple Responses to GSEJA and SHUTE) as well as the updated Errata, the Draft EIR for the proposed project robustly evaluated all potential air quality and GHG emissions impacts and identified feasible mitigation where necessary. Specifically with respect to potential health risks, the proposed project's potential to expose sensitive receptors to elevated concentrations of TACs was fully analyzed and mitigated to the extent feasible under Impact AIR-3 in the Draft EIR. See also Response to SIERRA-1-4 and Response to SIERRA-1-5, below, for more details addressing the adequacy of the air quality analysis prepared for the proposed project. The Draft EIR and Final EIR for the proposed project (1) properly assume compliance with a robust regulatory framework (including citing relevant General Plan policies as well as guidance from ARB and the Valley Air District) and set forth a thoughtful consistency analysis related thereto; (2) fully disclose all significant impacts; (3) identify all feasible mitigation measures to mitigate, avoid or reduce the identified significant impacts; and (4) include a summary of all such measures that will be incorporated into a MMRP that will be adopted by the City Council in connection with its certification of the Draft EIR and thereafter imposed as enforceable conditions of approval.

Response to SIERRA-1-4

The commenter claims that the Draft EIR did not adequately evaluate the potential mitigation measures and lists the CEQA requirements that all mitigation measures must meet. The commenter reiterates Tracy General Plan Policy AQ-1.2-P14, which requires new development only be approved if it includes feasible mitigation measures.

See Response to SIERRA-1-3, above. See also multiple Responses to SHUTE.

For informational purposes, the following is noted. As described in the Response to Comments and Errata of this Final EIR, the Draft EIR for the proposed project robustly evaluated and disclosed all potential air quality and GHG emissions impacts and identified feasible mitigation consistent with CEQA requirements, where necessary; specifically, the Draft EIR considered air quality and GHG impacts in Chapters 3-3 and 3-8, which detail all potential project impacts, the resulting mitigation

[12] See Citizens for E. Shore Parks v. State Lands Comm'n (2011) 202 Cal.App.4th 549.

measures, and how those measures would reduce impacts to the extent feasible. The Draft EIR discloses that the proposed project would result in significant and unavoidable impacts related to the following topics: Implementation of the Applicable Air Quality Plan, Cumulatively Considerable Net Increase of ROGs and CO During Construction, and Cumulatively Considerable Net Increase of ROG and NO_X During Operation, Exposing Sensitive Receptors to Substantial Pollutant Concentrations, and Cumulative Air Impacts. In addition, the Draft EIR determined that less than significant impacts would occur related to a substantial increase in GHG emissions and consistency with the applicable GHG Reduction Plan and policies.

With respect to potential health risks in particular, the proposed project's potential to expose sensitive receptors to elevated concentrations of TACs was fully analyzed and mitigated to the extent feasible under Impact AIR-3 in the Draft EIR. See also Response to SIERRA-1-3, above, and Response to SIERRA-1-6, below, for more details addressing the adequacy of the air quality analysis prepared for the proposed project. For example, as further described in Response to GSEJA-31 and multiple Responses to SHUTE, the Draft EIR and Final EIR considered additional potential mitigation measures when the analysis was prepared; however, the suggested potential measures that were not adopted were determined to be either infeasible, unenforceable, not considerably different compared to measures already required, or would not reduce the impact being mitigated. In addition, the project applicants have also voluntarily agreed to the incorporation of additional enforceable conditions of approval to further address air quality and health risk issues (see updated MMRP). See also multiple Responses to SHUTE.

Response to SIERRA-1-5
The commenter requests the City Council not approve the proposed project unless the commenter's specific listed mitigation measures are included as conditions of approval. The commenter then states the CEQA requirement for all lead agencies to adopt feasible mitigation measures that reduce impacts of a development.

For the reasons set forth in Chapters 3-3 and 3-8 and as further described in the Final EIR Response to Comments and Errata (including, without limitation, Responses to Valley Air District-2, and multiple Responses to GSEJA and SHUTE), the Final EIR for the proposed project evaluated and disclosed all potential air quality and GHG emissions impacts as required under CEQA. In addition, feasible mitigation was identified, which would be imposed on the proposed project as enforceable conditions of approval and implemented prior to issuance of applicable permits as detailed in the MMRP (which would be adopted in connection with the City Council's certification of the Draft EIR). In addition, see Response to SIERRA-1-4 above, and Response to SIERRA-1-6, below. Moreover, the project applicants have also voluntarily agreed to the incorporation of additional enforceable conditions of approval to further address air quality and GHG emission issues (see updated MMRP).

Response to SIERRA-1-6
The commenter urges the lead agency to adopt a list of recommended mitigation measures that the commenter suggests are feasible and would reduce impacts of the proposed project. Some of the recommended measures are based on measures recommended by the State Attorney General and/or other State Agencies to reduce Air Quality and GHG impacts.

For the reasons set forth herein, CEQA does not require the incorporation of additional mitigation beyond those measures already identified therein. Therefore, no further response is necessary.

However, for informational purposes the following is noted. As detailed more fully below, with respect to certain measures proposed by the commenter, the project applicants had already previously agreed to incorporate measures that are substantially similar to several of those suggested by the commenter. See also multiple Responses in SHUTE.

Furthermore, although not required to do so, the project applicants have voluntarily agreed to accept certain of the additional measures, as detailed further below and in the updated MMRP.

A response to each suggested mitigation measure is provided below.

Suggested Mitigation Measure No. 1: Construct sufficient solar panels on each building to provide power for the proposed project, to be completed prior to the issuance of the first occupancy permit for the building.

> **Response:** This Final EIR addresses the topic of solar panels on each building as part of the Response to GSEJA-31 and Valley Air District 2-12. As described therein, the California Building Standards Code (CBC) requires that nonresidential projects construct their roofs to be solar-ready to accommodate the future installation of solar panels. The proposed project would be required to comply with the foregoing, thereby contributing to improved air quality and making progress toward reducing greenhouse gas emissions through the facilitation of the future production of solar energy. Furthermore, the use of solar panels would not substantially reduce air pollutant emissions on-site, because energy source emissions described in the Air Quality Analysis (see Section 3.3 of the Draft EIR) are limited to those generated from the on-site combustion of natural gas due to the inter-regional relationship between land use development projects and the facility generating the electricity. As such, the consideration of electricity-related energy source emissions is limited to GHGs. Moreover, the proposed project would not result in any significant impact related to GHG emissions, as discussed in Section 3.8 of the Draft EIR, and thus the City does not have the legal authority under CEQA to impose this measure. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as this Final EIR, the suggested mitigation is not required under CEQA.
>
> Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.

Suggested Mitigation Measure No. 2: Utilize a "clean fleet" of light vehicles/delivery vans/trucks (Class 2 through 6) as part of business operations for all buildings.

> **Response:** The suggested mitigation measure is similar to recommended measures identified in the Draft EIR as well as the Final EIR, as reflected in the updated MMRP. Moreover, the commenter's suggestion that the project applicant provide clean fleet vehicles for all light and

medium-duty vehicles beyond what has already been identified as appropriate mitigation would be infeasible.

The fact that other projects in other jurisdictions have incorporated the requested measure does not demonstrate feasibility since, among other things, different projects have different limitations/parameters (e.g., a project that will be operated by one user that owns and controls its fleet, which is a very limited number of projects). Furthermore, the vast majority of light-duty passenger vehicles would be owned and operated by employees of future tenants/users, all of whom are private citizens. As such, neither the project applicants nor the City would be able to mandate or acquire clean fleet vehicles for employees. Other light vehicles/delivery vans/trucks that would access the project site during operations are anticipated to be from third-party vendors. Because it is not anticipated that future tenants occupying the proposed project would own these vehicles, neither the future tenants nor the City would have control over the vehicles accessing the project site and thus neither would have the ability to enforce any such obligation during the life of the proposed project. Rather, the emissions resulting from the vehicles accessing the project site would largely be influenced by regulations (current and future) that would apply to vehicle manufacturers based on determinations made by the ARB, which is the expert public agency charged to address these issues via a comprehensive regulatory framework applied Statewide based on robust data and evaluation with consideration of multiple complicated factors. As described in Response to GSEJA-31, given the volume of medium-duty vehicles that would be involved as part of the tenants' business operations, practical limitations on the owner's ability to control and enforce such an obligation, along with the current substantial cost and concerns regarding widespread availability of electric vehicles, the suggested mitigation is not feasible. Moreover, the project applicants would be required to provide EV charging infrastructure throughout all parking areas as part of MM AIR-1i, which would improve charging infrastructure in the City and help facilitate the transition to electric vehicles. Furthermore, the suggested measure cannot be enforced in a way that would ensure a reduction of potential health impacts. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as this Final EIR, the suggested mitigation is not required under CEQA.

Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.

Suggested Mitigation Measure No. 3: The property owners/tenants/lessees shall ensure that all heavy-duty trucks (Class 7 and 8) domiciled on the project site are model year 2014 or later from start of operations and shall expedite a transition to zero-emission vehicles, with the fleet fully zero-emission by December 31, 2025, or when commercially available for the intended application, whichever date is later.

Response: The Final EIR has explained in detail how the proposed project would be required to ensure the use of a clean truck fleet during operations to the maximum extent feasible, and thus is generally consistent with the commenter's request. For example, the proposed project would be required to demonstrate compliance with MM AIR-1d, which requires as a condition

of issuance of occupancy permit that applicants of each specific individual development proposal document the use of a clean truck fleet that meets the California ARB adopted 2013 Optional Low-NO_X standard of 0.02 gram of NO_X per brake horsepower for all heavy-duty trucks during operation to the maximum extent feasible. Moreover, MM AIR-1i would require the proposed project to include EV charging infrastructure pursuant to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2 in all parking areas during operation. Therefore, all development as part of the proposed project would be conditioned to demonstrate that a clean truck fleet would be operational to the maximum extent feasible when the subject project operations begin.

The suggested mitigation measure requiring that the property owners/tenants/lessees ensure that all heavy-duty trucks (Class 7 and 8) domiciled on the project site are model year 2014 or later from start of operations is not feasible, as detailed in Response to SHUTE-6.Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as the Final EIR, the suggested mitigation is not required under CEQA.

Suggested Mitigation Measure No. 4: At all times during project operation, owners, operators, or tenants shall be required to provide electric charging facilities on the project site sufficient to charge all electric trucks domiciled on the site and such facilities shall be made available for all electric trucks that use the project site.

Response: The proposed project would be required to comply with MM AIR-1i, which would require the inclusion of EV charging infrastructure pursuant to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2, in all parking areas during operation. Therefore, the proposed project would provide EV charging infrastructure that would support passenger vehicles and the future use of electric trucks. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as the Final EIR, the suggested mitigation is not required under CEQA.

Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.

Suggested Mitigation Measure No. 5: Design the proposed project to include a setback of at least 1,000 feet from the nearest homes.

Response: The ARB's general recommendation of a 1,000-foot setback is not a legal mandate that would prohibit all new warehouse developments from operating within 1,000 feet of existing receptors. Rather, this suggested setback is merely a general, non-binding guideline. Moreover, to the extent the commenter construes this recommendation as a mandate, the language of the ARB guidance demonstrates this is not the case. Rather, the referenced ARB guidelines also provide that for new warehouses meeting certain criteria that operate within 1,000 feet of new receptors, ARB recommends that a site-specific HRA be prepared to fully analyze a project's anticipated health risk impacts. As described in the "Concept Paper for the Freight Handbook," prepared by the ARB, "Transition zone recommendations. . . should not be

used as a substitute for site-specific assessments of emissions and health impacts for proposed freight facilities, including those analyses required or recommended as part of federal or State environmental review processes."

Consistent with ARB's guidance, the Draft EIR included the preparation of a robust, site-specific HRA that fully evaluated the proposed project's estimated health risk impacts on nearby residences and other sensitive receptors and included recommended feasible mitigation. Additionally, the primary source of TACs during operation would be from truck idling and parking activity occurring in the parking areas of the project site. As such, the main source of project TACs would be near docking doors, loading areas, and parking areas where trucks would idle and stop and start engines—not at the boundaries of the project site nearest existing sensitive receptors. As described in the "Concept Paper for the Freight Handbook," prepared by the ARB, physical space or transition zones are implemented to separate sensitive receptors from new freight facilities because creating distance from an emissions source can reduce health risks. The proposed project design would include drainage basins in the northern portion of the project site such that project truck operations would not occur directly adjacent to existing sensitive receptors. Further, the City would review and approve the detailed site plans associated with each individual specific development proposal for the proposed project before any development occurs, to confirm compliance with all applicable requirements and standards. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as the Final EIR, the suggested mitigation is not required under CEQA.

Suggested Mitigation Measure No. 6: Provide a community benefits fund to assist Banta residents and the Banta Elementary School in upgrading air ventilation systems.

Response: The City does not have the legal authority to impose an obligation for the project applicants to provide funds as suggested by the commenter because, among other reasons, there is no legal nexus of this measure to any identified impacts of the proposed project. See Section 3.3 of the Draft EIR as well as this Final EIR for additional detail in this regard. Moreover, the operation of private homes in the Banta community are not under the purview of the owners or operators of the proposed project; thus, there would be no mechanism available to ensure that any such funding would be utilized to install and maintain air filtration systems at sensitive receptor locations within the Banta community. In addition, the suggested measure raises significant implementation issues, e.g., it does not identify which Banta residents would receive such funding, how much would be provided to each recipient, and how such air filtration systems (which heavily rely on continued maintenance and replacing filters) would be effectively maintained. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as this Final EIR, the suggested mitigation is not required under CEQA.

Suggested Mitigation Measure No. 7: Provide funding to install large signs along Grant Line Road in multiple locations which state that trucks are prohibited on the road east of the project site, and design all phases of the proposed project to prohibit left turns onto Grant Line Road.

Response: Although not required as mitigation for any impact, the City has agreed to adopt, and the project applicants have agreed to expand the requirements in MM AIR-1e to include the suggested measure. The updated MM AIR-1e is provided below (with changes reflected in in underline), in Section 4, Errata, and is also included in the updated MMRP.

Recirculation is required only if the new mitigation measure is considerably different from the alternatives or mitigation measures already evaluated in the Draft EIR; would clearly lessen the proposed project's significant environmental impacts; and is not adopted. Recirculation is required only if each of the above criteria is met (*South County Citizens for Smart Growth v. County of Nevada (2013) 221 CA4th 316, 330*). Here, as documented in Section 3.3 of the Draft EIR and this Final EIR, this suggested measure is not required under CEQA. Nevertheless, the City has agreed to adopt, and the project applicants have voluntarily accepted the inclusion of this mitigation measure; therefore, recirculation is not required.

MM AIR-1e Operational Truck Fleet Routing

Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that trucks used during project operation for the subject individual development proposal shall be prohibited from accessing Grant Line Road east of the project site, such as plans illustrating intended truck routes. Additionally:

A. Prior to the issuance of grading permit, the project applicant shall submit to the City of Tracy Engineering Department plans or designs that show where the project's private drive intersects with Grant Line Road; the applicant shall use a combination of raised concreate medians (or islands) and/or bollards to prevent trucks from entering the left turn pocket. Truck drivers shall be directed into a dedicated right turn lane onto Grant Line Road. Signage and roadway striping within the project will also direct drivers to the appropriate lanes as they approach the intersection. The design shall be reviewed and approved by the City of Tracy Engineering Department.
B. Prior to the issuance of occupancy permit for the first building, the Phase I Developer shall demonstrate to the City of Tracy Public Works Department that the development shall include new signage placed along Grant Line Road, warning truck drivers that truck travel through the Community of Banta is not permitted and is a finable offense. Specifically, two signs shall be placed on the north and south sides of Grant Line Road near its intersection with the proposed project's private drive and visible to east bound traffic. The exact locations, design and text of the signs shall be approved by the City of Tracy Public Works Department.

As revised, MM AIR-1e would prohibit trucks from accessing Grant Line Road east of the project site by requiring installation of raised concrete medians and/or bollards to prevent trucks from entering the left turn pocket, and by requiring signage along

> Grant Line Road warning truck drivers that truck travel through the Banta community is not permitted and is a finable offense.

See also Response to SIERRA-1-3 through Response to SIERRA-1-5, above and Responses to SHUTE-13 and SHUTE-14.

Response to SIERRA-1-7
The commenter states that it attached a letter to this February 23, 2023, comment letter that is the settlement agreement between the Sierra Club, City of Stockton, and Greenlaw Development, LLC, for a project that would develop a 203-acre industrial park. The commenter further elaborates that the State Attorney General signed a separate Memorandum of Understanding (MOU) with the City of Stockton and the developer that includes many of the measures listed previously. The commenter states that they have commented on other warehouse projects in the City and incorporate by reference those other letters as well as the public comment letter by the Golden State Environmental Justice Alliance.

This comment has been noted. No response is needed as no new concerns are raised. CEQA directs commentors to focus on specific environmental issues associated with the proposed project and the proposed project's environmental document. To the extent this comment attempts to incorporate letters related to a separate project and unrelated environmental analysis, no further response is required as the comments are not focused on the proposed project. Contrary to the commenter's assertion, there is no substantial evidence in the record to document why or how comments made on an unrelated Costco project and its separate environmental review, which is being pursued by a different applicant on a different site, are "very germane and applicable" to the proposed project. Thus, there is no basis for "incorporating by reference" such comments; brief, generalized statements by the commenter, apparently based solely on the fact that each project proposes a warehouse-type light industrial use is not sufficient for purposes of exhausting any such issues. Moreover, the commenter's failure to specifically identify the purported "flaws" in the Draft EIR for the proposed project—instead seeking to rely on a "shortcut" of generally referencing a separate proposal with a separate CEQA document—does not provide the City with an opportunity to thoughtfully respond to specific comments at hand, contrary to CEQA.

No further response is necessary.

See Response to GSEJA-1 through Response to GSEJA-37 for responses to the comment letter by the Golden State Environmental Justice Alliance.

See also Response to SIERRA-1-3, above.

Response to SIERRA-1-8
The commenter refers to the published document from the State Attorney General, *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act*, which includes measures to reduce air quality and GHG impacts. This document includes measures such as setbacks between sensitive receptors and new warehouse uses.

The comment is noted. Because it does not raise any specific CEQA comments with respect to the proposed project, no response is necessary.

For informational purposes, see also Response to SIERRA-1-3 and Response to SIERRA-1-6, above and multiple Responses to SHUTE.

Response to SIERRA-1-9
The commenter restates text from the Draft EIR describing where existing sensitive receptors are located in relation to the project site.

This comment has been noted. Because it does not raise any specific CEQA comments with respect to the proposed project, no further response is required.

Response to SIERRA-1-10
The commenter requests that the Final EIR include a new mitigation measure that ensures all phases of the project provide a minimum 1,000-foot setback between the nearest residence and the proposed project that includes landscaping, earthen berms, and mature trees.

See Response to SIERRA-1-6, above, regarding the suggested mitigation of a 1,000-foot setback. See also Section 3.3 of the Draft EIR for additional information as to why the suggested mitigation is not triggered under CEQA. See also Responses to SHUTE-16 and SHUTE-20. No further response is required.

For informational purposes, the following is noted. The proposed project would be required to include a vegetative buffer along the eastern property boundary of the project site pursuant to MM AIR-1h. This mitigation measure was requested by the San Joaquin Valley Air District (Valley Air District), and accepted by the City and the project applicants, and states the following: "Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall demonstrate on their site plans the inclusion of a vegetative buffer along the eastern property line of the project site adjacent to sensitive receptors. Examples of vegetative buffers may include, but are not limited to, trees, bushes, shrubs, or a mix thereof." As discussed more fully throughout this Final EIR, MM AIR-1h further addresses the concern related to the proposed project's potential to locate sources of TACs near sensitive receptors. Furthermore, with incorporation of MM AIR-1h, the proposed project satisfies the commenter's request that the proposed project include landscaping, earthen berms, and mature trees. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as this Final EIR, the suggested mitigation is not required under CEQA. In addition, the project applicants have also voluntarily agreed to the incorporation of additional enforceable conditions of approval to further address air quality, health risk and buffer issues (see updated MMRP).

Response to SIERRA-1-11
The commenter requests that the City consider an ordinance for future projects that establishes development standards for the construction of industrial warehousing and distribution facilities that exceed 100,000 square feet before December 31, 2023.

The comment is noted. This comment does not raise any CEQA concerns with respect to the Draft EIR for the proposed project, and instead involves a requested action directed to the City that is only within its land use purview. The commenter's opinion is noted and will be included in the administrative record for consideration by the City decision-makers. No further response is required.

Response to SIERRA-1-12
The commenter provides conclusion statements and requests that the aforementioned suggested mitigation measures be included as part of the proposed project.

See Response to SIERRA-1-3 through Response to SIERRA-1-6, above. No further response is required.

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SIERRA CLUB
DELTA-SIERRA GROUP
MOTHER LODE CHAPTER

February 8, 2023

Tracy City Council
333 Civic Center Plaza
Tracy, California
Via e-mail

Re: Comments on Tracy Alliance warehouse project and Final Environmental Impact Report

Dear Tracy City Council:

The Sierra Club submits the following comments on the Tracy Alliance warehouse project and Final Environmental Impact Report (FEIR). The Sierra Club also requests that notices of scheduled public hearings and availability of documents relating to all large proposed industrial development projects be sent to us. Please send digital copes of notices by e-mail to Eric Parfrey at parfrey@sbcglobal.net. 1

We are requesting that the Council not approve this large warehouse project unless the following specific air quality, greenhouse gas emissions, and project setback measures are included in the project's conditions of approval:

- sufficient solar panels to provide power for the project
- utilize a "clean fleet" of light vehicles/delivery vans/trucks (Class 2 through 6) as part of business operations
- adopt standards to provide 100% electrification of all heavy-duty trucks (Class 7 and 8) domiciled on the project site by end of 2025 or when commercially available for the intended application, whichever date is later
- provide electric charging facilities on the project site sufficient to charge all electric trucks and employee vehicles
- design the project to include a setback of at least 500 feet from the nearest homes
- provide a community benefits fund to assist Banta residents and the Banta elementary school in upgrading air ventilation systems
- provide funding to install large signs along Grant Line Road in multiple locations that state trucks are prohibited on the road east of the project site, and design the project to prohibit left turns on to Grant Line Road

2

Background

San Joaquin County along with other inland areas of California have seen an explosion of very large warehouse development due to demand from Internet shopping. Distribution warehouses have been concentrated in locations with access to major metropolitan markets in southern and northern California such as the Inland Empire (Riverside and San Bernardino counties) and now in San Joaquin and other counties of the Central Valley. These projects have the potential, if not adequately mitigated, for adding large numbers of heavy duty trucks and contributing to an increase in poor air quality in the Central Valley.

The Sierra Club together with other community organizations has been actively involved in warehouse projects throughout the state and has secured very meaningful mitigation programs along with environmental justice and community organizations to address heavy duty diesel truck emissions and protect the primarily disadvantaged neighborhoods that are most affected by the new warehouses.

For the last several months the Club has been carefully monitoring and commenting on environmental analyses of proposed large warehouse distribution projects in San Joaquin County, including in the cities of Stockton, Manteca, Lathrop, and Tracy

In Tracy, our attorneys Shute, Mihaly, and Weinberger submitted extensive comments to the City regarding the Costco project Draft Environmental Impact Report (DEIR) on October 31, 2022. We followed up with a letter of December 6, 2022 which stated the following, which is also applicable to this Tracy Alliance project: 3

> …[T]he Sierra Club has serious concerns about the environmental impacts of the Project as currently proposed, and the DEIR substantially understates, and fails to fully analyze, the severity and extent of significant project-related effects on air quality, greenhouse gas ("GHG") emissions, and public health. In particular, we noted that the environmental documentation for the Project is inadequate in that the DEIR identifies virtually no mitigation measures to reduce the Project's impacts, even though such measures are readily available, feasible, and commonly required.

In our December 6 letter we attached the executed Settlement Agreement (Attachment A to this letter) between the Sierra Club, the City of Stockton, and Greenlaw Development, LLC (developer of the proposed 203-acre Mariposa Industrial Park in the South Stockton area).

In addition, the State Attorney General (AG) signed a separate Memorandum of Understanding with the City of Stockton and the developer which includes the same measures that were included in the Sierra Club settlement (Attachment B to this letter).

We incorporate by reference our two letters on the Costco project and DEIR, as they are very germane and applicable to this Tracy Alliance project and FEIR.

The issue of requiring adequate mitigation for local distribution warehouse projects has recently come to the attention of the State Attorney General's Office (AG). The office has recently published a very helpful guide, updated in 2022, called "Warehouse Projects: Best Practices and Mitigation

Measures to Comply with the California Environmental Quality Act" (Attachment C to this letter) and has become actively involved in commenting on projects and negotiating with local agencies to secure additional needed mitigation. The Sierra Club appreciates the AG's actions and has worked to support their advocacy in several cities.

For example, earlier this year the Sierra Club initiated litigation and negotiated a settlement agreement with the City of Fontana. The AG also negotiated a memorandum of agreement in Fontana to resolve air quality and other issues for a large warehouse project located adjacent to a high school (see https://oag.ca.gov/news/press-releases/attorney-general-bonta-announces-innovative-settlement-city-fontana-address). 3 CONT

We are making similar requests in comment letters on pending warehouse projects in the cities of Lathrop, Manteca, and in unincorporated San Joaquin County.

If enacted by all jurisdictions in San Joaquin County, a standard set of air quality and greenhouse gas emission standards will create a level playing field for all warehouse developers and protect the health of San Joaquin County residents and lessen the impacts of climate change.

Additional Air Quality/GHG Mitigation Measures That Must be Approved by Tracy City Council for the Tracy Alliance Project

The California Environmental Quality Act (CEQA) requires lead agencies to adopt all feasible mitigation measures to reduce impacts of a development project, even if the environmental analysis finds that the impacts are "significant and unavoidable." [cite] 4

The following specific measures would mitigate (reduce) the project's air quality and greenhouse emissions impacts. These are the same measures that were recommended by the Attorney General and state regulatory agencies such as the California Air Resources Board (CARB) for the Mariposa project in south Stockton.

- The project shall include sufficient solar panels on the roofs of the project's building or in the parking lot to provide power for the operation's base power use at the start of operations and as base power use demand increases. To be clear, enough solar panels to power each individual building must be constructed at the same time the building is finished, and in operation prior to the first occupancy permit issued by the City. 5

- The project shall adopt standards to provide 100% electrification under the clean fleet requirements The property owner/tenant/lessee shall ensure that all heavy-duty trucks (Class 7 and 8) domiciled on the project site are model year 2014 or later from start of operations and shall expedite a transition to zero-emission vehicles, with the fleet fully zero-emission by December 31, 2025 or when commercially available for the intended application, whichever date is later.

- The property owner/tenant/lessee shall utilize a "clean fleet" of vehicles/delivery vans/trucks (Class 2 through 6) as part of business operations

- At all times during project operation, owners, operators or tenants shall be required to provide electric charging facilities on the project site sufficient to charge all electric trucks domiciled on the site and such facilities shall be made available for all electric trucks that use the project site. 5 CONT

Require Setbacks from the Nearest Residences

The EIR notes on page 3.3-42 that the closest sensitive receptors to the project site are single-family residences and Banta Elementary School. The closest sensitive receptors to the project site are located at the following distances:

- Residences as close as 145 feet west of the project site across Paradise Road;
- Residences immediately adjacent to the project site to the east along Grant Line Road;
- Residences as close as 120 feet south of the project site across Grant Line Road;
- Residences as close as 60 feet north of the project site across California Avenue; and
- Banta Elementary School approximately 1,500 feet to the east at its closest outside area. 6

With so many residences and the school located in proximity to the project, it is dismaying that nowhere in the DEIR is there an analysis about required setbacks. For example, the DEIR fails to analyze how the site plan for Phase 3 of the project could be conditioned to guarantee a minimum setback from the nearest residence of at least 500 feet. This required setback would mitigate air quality, aesthetic, noise, and other impacts generated by the project. 7

The Final EIR must include the following mitigation measure, which is available and feasible:

- The site plan for Phase 3 of the project shall ensure a minimum setback from the nearest residence of at least 500 feet. The setback area shall be landscaped with an earthen berm and mature trees and shrubs

Require a Community Benefits Fund to Pay for HVAC Upgrades

The EIR fails to include any analysis of measures that could be adopted to mitigate air quality impacts by funding improvements to the HVAC and ventilation systems of nearby homes and Banta Elementary School. Such a measure could be implemented through the adoption of a development agreement signed between the developer and the City.

As part of the negotiated settlement agreement for the Mariposa project in south Stockton, the developer agreed to fund a $200,000 community benefits program that will be used for specific improvements, including upgrades to nearby residents HVAC systems to mitigate air quality impacts. The community benefits program will be administered by a local non-profit organization. 8

The development agreement signed between the City and developer must include the following program, modeled on the Stockton example:

- The project development agreement shall include a community benefits program that will be used for specific improvements to benefit the Banta community, including upgrades to

nearby residents and the elementary school HVAC systems to mitigate air quality impacts. The program could also fund water filtration systems for the school and /or residents.

- The project shall install one open source air quality monitoring station near the site that can be monitored in rea time by Banta residents

8 CONT

Require Mitigation to Prohibit Heavy Duty Trucks on Grant Line Road

The Final EIR includes a measure that requires the developer to prepare a signage plan but includes no details or standards for the plan. Prohibiting truck travel on Grant Line Road through the Banta community is a critical component of the project's mitigation strategy. Standards must be established as a condition of approval. The project's site plan must also be amended to prohibit left turn lanes from the project on to Grant Line Road.

The project conditions of approval shall include the following:

- The developer shall prepare a signage plan that includes funding to install large (minimum size of four by six feet) digital signs along Grant Line Road in multiple locations that state trucks are prohibited on the road east of the project site. The City shall work with the developer, California Highway Patrol, and San Joaquin County to ensure that the prohibition is enforced. The developer shall fund the installation of cameras along Grant Line Road by Banta School to enforce and ticket noncompliant truck traffic
- The site plans for the project shall locate the truck entrance and exit into the complex to be constructed the farthest away from residents on California Avenue. The intersection of the entrance/exit to the project from Grant Line Road shall be designed to physically prohibit left turns on to Grant Line Road and shall include a median on Grant Line Road to prohibit left turns.
- Truck traffic shall be limited during school hours

9

Adopt a Warehouse Ordinance

In addition to the above measures, the Sierra Club is requesting that the City of Tracy draft and consider a comprehensive Warehouse Sustainability Ordinance for future projects that establishes development standards for the construction of industrial warehousing and distribution facilities that exceed 100,000 square feet before December 31, 2023. The City of Stockton has agreed to this timeline.

10

Conclusion

We are formally requesting that the above mitigation measures be included as part of the Tracy Alliance project approval.

Please be advised that the Sierra Club will continue to monitor and comment on every proposed warehouse project in the City of Tracy (as well as in the Cities of Manteca, Lathrop, Stockton, and San Joaquin County). If future projects fail to incorporate the measures as recommended by the Attorney General and CARB, the Sierra Club will consider litigation to enforce inclusion of these measures in project approvals.

11

The City of Tracy, along with the other jurisdictions in San Joaquin County, must to address the very serious health, air pollution, and energy impacts of the rapidly growing distribution warehouse development in our communities. Applicants must do all that is possible to minimize the very real environmental impacts that warehouse development projects pose. 11 CONT

We are available to meet with your staff and applicants at any time to further discuss the programs that may be implemented to achieve our mutual goals.

Sincerely,

s/s Margo Praus, Chair
Delta-Sierra Group, Sierra Club

cc: Scott Lichtig, California Attorney General's Office
Stanley Armstrong, California Air Resources Board
Patia Siong and Harout Sagherian, San Joaquin Valley Air Pollution Control District
Heather Minner and Winter King, Shute, Mihaly, Weinberger
Aaron Isherwood and Harrison Beck, Sierra Club Environmental Law Program
Manteca City Council
Lathrop City Council

Attachment A: Sierra Club Settlement Agreement with City of Stockton
Attachment B: Attorney General's Memorandum of Agreement with City of Stockton
Attachment C: Attorney General's report "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act"

Sierra Club (SIERRA-2)

Response to SIERRA-2-1
The commenter provides an introduction and requests that notices of scheduled public hearings and availability of documents relating to all large proposed industrial development projects be sent to the commenter.

The comment is noted and acknowledged. This comment does not raise any specific project-related environmental issues under CEQA, and therefore no further response is required.

Response to SIERRA-2-2
The commenter requests the City Council not approve the proposed project unless the commenter's specific listed mitigation measures are included as conditions of approval. The commenter then states the CEQA requirement for all lead agencies to adopt feasible mitigation measures that reduce impacts of a development. The commenter urges the lead agency to adopt a list of recommended mitigation measures that the commenter suggests are feasible and would reduce impacts of the proposed project. Some of the recommended measures are based on measures recommended by the State Attorney General and/or other State Agencies to reduce Air Quality and GHG impacts.

The issues raised herein have been thoroughly addressed in Responses to SIERRA-1-5 and -6 and multiple Responses to SHUTE. No additional response is required.

Response to SIERRA-2-3
The commenter provides background information on increases of warehouse development in San Joaquin County and other inland areas of California, and states that the commenter is actively involved in these warehouse projects. The commenter states that it attached a letter that is the settlement agreement between the Sierra Club, City of Stockton, and Greenlaw Development, LLC, for a project that would develop a 203-acre industrial park. The commenter further elaborates that the State Attorney General signed a separate MOU with the City of Stockton and the developer that includes many of the measures listed previously. And the Attorney General also negotiated a memorandum of agreement in Fontana for a warehouse project.

The issues raised herein have been thoroughly addressed in Response to SIERRA-1-7 and Responses to SHUTE-11 and SHUTE-12. No additional response is required.

Response to SIERRA-2-4
The commenter states that CEQA requires lead agencies to adopt all feasible mitigation measures to reduce impacts of a development project, even if the environmental analysis finds that the impacts are significant and unavoidable.

The issue raised herein has been thoroughly addressed in Responses to SIERRA-1-5 and -6 and multiple Responses to SHUTE. No additional response is required.

Response to SIERRA-2-5
The commenter urges the lead agency to adopt a list of recommended mitigation measures that the commenter suggests are feasible and would reduce impacts of the proposed project. Some of the

recommended measures are based on measures recommended by the State Attorney General and/or other State Agencies to reduce Air Quality and GHG impacts.

The issues raised herein have been thoroughly addressed in Responses to SIERRA-1-5 and SIERRA-1-6 and multiple Responses to SHUTE. No additional response is required.

Response to SIERRA-2-6
The commenter restates text from the Draft EIR describing where existing sensitive receptors are located in relation to the project site.

The issue raised herein has been thoroughly addressed in Response to SIERRA-1-9. No additional response is required.

Response to SIERRA-2-7
The commenter requests that the Final EIR include a new mitigation measure that ensures all phases of the project provide a minimum 500-foot setback between the nearest residence and the proposed project that includes landscaping, earthen berms, and mature trees.

A similar comment which requested a more conservative, 1,000-foot setback from the nearest residence is addressed in Response to SIERRA-1-10, as well as Responses to SHUTE-16 and SHUTE-20. In addition, the project applicants have also voluntarily agreed to the incorporation of additional enforceable conditions of approval to further address air quality, health risk and buffer issues (see updated MMRP). No additional response is required.

Response to SIERRA-2-8
The commenter requests analysis and a mitigation measure requiring funding of HVAC improvements for nearby homes and Banta Elementary School. The commenter also requests the project to install one open-source air quality monitoring station near the project site that can be monitored in real time by Banta residents.

The comment related to funding HVAC improvements has been thoroughly addressed in Responses to SIERRA-1-6 and SHUTE-17. No additional response is required.

The suggested measure of installing one open-source air quality monitoring station near the project site would not reduce any air quality or GHG impact, since monitoring in and of itself does not reduce emissions. Furthermore, the commenter does not provide any information on why monitoring would be beneficial to the community. Because the suggested measure would not reduce an environmental impact caused by the project, there is no legal nexus of this measure to any identified impacts of the proposed project. Therefore, the suggested mitigation is neither required under CEQA nor would it reduce any impact from the project. See also Response to SHUTE-14. No additional response is required.

Response to SIERRA-2-9
The commenter requests enforcement measures to prohibit truck traffic on Grant Line Road east of the project site, including signage plan, installation of cameras, siting truck entry away from

residents on California Avenue, implementing physical barrier to prevent illegal truck turns, and limiting truck traffic to occur outside of school hours.

The issue raised herein has been thoroughly addressed in Response to SIERRA-1-6 and multiple Responses to SHUTE. No additional response is required.

Response to SIERRA-2-10
The commenter requests that the City consider an ordinance for future projects that establishes development standards for the construction of industrial warehousing and distribution facilities that exceed 100,000 square feet before December 31, 2023.

The issue raised herein has been thoroughly addressed in Responses to SIERRA-1-11 and SHUTE-2. No additional response is required.

Response to SIERRA-2-11
The commenter provides conclusion statements and requests that the aforementioned suggested mitigation measures be included as part of the proposed project. See Response to SIERRA-1-3 through Response to SIERRA-1-6. No further response is required.

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HEATHER M. MINNER
Attorney
Minner@smwlaw.com

April 13, 2023

Via Electronic Mail Only

Mayor Nancy Young and
Members of the Tracy City Council
City of Tracy
333 Civic Center Plaza
Tracy, CA 95376

tracycitycouncil@cityoftracy.org
cityclerk@cityoftracy.org
cm@cityoftracy.org

Re: Final Environmental Impact Report for the Tracy Alliance Project (State Clearinghouse No. 2020080524)

Dear Mayor Young and Members of the City Council:

This firm represents the Sierra Club Mother Lode Chapter's Delta-Sierra Group in matters relating to the proposed Tracy Alliance Industrial Project (hereinafter "Project"). On behalf of the Delta-Sierra Group, we respectfully submit these comments to ensure that the City's decision-makers fully comply with the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 *et seq.*, and the CEQA Guidelines, California Code of Regulations, title 14, § 15000 *et seq.*) ("CEQA Guidelines"). The Delta-Sierra Group is deeply concerned about the detrimental environmental and public health impacts the Project will have on the neighborhoods immediately adjacent to the site and the broader community at large. The City should take a pause on approving any new warehouse projects at this time. 1

I. Executive Summary

Warehouse development in the Tracy-Manteca-Lathrop-Stockton area has exploded, and before another 3.3 million square feet are added from this project, it is time for decision-makers to take a step back and look at this issue holistically and comprehensively. Exhibit A to this letter summarizes warehouse/light industrial projects along the I-205 corridor that are recently approved or under consideration in some form. It illustrates the sheer volume of warehouses approved/proposed for this relatively small area of San Joaquin County – each of which will bring thousands of daily Heavy Duty Diesel truck trips and their accompanying particulate pollution. In Tracy alone, if 2

approved, the Tracy Alliance project will generate over 1,500 truck trips per day, and the Costco Depot Annex project will generate an additional 1,200. In addition, the Cordes Ranch Specific Plan in Tracy will allow the development of more than 30 million square feet of light industrial uses and the associated truck traffic that project will bring. We only have to look as far as the Inland Empire in Southern California to see the public health damage that unchecked warehouse development can bring to an area. The Tracy City Council has an opportunity to re-examine whether this is the future they want to for this community and, by extension, the larger region.

The proliferation of logistics and fulfillment center warehouses in southern San Joaquin County should be a big concern to the Tracy City Council. While there are some benefits to new industrial development in terms of construction (limited term) and warehouse jobs, the long-term, ongoing costs to the community at large are substantial. In the case of this project, a notable share of the Project's impacts will be borne by residents of the small, unincorporated community of Banta, which is immediately east of the project site. According to the California Office of Environmental Health Hazard Assessment's CalEnviroScreen tool[1], the community of Banta is in a census tract that is currently more burdened than 72% of California's census tracts in terms of air- and water-borne pollutants. The toxic air contaminants and diesel particulate matter generated by this project will further degrade the air quality in the area. 2 CONT

It is important to acknowledge that the City of Tracy is not required to approve the Tracy Alliance project. The Project Applicant is requesting approval of several legislative land use decisions including pre-zoning, initiation of reorganization proceedings to LAFCo for annexation, and an amendment to the Northeast Industrial Specific Plan. The City has full discretion to decline these requests while it considers how this project – combined with the other millions of square feet of warehouse space currently being proposed in Tracy (and millions of square feet under consideration in nearby cities) – will impact Tracy residents and other local businesses for decades to come.

The Delta-Sierra Group urges the City Council to consider adoption of a warehouse ordinance that would apply citywide and would set expectations and requirements for the responsible development of warehouse projects. The developers of the Tracy Alliance project have the ability and opportunity to incorporate better design features, more energy-efficiency, and cleaner technologies into their project and have not opted to do so. A warehouse ordinance would require developers to be better neighbors and better partners to the community, and would establish a level playing field for all

[1] CalEnviroScreen 4.0 Indicator Maps: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

future warehouse development. Instead of requiring a project-by-project process (and potential litigation) to incorporate best practices, an ordinance would make such practices known up front, resulting in an improved environmental for all – particularly those who live, work, and attend school near the warehouse facilities.

A comprehensive look at warehouse development is the best approach. However, if the City decides to consider approval of this project now, know that the Tracy Alliance Final EIR fails to fully analyze the severity and extent of significant project-related effects on air quality, greenhouse gas ("GHG") emissions, and public health. The EIR is thus inadequate as an informational document and violates the minimum standards of adequacy under CEQA and the CEQA Guidelines. The EIR also fails to identify or adopt feasible mitigation to reduce the Project's significant impacts to the extent feasible. At a minimum, the Delta-Sierra Group strongly encourages the City to prepare the proper analysis, identify appropriate mitigation measures, and recirculate an EIR that addresses the issues raised in this letter.

While there are many significant impacts identified in the EIR, the Delta-Sierra Group is deeply concerned about those impacts that will dramatically affect public health near the Project and contribute to a decline in the overall quality of life in the San Joaquin Valley. These impacts include an unacceptable increase in toxic air pollution and other harmful emissions, including climate-destroying greenhouse gas emissions. 2 CONT

If for no other reason, the City Council should deny this project at this time because the EIR found that neighboring residents would be exposed to substantial pollutant concentrations from construction, and that "operation at full buildout of the proposed project could have a potentially significant health impact on nearby sensitive receptors, particularly the resident[s]." *See* the Findings of Fact (Attachment F) to the Tracy Planning Commission Staff Report dated January 25, 2023 at 123. This is true even after all of the mitigation identified in the EIR has been adopted. We don't even know how harmful this significant impact will be, because the EIR inexplicably fails to conduct a health risk assessment for the second and third phases of the Project—even though expert testimony submitted with this letter emphasizes that such a study is entirely possible at this time.

The EIR attempts to excuse this fatal omission by asserting that all feasible mitigation has been identified to reduce significant health impacts. But that assertion is preposterous. For instance, the EIR only requires the use of a "vegetative buffer" between residents and the project site, when other jurisdictions have required high walls or berms with strict standards to reduce pollution from the site. Similarly, the EIR would only require the use of heavy-duty trucks meeting a 2013 low-NOx standard, when other

jurisdictions have required, and warehouse operators have agreed to, quickly using zero-emission heavy-duty trucks with no diesel emissions. These are only a few of the most egregious Project impacts and failings of the EIR. The City Council should not approve the Project at this time. 2 CONT

II. The EIR Fails to Adequately Analyze and Mitigate the Project's Air Quality Impacts.

In evaluating the Project's air quality impacts, the regional air quality baseline is key. Air pollution from ongoing activities in the San Joaquin Valley Air Basin includes a variety of industrial-based sources as well as on- and off-road mobile sources. These sources, coupled with mountains surrounding the Air Basin that form natural horizontal barriers to the dispersion of air contaminants, create the existing climatic conditions. *See* DEIR at 3.3-1. San Joaquin County is in non-attainment of Ozone, PM_{10} and $PM_{2.5}$ State air quality standards. *See* DEIR at 3.3-5. Breathing in particulate matter (PM_{10} and $PM_{2.5}$) and ground-level ozone can trigger a variety of health problems. Heavy-duty trucks are key sources of diesel pollution and toxic air contaminants (TACs) and are therefore a focus of air quality impacts. Diesel trucks emit large volumes of particulate matter (a.k.a. diesel particulate matter, or DPM), therefore contributing to health problems that include cardiovascular problems, cancer, asthma, decreased lung function and capacity, reproductive health problems, and premature death.[2] Diesel generators are another source of DPM and NO_x, and as explained below, the amount of diesel generators expected at the site are not clearly quantified in the emissions calculations. Another source not identified are the use of truck refrigeration units (TRUs) on heavy-duty trucks coming to the project site. The Project Description does not acknowledge that any of the 3,352,000 square feet of warehouse space could be used for cold storage uses. The analysis does not include an analysis of TRUs or cold storage, so there should be a mitigation measure and/or condition of approval prohibiting this use. 3

Given the Air Basin's existing air quality problems and public health consequences, the City needs to do everything in its power to ensure new development does not exacerbate the problem. Unfortunately, the EIR does not adequately analyze or mitigate the Project's air quality impacts. This firm retained air quality experts at Baseline Environmental Consulting to review the Air Quality and Greenhouse Gas Emissions sections of the DEIR and FEIR and to offer their professional expertise on the analyses and mitigation measures. Their comments ("Baseline letter") are included as

[2] Storing Harm: the Health and Community Impacts of Goods Movement Warehousing and Logistics, January 2012, available at: https://envhealthcenters.usc.edu/wp-content/uploads/2016/11/Storing-Harm.pdf; accessed June 2, 2021.

Exhibit B and are referenced throughout this letter. The Baseline letter describes flaws in the EIR analysis used to support the significance determinations and identification and assessment of mitigation measures, such as unsubstantiated and incomplete calculations for evaluating air pollutant emissions during project operation. 3 CONT

Even with the additional information provided in the Final EIR, the document's analysis of Project-related air quality impacts and GHG emissions contains deficiencies that must be remedied in order for the EIR to be reliable under CEQA. Furthermore, the EIR fails to identify all feasible mitigation that could be incorporated to minimize the impacts of the Project.

A. The EIR Fails to Properly Analyze Project Emissions and the Associated Health Risks.

1. The EIR Does Not Identify All Sources of Toxic Air Contaminants.

While the EIR assumed the use of diesel generators during construction and accounted for those emissions in the analysis, the EIR does not adequately analyze the emissions from diesel generators (back-up or otherwise) in the day-to-day operations of the future warehouse facilities. Diesel generators are a fairly typical piece of equipment at industrial warehouses. If diesel generators were intentionally not included in the operations emissions calculations, it should be noted and there should be a requirement prohibiting their use at any facility in the Specific Plan area and the means to ensure compliance should be detailed. If diesel generators are not going to be prohibited, their omission from the emissions calculations is a substantive oversight which renders the emissions calculations inaccurate and the conclusions of the Health Risk Assessment (HRA) incorrect as well. 4

Additionally, there is no discussion of the potential for cold storage in any of the warehouse buildings, which would result in substantially higher energy use and emissions from trucks equipped with TRUs. The EIR must analyze the impacts from these potential uses. If the applicants agree that no trucks transporting refrigerated goods would be accessing the site and none of the warehouses will have cold storage, there should be a mitigation measure and/or condition of approval prohibiting cold storage and TRUs and requiring that language to be included in future lease agreements. 5

2. The EIR Fails to Adequately Analyze NOx Mitigation Measures.

As detailed in the Baseline letter, the project's unmitigated NOx emissions from heavy-duty trucks are already expected to be about 75 percent lower than the current heavy-duty truck NOx standard that was established in 2010. Therefore, the FEIR suggestion that implementation of MM AIR-1d could reduce the project's unmitigated emissions from trucks by 90 percent is significantly overestimated and highly misleading. *See* Exh. B at 3. This measure should be modified to accurately reflect realistic reductions. MM AIR-1d should also be modified to require the use of heavy-duty trucks equipped with 2014 or later model engine years when using trucks that meet the Low-NOx Standard is not immediately feasible. Furthermore, the FEIR must adopt mitigation requiring the phasing in of zero-emission electric trucks as they become increasingly available to further reduce criteria air pollutant emissions to the greatest extent feasible. Finally, the EIR should include mitigation to reduce emissions from light and medium-duty trucks. 6

3. The EIR Fails to Adequately Evaluate Health Risks.

As detailed in the Baseline letter, the EIR air quality analysis is deeply flawed in that it contains multiple missteps related to the health risk assessment: 1) The FEIR only calculated health risks associated with operation of Phase 1 of the project and stated that health risks associated with Phases 2 and 3 could not be estimated due to "a lack in operational information …". The Baseline letter describes how this is incorrect; and 2) The FEIR presented separate health risk assessments for project construction and operation – ignoring that fact that these two steps are likely to be overlapping at time and magnifying the health risk impacts. *See* Exh. B at 4. With these inaccuracies, the EIR's evaluation of health risks is incomplete and insufficient. 7

4. The EIR Underestimates Emissions from Warehouse Vehicle Trips and Therefore Improperly Calculates Air Pollutant Emissions.

As detailed in the Baseline letter, the EIR did not substantiate the default travel distance used to estimate emissions from both passenger vehicle and truck trips. *See* Exh. B at 1. The justification provided in the FEIR for using the CalEEMod default travel distance of 11.35 miles per trip for operational truck trips is inadequate and non-conservative. There is no information in the Project Description of the FEIR regarding the potential origin and destination of truck trips generated by the project. This is especially true of Phases 2 and 3 of the Project, for which there are not yet any development plans and therefore no basis for the applicants to even begin to make 8

assumptions about the origins and destinations of diesel trucks. There was likewise no justification for assuming passenger vehicles would travel 11.35 miles per trip. Recognizing that the CalEEMod default travel distance is not appropriate, recent EIRs for large-scale warehouse projects have used more conservative values. The Mariposa Industrial Project in Stockton doubled the CalEEMod default travel distance from 7.3 miles per trip for operational truck trips to 15.0 miles per trip after both CARB and the SJVAPCD raised concerns about the appropriateness of the default trip value (as SJVAPCD did for this project as well). *See* Mariposa FEIR[3] at 3-17. At the CenterPoint Properties Project in Contra Costa County, the EIR assumed a truck travel distance of 28.61 miles per trip in accordance with the Transportation Impact Assessment (TIA) conducted specifically for the project. See Center Point TIA[4] at 3.2-40. 8 CONT

However, for the Tracy Alliance project, the EIR did not provide substantial evidence to justify the per trip truck travel distance assumed or total VMT and associated air pollutant emissions that would be generated by truck and passenger vehicle trips. The EIR omitted any analysis of trip origins and destinations other than to nearby intermodal facilities. As a result, the FEIR significantly underestimates the mobile air pollutant emissions that would be generated by the project.

B. The Mitigation Measures Identified to Reduce Air Quality, Public Health, and Greenhouse Gas Emissions Impacts Are Insufficient.

The EIR's evaluation of potential mitigation measures continues to be deeply flawed. CEQA requires that (1) a project's significant impacts be fully disclosed in detail, (2) mitigation be fully enforceable and not improperly deferred, (3) the City adopt all feasible mitigation to mitigate a project's significant impacts, and (4) the Final EIR provide for an adequate mitigation monitoring and reporting program. Here, Tracy's General Plan provides sound guidance as well: Developments that significantly impact air quality shall only be approved if all feasible mitigation measures to avoid, minimize or offset the impact are implemented." (General Plan Policy AQ-1.2-P14). And to confirm conformity with the San Joaquin Valley Air Pollution Control District's "PM 2.5 Plan for the San Joaquin Valley" and others, the California Air Resources Board requires 9

[3] See Mariposa Industrial Project FEIR: http://www.stocktonca.gov/files/Mariposa_Final_Environmental_Impact_Report.pdf
[4] See CenterPoint Properties Project TIA: https://files.ceqanet.opr.ca.gov/256802-3/attachment/3ntW1kfqcVbzgoQdoNVv726ko6HRswUxmNWQ_yoZq4lO9XUaRXthhKb14ky-QneGDR5TcQq2Dip2JT5x0

that any new project "contain in its design all reasonably available and feasible air quality control measures." 9 CONT

1. Additional Mitigation Measures to Reduce Air Quality and Greenhouse Gas Emissions Impacts Are Reasonable and Feasible.

CEQA requires lead agencies to adopt all feasible mitigation measures to reduce impacts of a development project, even if the environmental analysis finds that the impacts are "significant and unavoidable." Even with the mitigation measures included in this EIR, significant and unavoidable impacts air quality and public health impacts remain. However, that does not allow the EIR or the City to simply conclude that nothing else can be done. CEQA mandates that an agency adopt the most effective and feasible measures to reduce a project's impacts, even if they do not reduce the impacts to a less than significant level. *See* Pub. Res. Code § 21002 (CEQA mitigation includes measures that would "*substantially lessen* the significant environmental effects" of a project); *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 524-25 ("Even when a project's benefits outweigh its unmitigated effects, agencies are still required to implement *all* mitigation measures unless those measures are truly infeasible.") (emphasis added). 10

Further, as discussed below, the EIR's conclusion that the Project's GHG impacts are less than significant is not supported. In fact, under the appropriate GHG threshold, the Project's impacts are clearly significant. The EIR's proposed mitigation measures for the Project's air quality and greenhouse gas impacts, however, fall far short of CEQA's requirements.

There are examples up and down the State of California of warehouse/fulfillment center projects that have been approved and constructed with feasible, effective, and robust measures designed to minimize the impacts of greenhouse gas emissions, reduce the effects of particulate matter and air quality degradation, and increase transportation and energy efficiency. Listed below are examples of recent projects that were approved with such measures in place; their approval documents with the measures to be implemented are included as appendices to this letter: 11

- World Logistics Center: Buildings totaling 40.6MSF on 2,610 acres in the City of Moreno Valley. Approved June 16, 2020. *See* WLC Settlement Agreement attached as Exhibit C.

- CenterPoint Properties Warehouse Project: Buildings totaling approximately 555,537 square feet on a 31.48-acre site in the

unincorporated North Richmond area of Contra Costa County. Approved May 2022. *See* CenterPoint Properties Warehouse Project Conditions of Approval attached as Exhibit D.

- Mariposa Industrial Park: Buildings totaling approximately 3.6MSF on 203 acres in the unincorporated Stockton area of San Joaquin County. Approved December 2022. *See* Mariposa Industrial Park Project Mitigation Monitoring and Reporting Program attached as Exhibit E and Development Agreement attached as Exhibit F. 11 CONT

In addition to the project-specific measures contained in each of the approval documents cited above, other municipalities such as the City of Fontana have adopted citywide ordinances that mandate the inclusion of many of these measures in every warehouse/fulfillment center project over a certain size. See Fontana Ordinance 1891 attached as Exhibit G.

With plentiful examples of effective, reasonable, and feasible warehouse project mitigation, the Project EIR must be revised to include more robust measures with requirements for: (1) context-sensitive site design and facility layout; (2) measures to reduce impacts during facility construction; and (3) measures to reduce impacts during ongoing facility operation. The measures below address issues such as energy efficiency, emissions reduction, particulate matter reduction, and minimizing vehicle miles traveled (which reduces air emissions). Just a few examples are listed below. The attachments to this letter provide detailed measures on these topics. 12

a. Impacts to Cumulatively Considerable Net Increase of reactive organic gases (ROG) and carbon monoxide (CO) During Construction, and ROG and oxides of nitrogen (NOx) During Operation are Significant and Unavoidable and Require Additional Measures. 13

Measures that would help further reduce emissions <u>during construction</u> include:

- Limiting the use of off-road diesel-powered equipment. Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day was proposed. The FEIR responded to this proposed measure by stating that if this limit was enforced, the construction contractor would simply rent multiple pieces of equipment for concurrent or overlapping use and that this measure would not clearly lessen a significant environmental impact. *See* FEIR at 3-115. But the City could easily address this concern by limiting the hours of construction that uses off-road diesel-powered equipment to 10 hours per day. 13 CONT

- Requiring on-road heavy-duty haul trucks to be model year 2014 or newer if diesel-fueled.

- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.

- Providing information on transit and ridesharing programs and services to construction employees.

- Providing meal options onsite for construction employees to minimize travel during meal breaks.

Measures that would help the Project reduce emissions <u>during operation</u> include the following (see Exhibits C through G to this letter for detailed measures on these topics).

- The property owner/tenant/lessee shall ensure that heavy-duty trucks(Class 7 and 8) traveling to and from the project site are model year 2014 or later from start of operations and shall be fully zero-emission by December 31, 2025, with limited exceptions.

  The FEIR rejected a proposal to require all heavy-duty trucks entering or operating on the project site to be zero-emission beginning in 2030. It claims that "[B]ecause of the volume of trucks anticipated to access the site, practical limitations on the owner's ability to regulate this item, and the current cost and availability of electric trucks, the suggested mitigation is not feasible." *See* FEIR at 3-118. This bald statement is insufficient to support a determination that the requirement is "truly infeasible," as CEQA requires. Moreover, similar measures are being required at other approved 14

warehouse facilities (*See* Mariposa MMRP, Exhibit E), so electric truck requirements are feasible and must be fully analyzed in this EIR.

- The property owner/tenant/lessee shall ensure that medium-duty trucks (Class 2 through 6) traveling to and from the project site are zero-emission, with limited exceptions.

- At all times during project operation, owners, operators or tenants shall be required to provide electric charging facilities on the project site sufficient to charge all electric trucks domiciled on the site and such facilities shall be made available for all electric trucks that use the project site.

- Prohibit the reliance on natural gas for the facility.

- Install solar photovoltaics energy system (or other renewable energy systems) should be used to power all of the Project's energy needs (all electric vehicle charging stations) unless sufficient usable space is not available. This will also allow the site to support and serve electric trucks, which will reduce NOx and PM emissions, and further reduce the Air Quality impacts of the Project. 14 CONT

- Require that all forklifts, yard trucks and yard equipment used on-site be electrically powered or zero-emission with sufficient on-site charging equipment.

- Install and maintain, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time.

- Require tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants to use carriers that are SmartWay carriers.

- Install signs along California Avenue, Paradise Road, and Grant Line Road noting that truck and employee parking is prohibited.

- Designate on-site areas for employee pickup and drop-off.

- Appoint a compliance officer who is responsible for implementing all mitigation measures, and providing contact information for the compliance officer to the City, to be updated annually. 14 CONT

b. Exposing Sensitive Receptors to Substantial Pollutant Concentrations are Significant and Unavoidable and Require Additional Measures.

The EIR found that during construction, if all three project phases were constructed concurrently, the proposed project would expose sensitive receptors to CO and diesel particulate matter (DPM) emissions that exceed applicable thresholds even with mitigation incorporated. One obvious mitigation measures to reduce this impact, not adopted in the EIR, is to require the phasing of construction such that construction of all three parcels do not occur at the same time. 15

During operation, the proposed project could expose sensitive receptors to NOx, and DPM levels that exceed applicable thresholds even after incorporation of identified mitigation resulting in a significant and unavoidable impact. As noted below, section, MM AIR-1i in the Final EIR should be modified to specify the details for more robust setbacks and buffers to adjacent uses and minimize operational impacts to residents in the area. More stringent clean fleet requirements are also feasible as discussed above and should be required. Furthermore, the entrance/exit to the project from Grant Line Road should be required to be designed to physically prohibit left turns on to Grant Line Road and include a median on Grant Line Road to ensure all trucks leaving the site are forced to travel west. 16

An additional mitigation measure that should be included in the FEIR is to establish and seed a community benefit fund to mitigate project air quality impacts on affected residents and the Banta Elementary School by retrofitting buildings on their properties. The community benefit fund could be used to retain a contractor to retrofit/install HVAC and/or air filtration systems on properties impacted by the Project. This comment was provided in response to the DEIR, and the Applicant/Developer responded that "[T]he operations of private homes surrounding the project site are not under the purview of the owner or operator of the proposed project; therefore, there is no mechanism available to ensure that filtration systems would be installed and maintained at sensitive receptor locations near the project site. In addition, the effectiveness of air filtration systems heavily relies on continued maintenance and replacing filters. The suggested mitigation is not feasible." *See* FEIR at 3-119. This is nothing more than an excuse that should not be tolerated by the City. The World Logistics Center project in Moreno Valley and the Mariposa Industrial Project in Stockton both provide ready 17

examples of how to establish feasible community benefit programs for retrofitting nearby properties. Residents and the school may request retrofits and it should not be presumed that they would not follow factory instructions for required maintenance. In the case of the Tracy Alliance project, the Applicants may not want to fund such a program, but that does not make the measure infeasible. 17 CONT

2. Existing Mitigation Measures are Weak and Unenforceable.

To follow are descriptions of deficiencies of the existing EIR mitigation measures:

a. MM AIR-1a (NOx Reduction Measure) is Not Effective as Written.

MM AIR-1a states "[F]or all construction equipment and vehicles used during project construction that are less than 250 horsepower, the contractor shall use electric construction equipment and vehicles to the extent feasible, with the exception of handheld generator sets." *See* DEIR at ES-11. The EIR fails to analyze whether strict compliance would be feasible, however. If in fact it would not be feasible in particular instances, the mitigation measure should be modified to identify the "next best" option to reduce emissions in those instances. 18

b. MM AIR-1e (Operational Truck Fleet Routing) Should be Modified to Include More Detail on How Trucks Will be Prohibited From Travelling on Grant Line Road East of the Project Site.

MM AIR-1e should be modified to ensure effectiveness and enforceability. For instance, the EIR should consider egress and ingress design measures to discourage truck traffic on Grant Line Road east of the project site. MM AIR-1e should also be modified to add the following language: "The developer shall prepare a signage plan that includes funding to install large (minimum size of four by six feet) digital signs along Grant Line Road in multiple locations that state trucks are prohibited on the road east of the project site. The City shall work with the developer, California Highway Patrol, and San Joaquin County to ensure that the prohibition is enforced. The developer shall fund the installation of cameras along Grant Line Road by Banta School to enforce and ticket noncompliant truck traffic." The City must include any signage obligations agreed to by the developers in the mitigation and monitoring report to allow these mitigation measures to be tracked and enforced. 19

c. MM AIR-1h (Vegetated Project Site Buffer) Should Include Specific Setback and More Effective Buffer Standards.

MM AIR-1h states that the Applicant "shall demonstrate on their site plans the inclusion of a vegetative buffer along the eastern property line of the project site adjacent to sensitive receptors. Examples of vegetative buffers may include, but are not limited to, trees, bushes, shrubs, or a mix thereof." This measure contains no specifics and will be ineffective at reducing significant health impacts from project emissions. In contrast, an effective mitigation measure would provide metrics of the size of a required vegetated buffer and details on the structures or plant materials in order to ensure the efficacy of the buffer. *See* *https://ww2.arb.ca.gov/sites/default/files/classic/research/apr/past/13-306.pdf*. For example, the plans for a similar warehouse project in the City of Stockton included much more robust buffer requirements, which were described in detail in the Project Development Agreement. *See* Exhibit F at 17 and Exhibit B to the DA. The State Office of the Attorney General and the City of Stockton also entered into a Memorandum of Agreement that requires the City to consider a warehouse ordinance to address a myriad environmental concerns related to warehouse development. Among other measures, the Agreement includes several site design measures related to establishing adequate buffers. *See* Exhibit H at 6 and 7.This is evidence that more effective, feasible buffering mitigation is available and similar measures must be adopted in this EIR. 20

MM AIR-1h should be modified to include specific standards based on California Air Resources Board (CARB) and State Attorney General guidance. The site plans for all phases of the project shall ensure a minimum setback from all on-site truck routes, parking areas, loading docks, and buildings of at least 1,000 feet to the nearest residence or other sensitive receptor. The setback area shall be landscaped with an earthen berm and sizable trees and shrubs that will grow to provide full visual screening that will also provide auditory and toxin-absorbing benefits. Bushes and shrubs are insufficient. The measure should be modified to incorporate these setback requirements and more specific standards on the amount, size, and height of the vegetated areas.

III. The EIR's Analysis of the Project's Greenhouse Gas Impacts is Woefully Insufficient and the Conclusion that Impacts are Less Than Significant is Unsupported.

Climate Change is the defining issue of our time and we are at a defining moment. From shifting weather patterns that threaten food production, to rising sea levels that 21

increase the risk of catastrophic flooding, the impacts of climate change are global in scope and unprecedented in scale.[5]

CEQA serves as one of the State's frontline tools in combatting climate change; careful attention to analyzing and mitigating the air quality impacts and greenhouse gas emissions of projects are paramount to improving community conditions on the local scale and combating climate change at every level. As the Supreme Court found in *Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204 ("*Newhall Ranch*"), it may not make sense to translate a general standard (in that case AB 32's requirement to reduce emissions to 1990 levels by 2020) to a specific project. In fact, *Newhall Ranch* noted that new projects—such as this Project—may require a greater level of emission reduction because "[d]esigning new buildings and infrastructure for maximum energy efficiency and renewable energy use is likely to be easier, and is more likely to occur, than achieving the same savings by retrofitting of older structures and systems." *Newhall Ranch*, 62 Cal.4th at 226. 21 CONT

Since 2010, it has become clear from a scientific perspective that any additional GHG emissions will contribute to a serious and growing climate crisis.[6] Recognizing this reality, in 2018 Governor Brown signed Executive Order 55-18 calling for the state to achieve carbon neutrality as soon as possible and no later than 2045.[7] Given these facts on the ground, the EIR should establish a net zero threshold for new emissions. *See* e.g., CARB 2017 Scoping Plan at 101 ("Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development.")[8] Not only does the EIR neglect to reference EO 55-18, it also fails to explain why this project should not be judged by a significance threshold requiring *no* net increase in GHG emissions, since that is the standard necessary to comply with the State's climate change plans and policies.

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[5] United Nations: https://www.un.org/en/global-issues/climate-change#:~:text=Climate%20Change%20is%20the%20defining,scope%20and%20unprecedented%20in%20scale.

[6] Summary for Policymakers (SPM) presents key findings of the Working Group I (WGI) contribution to the Intergovernmental Panel on Climate Change (IPCC): https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf

[7] Executive Order to Achieve Carbon Neutrality: https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf

[8] California's 2017 Climate Change Scoping Plan: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf?utm_medium=email&utm_source=govdelivery

The DEIR includes a quantitative measure of the Project's GHG emissions, analyzing whether the Project would "generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment." (DEIR a 3.8-35). Additionally, the DEIR includes a qualitative analysis of the Project's GHG impacts, considering whether the Project would "conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases." *See* DEIR at 3.8-46. Both analyses violate CEQA. The FEIR failed to make any changes to the DEIR's analysis of GHG impacts. 21 CONT

First, the Project's quantitative analysis relies entirely on outdated thresholds of significance that are unsupported by substantial evidence because they fail to reflect the State's more recent—and more aggressive—GHG reduction goals. Even on its own terms, the analysis is flawed. The DEIR employs a "Business-As-Usual" ("BAU") analysis that violates the requirements laid out by the California Supreme Court to (1) consider the Project's effects on the State's long-term GHG reduction goals, and (2) adequately explain why the Statewide standards relied upon for the analysis accurately capture the unique characteristics of this Project. *See Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal.4th 204, 223, 225-27. ("*Newhall Ranch*") 22

Compounding the DEIR's entirely insufficient quantitative analysis is an equally insufficient discussion of the Project's consistency with the State's long-term GHG reduction goals. The EIR inexplicitly omits any discussion of the State's most recent 2045 goal of carbon neutrality by 2045. The EIR also impermissibly omits any analysis of the Project's consistency with Assembly Bill 32's 2050 goal, under the guise that such analysis is too speculative. Each of these legal errors is, alone, sufficient invalidate any potential certification of the EIR. 23

A. The Project Impermissibly Relies on Outdated Thresholds of Significance.

The EIR evaluates the Project's estimated GHG emissions under thresholds of significance from 2009 and 2010. The DEIR's BAU analysis compares the Project's estimated emissions to a "business-as-usual" scenario that estimates emissions under the regulatory framework that existed in 2005, assuming that it would apply for the entirety of the Project's life. The specific significance thresholds used in the DEIR are 29% and 21.7% below BAU levels. Therefore, because the DEIR concluded the Project's actual emissions would achieve a greater than 29% reduction from 2005 BAU levels, the Project's GHG impacts were considered insignificant (DEIR a 3.8-42). These two thresholds, however, were created by the California Air Resources Board ("CARB") in 2009 and 2010, respectively, and are a measurement of the Statewide reductions 24

necessary to achieve Assembly Bill ("AB") 32's goal of reducing GHGs to 1990 levels by 2020. (DEIR at 3.6-6, 3.6-7, 3.6-8).[9] The DEIR also cites the 2009 San Joaquin Valley Air District ("Air District") Guidance for its use of the 29% BAU threshold.[10]

Since the publication of these two significance thresholds—which were only intended to ensure the State met its 2020 goal—it has become clear from a scientific perspective that any additional GHG emissions will contribute to a serious and growing climate crisis. The Intergovernmental Panel on Climate Change recently released its "Synthesis Report" for the "Sixth Assessment Report," which is based on the content of three "Working Group Assessment Reports" and three "Special Reports."[11] The Report sounds the alarm on the dire need for rapid and decisive action to ensure global warming does not exceed 1.5ºC compared to pre-industrial levels, which is widely considered the point at which the effects of climate change will be "irreversible."[12] 24 CONT

Recognizing the need to take comprehensive and timely action, in 2018 former Governor Brown signed Executive Order 55-18, calling for the state to achieve carbon neutrality as soon as possible and no later than 2045.[13] In 2022, Governor Newsom signed AB 1279, which codified into legislation the goal of achieving carbon neutrality by 2045.[14] Not only does the EIR neglect to reference this goal (or CARB's accelerated 2030 target identified in the 2022 Scoping Plan), it also fails to explain why this project should not be judged by a significance threshold requiring *no* net increase in GHG 25

[9] *See also* California Air Resources Board, *Climate Change Scoping Plan* (December 2008), https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf.

[10] San Joaquin Valley Air Pollution Control District, *Final Staff Report Addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act*, (December 17, 2009), https://www.valleyair.org/Programs/CCAP/12-17-09/1%20CCAP%20-%20FINAL%20CEQA%20GHG%20Staff%20Report%20-%20Dec%2017%202009.pdf.

[11] Intergovernmental Panel on Climate Change, *AR6 Synthesis Report: Climate Change 2023*, https://www.ipcc.ch/report/sixth-assessment-report-cycle/.

[12] Intergovernmental Panel on Climate Change, *Summary for Policymakers: Synthesis Report of the IPCC Sixth Assessment Report*, https://report.ipcc.ch/ar6syr/pdf/IPCC_AR6_SYR_SPM.pdf.

[13] Executive Order to Achieve Carbon Neutrality: https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf.

[14] Muratsuchi, The California Climate Crisis Act (2021-2022) ("AB 1279").

emissions, since that is the standard necessary to comply with the State's climate change plans and policies across the board. There is no evidence, much less substantial evidence, to conclude that reducing the GHG emissions of new warehouses by 29 percent below 2005 BAU will achieve the state's current goal of net neutrality by 2045. There is not even any evidence that 29 percent below BAU, a threshold designed to meet the goal of reaching 1990 levels by 2020, will achieve the SB 32 goal of 40 percent below 1990 levels by 2030. The EIR simply assumes that it is sufficient to show "continued progress" reducing emissions based on outdated thresholds simply because the City of Tracy has not yet adopted new thresholds for the 2030 target. (DEIR at 23.8-45). Lack of a previously adopted City threshold for 2030 is not substantial evidence for refusing to acknowledge that steeper reductions are required to reach the state's 2030 goals, than assumed to reach the state's 2020 goals. The City cannot bury its head in the sand. 25 CONT

To comply with CEQA's dictates, the EIR must be revised and recirculated to include a significance threshold of *no net increase in GHG emissions* and conclude the Project's massive GHG impacts are significant. As a result, the Project must also be required to incorporate all feasible mitigation measures, including, but not limited to: (1) clean fleet and clean construction equipment requirements, (2) extensive use of on-site solar photovoltaic panels, and (3) installation of electric vehicle charging infrastructure.[15] Proven feasible measures are attached to this letter. 26

B. The EIR's Business-As-Usual Analysis Violates the Requirements set forth by the California Supreme Court in Newhall Ranch.

The EIR's GHG analysis fails to comply with the requirements laid out in *Newhall Ranch*. In *Newhall Ranch*, the California Supreme Court held in 2015 that a lead agency may be able to rely on an AB 32-based business-as-usual ("BAU") threshold to determine whether a project's GHG impacts are significant. However, its holding was subject to two major caveats. First, the Court warned that "over time consistency with year 2020 goals will become a less definitive guide, especially for long term projects that will not begin operations for several years." *Id*. at 223. The Court, in 2015, emphasized that an EIR "may *in the near future* need to consider the project's effects on meeting longer term emissions reduction targets." *Id*. (emphasis added). That was over eight years ago, and it is now 2023. It is patently improper to rely on a threshold for 2020 emissions for a project that will begin operation four years after that date. 27

[15] *See* San Joaquin Valley Air Pollution Control District, *Emission Reduction Clean Air Measures*, https://ww2.valleyair.org/media/ob0pweru/clean-air-measures.pdf.

Additionally, the Court noted that the CARB Scoping Plan implementing AB 32's GHG reduction goals "nowhere related that *statewide* level of reduction effort to the percentage of reduction that would or should be required from *individual* projects." *Id*. at 225-26. Indeed, the Court emphasized that the flawed EIR was using the BAU model "for a purpose *very different* from its original design." *Id*. at 227 (emphasis added). Lead agencies could only rely on the use of a BAU threshold if they provided substantial evidence that "the required percentage reduction from business as usual is the *same* for an individual project as for the *entire* state population and economy." *Id*. at 225-26 (emphasis added). Tellingly, a Draft EIR recently prepared by the City of Tracy in connection with the "Costco Depot Annexation Project" explicitly refused to undertake a BAU analysis because of the Supreme Court's "skepticism that a percentage reduction goal applicable to the State as a whole would apply without change to an individual development project, regardless of its size or location." *See* Costco DEIR at 3.7-18.[16] 27 CONT

The EIR here uses the exact same threshold as the EIR in *Newhall Ranch*, assuming that a 29 percent reduction from BAU projections will render the Project's GHG impacts insignificant. *See* DEIR at 3.8-42. Yet, the EIR has failed to either (1) adequately explain the Project's effect on meeting the State's long-term GHG reduction goals beyond 2020, or (2) provide substantial evidence justifying its use of the Statewide BAU for a large warehouse development that displaces climate-friendly agriculture in the already warehouse-laden San Joaquin Valley, as the Supreme Court requires.

The DEIR utterly fails to "consider the project's effects on meeting longer term emissions reduction targets" beyond AB 32's end-date of 2020. *Newhall Ranch*, 62 Cal.4th at 223. The DEIR misleadingly asserts that it incorporates the State's GHG reduction goals for 2030, as delineated in Senate Bill ("SB") 32 and CARB's 2017 Scoping Plan Update. The DEIR asserts its analysis "addresses consistency with the SB 32 targets and the 2017 Scoping Plan Update with an assessment of the project's reduction from BAU based on emissions in 2030 compared with the 21.7 percent reduction." *See* DEIR at 3.8-32. 28

However, as the EIR itself notes, this 21.7 percent BAU threshold was created years before SB 32 and the 2017 and 2022 Scoping Plan Update and was intended solely to update the State's pathway for achieving its 2020 goal in light of the expected reduction in growth and development caused by the "Great Recession." (DEIR at 3.8-13).

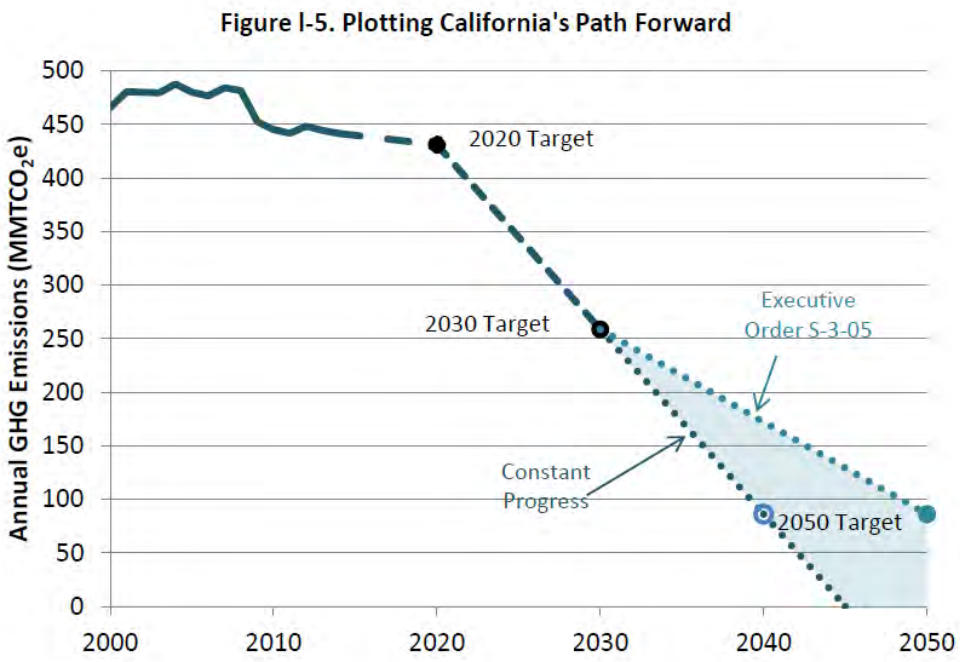
[16] City of Tracy, *Draft Environmental Impact Report: Tracy Costco Depot Annex Project* (September 2022), https://www.cityoftracy.org/home/showpublisheddocument/13855/637989204233470000 .

As delineated in SB 32 and the 2017 Scoping Plan Update, the State's goal for 2030 is to reduce GHG emissions to *40 percent below* 1990 levels. *See* DEIR at 3.8-14. Neither CARB, nor the Air District, nor any other entity, have quantified a BAU threshold needed to ensure the State achieves its 2030 target. The Bay Area Air Quality Management District is in the process of updating its GHG-related thresholds to capture the State's 2030 and 2045 targets, but has not yet completed this process.[17] This 21.7 percent BAU threshold *in no way* encompasses the State's more aggressive 2030 goal. 28 CONT

Nor does the EIR's conclusion the Project's actual 2030 emissions achieve a greater than 40% reduction from BAU levels. *See* DEIR at 3.8-45. A 40% reduction from 2005 BAU levels is not synonymous with reducing Statewide GHGs to 40% below 1990 levels. Otherwise, the 29% BAU threshold would have ensured the State reduced GHGs 29% below 1990 levels, which is clearly not the case. Indeed, since a 29% reduction in BAU levels was needed to simply achieve 1990 levels, then significantly more than a 40% reduction in BAU levels is likely needed to achieve reductions of 40% below 1990 29

[17] Bay Area Air Quality Management District, *CEQA Thresholds and Guidelines Update*, https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines.

levels. The following chart that quantifies and maps California's path to decarbonization is illustrative. *See* DEIR at 3.8-48.



29 CONT

As is evident from the chart, to achieve the 2020 target, the State solely needed to reduce its annual GHG emissions by about 20 MMTCO2e from 2009 levels—the year in which the Scoping Plan and Air District Guidance were published. However, achieving the 2030 target will require a reduction of approximately 200 MMTCO2e from 2020 levels. Significantly more emissions reduction are necessary to achieve the 2030 target than the 2020 target. A simple 11% increase in required reductions from BAU levels is wholly insufficient to ensure the Project does not interfere with the State's 2030 target, given the substantial reductions needed to meet both the 2030 and 2050 targets. Indeed, that that the Project barely achieves a greater than 40% reduction from BAU levels in 2030, and achieves less for the years 2023, 2024, and 2025, indicates its impacts are significant.

At any rate, this warehouse will operate for decades after 2030. Thus, even if the EIR accurately reflects the goals delineated in SB 32 and the 2017 Scoping Plan Update (it does not), the EIR would still be insufficient. Given the warehouse's long life-span, the Statewide GHG goal of carbon neutrality by 2045, as announced by Governor Brown in Executive Order 55-18, and codified in legislation by Governor Newsom in 2022, is entirely relevant. Tellingly, the EIR does not even mention this goal, let alone quantify

the Project's 2045 emissions and analyze whether the Project will interfere with the target, as *Newhall Ranch* requires.[18] 29 CONT

The EIR also fails to provide substantial evidence justifying its use of the Statewide 29 and 21.7 percent BAU thresholds and concluding that impacts are less than significant for this specific warehouse development, which will replace climate-friendly agriculture in the now warehouse-laden San Joaquin Valley. The EIR entirely ignores the significant changes that have occurred in the San Joaquin Valley since 2009, the year the first Scoping Plan and the San Joaquin Valley Air District's recommended GHG thresholds were published. Warehouse development has exploded in San Joaquin Valley, and the State, in the past fifteen years.[19] Warehouses generate enormous amounts of GHG emissions due to the large numbers of diesel-fueled truck trips typically used to make deliveries to warehouses.[20] Crucially, this particular warehouse development will replace climate-friendly agriculture, particularly alfalfa, that can contribute to net neutrality by removing GHGs from the atmosphere.[21] 30

The DEIR takes the position that "substantial evidence needed to support a project BAU threshold can be derived from data used to develop the Scoping Plan inventory and control strategy and from analysis conducted by the ARB to track progress in achieving the AB 32 2020 target." *See* DEIR at 3.8-33. However, in *Golden Door Properties, LLC*

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[18] There is no excuse for failing to consider the Project's hinderance on meeting the State's 2045 carbon neutral goal, given that the Executive Order was made in 2018. At the very least the DEIR should have been revised and recirculated when AB 1279 was signed and when CARB approved its related 2022 Scoping Plan. This new information shows that the Project's GHG impacts will be significant under both thresholds. Moreover, the Draft EIR was fundamentally inadequate for failing to include a discussion of the State's 2045 net neutrality goal.

[19] *See* California Attorney General Xavier Becerra, *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act*," https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf; New York Times, Warehouses Are Headed to the Central Valley, Too (Jul. 22, 2020), available at https://www.nytimes.com/2020/07/22/us/coronavirus-ca-warehouse-workers.html.

[20] Becerra, *Warehouse Best Practices*.

[21] *See* Farm & Ranch Guide, *Alfalfa "Fabulous" in Removing Carbon Dioxide from Atmosphere*, https://www.ars.usda.gov/ARSUserFiles/38020/Alfalfa.pdf; The Alfalfa Project, *Does Alfalfa Sequester Carbon?*, https://thealfalfaproject.com/alfalfa-blog/2017/11/2/does-alfalfa-sequester-carbon.

v. County of San Diego (2018), the Court held a similar efficiency metric was unsupported by substantial evidence *precisely* because it "relie[d] on statewide service population and GHG inventory data" and did "not address the County specifically." 27 Cal.App.5th 892, 904-05. The EIR made absolutely no effort to determine whether this "data" accurately reflects the explosion in warehouse development in the San Joaquin Valley, which has historically been an agricultural-intensive region. Given the warehouse boom has occurred recently and rapidly, the decades-old "data" referenced in the EIR likely failed to encompass this massive change, and the GHG emission implications from it. Moreover, the CARB 2022 Scoping Plan (page 108) found that the SB 32 2030 target must be increased to meet the state's 2045 net neutrality goals. 30 CONT

The DEIR's core justification for its use of the Statewide BAU threshold is that the California Supreme Court's concern that new development may need to do more than existing development to reduce GHGs is unfounded. *See* DEIR at 3.8-33. According to the DEIR "[t]he State's regulatory program is able to target both new and existing development because the two most important strategies, motor vehicle fuel efficiency and emissions from electricity generation, obtain reductions equally from existing sources and new sources." *See* DEIR at 3.8-34. As the DEIR notes, the State's transportation and electricity sectors are by far the leading causes of GHG emissions in the State. The DEIR's argument is unavailing for multiple reasons.

First, the DEIR misrepresents the holding in *Newhall Ranch*. The California Supreme Court did not hold that the *only* reason use of a Statewide BAU threshold may be inappropriate for an individual project is that new projects may need to do more than existing projects to ensure the State meets its goals. Instead, the Court merely cites this as "one ready reason to suspect that the [Statewide] percent reduction is *not* the same." *Newhall Ranch*, 62 Cal.4th at 226. Another great reason why use of the Statewide threshold should not be used is if the project at issue is of a type whose development was unanticipated when the threshold was created. Comparing the actual emissions of a type of project to the emissions the project would have generated under a regulatory framework that was not tailored in any way to address that type of project will likely always result in finding those projects have an insignificant GHG impact. Thus, comparing the Project's actual emissions to the emissions it would have generated under the 2005 regulatory framework cannot provide substantial evidence the Project's GHG impacts are insignificant. 31

Second, the Court's stated reason for why use of the Statewide threshold may be inappropriate for individual projects applies with full force here. The Court's held that new projects may need to do more than existing projects because "[d]esigning new building and infrastructure for maximum energy efficiency and renewable energy use is 32

likely to be easier, and is more likely to occur, than achieving the same savings by retrofitting of older structures and systems." *Newhall Ranch*, 62 Cal.4th at 226. Designing new warehouses to incorporate climate-friendly components like photovoltaic solar panels, alternatives to reliance on natural gas and electric vehicle charging infrastructure is much easier than attempting to retroactively require older warehouses to implement such measures. Given this relative ease of implementation, and the serious need to reduce GHG emissions associated with warehouses, new warehouses do, in fact, need to do more than existing warehouses to ensure the State achieves its goals. Thus, even under the DEIR's inaccurate reading of the *Newhall Ranch* holding, the DEIR has failed to provide substantial evidence demonstrating the Statewide threshold is appropriate for this Project.

32 CONT

The DEIR nonetheless argues that new projects, in general, do not need to do more than existing projects, because the State's "two most important strategies" for GHG reduction, fuel efficiency and decarbonization of the electricity sector, apply equally to new and existing projects. This argument fails because it does not differentiate warehouses from any other types of projects. Under the DEIR's logic, the Statewide BAU threshold would be appropriate for *any* project, regardless of its particular characteristics, simply because the State's fuel efficiency and electricity generation standards apply equally to new and existing development. However, in *Golden Door*, the Court took issue with the metric used by the County because it "allow[ed] the threshold to be applied evenly to most project types" and "d[id] not account for variations between different types of development." 27 Cal.App.5th at 905. This Project exemplifies this flawed logic. Projects that generate substantial emissions from diesel-fueled trucks, such as warehouses, cannot be lumped in with projects that do not generate diesel-fueled trips, simply because the State's fuel efficiency standards apply to all vehicles.

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Given the explosion of warehouse development, with much of it occurring on agricultural lands, since the creation of the threshold used in the EIR, a 29 percent reduction from BAU is not sufficient to ensure this Project will not create a cumulatively considerable GHG impact. The DEIR must utilize a no net increase significance threshold to ensure this Project will not interfere with the State's aggressive 2030 goal and its 2045 goal of carbon neutrality. Under this threshold, the Project's impacts are significant, and must be mitigated with comprehensive measures.

C. The FEIR Lacks Crucial Analysis of the Project's Consistency with the State's Aggressive GHG Reduction Goals and the Project Conflicts with those Plans and Policies.

The EIR concludes that Impact GHG-2, Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing GHG emissions, is less than significant. The DEIR's qualitative analysis purports to consider the Project's consistency with the State's plans, policies and regulations adopted "for the purpose of reducing the emissions of greenhouse gases." *See* DEIR at 3.8-46. However, the DEIR's analysis consists of simply listing *some* of the State's applicable GHG reduction goals, explaining the State's general regulatory framework, and asserting in a wholly conclusory manner that this regulatory framework will ensure the State meets its various goals. Whether the GHG-intensive nature of this Project will interfere with the State meeting its goal is ignored. Under the logic of the DEIR and FEIR, no Project would ever have a significant GHG impacts. CARB, moreover, has emphasized that its Scoping Plans makes clear "that in CARB's expert view, local mitigation is critical to achieving climate goals and reducing greenhouse gases below levels of significance." Exhibit I at 1 fn 1 (CARB scoping letter on similar warehouse project); *see also* CARB, 2022 Scoping Plan for Achieving Carbon Neutrality at 35. The EIR's failure to adopt feasible measures to reduce GHG emissions demonstrates that it is not consistent with State plans. *See e.g.*, 2022 Scoping Plan at 110 (deployment of renewable energy and transitioning to electrification is a key component of meeting the state's goals). 34

The DEIR's omission of two crucial analyses related to the State's long-term goals is particularly concerning. First, as discussed above, the DEIR entirely omits any analysis of the Project's consistency with Executive Order 55-0-18 and AB 1279, which set a goal of carbon neutrality for 2045. Similarly, the EIR fails to explain how the Project is consistent with the 2022 CARB Scoping Plan, which is the State's roadmap to address climate change and cut greenhouse gas emissions by 85% to achieve carbon neutrality in 2045 as required by AB 1279. *See* https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf and https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf. The 2045 goal of carbon neutrality is the most relevant goal here, given the long life-span of the Project and the fact these are the most recently announced Statewide GHG reduction goals. The DEIR's and FEIR's failure to analyze the Project's consistency with this 2045 goal, alone, violates CEQA. 35

Second, the DEIR notes that Executive Order S-3-05 set a goal for 2050 of reducing GHGs 80% below 1990 levels, but asserts "at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed." *See* DEIR at 3.8-51. Nevertheless, the DEIR still concludes that the Project 36

"would further" this goal because "it can be anticipated that operation of the project would be required to comply with whatever measures are enacted that State lawmakers decide would lead to an 80 percent reduction." *See* DEIR at 3.8-51, 3.8-52. However, the California Supreme Court has explicitly rejected previous attempts to defer analysis by "simply stating information will be provided in the future." *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 440-41; *see also Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 398-99 ("that precision may not be possible … does not mean that no analysis is required .. an agency must use its best efforts to find out and disclose all that it reasonably can"). 36 CONT

Here, the DEIR and FEIR have identified information relevant to determining whether this Project will conflict with the 2050 goal. For example, the DEIR cited studies showing that "aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required" to meet the 2050 goal. *See* DEIR at 3.8-47. The DEIR also noted that achieving the State's GHG goals may be inhibited by "new trends ... such as the increasing importance of web-based shopping… and the increasing effect of web-based applications on transportation choices." *See* DEIR at 3.8-49. This Project, a large warehouse development in the Central Valley, is a prime example of the intersection of the increase in warehouse-centered transportation and the need for significant electrification to ensure such transportation does not inhibit the State's goals. Based on this information alone, there is a possibility the Project will interfere with the State's achievement of the 2050 goal, absent comprehensive mitigation measures. The City may not simply assert the Project's impacts are insignificant because the state Legislature *may* enact stringent measures sometime *in the future*. The Project's impacts must be analyzed, and mitigated for, now. The failure of the DEIR and FEIR to include any such analysis therefore violates CEQA. 37

D. The EIR Analysis Underestimated VMT from Warehouse Vehicle Trips.

As described in a previous section of this letter, the FEIR air quality analysis used CalEEMod default parameters for trip length, trip type, and trip percentage to estimate the project's VMT. According to page 3-44 of the FEIR, the CalEEMod default travel distance of 11.35 miles per trip, on average, was used to estimate emissions from both passenger vehicle and truck trips. However, truck and vehicle trips associated with this particular Project could well exceed those lengths, as described in the Baseline letter. In addition, based on the proposed use of the warehouses, it would be reasonable to assume that 100 percent of the passenger vehicle trips will be worker commute trips at an average distance of 14.7 miles (instead of the 11.35 miles) and all other work-related trips would 38

be generated by the warehouse trucks. Therefore, potential emissions are severely underestimated. 38 CONT

As discussed above, the EIR did not provide substantial evidence to justify the assumptions used (trip distance, in particular) to calculate total VMT generated by the project and it omitted analysis of potential trips. As a result, the EIR's conclusion that impacts would be Less Than Significant is dubious and unsupported. 39

IV. The EIR Fails to Properly Analyze Energy Impacts.

The EIR's conclusion that the Project would be consistent with climate change plans and policies, and therefore would have less than significant climate change impacts, is not supported by substantial evidence. The DEIR traffic analysis states that this project will generate approximately 3,205 new daily passenger vehicle trips and 1,510 daily truck trips. Transportation is one of the biggest emitters of GHGs at 27% of total U.S. emissions by economic sector.[22] Yet, because of the faulty GHG emissions analysis, insufficient acknowledgement of the Project's contributions to achieving carbon neutrality, and the incorrect conclusion that the Project's GHG emissions are Less Than Significant, the EIR adopts no mitigation measures to reduce GHG emissions from truck and vehicle trips. The EIR contains mitigation measures aimed at achieving a minimum of energy efficiency, but not nearly the potential that could be achieved through a commitment to PV installation and a greater focus on electrification. Without appropriate mitigation, the Project will continue to be served by diesel trucks and gasoline-powered cars, potentially for decades to come. As noted in the Air Quality section of this letter, there are numerous feasible mitigation measures that could improve the project's energy efficiency and reduce the Project's climate change impacts that should be implemented into this EIR. 40

This refusal to identify or require any mitigation for these impacts also undermines the EIR's conclusion that the Project will have less than significant energy impacts. A project will have significant energy impacts if the Project will: 41

[22] US Environmental Protection Agency's Sources of Greenhouse Gas Emissions: https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#:~:text=The%20primary%20sources%20of%20greenhouse,share%20of%20greenhouse%20gas%20emissions.

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Because the project includes basic energy efficiency measures and doesn't incorporate renewable energy production on site despite ample opportunity to do so, it cannot be assumed that the project's energy impacts would be less than significant. In fact, *League to Save Lake Tahoe et al. v. County of Placer* (2022) 75 Cal.App.5th 63, 167-68 held that that project's energy analysis was deficient because the EIR failed to analyze the project's potential use of renewable energy. The requirement to analyze renewable energy is thus a procedural requirement of CEQA.

The Tracy Alliance Project will use approximately 446,864 gallons of diesel fuel by construction equipment and approximately 155,123 gallon of gasoline and diesel fuel for employee vehicle travel over the duration of construction. *See* DEIR at 3.6-23. Furthermore, once operational, the Project will utilize 805,478 gallons of gasoline and diesel fuel per year. The Project will use 16,056,160 kWh of electricity per year, in ongoing operations, which is enough electricity to power more than 2,200 average California homes annually[23]. The project would also use approximately 21,072,650 kBTU of natural gas per year. *See* DEIR at 3.6-23. 41 CONT

By failing to analyze the project's ability to generate renewable energy through use of solar photovoltaics, the EIR is also failing to assess whether the energy needs of the project could be served by electricity generated on site and either eliminate or reduce the need for electricity from the grid, as well as reduce or eliminate the use of natural gas usage on site. The reduction of natural gas usage at the project site would reduce greenhouse gas emissions by eliminating/reducing gas combustion. Yet the EIR concludes that the Project's operational energy use would not be wasteful because "[t]he the design of the proposed project would facilitate the future commitment to renewable energy resources. Therefore, building energy consumption would not be considered wasteful, inefficient, or unnecessary." *See* EIR at 3.6-24. Without considering the potential for generating energy onsite *at the beginning of operations* (as opposed to some point in the future that may or may not materialize) and the reduced need for energy from the grid and reduction or elimination of the need for natural gas, there is absolutely no

[23] U.S. Energy Information Administration: https://www.eia.gov/consumption/residential/reports/2009/state_briefs/pdf/ca.pdf

support for the EIR's conclusion that operational energy use is not wasteful and would have less than significant impacts. The attachments to this letter indicate that it is entirely feasible for warehouse projects such as this to serve all or nearly all of the project's electricity needs with solar PV panels, rather than electricity from the grid. 10 CONT

With respect to transportation, the project could be designed to provide ample electric vehicle (EV) charging stations for cars, on-site vehicles and equipment, as well as for heavy-duty trucks to support a rapid accommodation of EVs. The EIR does not evaluate these feasible efforts, contrary to CEQA. 42

In short, CEQA requires more when it comes to analyzing a project's energy impacts and identifying mitigation measures that would support a "less-than-significant" conclusion. Here, the Project would clearly use enormous amounts of energy, and there are numerous feasible mitigation measures referenced earlier in this letter and included as Appendices C through G that could make the Project more energy-efficient. 43

V. The Project Does Not Comply with the Tracy General Plan

The Project is inconsistent with numerous General Plan policies related to air quality and GHG emissions, including the following:

AQ-1.2-P3 ("Developers shall implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects."). The Final EIR at 4-14 states that the proposed project would be required to implement to reduce air pollutant emissions to the extent feasible. As illustrated in this letter, additional mitigation measures are required in order to accurately suggest that best practices are being followed and implemented. Until such time, the Project remains inconsistent with this policy. 44

AQ-1.2-P6 ("Installation of solar voltaic panels on new homes and businesses shall be encouraged.") The developer has opted to comply with the City's minimum requirement to design the buildings to structurally accommodate future installation of a rooftop solar system, but is not taking the logical step of installing the panels as noted in the policy. Therefore, the project remains inconsistent with the policy. 45

AQ-1.2-P12 ("New sources of toxic air pollutants shall prepare a Health Risk Assessment as required under the Air Toxics "Hot Spots" Act and based on the results of the Assessment, establish appropriate land use buffer zones around those areas posing substantial health risks."). MM AIR-1h does not specify what an appropriate buffer distance would be or identify what type/amount of vegetation would be sufficient to 46

mitigate the impacts of the toxic air contaminants generated by the project on nearby sensitive receptors. Until such time that is done, the Project remains inconsistent with this policy. 46 CONT

AQ-1.2-P14 ("Developments that significantly impact air quality shall only be approved if all feasible mitigation measures to avoid, minimize or offset the impact are implemented."). As identified previously, there remain dozens of additional feasible mitigation measures that could be implemented in order to further reduce the air quality and GHG emissions impacts of the Project. Until such time all feasible additional measures are considered, the Project remains inconsistent with this policy. 47

AQ-1.4-P3. ("The City shall be proactive in reducing greenhouse gas emissions from City operations as well as new or renovated development.").

The EIR fails to demonstrate the Project's consistency with these policies, and such inconsistencies mean the City cannot, legally, approve the Project. State Planning and Zoning Law (Gov't Code § 65000 et seq.) requires that development decisions be consistent with the jurisdiction's general plan. See Gov't Code §§ 65860 (requiring consistency of zoning to general plan), 66473.5 & 66474 (requiring consistency of subdivision maps to general plan), and 65359 and 65454 (requiring consistency of specific plan and other development plan and amendments thereto to general plan). Thus, "[u]nder state law, the propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." *Resource Defense Fund v. County of Santa Cruz* (1982) 133 Cal.App.3d 800, 806. Accordingly, "[t]he consistency doctrine [is] the linchpin of California's land use and development laws; it is the principle which infuses the concept of planned growth with the force of law." *Families Unafraid to Uphold Rural El Dorado County v. Board of Supervisors* (1998) 62 Cal.App.4th 1332, 1336. 48

It is an abuse of discretion to approve a project that "frustrate[s] the General Plan's goals and policies." *Napa Citizens for Honest Gov't v. Napa County* (2001) 91 Cal.App.4th 342, 379. The project need not present an "outright conflict" with a general plan provision to be considered inconsistent; the determining question is instead whether the project "is compatible with and will not frustrate the General Plan's goals and policies." *Napa Citizens*, 91 Cal.App.4th at 379. Here, the proposed Project does more than just frustrate the General Plan's goals. It is directly inconsistent with numerous policies in the General Plan. Consequently, the Project cannot be approved in its current form. Conflict with General Plan policies also presents an environmental impact requiring further CEQA analysis in that the Project does indeed cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation

adopted for the purpose of avoiding or mitigating an environmental effect (CEQA Guidelines Appendix G "Land Use and Planning" section). 48 CONT

VI. Conclusion

As set forth above, the EIR does not satisfy CEQA's basic requirements. At a fundamental level, it fails to provide an adequate and complete analysis of Project impacts and feasible mitigation measures. For these reasons, the Sierra Club Delta-Sierra Group respectfully requests that the City deny the Tracy Alliance project as proposed. Furthermore, we'd like to reiterate the request that the City of Tracy consider the bigger questions of how much more warehouse development the City and its residents should really be subjected to, and urges the City Council to explore this issue in a more comprehensive fashion. 49

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Heather M. Minner

Exhibits:

A. Current and Proposed industrial/warehouse development along the I-205 corridor (Tracy/Manteca/Lathrop) dated October 18, 2022.
B. Sutton, Patrick and Yilin Tian, Air Quality Specialists, Baseline Environmental Consulting. April 10, 2023.
C. World Logistics Center Settlement Agreement.
D. CenterPoint Properties Warehouse Project Conditions of Approval. May 2022.
E. Mariposa Industrial Park Project Mitigation Monitoring and Reporting Program. December 2022.
F. Mariposa Industrial Park Project Development Agreement.
G. City of Fontana Ordinance 1891, mandatory measures for warehouse/fulfillment center projects.
H. Bonta, Rob, Attorney General of California and City of Stockton, *Memorandum of Agreement*. December 2022
I. California Air Resources Board (CARB), *Comment letter on the Notice of Preparation (NOP) for the Pepper 210 Commerce Center Project DEIR*. February 20, 2023.

cc: Sierra Club, Delta-Sierra Group of the Motherlode Chapter
Tracy City Manager Michael Rogers (via email)
Tracy City Clerk Adrianne Richardson (via email)

Shute, Mihaly, and Weinberger LLP (SHUTE)

Response to SHUTE-1

The commenter provides introductory statements as well as a general statement of opposition to the proposed project, and also requests that the City pause on approving any new warehouse projects.

This comment is noted and acknowledged. Because it does not raise any specific project-related environmental issues under CEQA, no further response is required.

Furthermore, to the extent the commenter opines on the merits of the proposed project, this is not subject to CEQA. However, the commenter's opinion and/or generalized concerns about the merits of the proposed project as well as other new warehouse projects more generally are hereby noted in this Final EIR for informational purposes and will be provided to the City decision-makers for consideration. No further response is required.

For informational purposes, the following is noted. As discussed in Master Response 1, the City adopted the NEI Specific Plan to implement a balanced growth strategy consistent with the long-term land use vision for the City and its planning area. The NEI Specific Plan directs growth as envisioned by the City in an efficient and cost-effective manner, and balances appropriate land uses with well-planned supporting infrastructure. The NEI Specific Plan is intended to improve the jobs/housing balance by encouraging the development of industrial, retail, and service-related employment opportunities in proximity to existing freeway interchanges, while taking appropriate land use compatibility considerations into account.

As part of the NEI Specific Plan, the northeastern sector of the City has been identified for industrial growth. With direct access to Interstate 205 (I-205) and rail transportation, the NEI Specific Plan area is ideally situated to attract and support business without the need for major infrastructure expenditures, and appropriately directs industrial uses to be sited in proximity to other similar uses and at a safe and reasonable distance from sensitive receptors. This enables the City to facilitate goals of economic development and employment generation, while also helping to ensure the availability of lands in other locations in the City (and its SOI) for non-industrial uses; this encourages an appropriately diverse and balanced approach to land use consistent with the City's General Plan.

The NEI Specific Plan area is intended for high-quality industrial and commercial sites that would attract businesses to the City. It provides a flexible phasing program that allows market forces to dictate reasonable growth increments, while ensuring that agricultural properties remain devoted to agricultural uses until ready to develop. The proposed project is immediately adjacent to the NEI Specific Plan area, which boundary runs along Paradise Road and Grant Line Road. It is consistent with its existing City of Tracy General Plan land use designation of Industrial; this reflects the long-planned urban development vision for the project site, which contemplates a variety of light industrial uses including warehousing and distribution. The project site would be annexed into the NEI Specific Plan area, representing a logical expansion of the NEI Specific Plan vision. The proposed project has been designed to incorporate applicable NEI development standards and design guidelines; accordingly, the proposed project would be consistent with the urban, industrial character of the NEI Specific Plan area.

See also Response to SIERRA 1-11.

Response to SHUTE-2
The commenter describes the proposed project objectives, design, and background information such as anticipated approvals as well as other warehouse development in the area in the City of Tracy as well as the broader San Joaquin Valley. The commenter states that the City should not approve the proposed project, because the cumulative health risk impacts from this project and other similar projects would primarily impact the Banta community, which it states is "currently more burdened than 72 percent of California's census tracts in terms of air- and waterborne pollutants." The commenter requests the City to adopt a warehouse ordinance that would set requirements for all warehouse-type development, including the proposed project. The commenter asserts that the Tracy Alliance EIR does not fully analyze the project-related effects on air quality, GHG emissions, and public health, and fails to identify or adopt adequate mitigation measures to reduce the proposed project's significant impacts (including a failure to conduct an HRA for later phases of the proposed project), and therefore requests that the Draft EIR be recirculated.

To the extent the comment makes general statements about the City's discretion to consider approval of the proposed project as well as the request for a Citywide warehouse ordinance, and raises policy considerations about approval of new warehouse development in Tracy and the broader San Joaquin Valley generally, these are not within CEQA's purview. These comments are hereby noted in this Final EIR for informational purposes and will be forwarded to City decision-makers for consideration as part of the public hearing process on the project; no further response is required. See also Responses to SIERRA 1-11 and SIERRA 2-3. Regarding the commenter's statements about the scope of analysis, as described in Response to SIERRA-1-3 and otherwise in this Final EIR (including, without limitation, multiple Responses to San Joaquin Valley Air Pollution Control District [Valley Air District-2] and multiple Responses to GSEJA) as well as the updated Errata, the Draft EIR for the proposed project robustly evaluated all potential air quality and GHG emissions impacts and identified feasible mitigation where necessary. Specifically with respect to potential health risks, the proposed project's potential to expose sensitive receptors to elevated concentrations of TACs was fully analyzed pursuant to applicable CEQA requirements and feasible mitigation was identified under Impact AIR-3 in the Draft EIR. See also Response to SIERRA-1-4 through SIERRA-1-6, for more details addressing the adequacy of the air quality analysis prepared for the proposed project and related mitigation. The Draft EIR and Final EIR for the proposed project (1) appropriately considered mandated compliance with a robust regulatory framework (including, without limitation, citing relevant General Plan policies as well as guidance from ARB and the Valley Air District) and set forth a thoughtful consistency analysis related thereto; (2) fully disclosed all significant impacts; (3) identified all feasible mitigation measures to mitigate, avoid or reduce the identified significant impacts; and (4) included a summary of all such measures that will be incorporated into a MMRP that will be adopted by the City Council in connection with its certification of the Draft EIR and thereafter imposed on the proposed project as enforceable conditions of approval.

With respect to the health risk impacts, as detailed in the Draft EIR and Response to SHUTE-7, the analysis fully considered and disclosed the health risk impacts associated with all phases of the proposed project. See Response to GSEJA-3 for additional information as to how the health risk

impacts were evaluated and disclosed with respect to each phase of the proposed project, as well as information regarding Environmental Justice considerations.

See Responses to Valley Air District 2 and multiple Responses herein regarding the numerous mitigation measures as well as other enforceable conditions of approval that would be imposed on or otherwise incorporated into the proposed project to reduce health risk and other air quality impacts to the extent feasible. For example, MM AIR-1h imposes a requirement to install vegetative buffers, the specifics of which would be selected by the City. For example, text in MM AIR-1h states, "Examples of vegetative buffers may include, but are not limited to, trees, bushes, shrubs, or a mix thereof." The commenter's assertion that high walls or berms would be more appropriate is not accurate because they do not provide substantial evidence explaining how a high wall or berm would be categorically different from a vegetative buffer. A vegetative buffer would achieve the same purpose as a berm or high wall by preventing direct exposure of sensitive receptors to air pollutants. Therefore, as discussed more fully throughout this Final EIR, MM AIR-1h would appropriately and feasibly address the concern related to the proposed project's potential to locate sources of TACs near sensitive receptors.

In addition, the use of heavy-duty trucks meeting a 2013 low-NO_X standard during project operations, as required by MM AIR-1d, would significantly reduce NO_X and health risk impacts related to TACs, which the commenter identified as a concern. Furthermore, the requirements in MM AIR-1i would ensure the proposed project includes EV charging infrastructure pursuant to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2 in all parking areas during operation, which would allow for any future electric trucks or vehicles to charge on-site. See Response to SHUTE-6 for information that explains the basis for the City's determination that requiring a fully zero-emission truck fleet to be utilized during project operations is not feasible.

Response to SHUTE-3
The commenter states background information about the importance of considering the regional air quality basin and identifies existing sources (such as industrial uses as well as on- and off-road mobile sources) and other factors (such as the mountains surrounding the San Joaquin Valley Air Basin) that contribute to air quality effects. The commenter also notes that the Air Basin is in nonattainment for several standards, and provides examples of how air pollution can trigger or contribute to health problems. The commenter notes that heavy-duty truck operation and the use of diesel-powered generators are sources of air pollution and TACs, and claims that the Draft EIR did not clearly quantify in the emissions calculations the amount of diesel generators to be used at the project site. The commenter also asserts that the Draft EIR failed to disclose that truck refrigeration units (TRUs) or cold storage uses could be included in the proposed project and goes on to state that sources of air pollutants associated with TRUs and cold storage uses were not analyzed in the Draft EIR. The commenter restates the the Draft EIR did not adequately disclose or anayze the proposed project's air quality impacts or provide feasible mitigation measures to address the foregoing concerns. The commenter refers to a technical analysis that accompanied its comment letter (Baseline analysis) that purports to describe flaws in the Draft EIR's analysis, such as unsubstantiated and incomplete calculations for evaluating emissions during project operations.

As described in the Project Description of the Draft EIR and Response to GSEJA-31, the proposed project would not include cold storage or the use of TRUs. Moreover, while not required under CEQA, the City has agreed to impose, and the project applicants have agreed to accept an enforceable condition of approval that would prohibit cold storage uses as well as the use of TRUs unless further CEQA review was conducted. (See updated MMRP.) See also Response to SHUTE-5.

As described in the Project Description of the Draft EIR, no diesel generators would be used during operations because the proposed project would connect to electrical power lines and would purchase power from the local energy provider. As such, the air quality analysis prepared for the proposed project as set forth in the Draft EIR did not improperly omit this source in the analysis. See also Response to SHUTE-4.

As described in Responses to AENV-15, SHUTE-5, and other multiple Responses herein, and detailed more fully in Section 3.4 Air Quality of the Draft EIR and as otherwise noted in this Final EIR, many of the mitigation measures the commenter is requesting be imposed would be implemented by the proposed project. In addition to the mitigation measures described in the Draft EIR, the City has agreed to adopt, and the project applicants have agreed to implement, additional mitigation measures and other enforceable conditions of approval that would further reduce emissions in this regard. See MMs AIR-1e, AIR-1f, AIR-1g, AIR-1h, and AIR-1i as well as COAs Nos. 1 through 10 (see updated MMRP). No revisions to the Draft EIR are required.

Response to SHUTE -4

The commenter states that the Draft EIR did not adequately analyze the emissions from diesel generators during operations, and that the HRA prepared for the proposed project is therefore inadequate.

See Response to SHUTE-3. Based on currently available information, it is not anticipated that the proposed project would use diesel generators during operation, and instead as described in Section 3.6 Energy of the Draft EIR, the proposed project would be served electricity by a local provider. Because the proposed project does not contemplate the use of diesel-powered generators during operations, it would be speculative to assume otherwise. Instead, the Draft EIR properly identified another power source, and fully evaluated the potential air quality impacts related thereto as required under CEQA. No further response is necessary.

For informational purposes, the following is noted. To the extent this decision changes in the future, prior to use during project operations, the relevant project applicant would be required to acquire the necessary permits from the Valley Air District and operate the generators according to their specifications, standards and other mandates pursuant to a comprehensive regulatory framework. In the event that a permitted source is included at a later date, the Valley Air District would evaluate potential health risk impacts as part of the permitting process and would require the use of best available technology to reduce environmental exposure to the extent feasible. Moreover, while not required under CEQA, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval that would prohibit the use of diesel-powered generators during operations unless further CEQA review is conducted at the time of the request. (See updated MMRP.)

Response to SHUTE-5
The commenter states that the potential for cold storage and the use of TRUs was not analyzed in the Draft EIR and there should be a mitigation measure or condition of approval prohibiting cold storage and the use of TRUs during operation.

See Response to SHUTE-3. The proposed project would not include cold storage uses or the use of TRUs given the relatively limited market for these types of uses (which already exist primarily in other less expensive areas such as Modesto and Stockton). Because the proposed project does not contemplate cold storage uses or the use of TRUs, the Draft EIR was not required to evaluate the impacts of these uses and to do so would have been speculative. Moreover, CEQA does not require the incorporation of mitigation to prohibit uses not contemplated or reasonably foreseeable to occur. Nevertheless, while not required by CEQA, the City is willing to impose, and the applicants are willing to accept the incorporation of an enforceable condition of approval that prohibits cold storage and the use of TRUs during project operations unless further CEQA review is conducted at the time of the request.

Response to SHUTE-6
The commenter states that the unmitigated NO_X emissions from heavy-duty trucks would be 75 percent lower due to standards in place in 2010 and MM AIR-1d in the Draft EIR would not actually reduce NO_X emissions from heavy-duty trucks by 90 percent, and thus the Draft EIR overestimates the degree of mitigation that would occur. The commenter states that MM AIR-1d should be modified to reflect accurate reductions. The commenter also states that MM AIR-1d should be modified to require the use of heavy-duty trucks equipped with 2014 or later model engine years when using trucks that meet Low NO_X standards is not immediately feasible, and, further, that CEQA requires mitigation that mandates use of zero-emission trucks as they become available as well as mitigation that would reduce emissions from light and medium-duty vehicles.

As explained in detail in the Draft EIR, including in Section 3.3 Air Quality, page 3.3-41, the reduction in NO_X emissions from MM AIR-1d is based on CalEEMod modeling results; contrary to the commenter's assertion, a basic 90 percent reduction in unmitigated NO_X emissions was not applied to determine the mitigated operational NO_X emissions. The FEIR states that MM AIR-1d would require the use of a HHD truck fleet that meets the 2013 Optional Low-NO_X Standard of 0.02 gram of NO_X per brake horsepower-hour, which would represent an approximately 90 percent reduction in NO_X emissions from the current heavy-duty truck NO_X standard of 0.2 gram of NO_X per brake horsepower-hour. As a result, the analysis is simply stating that MM AIR-1d would be more stringent than current regulations. The FEIR does not quantify the reductions that could occur from the implementation of MM AIR-1d.

As explained and expressly noted as a footnote in the Draft EIR, the ARB Heavy-Duty Low NO_X web page (https://ww2.arb.ca.gov/our-work/programs/heavy-duty-low-nox/about) details that in 2013 California, "…established optional low-NO_x standards with the most aggressive being 0.02 g/bhp-hr, which is 90 percent below the current standard." The optional NO_x standards were developed to pave the way for mandatory standards by encouraging manufacturers to develop and certify low NO_X engines and incentivizing the purchase of certified low NO_X engines." As the ARB explains, "In its public hearing of August 27, 2020, CARB staff proposed, and the Board approved for adoption the

Omnibus regulation, which established stringent NO_X engine emission standards that are 90 percent below current levels on existing certification cycles and lower NO_X standards on new certification cycles to control emissions over a broader range of vehicle operation, including idling, low load, and highway operation. In addition, the above-referenced regulation revised the heavy-duty in-use testing program to make it more effective in ensuring compliance with the in-use emission standards over a broader range of vehicle operation and lengthened the useful life and emissions warranty period requirements to reflect the longevity of heavy-duty vehicles. The regulation was approved by the Office of Administrative Law on December 22, 2021, with an effective date of December 22, 2021." Therefore, contrary to the commenter's suggestion, the assumptions utilized in the modeling were correct and the Draft EIR does not overstate the effects of MM AIR-1d. Additionally, the ARB last updated this standard in 2020, whereas the NOP for the Draft EIR was published in August 2020. As a result, the Draft EIR was prepared according to the most recent information and regulations at the time of publication.

The commenter requests that the City impose an obligation to use zero-emission heavy-duty trucks during operation. Such a measure is not feasible; among other reasons, neither the project applicants nor the City could effectively impose, implement and enforce such an obligation for the life of the proposed project, given the current very significant cost and lack of widespread availability of such vehicles and the fact that the project applicants would not own the truck fleets. Instead, it is reasonable to conclude that project operations, including the truck fleets utilized by project operators, would adhere to the State of California's comprehensive regulatory framework, including applicable NO_x standards for vehicles. The ARB, as the expert State agency that is charged to promote and protect public health, welfare, and ecological resources, continues to pursue and refine regulations to effectively reduce air pollutants while recognizing and considering effects on the economy. The ARB is the lead agency for climate change programs and oversees all air pollution control efforts in California to attain and maintain health-based air quality standards. For example, the ARB continues to revise the heavy-duty in-use testing program to ensure that newer trucks would still meet the applicable NO_X standards. This Statewide, comprehensive approach, based on robust data evaluated by the public agency with the expertise in this complicated area, is considered the most effective and feasible means of reducing emissions associated with heavy truck use over time.

As described in detail in Responses to AENV-15, SIERRA-1-6, and Section 3.3, Air Quality, the Draft EIR includes MM AIR-1d, which requires the use of a clean truck fleet that meets the ARB's adopted 2013 Optional Low-NO_X Standard of 0.02 gram of nitrogen oxide (NO_X) per brake horsepower-hour for all heavy-duty trucks during operation of the proposed project. This measure was recommended by the Valley Air District in their NOP comment letter dated September 30, 2020, and the City has already agreed to impose and the project applicants have already agreed to implement this measure. (See updated MMRP.)

In addition, consistent with the commenter's request, the Draft EIR recommended feasible mitigation to reduce emissions from passenger vehicles. For example, the proposed project would be required to incentivize alternative transportation methods pursuant to MM TRANS-1a, which requires the creation and implementation of a TDM program that incorporates telecommuting for administrative staff, as well as the provision of designated parking spaces for carpool vehicles, a

transit stop along the project frontage at Grant Line Road, the installation of bicycle lanes and sidewalks along the project frontages, the installation of on-site bicycle racks and showers for employees to use, and the incentivizing of carpools. Approval and implementation of the TDM would be required to occur prior to the issuance of the first building permit for the proposed project. The Draft EIR does not specifically address mitigation related to medium-duty trucks and vehicles that could be operated on the project site. However, as detailed in Response to SHUTE-6 and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as the Final EIR, the suggested mitigation is not required under CEQA, because this mitigation could not be feasibly implemented by either the applicant or City. See also Responses to SIERRA 1-5, SIERRA 1-6 and SIERRA 2-2.

Response to SHUTE-7
The commenter asserts that the HRA prepared for the Draft EIR is flawed because (1) it only evaluated impacts from the first phase of the proposed project, and failed to analyze health risks associated with Phases 2 and 3 of the project operations; and (2) it did not analyze health risks from the overlap of construction and operation of the proposed project. For these reasons, the commenter asserts that the HRA's conclusions and analysis are insufficient.

Contrary to the commenter's assertions and as described in detail in Section 3.4, Air Quality, the analysis presents a reasonable worst-case scenario where all phases of project construction were properly considered and disclosed. For purposes of a conservative analysis, the analysis considered the construction-related impacts where all phases occur concurrently and thus overlap. This methodological approach is consistent with the project description and related project objectives, and is particularly necessary and relevant here given there are three different property owners/applicants, each of which would develop its respective specific individual development proposal(s) with independent timing based on numerous considerations. With respect to potential health risks in particular, the proposed project's potential to expose sensitive receptors to elevated concentrations of TACs was fully analyzed and mitigated to the extent feasible under Impact AIR-3 in the Draft EIR. See Responses to Valley Air District 2-5 and GSEJA-3 for a detailed explanation of how the HRA was performed. See also Responses to SIERRA-1-3 and SIERRA-1-6, for more details addressing the adequacy of the air quality analysis prepared for the proposed project.

With respect to the commenter's assertion that the analysis should have evaluated impacts of project construction and project operation concurrently, to ensure a conservative analysis, the Final EIR appropriately considered and disclosed the impacts associated with the concurrent construction of all phases of the proposed project. In addition, Section 3.3, Air Quality, Table 3.3-12 of the Draft EIR discloses the potential operational emissions from all phases of project buildout occurring concurrently. This was necessary and appropriate given the size of the proposed project that is owned by different individuals/entities, which are in different stages of planning, and which necessarily would be built independently over time, taking into account market and other considerations. Given the foregoing, it would not be feasible to constrain the development of one portion of the proposed project by tying the ability of the relevant property owner to move forward to the development of remaining portions thereof, over which it would have no control. For additional information in this regard, see also Response to AENV-16.

Response to SHUTE-8

The commenter states that the emissions modeling did not substantiate the default travel distances used for passenger vehicles and truck trips, especially with respect to Phases 2 and 3 of the proposed project, and should have included more information about trip origins and destinations. The commenter also points to other EIRs for warehouse projects that have used more conservative travel distance (i.e., greater travel distance) assumptions.

The Final EIR includes substantial evidence to support the assumed travel distances used for passenger vehicles and truck trips. See Response to Valley Air District-2-2 for an explanation of the CalEEMod trip length used to model heavy-duty truck trips in the analysis. Assumptions utilized in other EIRs prepared for other projects in other jurisdictions are not relevant here and generalized assertions as to why those assumptions should have been incorporated here do not warrant further response. Specifically, doubling the CalEEMod truck trip length is not based on empirical evidence; furthermore, the Tracy Alliance transportation analysis did not provide specific truck trip lengths. As a result, the air quality analysis prepared for the Draft EIR used project applicant information.

As detailed more fully therein and below, CalEEMod utilizes three separate travel distance metrics by default. In this case, the model's truck trips were divided, with 41 percent assigned to a "H-O or C-NW" trip type with a default distance of 6.6 miles per trip and 59 percent assigned to a "H-W or C-W" trip type with a default distance of 14.7 miles per trip. Therefore, the model's default truck travel distance would be an average 11.35 miles per trip ((14.7 x 0.59) + (6.6 x 0.41) = 11.35).

Based on information reasonably available as of the preparation of the Draft EIR, the project applicants identified three regionally located intermodal facilities as the most likely origins and destinations for much of their operations: an intermodal facility located at 1000 East Roth Road, Lathrop, California 95231, approximately 12.1 miles from the project site, an Amazon distribution center, located along East Paradise Road approximately 1 mile from the project site, and a UPS distribution center, located along West Shulte Road approximately 10.9 miles from the project site. Considering an even distribution between the three listed product origins and destinations, trucks traveling to and from the project site during operation would travel an average of 8 miles per trip. As the CalEEMod default results in an average truck travel distance of 11.35 miles, as shown in Appendix B of the Draft EIR, the proposed project's trucking activity was conservatively captured in the modeling. In addition, the Draft EIR provided total VMT is based on the CalEEMod results, which utilized the project-specific truck trip length as well as operational vehicle trip rates based on the transportation study prepared for the project. Based on the foregoing, the City has determined, supported by substantial evidence in the record, that no revisions to the analysis are necessary in order to comply with CEQA.

The commenter's assertion that passenger vehicle trip lengths are not sufficiently justified and thus should be changed does not have merit under applicable CEQA provisions. CEQA does not require speculation, but instead the incorporation of appropriate assumptions based on reasonably available information. The CalEEMod model incorporates default assumptions that are to be used unless there is a reasonable basis pursuant to industry standards and other considerations to deviate therefrom. Here, given the nature of the proposed project and based on information reasonably available at the time of the analysis, air quality experts retained by the City determined it would be most

appropriate and accurate to utilize CalEEMod default trip lengths as reflected in the CalEEMod modeling files shown in Appendix B. The CalEEMod operational vehicle trip rates and lengths were based on the TIA prepared by Kimley-Horn and Associates for the proposed project (Appendix J of the Draft EIR), that analyzes the trip generation rates for the proposed project.

Response to SHUTE-9
The commenter briefly summarizes various CEQA requirements, references a General Plan policy and other regulatory planning documents with respect to air quality impacts and related mitigation, and restates generally that the Draft EIR did not properly evaluate all possible mitigation measures to reduce or avoid impacts associated with air quality, public health and GHG emissions.

The comment is noted and acknowledged. It provides a general objection and does not offer any specific mitigation. Responses to comments need not address a list of general suggestions for mitigating an environmental impact that are not concrete or specific to the project. *See, e.g.*, *Santa Clarita Org. for Planning the Env't v City of Santa Clarita* (2011) 197 CA4th 1042. Because this comment is conclusory in nature and does not identify any specific project-related environmental issues under CEQA, no further response is required.

For informational purposes, the following is noted. The Air Quality, GHG, and Energy analyses in the Draft EIR were prepared according to the City of Tracy and Valley Air District requirements and adhered to the guidance described in the GAMAQI, the Valley Air District's recommended set of modeling, and analysis guidance for CEQA land use projects. This comment does not specifically indicate how the Draft EIR underrepresents emissions and health risk impacts. In addition, as shown in Responses to Valley Air District-1 through Valley Air District-21, and as presented in the updated Errata, the proposed project would include additional mitigation measures requested by the Valley Air District (as well as other enforceable conditions of approval) aimed at reducing air pollutant emissions and associated health risks to the extent feasible. See also Responses to AENV-15 and SIERRA-1-3 for a detailed description of the numerous mitigation measures and other enforceable conditions of approval that would be imposed on or otherwise incorporated into the proposed project that reduce GHG and AQ emissions to the extent feasible. See also Response to SHUTE-10.

The City, in its discretion as the Lead Agency, has the authority in the context of an EIR to choose the methodologies and assumptions to be utilized in the analysis, as well as to choose which experts it will rely upon in conducting the CEQA review, so long as these decisions are based on substantial evidence in the record. The City, as Lead Agency, has discretion to determine the appropriate method to analyze environmental impacts in an EIR. Disagreements with an EIR's impact analysis will be resolved in favor of the Lead Agency if there is any substantial evidence in the record supporting the approach used. *See Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 C3d 376, 409; *City of Hayward v. Board of Trustees of Cal. State Univ.* (2015) 242 CA4th 833, 840; *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 CA4th 899; *Eureka Citizens for Responsible Gov't v. City of Eureka (2007) 147 CA4th 357, 372; State Water Resources Control Bd. Cases* (2006) 136 CA4th 674, 795; *Anderson First Coalition v. City of Anderson* (2005) 130 CA4th 1173.

Response to SHUTE -10

The commenter briefly summarizes various general CEQA requirements, restates that the Draft EIR did not include all feasible mitigation measures, and reasserts that an EIR must include feasible measures that reduce impacts even if doing so would not reduce impacts to a less than significant level. In addition, the commenter states generally that the GHG impacts described in the Draft EIR are inadequate.

The comment is noted and acknowledged. Responses to comments need not address a list of general suggestions for mitigating an environmental impact that are not concrete or specific to the project. *See, e.g.*, *Santa Clarita Org. for Planning the Env't v City of Santa Clarita* (2011) 197 CA4th 1042. Because the comment is conclusory in nature and does not identify any specific project-related environmental issues under CEQA, no further response is required.

For informational purposes, the following is noted. Contrary to the commenter's assertions, the Draft EIR identifies multiple mitigation measures as well as other enforceable conditions of approval to avoid or reduce, to the extent feasible, the proposed project's air quality and GHG impacts. See, e.g., Responses to Valley Air District-1 through Valley Air District-21, AENV-15, SIERRA-1-3 and SIERRA-1-6 for detailed descriptions of the approach to the analysis and the identification of feasible mitigation measures and other enforceable conditions of approval. See also multiple Responses herein with respect to the Draft EIR's analysis of GHG impacts. See the updated MMRP for all mitigation measures and additional enforceable conditions of approval.

Response to SHUTE-11

The commenter lists three warehouse projects (and attaches related approval documents) in other areas of California that purportedly provide examples of feasible measures to mitigate GHG and air quality impacts and increase transportation and energy efficiency. The commenter also states that other municipalities, such as the City of Fontana, have adopted ordinances that impose similar measures on all warehouse/fulfillment projects.

The comment does not raise any specific project-related environmental issues under CEQA, and therefore no further response is required.

For informational purposes, the following is noted. As noted in Response to SHUTE-10, the Draft EIR contains numerous feasible, effective, and robust mitigation measures and other enforceable conditions of approval that would be imposed on or otherwise incorporated into the proposed project. See Response to SHUTE-12 for additional detail in this regard.

Response to SHUTE-12

The commenter restates its assertion that based on examples of other warehouse projects, the proposed project should be required to implement more robust mitigation measures to incorporate requirements for: (1) context-sensitive site design and facility layout; (2) measures to reduce impacts during ongoing facility construction; and (3) measures to reduce impacts during ongoing facility operation. The commenter then references examples below (as discussed further in Response to SHUTE-13).

To the extent the comment does not raise any specific project-related environmental issues under CEQA, no further response is required.

As detailed further in Response to SHUTE-10 and SHUTE-13 and as otherwise described in this Final EIR (including, without limitation, multiple Responses to Valley Air District-2 and GSEJA) as well as the updated Errata, the Draft EIR robustly evaluated all potential air quality and GHG emissions impacts and identified feasible mitigation where necessary. As detailed more fully in Section 3.3, Air Quality of the Draft EIR, the City, in its discretion, elected to utilize the applicable Valley Air District thresholds and methodologies, which are contained under each impact statement in Section 3.3 and which are based on relevant robust scientific and factual data.

The Draft EIR and Final EIR for the proposed project (1) properly assume compliance with a robust regulatory framework (including, without limitation, citing relevant General Plan policies as well as guidance from the ARB and the Valley Air District) and set forth a thoughtful consistency analysis related thereto; (2) fully disclose all significant impacts; (3) identify all feasible mitigation measures to mitigate, avoid or reduce the identified significant impacts; and (4) include a summary of all such measures that will be incorporated into the MMRP that will be adopted by the City Council in connection with its certification of the Draft EIR and thereafter imposed as enforceable conditions of approval. In addition, the project applicants have voluntarily agreed to implement additional mitigation measures as well as other enforceable conditions of approval to further reduce impacts related to air quality and GHG emissions, to the extent feasible. Collectively, these measures are consistent with many of the measures the commenter requests to be imposed, and in particular, are consistent with the approach taken by the City of Fontana in connection with its warehouse ordinance (as supported by the commenter). Also, see Responses to SIERRA-1-5 and SIERRA-1-6 for additional detail in this regard.

Response to SHUTE-13
The commenter suggests specific mitigation measures that purportedly are feasible and effective that would reduce construction emissions of the proposed project.

As explained at length in Responses to GSEJA-31, SIERRA-1-5, and SIERRA-1-6 and as further detailed below, the commenter's suggested construction-related mitigation measures were previously considered and have been determined to be either not effective, not substantially different from already identified mitigation measures or other enforceable conditions of approval included in the Final EIR, or not feasible.

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
Construction Measures		
Limiting the use of off-road diesel-powered equipment. Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day was proposed. The FEIR responded to this proposed measure by stating that if this limit was enforced, the construction	COA No. 1.	For the reasons set forth in the Final EIR, it is reasonable to conclude that this measure could not be implemented in a manner that would effectively result in overall construction emissions reductions. Should the construction contractor be limited to utilizing equipment for only 10

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
contractor would simply rent multiple pieces of equipment for concurrent or overlapping use and that this measure would not clearly lessen a significant environmental impact. See FEIR at 3-115. But the City could easily address this concern by limiting the hours of construction that uses off-road diesel-powered equipment to 10 hours per day.		hours per day, that contractor could instead rent multiple pieces of equipment for concurrent operation or lengthened construction schedules and times, resulting in the same or greater construction emissions than was analyzed. The suggested mitigation would not clearly lessen any significant environmental impact. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.
Requiring on-road heavy-duty haul trucks to be model year 2014 or newer if diesel-fueled.	MM AIR-1d, MM AIR-1i .	On-road heavy-duty haul trucks are regulated by the ARB under the California State On-Road Heavy-Duty Vehicle Program. As described in Section 3.3, Air Quality and these Responses, by January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. The suggested mitigation would not clearly lessen any significant environmental impacts and would not be feasible as detailed in Response to SHUTE-6. See MM AIR-d (Clean Truck Fleet) for the feasible mitigation measure that would be imposed on the proposed project to address this issue. See also MM AIR-1i.
Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.	MM AIR-1b.	MM AIR-1b would significantly reduce the generation of ozone precursor pollutants, such as ROGs, during project construction. In addition, the incorporation of MM AIR-1a would reduce another ozone precursor pollutant, NO_X, generated during construction. These two measures combined would significantly reduce the

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
		generation of particulates or ozone generating pollutants. Moreover, as illustrated in Section 3.3, Air Quality, project construction would not result in an exceedance of particulate emissions. The suggested mitigation would not clearly lessen any significant environmental impacts, would not be feasible given likely substantial impacts on the construction schedule (both in terms of timing and mobilization efforts), nor is the suggested mitigation considerably different from the mitigation measure already evaluated in the Draft EIR.
Providing information on transit and ride sharing programs and services to construction employees.	COA No. 2.	The information that the commenter is referencing is available on the City of Tracy's website. Additionally, as it would be difficult to assess the effectiveness of this type of temporary TDM measure or confirm any quantifiable emission reductions that could reasonably be expected to occur, the suggested mitigation would not clearly lessen any significant environmental impacts. Moreover, the feasibility of effectively implementing this type of temporary TDM measure to result in actual trip reductions is questionable because ride sharing applications have been publicly available for over a decade and transit information is accessible on the City's website as well as provided in map-based phone applications, such as Google maps. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
		condition of approval consistent with the commenter's request.
Providing meal options on-site for construction employees to minimize travel during meal breaks.	COA No. 6, No. 8(h).	The suggested mitigation would not clearly lessen any significant environmental impacts. Construction worker vehicle trips would represent a minuscule amount of the overall construction emissions because the majority of emissions are generated by the use of off-road construction equipment. Moreover, any use involving commercial-grade kitchens or the like would be beyond the scope of the proposed project and contemplated uses, and thus not feasible in this regard. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of enforceable conditions of approval consistent with the commenter's request.

Response to SHUTE -14

The commenter suggests specific mitigation measures that purportedly are feasible and effective and would reduce operational emissions of criteria pollutants and GHG emissions.

As explained at length in Responses to GSEJA-3*2*, *GSEJA-33*, SIERRA-1-5, and SIERRA-1-6 and as further detailed herein, many of the commenter's suggested operational measures have already been evaluated and determined to be infeasible, ineffective and/or not substantially different from what the Final EIR already includes. For the reasons set forth in Chapters 3-3 and 3-8 and as further described in the Final EIR (including the updated Errata), the analysis robustly evaluated and disclosed all potential air quality and GHG emissions impacts as required under CEQA. In addition, feasible mitigation was identified, which would be imposed on the proposed project as enforceable conditions of approval and implemented prior to issuance of applicable permits as detailed in the MMRP (which would be adopted in connection with the City Council's certification of the Final EIR). Furthermore, the applicants have voluntarily agreed to additional enforceable conditions of approval that would be imposed on or otherwise incorporated into the proposed project. The commenter's suggested mitigation measures are discussed individually below.

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
Operational Measures		
The property owner/tenant/lessee shall ensure that heavy-duty trucks (Class 7 and 8) traveling to and from the project site are model year 2014 or later from start of operations and shall be fully zero-emission by December 31, 2025, with limited exceptions. The FEIR rejected a proposal to require all heavy-duty trucks entering or operating on the project site to be zero-emission beginning in 2030. It claims that "[B]ecause of the volume of trucks anticipated to access the site, practical limitations on the owner's ability to regulate this item, and the current cost and availability of electric trucks, the suggested mitigation is not feasible." See FEIR at 3-118. This bald statement is insufficient to support a determination that the requirement is "truly infeasible," as CEQA requires. Moreover, similar measures are being required at other approved warehouse facilities (See Mariposa MMRP, Exhibit E), so electric truck requirements are feasible and must be fully analyzed in this EIR.	MM AIR-1d, MM AIR-1i.	The Final EIR has explained in detail how the proposed project would be required to ensure the use of a clean truck fleet during operations to the maximum extent feasible, and thus is generally consistent with the commenter's request. For example, the proposed project would be required to demonstrate compliance with MM AIR-1d, which requires as a condition of issuance of occupancy permit that applicants of each specific individual development proposal document the use of a clean truck fleet that meets the California ARB adopted 2013 Optional Low-NO_X standard of 0.02 gram of NO_X per brake horsepower for all heavy-duty trucks during operation to the maximum extent feasible. Moreover, MM AIR-1i would require the proposed project to include EV charging infrastructure pursuant to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2 in all parking areas during operation. Therefore, all development as part of the proposed project would be conditioned to demonstrate that a clean truck fleet would be operational to the maximum extent feasible when the subject project operations begin. The suggested mitigation measure requiring that the property owners/tenants/lessees ensure that all heavy-duty trucks (Class 7and 8) domiciled on the project site are model year 2014 or later from start of operations is not feasible, as detailed in Response to SHUTE-6.Therefore, based on the

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
		foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as the Final EIR, the suggested mitigation is not required under CEQA.
The property owner/tenant/lessee shall ensure that medium-duty trucks (Class 2 through 6) traveling to and from the project site are zero-emission, with limited exceptions.	MM AIR 1i; COA No. 9(D).	The suggested mitigation measure is similar to recommended measures already identified in the Draft EIR as well as the Final EIR, as reflected in the updated MMRP. Moreover, the commenter's suggestion that the project applicant provide clean fleet vehicles for all medium-duty vehicles beyond what has already been identified as appropriate mitigation would be infeasible (see Responses to SHUTE-6, GSEJA-31. The fact that other projects in other jurisdictions have incorporated the requested measure does not demonstrate feasibility since, among other things, different projects have different limitations/parameters (e.g., a project that will be operated by one user that owns and controls its fleet, which is a very limited number of projects). Furthermore, other light and medium vehicles/delivery vans/trucks that would access the project site during operations are anticipated to be from third-party vendors. Because it is not anticipated that future tenants occupying the proposed project would own these vehicles, neither the future tenants nor the City would have control over the vehicles accessing the project site and thus neither would have the ability to enforce any such obligation during the life of the proposed project. Rather, the emissions resulting from the vehicles accessing the project site would largely be influenced by

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
		regulations (current and future) that would apply to vehicle manufacturers based on determinations made by the ARB, which is the expert public agency charged to address these issues via a comprehensive regulatory framework applied Statewide based on robust data and evaluation with consideration of multiple complicated factors. As described in Response to GSEJA-31, given the volume of medium-duty vehicles that would be involved as part of the tenants' business operations, practical limitations on the owner's ability to control and enforce such an obligation, along with the current substantial cost and concerns regarding widespread availability of electric vehicles, the suggested mitigation is not feasible. Moreover, the project applicants would be required to provide electric vehicle (EV) charging infrastructure throughout all parking areas as part of MM AIR-1i, which would improve charging infrastructure in the City and help facilitate the transition to electric vehicles. Furthermore, the suggested measure cannot be enforced in a way that would ensure a reduction of potential health impacts. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as this Final EIR, the suggested mitigation is not required under CEQA. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
		condition of approval consistent with the commenter's request.
At all times during project operation, owners, operators or tenants shall be required to provide electric charging facilities on the project site sufficient to charge all electric trucks domiciled on the site and such facilities shall be made available for all electric trucks that use the project site.	MM AIR-1i.	The suggested mitigation measure is similar to recommended measures already identified in the Draft EIR as well as the Final EIR, as reflected in the updated MMRP. The proposed project would be required to comply with MM AIR-1i, which would require the inclusion of EV charging infrastructure pursuant to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2, in all parking areas during operation. Therefore, the proposed project would provide EV charging infrastructure that would support passenger vehicles and the future use of electric trucks. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as the Final EIR, the suggested mitigation would be duplicative and is not required under CEQA.
Prohibit the reliance on natural gas for the facility.	None.	The proposed project would not preclude the use of natural gas appliances, but the overall air pollutant and GHG emissions during project operation from energy sources, such as natural gas appliances or heating. The proposed project would include the use of energy-efficient lighting and heating, ventilation, and air conditioning (HVAC) systems in accordance with then-current City building code and Title 24 standards (which are considered some of the most stringent in the nation). In addition, prohibiting natural gas for future land uses would restrict potential future operations and types of development. Therefore, based on

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
		the foregoing reasons, the suggested mitigation would not be required under CEQA.
Install solar photovoltaics energy system (or other renewable energy systems) [sic] should be used to power all of the Project's energy needs (all electric vehicle charging stations) unless sufficient usable space is not available. This will also allow the site to support and serve electric trucks, which will reduce NOx and PM emissions, and further reduce the Air Quality impacts of the Project.	COA No. 9(A-C). See Responses to GSEJA-31 and Valley Air District 2-12.	The Final EIR addresses the topic of solar panels on each building as part of the Responses to GSEJA-31 and Valley Air District 2-12. As described therein, the California Building Standards Code (CBC) requires that nonresidential projects construct their roofs to be solar-ready to accommodate the future installation of solar panels. The proposed project would be required to comply with the foregoing, thereby contributing to improved air quality and making progress toward reducing greenhouse gas emissions through the facilitation of the future production of solar energy. Furthermore, the use of solar panels would not substantially reduce air pollutant emissions on-site, because energy source emissions described in the Air Quality Analysis (see Section 3.3 of the Draft EIR) are limited to those generated from the on-site combustion of natural gas due to the inter-regional relationship between land use development projects and the facility generating the electricity. As such, the consideration of electricity-related energy source emissions is limited to GHGs. Moreover, the proposed project would not result in any significant impact related to GHG emissions, as discussed in Section 3.8 of the Draft EIR, and thus the City is not required by CEQA to impose this measure. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as this Final EIR, the

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
		suggested mitigation is not required under CEQA. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.
Require that all forklifts, yard trucks and yard equipment used on-site be electrically powered or zero-emission with sufficient on-site charging equipment.	MM AIR-1g.	The suggested mitigation measure is similar to recommended measures already identified in the Draft EIR as well as the Final EIR, as reflected in the updated MMRP. MM AIR-1g would require all on-site off-road and on-road equipment to be electric powered, including but not limited to forklifts and pallet jacks. The suggested mitigation is not considerably different from the additional mitigation measure already incorporated in the Final EIR (see Errata), and therefore the suggested mitigation is not required under CEQA.
Install and maintain, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time.	None.	The suggested measure of installing one open-source air quality monitoring station near the project site would not reduce any air quality or GHG impact, since monitoring in and of itself does not reduce emissions. Furthermore, the commenter does not provide any information on why monitoring would be beneficial to the community. Because the suggested measure would not reduce an environmental impact caused by the proposed project, there is no legal nexus of this measure to any identified impacts of the proposed project. Therefore, the suggested mitigation is not feasible, would not be effective to reduce any impact from the

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
		proposed project, and is not required under CEQA.
Require tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants to use carriers that are SmartWay carriers.	COA No. 10(f).	The commenter does not provide evidence for why or how this program would reduce emissions. Smartway programs aim to make supply chains more efficient by reducing fuel consumption and energy costs. The suggested mitigation would not result in quantitative reductions in air pollutant or GHG emissions and would be infeasible because it would limit the types of carriers the future tenants could work with. Nevertheless, in an effort to address the concerns of the commenter, the City has agreed to impose, and the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.
Install signs along California Avenue, Paradise Road, and Grant Line Road noting that truck and employee parking is prohibited.	MM AIR-1e; COA No. 8.	The suggested mitigation measure is similar to recommended measures already identified in the Draft EIR as well as the Final EIR, as reflected in the updated MMRP. The suggested mitigation would be included as part of MM AIR-1e Operational Truck Fleet Routing contained in Section 4: Updated Errata. MM AIR-1e would prohibit trucks from accessing Grant Line Road east of the project site. In addition, the project applicants have agreed to voluntarily implement a signage program along project frontage on Grant Line Road to deter trucks from accessing Grant Line Road east of the project site. Moreover, in an effort to address the concerns of the commenter, the City has agreed to impose, and

Commenter-Suggested Mitigation Measure	Which EIR Mitigation Measure or previous response addresses the Commenter's request?	Explanation
		the project applicants have agreed to accept the incorporation of an enforceable condition of approval consistent with the commenter's request.
Designate on-site areas for employee pickup and drop-off.	None.	The commenter does not explain why this measure would significantly reduce emissions, and there is no basis to conclude that the suggested mitigation would clearly lessen any significant environmental impacts. Therefore, imposition of the requested mitigation is not required under CEQA.
Appoint a compliance officer who is responsible for implementing all mitigation measures, and providing contact information for the compliance officer to the City, to be updated annually.	None.	The City of Tracy and the applicant would be responsible for implementing the EIR mitigation measures pursuant to the MMRP. The foregoing is sufficient to ensure compliance with and the enforceability of all mitigation measures and other conditions of approval. The commenter does not explain why this additional measure would be necessary to ensure compliance and thus there is no basis to conclude that it would significantly reduce emissions. Therefore, incorporation of the requested mitigation is not required under CEQA.

Response to SHUTE-15

The commenter restates analysis from the Draft EIR that concluded if project construction of phases were to occur concurrently, then impacts to sensitive receptors related to CO and DPM emissions would be significant and unavoidable. The commenter proposes a mitigation measure that would require phasing restrictions of construction activities to reduce those impacts.

As discussed above, to ensure a conservative analysis, the Final EIR appropriately considered and disclosed the impacts associated with the concurrent construction of all phases of the proposed project. This was necessary and appropriate given the size of the proposed project that is owned by different individuals/entities, which are in different stages of planning, and which necessarily would be built independently over time, taking into account market and other considerations. Given the

foregoing, it would not be feasible to constrain the development of one portion of the proposed project by tying the ability of the relevant property owner to move forward to the development of remaining portions thereof, over which it would have no control. For additional information in this regard, see also Response to AENV-16.

Response to SHUTE-16
The commenter restates analysis from the Draft EIR that project operation could expose sensitive receptors to NO_X and DPM levels that exceed applicable thresholds even after incorporation of identified mitigation. The commenter states that the Draft EIR should modify MM AIR-1i to specify the details for more robust setbacks and buffers to adjacent uses, more stringent clean fleet requirements, and different roadway design features.

See Response to Valley Air District 2-11. Consistent with the comment, Section 3.3, Air Quality, of the Draft EIR evaluates the potential impact of project operations on sensitive receptors; see, e.g., page 3.3-47. In addition, although not required under CEQA, MM AIR-1h has been added to Section 3.3, Air Quality, of the Draft EIR to require the installation of a vegetative barrier at the eastern boundary of the project site, between I-205 and Grant Line Road. Furthermore, as described in Section 3.3, Air Quality, and Section 4 of the Final EIR: Errata, the proposed project would be required to implement MMs AIR-1a, -1e, -1f, and -1g, which would require a clean truck fleet to the maximum extent feasible, limit truck idling, address operational truck routing, and mandate zero-emission on-site equipment, all of which would reduce NO_X and DPM emissions during operation to the extent feasible. Moreover, the project applicants have voluntarily agreed to incorporate additional measures to address buffer issues (see COA No. 7). Also, see Responses to SIERRA-1-3 and SIERRA 1-6. Therefore, the Final EIR analysis already incorporates substantially similar measures as those requested by the commenter in several respects. In terms of more stringent clean fleet requirements, see also Response to SHUTE-6. With respect to changes in the required setbacks and buffers, as discussed in Response to SHUTE-2 and more fully throughout this Final EIR, MM AIR-1h would appropriately and feasibly address the concern related to the proposed project's potential to locate sources of TACs near sensitive receptors. MM AIR-1h would require the installation of a vegetative buffer with trees and other species of plants that would not only screen sensitive receptors from future building operations, but would also create as much physical distance as feasible between buildings and internal roadways and the neighboring sensitive receptors.

See also Responses to SIERRA 1-6 and SIERRA 1-10.

Response to SHUTE-17
The commenter states that an additional mitigation measure should be included in the Draft EIR that establishes a community benefit fund to mitigate air quality impacts on affected residents and the Banta Elementary School, including funding the cost to retrofit or install HVAC and/or air filtration systems on properties impacted by the proposed project. The commenter then dismisses without explanation the City's determination that the foregoing would not be effective or feasible.

The commenter's position as to the City's prior response on this issue is noted. To the extent the comment provides a general objection and does not offer any specific mitigation, no further

response is required. *See, e.g.*, *Santa Clarita Org. for Planning the Env't v City of Santa Clarita* (2011) 197 CA4th 1042.

The following is provided for informational purposes. The City, in its discretion, has determined that CEQA does not require incorporation of the requested mitigation for the following reasons. The fact that other applicants in connection with other projects in other jurisdictions may have agreed to accept such a condition does not equate to substantial evidence as to its feasibility and proper applicability as to the proposed project. As described in Response to SIERRA-1-6, the City of Tracy does not have the legal authority to impose an obligation for the project applicants to provide funds as suggested by the commenter because, among other reasons, there is no legal nexus of this measure to any identified impacts of the proposed project. See Section 3.3 of the Draft EIR as well as this Final EIR for additional detail in this regard. Moreover, the operations of private homes in the Banta community are not under the purview of the owners or operators of the proposed project; thus, there would be no mechanism available to ensure that any such funding would be utilized to install and maintain air filtration systems at sensitive receptor locations within the Banta community. In addition, the suggested measure raises significant implementation issues, e.g., it does not identify which Banta residents would receive such funding, how much would be provided to each recipient, and how such air filtration systems (which heavily rely on continued maintenance and replacing filters) would be effectively maintained. Therefore, based on the foregoing reasons and as further documented in Sections 3.3 and 3.8 of the Draft EIR as well as this Final EIR, there is no basis to conclude this measure would be effective or feasible and therefore the suggested mitigation is not required under CEQA.

Response to SHUTE-18
The commenter restates the language of MM AIR-1a and asserts that this mitgation measure is not effective as written because the measure allows for the possiblity that electric construction equipment may not be available, and suggests that the measure include a stipulation that if electric construction equipment is not available, the contractor should use the next best option to reduce construction emissions. MM AIR-1a, from the Final EIR, is provided below.

MM AIR-1a **NO_X Reduction Measures**

Prior to the issuance of grading permits for each individual development proposal within the project site, the relevant applicant for each development proposal shall provide documentation to the City of Tracy demonstrating the following NO_X reduction measures would be adhered to during construction activities for the relevant development proposal:

- For all construction equipment and vehicles used during project construction that are equal to or greater than 250 horsepower, the contractor shall use construction equipment and vehicles that meet the United States Environmental Protection Agency (EPA) Tier 4 Final engine standards;
- For all construction equipment and vehicles used during project construction that are less than 250 horsepower, the contractor shall use electric construction

equipment and vehicles to the extent feasible, with the exception of handheld generator sets; and
- All generator sets utilized during project construction shall be limited to 5 horsepower and shall only be used to power handheld power tools.

The construction contractor shall maintain reasonable records concerning its efforts to comply with this requirement, including equipment lists. Documentation that each relevant applicant provides to the City shall include, but is not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

The Final EIR properly discloses that certain aspects of a number of mitigation measures may not be entirely achievable, and thus comes to a significant and unavoidable conclusion, as required under CEQA since full implementation of certain mitigation cannot be guaranteed. Nevertheless, in accordance with mandates under CEQA, even though this may be the case, the Draft EIR still imposes the obligation on project applicants to implement the identified measures to the extent feasible. Therefore, the Draft EIR's analysis properly discloses impacts and mitigation as feasible. Nevertheless, the commenter's suggestion is noted and has been incorporated into the FEIR. See Section 4: Errata.

MM AIR-1a **NO_X Reduction Measures**

Prior to the issuance of grading permits for each individual development proposal within the project site, the relevant applicant for each development proposal shall provide documentation to the City of Tracy demonstrating the following NO_X reduction measures would be adhered to during construction activities for the relevant development proposal:

- For all construction equipment and vehicles used during project construction that are equal to or greater than 250 horsepower, the contractor shall use construction equipment and vehicles that meet the United States Environmental Protection Agency (EPA) Tier 4 Final engine standards.
- For all construction equipment and vehicles used during project construction that are less than 250 horsepower, the contractor shall use electric construction equipment and vehicles to the extent these are reasonably available. If the applicant can demonstrate that electric equipment and vehicles are not reasonably available, the next best reasonably available piece of equipment or vehicle shall be used, such as, for example, Tier IV final or alternative fueled equipment that is zero-emission. The foregoing requirement to use electric construction equipment shall not apply to handheld generator sets.
- All generator sets utilized during project construction shall be limited to 5 horsepower and shall only be used to power handheld power tools.

The construction contractor shall maintain reasonable records concerning its efforts to comply with this requirement, including equipment lists. Documentation that each relevant applicant provides to the City shall include, but is not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.]

Response to SHUTE-19
The commenter states that MM AIR-1e should be modifiedto include several additional features to ensure its effectiveness and enforceability, which are listed. The requested modifications include funding to install a large sign on Grant Line Road where trucks would be prohibited and strategies to enforce this prohibition.

For reasons discussed in Response to Valley Air District 2-5, although not required under CEQA, the City has agreed to adopt, and the project applicants have agreed to implement the expanded requirements in MM AIR-1e to include the suggested measure. The updated MM AIR-1e is provided in Section 4, Errata, with additions shown in underline, and is also included in the updated MMRP. See also Response to SIERRA 1-6, and COA No. 8 in updated MMRP (additional enforceable conditions of approval regarding signage and traffic patterns).

Response to SHUTE-20
The commenter asserts that MM AIR-1h lacks specificity and will be ineffective at reducing significant health impacts from project emissions, and requests edits to MM AIR-1h to include specific standardsfor the recommended vegetative buffer; in addition, the commenter provides examples of specific types of vegetative buffers that have been included as mitigation in another warehouse project in another jurisdiction. Also, the commenter states that MM AIR-1h should be modified to include specific standards based on ARB and State Attorney General Guidance, such as a 1,000-foot buffer from the nearest residence to all on-site truck routes, parking areas, loading docks, and buildings along with specified landscaping buffer treatment.

As a preliminary matter, the commenter does not provide any evidence as to the ineffectiveness of the proposed mitigation or identify any specific ways in which the measure would fail to mitigate the impact; rather, it merely asserts that “bushes and shrubs are insufficient” and that there instead needs to be “full visual screening that will also provide auditory and toxin-absorbing benefits.” Therefore, to the extent no specific CEQA issue has been raised, no further response is necessary.

Furthermore, the following is noted. The proposed project would be required to include a vegetative buffer along the eastern property boundary of the project site pursuant to MM AIR-1h. This mitigation measure was requested by the San Joaquin Valley Air District (Valley Air District) and accepted by the City and the project applicants. This vegetative buffer would not conflict with what is summarized in the State Attorney General guidance document for warehouses mentioned by the commenter, because that document does not specify that all vegetative buffers must include earthen berms or sizable trees.

Furthermore, a vegetative buffer with trees and other species of plants would not only screen sensitive receptors from future building operations, but would also create as much physical distance

as feasible between buildings and internal roadways and the neighboring sensitive receptors, which fulfills the commenter's request. Moreover, the project applicants have voluntarily agreed to incorporate additional enforceable conditions of approval to further address buffer issues (see COA No. 8 in updated MMRP).

With respect to the 1,000-foot distance buffer that the commenter is seeking to impose on the proposed project, see Response to SIERRA-1-6 for information in this regard.

Response to SHUTE -21
The commenter states general propositions related to global climate change effects and cites several court case rulings related to CEQA and GHG impacts, such as the *Newhall Ranch* case. The commenter requests that the Draft EIR use a net-zero GHG emissions threshold to determine whether impacts would be considered significant. The commenter asserts that the Draft EIR failed to explain the relevance of EO 55-18, and why a net-zero threshold was not used.

The City has the discretion, under CEQA, to weigh the evidence relating to the accuracy and sufficiency of the information in the Draft EIR and to decide whether to accept it. The City may adopt the environmental conclusions reached by the experts who prepared the Draft EIR even though others may disagree with the underlying data, analysis, or conclusions. (*Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal*. (1988) 47 C3d 376, 408; *State Water Resources Control Board Cases* (2006) 136 CA4th 674, 795). Disagreements or discrepancies in results arising from different methods for assessing environmental issues do not undermine the validity of the Draft EIR's analysis as long as a reasonable explanation supporting the Draft EIR's analysis is provided. (*Planning and Conserv. League v. Castaic Lake Water Agency* (2009) 180 CA4th 210, 243).

With respect to consistency with the goals contained in EO 55-18, the Draft EIR analyzed the proposed project's consistency with SB 32 and the 2017 ARB Scoping Plan as described in the impact analysis for Impact GHG-1 and GHG-2. As described in Impact GHG-2, Executive Order B-30-15 establishes an interim goal to reduce GHG emissions to 40 percent below 1990 levels by 2030. The 2030 goal was codified under SB 32 and is now addressed by the 2017 Scoping Plan Update. As described in Response to AENV-8, each of the project phases would achieve reductions beyond the ARB 2020 21.7 percent target and the Valley Air District 29 percent reduction from BAU requirements from adopted regulations in their respective operational years. The emission estimates presented in Tables 3.8-9 through 3.8-11 demonstrate that the proposed project would achieve greater reductions than the Valley Air District-established threshold of 29 percent, resulting in annual reductions ranging from 43.3 to 44 percent. Based on this progress and the 2017 Scoping Plan Update, it is reasonable to conclude that the proposed project would be consistent with the 2017 Scoping Plan and would make a reasonable fair share contribution to achieving the 2030 target.

As explained in detail in SHUTE-22 through 48, the Final EIR properly evaluated the proposed project's potential GHG impacts.

See also Responses to AENV-3, -4, -5, and -7.

Response to SHUTE-22

The commenter states that the quantitative GHG threshold used in the Draft EIR is outdated and not supported by substantial evidence because these thresholds do not reflect the State's more recent and aggressive GHG reduction goals. The commenter also states the Draft EIR's GHG threshold conflicts with the requirements established in the *Newhall Ranch* court case.

As explained in Response to Valley Air District 2-5, the final determination of whether a project would have a significant impact is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines. The City, in its discretion, has acted in accordance with Valley Air District's recommendation that its quantitative air pollution thresholds be used to determine the significance of project emissions. The applicable Valley Air District thresholds and methodologies are contained under each impact statement in Section 3.3, which are based on relevant and robust scientific and factual data and the Valley Air District's expertise in this regard.

See also Responses to SHUTE-24, SHUTE-27, GSEJA-33, AENV-4 and -5, which explain in detail how the Final EIR utilized a proper quantitative threshold to determine the proposed project's potential GHG impacts.

Response to SHUTE-23
The commenter states that the Draft EIR's qualitative analysis of project consistentcy with the State's long-term GHG reduction goals is insufficient because it does not discuss the State's most recent 2045 goal of carbon neutrality by 2045, and omits any analysis of the proposed project's consistency with AB 32's 2050 goal.

See multiple Responses herein as well as AENV-8 and GSEJA-6, which explain in detail how the Final EIR contains a robust qualitative analysis of the proposed project's consistency with relevant plans and policies and complies with CEQA's requirements in this regard.

Response to SHUTE-24
The commenter restates its position that the Draft EIR utilized outdated thresholds to determine potential GHG impacts, and includes text from the Draft EIR related to how the BAU threshold is developed and how the less than significant impact conclusion was supported. It also asserts that "any additional GHG emissions will contribute to a serious and growing climate crisis," and then goes on to discuss broader policy implications of climate change generally.

To the extent the commenter makes a general policy assertion about the implications of climate change or the need for all projects to ensure no additional GHG emissions, these comments are not within CEQA's purview but are hereby noted in this Final EIR for informational purposes and will be forwarded to City decision-makers for consideration as part of the public hearing process on the project. No further response is required.

As described in Responses to AENV-2 and AENV-3, CEQA does not require an evaluation of impacts against a threshold that requires net-zero GHG emissions. The Draft EIR evaluated GHG impacts against the appropriate threshold as required by CEQA and as the City determined, in its discretion, to be appropriate (supported, among other things, by reliance on Valley Air District adopted guidance). See also Responses to AENV-4 and AENV-5.

Section 3.8, Greenhouse Gas Emissions, of the Draft EIR robustly evaluates the proposed project's GHG impacts, both from a quantitative and qualitative perspective. Section 3.8.4 describes the significance criteria, assumptions and methodologies used by the City, in its discretion, to conduct this impact analysis. As described in the ARB 2017 Scoping Plan, "achieving net-zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net-zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State's long-term GHG goals, and climate change science."

Moreover, as detailed in Section 3.8, Greenhouse Gas Emissions, each of the project phases would achieve reductions beyond the ARB 2020 21.7 percent target and the Valley Air District 29 percent reduction from BAU requirements based on compliance with mandated regulations in their respective operational years. The emission estimates presented in Tables 3.8-9 through 3.8-11 demonstrate that the proposed project would achieve greater reductions than the Valley Air District-established threshold of 29 percent, resulting in annual reductions ranging from 43.3 to 44 percent. Based on this continued progress toward achieving the State's GHG emission reduction goals and the 2017 Scoping Plan Update, it is reasonable to conclude that the proposed project would be consistent with the 2017 Scoping Plan and would make a reasonable fair share contribution to achieving the 2030 target. Furthermore, Table 3.8-12 describes in detail how the proposed project would be consistent with the 2017 Scoping Plan Update measures. Therefore, the City has properly determined that the proposed project would not prohibit or prevent the State of California from achieving the goals set in Executive Order B-55-18 because it would not result in barriers to achieving net-zero emissions. See also Responses to AENV-2, -3, -4, -5, and -7.

Finally, with respect to the commenter's assertion that the Final EIR should have evaluated the proposed project against the final 2022 Scoping Plan, this is not required under CEQA. The foregoing was published in November 2022 and adopted in December 2022, well after commencement of preparation of the Draft EIR (which was published in April 2022). The 2022 Scoping Plan establishes a scenario by which the State may achieve carbon neutrality by 2045 or earlier, and it outlines a technologically feasible, cost-effective, and equity-focused path for achieving this climate target. The 2022 Scoping Plan relies on the aggressive reduction of fossil fuels in all Statewide sectors and accelerating existing carbon reduction programs.

See also Responses to SIERRA 1-11 and SIERRA 2-3.

Response to SHUTE-25

The commenter restates its concern that the Draft EIR used an outdated threshold, noting that the BAU threshold was developed to meet the AB 32 goals; thus, it is no longer relevant because a more recent Executive Order (EO 55-18) and State legislation (AB 1279) have been adopted to further reduce GHG emissions and therefore does not constitute substantial evidence. The commenter concludes that a no net increase GHG threshold should be used by the Draft EIR to determine project impacts, because the BAU threshold would not meet SB 32 or net neutrality goals by 2045.

See Responses to SHUTE-24 as well as AENV-3 and AENV-8.

Response to SHUTE-26
The commenter reiterates its position that the Draft EIR must be revised and recirculated to include a no net increase in GHG emissions threshold, and must include additional mitigation measures, such as, without limitation, clean fleet and clean construction equipment requirements, extensive use of solar panels, and EV charging infrastructure. It also references an attachment listing "proven feasible" measures.

See Responses to SHUTE-24 as well as GSEJA-31, GSEJA-32, GSEJA-36, AENV-8, -9, -10, and -15.

Moreover, see also Response to CALTRANS-11, which lists numerous TDM measures that the proposed project would be required to implement such as:

- Provision of communication and information strategies
- Encouraging telecommuting for administrative staff
- Designating parking spaces for carpool vehicles
- Providing a transit stop along the project frontage on Grant Line Road (if agreed to by the City)
- Providing bike lanes and sidewalks along the project frontage
- Providing on-site bike racks and showers
- Paying toward the City's VMT Mitigation Banking Fee Program

While these measures are designed to reduce VMT impacts, in so doing they also necessarily would reduce impacts associated with GHG emissions.

Response to SHUTE-27
The commenter restates its concern that the Draft EIR does not comply with the requirements included in the *Newhall Ranch* case. It notes the holding of this case and describes two caveats from the decision. The commenter also notes that the *Newhall Ranch* case is eight years old, and asserts that it is now improper to rely on a threshold for 2020 emissions.

See Responses to SHUTE-25 as well as AENV-4. The analysis of GHG impacts in the Draft EIR was prepared in accordance with the applicable requirements of CEQA as reflected in the relevant case law as well as the statute and regulations, including guidance provided in Section 15064.4 of the State CEQA Guidelines, which states that the lead agency should use a model or methodology to provide a quantified estimate of GHG emissions from a project and that factors that should be considered to determine the significance of GHG emissions on the environment include (1) the extent to which a project will increase GHG emissions compared to the existing environment; (2) whether the project emissions exceeds an applicable threshold of significance; and (3) the extent to which the project complies with regulations or requirements adopted to reduce GHG emissions. The Draft EIR meets these requirements.

In *Newhall Ranch*, the Court notes that then-pending legislation would codify the 2030 limit equivalent to 40 percent below 1990 levels. With approval of SB 32, the 2030 goal was then codified by the legislature. The Draft EIR specifically considers the decision in *Newhall Ranch* and clarifies that for purposes of this analysis, consistent with CEQA Guidelines Appendix G, the three factors identified in CEQA Guidelines Section 15064.4 and the *Newhall Ranch* opinion, the GHG impacts would be considered significant if the proposed project would:

- Conflict with a compliant GHG Reduction Plan if adopted by the lead agency;
- Exceed the San Joaquin Air Pollution Control District (Valley Air District) GHG Reduction Threshold; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs

The Draft EIR does not state or suggest that the 2017 Scoping Plan does not look beyond 2020 as implied by the comment. Rather, the Draft EIR accurately explains that the 2017 Scoping Plan does not identify a specific pathway to achieve the 2050 target. In several instances, the Draft EIR specifically acknowledges that the 2017 Scoping Plan references the state's long-term goals (see, e.g., Draft EIR pp. 3.8-32, 3.8-45, 3.8-46.) However, as noted in the Draft EIR, until a new threshold or best performance standards (BPS) are identified for projects constructed after 2020, significance is appropriately evaluated based on making continued progress toward the SB 32 2030 goal. Additionally, the Draft EIR notes that as "[n]o new threshold has been adopted by the City of Tracy for the 2030 target, so in the interim the project must make continued progress toward the 2030 goal." For the reasons explained in Section 3.8 of the Draft EIR and further discussed in Responses to SHUTE-24 as well as AENV-4, -5, and -7, the Air Quality analysis appropriately addresses consistency with the SB 32 targets and the 2017 Scoping Plan Update. This approach provides estimates of project emissions in the new 2030 milestone year with the existing threshold to show the extent of progress achieved with existing regulations and the incorporation of specific project design features. Contrary to the commenter's assertion, CEQA does not require that an EIR explain why it did not utilize a particular threshold. Moreover, the referenced Costco EIR did not utilize a net-zero threshold either.

Response to SHUTE-28
The commenter restates its assertion that the Draft EIR fails to analyze the proposed project's GHG emission impacts on meeting longer term emission reduction targets beyond AB 32's end date of 2020. The commenter reiterates its position that the Draft EIR incorrectly asserts that it incorporates the State's GHG reduction goals for 2030, as delineated in SB 32 and CARB's 2017 Scoping Plan Update. The commenter further elaborates that the Draft EIR's use of a 21.7 percent BAU threshold does not account for the State's 2030 reduction goals.

See Responses to SHUTE-24, SHUTE-27, AENV-3, -4, -5, and -7.

Response to SHUTE-29
The commenter states that a 40 percent reduction from 2005 BAU levels does not equate to 40 percent reduction from 1990 levels. The commenter states its belief that a 29 percent reduction in

GHG levels compared to BAU would only meet 1990 levels, and that more of a reduction is necessary (as shown in a graph created and provided by the commenter). It then goes on to reiterate why the commenter believes that a net-zero emissions threshold would be more appropriate, particularly given the proposed project's anticipated lifespan.

To the extent the comments set forth a policy position on the appropriate threshold to be utilized generally based on its belief about the level of reduction necessary to achieve the State's emission reduction goals, such a general policy position does not raise specific CEQA issues and does not warrant a further response.

Furthermore, as detailed more fully in Responses to SHUTE-24 and SHUTE-27, the City is not required to utilize the threshold suggested by the commenter. The City elected, in its discretion, to utilize the identified threshold in accordance with Valley Air District guidance and the mandates of CEQA. See also Responses to AENV-3, -4, -5, and -7. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with the applicable Scoping Plan, the State's long-term GHG goals, and climate change science. The City has the discretion, under CEQA, to weigh the evidence relating to the accuracy and sufficiency of the information in the Draft EIR and to decide whether to accept it. The City may adopt the environmental conclusions reached by the experts who prepared the Draft EIR even though others may disagree with the underlying data, analysis, or conclusions. (*Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 C3d 376, 408; *State Water Resources Control Board Cases* (2006) 136 CA4th 674, 795). Disagreements or discrepancies in results arising from different methods for assessing environmental issues do not undermine the validity of the Draft EIR's analysis as long as a reasonable explanation supporting the Draft EIR's analysis is provided. (*Planning and Conserv. League v. Castaic Lake Water Agency* (2009) 180 CA4th 210, 243).

As discussed more fully in Section 3.8, Greenhouse Gas Emissions, the Valley Air District "Guidance for Valley Land Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA," includes thresholds based on whether the project will reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels. This level of GHG reduction is based on the target established by ARB's AB 32 Scoping Plan, which was approved in 2008. The ARB recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels." The Valley Air District guidance recommends using emissions in 2002–2004 in the baseline scenario to represent conditions—as if regulations had not been adopted—to allow the effect of projected growth on achieving reduction targets to be clearly defined. Thus, the BAU scenario is based on 2005 levels.

The GHG analysis in the Draft EIR complies with CEQA, and therefore no revisions are required.

Response to SHUTE-30

The commenter restates its assertion that the Draft EIR does not provide substantial evidence to support the use of the Statewide 29 percent and 21.7 percent BAU thresholds. The commenter states the Draft EIR does not recognize the land use changes that have occurred throughout in the

San Joaquin Valley, which has experienced a significant increase in warehouse development (and related large increase in diesel truck trips), and indicates that the Draft EIR should have considered the potential impacts of replacing climate-friendly agricultural uses (particularly alfalfa), which can contribute to net neutrality by removing GHG emissions from the atmosphere.

See Responses to SHUTE-24, SHUTE-27, SHUTE-30, AENV-3, AENV-4, and AENV-5.

Response to SHUTE-31
The commenter repeats its assertion that the Draft EIR misrepresents the conclusions from the *Newhall Ranch* case. The commenter explains that the *Newhall Ranch* case did not only find the use of a BAU threshold may be inappropriate for an individual project because new projects may need to do more than existing projects to ensure the State meets its goals. The commenter concludes that comparing the proposed project's GHG emissions to the emissions it would have generated under the 2005 regulatory framework is not substantial evidence. The commenter then reiterates its position that a net-zero threshold is more appropriate.

To the extent the comments set forth a policy position on the appropriate threshold to be utilized generally based on its belief about the level of reduction necessary to achieve the State's emission reduction goals, such a general policy position does not raise specific CEQA issues and does not warrant a further response.

The California Supreme Court's decision in *Newhall Ranch* is accurately described and applied throughout Section 3.8 of the Draft EIR. It is important to note that the Court in *Newhall Ranch* did not invalidate the BAU approach entirely. See Responses to SHUTE-27, SHUTE-30, AENV-3 and AENV-8.

CEQA does not require an evaluation of impacts against a threshold that requires net-zero GHG emissions. The Draft EIR evaluated GHG impacts against the appropriate thresholds as required by CEQA. See Responses to AENV-4 and AENV-5. Moreover, as detailed in Section 3.8, Greenhouse Gas Emissions, each of the project phases would achieve reductions beyond the ARB 2020 21.7 percent target and the Valley Air District 29 percent reduction from BAU requirements from adopted regulations in their respective operational years. The emission estimates presented in Tables 3.8-9 through 3.8-11 demonstrate that the proposed project would achieve greater reductions than the Valley Air District-established threshold of 29 percent, resulting in annual reductions ranging from 43.3 to 44 percent. Based on this progress and the 2017 Scoping Plan Update, it is reasonable to conclude that the proposed project would be consistent with the 2017 Scoping Plan and would make a reasonable fair share contribution to achieving the 2030 target. Furthermore, Table 3.8-12 describes how the proposed project would be consistent with the 2017 Scoping Plan Update measures. Therefore, the City has properly determined that the proposed project would not prohibit or prevent the State of California from achieving the goals set in Executive Order B-55-18 because it would not result in barriers to achieving net-zero emissions.

Also, see Response to AENV-15 and multiple Responses herein for a description of mitigation measures included in the Final EIR that would also have the effect of reducing GHG emissions.

Response to SHUTE-32
The commenter restates its belief that designing new warehouses to include the most emission reduction components would be more feasible to reduce GHG emissions and meet Statewide climate targets rather than retrofitting existing buildings. The commenter concludes that the Draft EIR inaccurately represented the holdings of the *Newhall Ranch* case and failed to provide substantial evidence that the Statewide BAU threshold is appropriate. Also, the commenter states that the Draft EIR conflicts with the findings of the *Golden Door* court case because the Draft EIR does not differentiate between different types of development and the proposed project would generate substantially more GHG emissions due to diesel-fueled truck use, compared to other types of land uses that do not use diesel-fueled trucks.

As discussed in multiple Responses herein, the Final EIR includes a stable project description, which was thoughtfully analyzed pursuant to requirements under CEQA. Consistent with the commenter's request, the proposed project is doing significantly more than what could be expected of existing projects (in terms of retrofitting). See numerous Responses herein that detail the mitigation measures and other enforceable conditions of approval that would be imposed on or otherwise incorporated into the proposed project, which would reduce air quality and GHG impacts to the extent feasible. The commenter seeks to distinguish warehouse developments from other types of proposals. However, the Final EIR properly accounts for the type of proposal at issue, identifies feasible mitigation measures, and also notes that emissions associated with light industrial uses such as the proposed project involve emissions primarily from mobile sources (i.e., truck trips) and electricity generation, and thus one of the best ways to feasibly and effectively reduce these emissions will necessarily result from compliance with a comprehensive regulatory framework implemented by expert public agencies such as the ARB.

See also Responses to AENV-8 and AENV-9.

See Responses to SHUTE-24, SHUTE-27 and SHUTE-30 regarding the Draft EIR's proper selection and application of the appropriate thresholds as required by CEQA.

As discussed in Section 3.6 Greenhouse Gas Emissions, under CEQA and as held in the California Supreme Court's decision in *Center for Biological Diversity v. California Department of Fish and Wildlife*, GHG impacts would be considered significant if the proposed project would:

1. Conflict with a compliant GHG Reduction Plan if adopted by the lead agency;
2. Exceed the San Joaquin Valley Air Pollution Control District (Valley Air District) GHG Reduction Threshold; or
3. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs.

Therefore, the first impact criterion, "conflict with a compliant GHG Reduction Plan if adopted by the lead agency," cannot be applied to the proposed project, because the City of Tracy has not adopted its own GHG thresholds or prepared a Climate Action Plan that can be used as a basis for determining project significance, although it has adopted a Sustainability Action Plan, which is a non-

qualifying GHG Reduction Plan. Moreover, the other two impact criteria presented closely align with the two Appendix G Environmental Checklist questions for GHG emissions. Therefore, the City, in its discretion and in accordance with CEQA requirements (including, without limitation, those set forth in relevant case law such as the *Newhall Ranch* decision), is utilizing Appendix G of the State CEQA Guidelines as thresholds for the proposed project. The Valley Air District Guidance for Valley Land use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA includes thresholds based on whether the project would reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels. This level of GHG reduction is based on the target established by ARB's AB 32 Scoping Plan, approved in 2008.

Consistent with the *Newhall Ranch* court decision and as further detailed in the robust analysis set forth in Section 3.8, Greenhouse Gas Emissions and explained further herein, a project BAU analysis based on substantial evidence in the record was prepared for the proposed project, which assesses "consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities." As explained in more detail in Section 3.8, Greenhouse Gas Emissions, of the Draft EIR, the proposed project is expected to become operational in phases beginning in 2023 and assumes full buildout in 2025, which is beyond the AB 32 target year. As a result, until a new threshold is identified for projects constructed after 2020, the only adopted threshold to address significance is based on making continued progress toward the SB 32 2030 goal.

Moreover, as detailed in Section 3.8, Greenhouse Gas Emissions and explained further herein, each of the project phases would necessarily achieve reductions beyond the ARB 2020 21.7 percent target and the Valley Air District 29 percent reduction from BAU requirements as a result of compliance with mandates in their respective operational years. The emission estimates presented in Tables 3.8-9 through 3.8-11 demonstrate that the proposed project would achieve greater reductions than the Valley Air District-established threshold of 29 percent, resulting in annual reductions ranging from 43.3 to 44 percent. Based on this continued progress and consistent with the 2017 Scoping Plan Update, it is reasonable to conclude that the proposed project would be consistent with the 2017 Scoping Plan and would make a reasonable fair share contribution to achieving the 2030 target. Furthermore, Table 3.8-12 describes in detail, pointing to specific project features and other relevant information, how the proposed project would be consistent with the applicable 2017 Scoping Plan Update measures. Therefore, the City has properly determined, based on substantial evidence, that the proposed project would not prohibit or prevent the State of California from achieving the goals set in Executive Order B-55-18 because it would not result in barriers to achieving net-zero emissions. See also Responses to SHUTE-24, SHUTE-27, SHUTE-30, AENV-3, -4, -5, and -7.

Response to SHUTE-33
The commenter reiterates that the use of a 29 percent BAU threshold is inadequate and the Draft EIR should use a net-zero GHG emissions threshold to ensure the proposed project is consistent with the States 2030 and 2045 goals.

See multiple Responses herein as well as AENV-3 and AENV-8.

Response to SHUTE-34
The commenter reiterates its position that the Draft EIR does not contain an adequate qualitative analysis, noting that the Draft EIR lists only some of the relevant GHG reduction goals, explains the general regulatory framework, and then provides only conclusory statements about consistency. It states that the Draft EIR's failure to adopt feasible measures to reduce GHG emissions demonstrates inconsistency with the relevant State goals.

See multiple Responses herein as well as Response to AENV-7.

Response to SHUTE-35
The commenter restates its assertion that the Draft EIR improperly omitted analysis of the proposed project's impacts on consistency with EO 55-0-18, AB 1279, and the 2022 Scoping Plan.

See multiple Responses herein as well as Response to AENV-3 through 5, AENV-7, and AENV-8. The City has properly determined that the proposed project would not prohibit or prevent the State of California from achieving the goals set in Executive Order B-55-18 or AB 1279 because the proposed project would not result in barriers to achieving net-zero emissions. In addition, CEQA does not require that the Draft EIR be updated to reflect the final 2022 Scoping Plan (which was published in November 2022 and adopted in December 2022), well after environmental review for the proposed project was commenced.

Response to SHUTE-36
The commenter restates its assertion that the Draft EIR did not adequately evaluate whether the project would conflict with goals of EO S-3-05 for reducing GHGs 80 percent below 1990 levels by 2050 and the Draft EIR conflicts with the findings of the *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* court case by improperly deferring analysis.

The Draft EIR did not improperly defer analysis. Rather, the evaluation concluded that it would be speculative to quantify the amount of emission reductions that would occur due to future regulatory measures since such measures have not yet been identified and adopted, but noted that the proposed project would be required to comply with any such future regulations as part of the implementation of a comprehensive regulatory scheme. As detailed more fully herein and otherwise in the Final EIR, the proposed project's potential GHG emissions impacts were fully analyzed both quantitatively and qualitatively, utilizing the adopted quantitative threshold recommended by Valley Air District (the public agency charged with regulating air quality and GHG emissions in the San Joaquin Valley). The Draft EIR explains why it would be speculative to do anything different. See also Responses to AENV-5 and AENV-8.

Response to SHUTE-37
The commenter restates its assertion that both the DEIR and FEIR failed to analyze whether the project would conflict with the Statewide 2050 climate goals and the project must include mitigation and not rely on future State legislation.

See multiple Responses herein as well as Responses to AENV-5 and AENV-10.

Response to SHUTE-38
The commenter restates its assertion that the Draft R underestimated mobile source emissions due to the use of the CalEEMod default values for passenger vehicle and truck trips; instead, the Draft EIR should have used different assumptions.

See Response to SHUTE-8. The Draft EIR properly utilized the CalEEMod default values. The commenter provides no basis for different assumptions except for a bare assertion that trip lengths "could well exceed those lengths." The City has the discretion, under CEQA, to weigh the evidence relating to the accuracy and sufficiency of the information in the Draft EIR and to decide whether to accept it. The City may adopt the environmental conclusions reached by the experts who prepared the Draft EIR even though others may disagree with the underlying data, analysis, or conclusions. (Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal. (1988) 47 C3d 376, 408; State Water Resources Control Board Cases (2006) 136 CA4th 674, 795). Disagreements or discrepancies in results arising from different methods for assessing environmental issues do not undermine the validity of the Draft EIR's analysis as long as a reasonable explanation supporting the Draft EIR's analysis is provided. (Planning and Conserv. League v. Castaic Lake Water Agency (2009) 180 CA4th 210, 243).

Response to SHUTE-39
The commenter restates its position that the Draft EIR underestimated trip length from project mobile sources.

The Draft EIR's modeling is accurate for the purposes of this analysis and is supported by substantial evidence in the record. See Responses to SHUTE-8 and SHUTE-38.

Response to SHUTE-40
The commenter restates its position that the Draft EIR failed to properly analyze climate change plan and policy impacts and failed to include feasible mitigation measures that would reduce mobile source emissions, and therefore the Draft EIR's evaluation of energy impacts is inadequate. The basis for this assertion is the Draft EIR's flawed GHG analysis. The commenter recognizes that the Draft EIR contains mitigation measures that are aimed at achieving a minimum of energy efficiency but then asserts that more could be done by imposing measures through a commitment to PV installation and a greater focus on electrification.

This comment merely reiterates the commenter's position that the GHG analysis is flawed and that additional mitigation should be imposed. See multiple Responses herein as well as Responses to AENV-5 and AENV-10 that address these concerns at length, and confirm that the Draft EIR contains a robust GHG analysis and identifies numerous feasible mitigation measures that would have the effect of reducing GHG emissions as well as air quality impacts.

Response to SHUTE-41
The commenter restates its assertion that the Draft EIR is required to include mitigation measures to reduce energy impacts, and indicates that the Draft EIR "refuses to identify or require any mitigation" for GHG impacts which undermines its conclusion with respect to energy. The commenter further states that a discussion of the potential ability of the proposed project to produce renewable energy is a procedural requirement. The commenter restates its position that

the proposed project should be required to include renewable energy production or design features, such as solar panels, summarizes the applicable CEQA energy threshold, and then lists the Draft EIR's findings about the amount of gasoline and diesel fuel that would be used during project construction and operation.

The commenter correctly lists the applicable energy threshold and the information disclosed by the Draft EIR in terms of the estimated gasoline and diesel fuel to be used during project construction and operation.

See multiple Responses herein, which explain at length the Draft EIR's approach to the GHG analysis and the basis for its less than significant conclusion, as well as identify numerous mitigation measures and other enforceable conditions of approval that would be imposed on and otherwise incorporated into the proposed project that would reduce air pollutant and GHG emissions and enhance energy efficiency. For example, among others, the proposed project would be required to comply with then-current City and Title 24 requirements to include solar-ready rooftop infrastructure, which would allow for the future installation of solar panels. The proposed project would not preclude the use of natural gas appliances, but the overall GHG emissions during project operation from energy sources, such as natural gas appliances, is expected to be relatively nominal due to the incorporation of highly efficient improvements and infrastructure. The proposed project would be required to include the use of energy-efficient lighting and HVAC systems in accordance with then-current applicable City building code and Title 24 standards.

This Final EIR addresses the topic of solar panels on each building as part of the Responses to GSEJA-31, Valley Air District 2-12, and Sierra 1-6. As described therein, the California Building Standards Code (CBC) requires that nonresidential projects construct their roofs to be solar-ready to accommodate the future installation of solar panels. The proposed project would be required to comply with the foregoing, thereby contributing to improved air quality and making progress toward reducing greenhouse gas emissions through the production of solar energy. Furthermore, the use of solar panels would not substantially reduce air pollutant emissions on-site, because energy source emissions described in the Air Quality Analysis (see Section 3.3 of the Draft EIR) are limited to those generated from the on-site combustion of natural gas due to the inter-regional relationship between land use development projects and the facility generating the electricity. As such, the consideration of electricity-related energy source emissions is limited to GHGs. Moreover, the proposed project would not result in any significant impact related to GHG (or energy) emissions and therefore the City is not required by CEQA to impose this type of mitigation, as discussed at length in Section 3.8 of the Draft EIR (see also Responses to Valley Air District 2-12, 2-13). Nevertheless, the project applicants have voluntarily agreed to incorporate additional enforceable conditions of approval to address this concern (see COA No. 9 in updated MMRP).

Response to SHUTE-42

The commenter restates its position that the Draft EIR did not evaluate the use of EV charging stations for on-site vehicles and equipment as well as trucks and passenger vehicles.

The commenter's statement is inaccurate. The Draft EIR evaluated the use of EV charging stations, and identified MM AIR-1i that would require the proposed project to include EV charging

infrastructure pursuant to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2 in all parking areas during operation. Therefore, all development as part of the proposed project would be conditioned to demonstrate a clean truck fleet would be operational to the maximum extent feasible when the subject individual development proposal operations begin. Moreover, the project applicants have voluntarily agreed to incorporate additional enforceable conditions of approval to address this concern (see COA No. 9(D) in updated MMRP).

Response to SHUTE-43
The commenter restates its position that the Draft EIR should not conclude energy impacts would be less than significant and should include additional mitigation measures to require the use of renewable energy production and other design features.

See Responses to SHUTE-41 and -42.

Response to SHUTE-44
The commenter states that the Draft EIR is inconsistent with General Plan Policy AQ-1.2-P3 because it believes additional mitigation measures should be included.

The City Council, as the legislative body that adopted its General Plan, has the discretion to interpret its General Plan in determining consistency. The fact that the commenter believes that another conclusion would be more appropriate does not undermine the ability of the City Council to exercise its discretion in making a consistency finding. The law gives deference to the City's interpretation of its General Plan. The City and its consultants, based on substantial evidence in the record, provided a thoughtful and robust consistency analysis, as set forth in detail in Impact LAND-2.

Here, Section 3.3, Air Quality, in the Draft EIR and Section 4, Errata, document in detail the basis for a consistency finding with the above-referenced policy as well as other relevant General Plan goals, policies, and objectives. See also multiple Responses herein, which document the numerous

mitigation measures and other enforceable conditions of approval that would be imposed on and otherwise incorporated into the proposed project that would be required to reduce air pollutant emissions to the extent feasible. In addition, as described in Section 3.3, Air Quality, the proposed project would be required to adhere to the applicable federal, State, and local laws and regulations, which include BMPs to reduce air pollutant emissions associated with the construction and operation of the proposed project. Also, see Responses to SIERRA-1-3, GSEJA-8, and GSEJA-11.

Response to SHUTE-45
The commenter states that the Draft EIR is inconsistent with General Plan Policy AQ-1.2-P6 because the project is fulfilling the minimum requirement of structurally accommodating the future installation of solar panels, but should install solar panels.

See Response to SHUTE-44.
As described more fully therein, the proposed project would be required to design the proposed buildings according to Subchapter 6, Part 6 of the Title 24 standards, to structurally accommodate

future installation of a rooftop solar system. As such, the design of the proposed project would facilitate the future commitment to renewable energy resources.

See also Responses to GSEJA-8, GSEJA-11.

Response to SHUTE-46
The commenter states that the Draft EIR is inconsistent with General Plan Policy AQ-1.2-P12 because EIR MM AIR-1h does not specify what an appropriate buffer distance would be and what type or amount of vegetation would be sufficient to mitigate the impacts of TAC emissions generated by the project.

See Response to SHUTE-44.

See also multiple Responses herein, which explain at length the HRA that was conducted for the proposed project, as detailed in Section 3.3, Air Quality, of the Draft EIR; as well as detailing numerous mitigation measures and enforceable conditions of approval that would be imposed on and otherwise incorporated into the proposed project. For example, the implementation of BMPs and MMs AIR-1a through 1i would reduce air quality emissions (along with having the concomitant effect of reducing GHG emissions) to the maximum amount feasible. In addition, in terms of a land use buffer zone, MM AIR-1h, as provided in Section 4, Errata of the Final EIR, requires a vegetated project site buffer in the area of the sensitive receptors in compliance with this policy. The City has agreed to adopt, and the project applicants have agreed to implement this additional mitigation measure.

See also Responses to GSEJA-3, GSEJA-8, GSEJA-11.

Response to SHUTE-47
The commenter states that the Draft EIR is inconsistent with General Plan Policy AQ-1.2-P14 based on its repeated assertion that the proposed project does not properly include additional measures the commenter lists in this comment letter and attachment.

See Response to SHUTE-44.

See also Responses to SIERRA-1-3 and SIERRA-1-4.

Response to SHUTE-48
The commenter states that the Draft EIR is inconsistent with General Plan Policy AQ-1.4-P3 based on its repeated assertion that the Draft EIR does not demonstrate the proposed project is consistent with the appropriate plans and policies related to GHG emissions reduction goals. The commenter further elaborates that because the proposed project would be inconsistent with General Plan policies, it would conflict with several course case rulings, such as *Families Unafraid to Uphold Rural El Dorado County v. Board of Supervisors* and *Napa Citizens for Honest Gov't v. Napa County* (2001).

See Response to SHUTE-44.

See also Responses to AENV-4, -5, -7, and -9. Response to SHUTE-49
The commenter concludes that the Draft EIR does not fulfill CEQA requirements and the City should deny the project approval.

To the extent the comment expresses its position on the merits of the proposed project and/or a general policy position that the City should consider broader policy questions regarding approval of large warehouse projects generally, such statements have been noted and will be provided to the City Council for its consideration and no further response is required.

This comment reflects a summary of its position that the Draft EIR does not satisfy requirements under CEQA. See multiple Responses herein.

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From: Genna McIntosh <gennamcintosh15@gmail.com>
Sent: Monday, August 29, 2022 6:18 PM
To: Victoria Lombardo <Victoria.Lombardo@cityoftracy.org>
Subject: Comments on Tracy Alliance Project EIR (SCH NO. 20200805524)

August 29, 2022

Victoria Lombardo, Senior Planner
CIty of Tracy Development Services
333 Civic Center Plaza
Tracy, California 95376

Subject: Comments on Tracy Alliance Project EIR (SCH NO. 20200805524)

Dear Ms. Lombardo,
During the May 25th 2022 Planning Commission meeting, I spoke about the project on the north east corner of our city, the Tracy Alliance Project. Since that meeting some things have come to my attention.
What is concerning is the lack of addressing an Environmental Justice element. 1

In 2016, Senate Bill 1000 signed in 2016, requires all cities and counties in California to include environmental justice goals and policies to their General Plan. https://oag.ca.gov/environment/sb1000

SB 1000 references that in local land use planning, cities are required to update their General Plan to include an Environmental Justice element when 2 or more elements have been amended/updated which would have occurred with our land use and housing general plan element updates.
https://www.cityoftracy.org/home/showpublisheddocument/906/637451218789130000

When I spoke at that May 25th meeting I was unaware of how my community is considered a Disadvantaged Community on Calenviroscreen and it raises the following questions: 2

Where are the environmental justice elements to this EIR?
Has the City reviewed and or adopted any of the AG Warehouse Project Best Practices?
https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf

Is the city utilizing the CalEnviroScreen to identify Disadvantaged Communities? (CalEPA's SB 535 "Disadvantaged Communities" Mapping Tool). 3

Did the public comment period reflect the OAG best practice of community engagement? 4
https://oag.ca.gov/system/files/media/warehouse-best-practices.pd

As Tracy strives to build an economically, diverse, healthy and robust community the residents expect full transparency, accountability and communication to be more actively engaged. Concerned Citizens for Tracy Alliance Project, Concerned Citizens for TAP, requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to ConcernedCitizensforTAP@gmail.org 5

Respectfully,
Genna McIntosh

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Individual

Genna McIntosh (MCINTOSH-3)

Response to MCINTOSH-3-1
The commenter notes participation at a May 25, 2022 Planning Commission meeting, and notes a lack of an Environmental Justice Element.

This comment does not raise any specific project-related environmental issues under CEQA and therefore no further response is required. However, for informational purposes, the following is noted.

A General Plan must include an Environmental Justice element when the local jurisdiction proposes to adopt or revise at least two elements concurrently, pursuant to SB 1000.

Since SB 1000 went into effect, the City of Tracy has updated only the Land Use Element of its General Plan. The Housing Element was updated in 2016, prior to SB 1000. Therefore, because the City has not updated more than one element concurrently since SB 1000 went into effect on January 1, 2018, the requirement to include an Environmental Justice element has not been triggered. If and to the extent such requirement is triggered in the future, the City will be required to comply with applicable law.

Response to MCINTOSH-3-2
The commenter noted a previous lack of awareness that her community (unincorporated Banta) is identified as a Disadvantaged Community on CalEnviroScreen. The commenter also noted that this raises several questions regarding inclusion of an Environmental Justice analysis in the Draft EIR, and whether the City has reviewed and/or adopted the "AG Warehouse Project Best Practices."

This comment is noted and acknowledged, but because it does not raise any specific project-related environmental issues under CEQA, no further response is required. However, for informational purposes, the following is noted.

While the Banta community may experience some existing pollution burden, the Banta community is not identified as part of an area which has different significance thresholds from those recommended by the Valley Air District. Refer to Response to GSEJA-3 and GSEJA-26 regarding Environmental Justice; see also Responses to Mcintosh 3-3 and SHUTE-2. Regarding the California Attorney General's *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act*, the Attorney General's letter provides examples of the AG's position with respect to best practices for siting warehouses but does not constitute legally enforceable requirements on facility siting. The Draft EIR, Section 3.3, Air Quality, included feasible mitigation measures to reduce potential air quality impacts. Furthermore, as discussed in Response to Valley Air District-2-5 and multiple Responses to SHUTE, to further reduce potential health impacts to the nearest sensitive receptors, new MM AIR-1e is added to Section 3.3, Air Quality, of the Draft EIR. These changes can be seen in Section 3.1 of the Errata. No further analysis or mitigation measures are required under CEQA.

Response to MCINTOSH-3-3
The commenter raises the question whether the City is utilizing the CalEnviroScreen to identify disadvantaged communities (Cal/EPA's SB 535 "Disadvantaged Communities" Mapping Tool).

This comment is noted and acknowledged, but because it does not raise any specific project-related environmental issues under CEQA, no further response is required. However, for informational purposes, the following is noted.

CalEnviroScreen is a general mapping tool developed by the California Office of Environmental Health Hazard Assessment (OEHHA) to help identify California communities that are most affected by sources of pollution.

The environmental effects of the proposed project are fully evaluated in the Draft EIR, and feasible mitigation measures are identified to reduce identified significant impacts. An adjacent area (Banta) is designated by Cal/EPA as being part of a disadvantaged community for the purpose of SB 535; however, Banta is outside of the City's SOI. The City of Tracy does not have any disadvantaged communities within its SOI. SB 535 targets disadvantaged communities in California for investment of proceeds from the State's Cap and Trade Program to improve public health, quality of life, and economic opportunity in California's most burdened communities, while also reducing pollution. The CalEnviroScreen general mapping tool was not developed for use in evaluating potential impacts under CEQA, and utilizing this tool is not required under CEQA.

The proposed project entails the development of three industrial warehouse and distribution buildings and related improvements, which would bring jobs and other economic opportunities to the local area without State assistance. The environmental effects of the proposed project are fully evaluated in the Draft EIR, and feasible mitigation measures are identified for the identified significant impacts that are within the City of Tracy's jurisdictional authority to impose and enforce as required by CEQA. The Draft EIR provides a disclosure of localized impacts. As described in the methodology section under Section 3.3, Air Quality, the Draft EIR's analysis was based on the applicable Valley Air District guidelines and thresholds and is supported by substantial evidence based, in part, on project-specific information. Furthermore, as discussed in Response to Valley Air District-2-5 and multiple Responses to SHUTE, to further reduce potential health impacts to the nearest sensitive receptors, new MM AIR-1e is added to Section 3.3, Air Quality, of the Draft EIR. These changes can be seen in Section 3.1 of the Errata. Additionally, refer to Response to GSEJA-3.

Response to MCINTOSH-3-4
The commenter raises the question whether community engagement occurred during the public comment period as recommended by the Attorney General.

This comment is noted and acknowledged, but because it does not raise any specific project-related environmental issues under CEQA, no further response is required. However, for informational purposes, the following is noted.

Opportunities for public participation are a mandated and essential part of the CEQA process. Pursuant to CEQA, the City held a duly noticed public scoping meeting on September 9, 2020, at which no public comments were submitted, Additionally, the City's Planning Commission held a duly

noticed public meeting on May 25, 2022, for the purpose of receiving oral and written comments on the Draft EIR, and opportunities to review and comment on the Draft EIR and related appendices were provided both electronically and via hard copies. Therefore, the environmental review process for the proposed project exceeds CEQA's requirements for public participation.

Response to MCINTOSH-3-5
The commenter requested that Concerned Citizens for Tracy Alliance Project (TAP) be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project.

Comment is noted and acknowledged. Concerned Citizens for TAP will be included in future notices for the proposed project. No further response is required.

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SECTION 4: ERRATA

The following are revisions to the Draft EIR for the Tracy Alliance Project. These revisions are minor typographical errors, refinements and revisions to the document that merely amplify and clarify the analysis herein, and do not change the significance of any of the environmental issue conclusions within the Draft EIR or otherwise require recirculation of the Draft EIR. The revisions are listed by page number. All additions to the text are underlined (underlined) and all deletions from the text are stricken (~~stricken~~).

4.1 - Changes in Response to Specific Comments

Revisions to Sources

The footnote sources for the Tracy Municipal Services Review are updated to the following to provide a working link:

> De Novo Planning Group. 2019. Tracy Municipal Services Review. Website: https://www.sjgov.org/docs/default-source/local-agency-formation-commission-documents/municipal-services-and-spheres-of-influence/cities/tracy---july-2019.pdf?sfvrsn=aa988a63_2. Accessed: July 25, 2022.

Executive Summary

Page ES-3-4

Significant Unavoidable Adverse Impacts

- **Project-Level Impact Related to Implementation of the Applicable Air Quality Plan:** The proposed project is consistent with the site's General Plan designation which means the proposed industrial use was accounted for in the Air Quality Plan (AQP) land use projections. However, the proposed project could create a localized violation of State or federal air quality standards, significantly contribute to cumulative nonattainment pollutant violations, and expose sensitive receptors to substantial pollutant concentrations. The proposed project would be required to implement MM AIR-1a through MM AIR-~~4~~1i; however, because full implementation of the mitigation cannot be guaranteed due to potential technical and/or financial infeasibility, the proposed project's potentially significant impact is conservatively identified as significant and unavoidable. Therefore, the proposed project is inconsistent with Criterion 1 of the AQP even after the incorporation of mitigation. The impact would be significant and unavoidable.
- **Project-Level Impact Related to Cumulatively Considerable Net Increase of reactive organic gases (ROG) and carbon monoxide (CO) During Construction, and ROG and oxides of nitrogen (NO_X) During Operation:** The construction schedule for the proposed project assumed that none of the three project phases would overlap. In this scenario, after the incorporation of MMs AIR-1a and AIR-1b, construction of the proposed project would not exceed the San Joaquin Valley Air Pollution Control District (Valley Air District) daily emission screening levels for an Ambient Air Quality Analysis (AAQA), pursuant to District Rule 2201.

However, the potential remains for project phases to be constructed concurrently. If the three phases of construction occur concurrently, emissions of ROG and CO would exceed the Valley Air District's significance thresholds ~~if all three project phases were constructed concurrently~~. As such, this impact would remain significant and unavoidable after implementation of identified mitigation.

During operation, unmitigated emissions would exceed Valley Air District thresholds of significance for ROGs and NO_X. Therefore, MM AIR-1c through MM AIR-1i~~and MM AIR-1d~~ would be required to mitigate operational emissions to below Valley Air District thresholds. However, the full implementation of MM AIR-1c through MM AIR-1i~~and MM AIR-1d~~ cannot be guaranteed during project operation; therefore, the reasonable worst-case operational emissions would exceed the Valley Air District's significance thresholds for ROG and NO_X and this impact would remain significant and unavoidable.

- **Project-Level Impact Related to Exposing Sensitive Receptors to Substantial Pollutant Concentrations:** During construction, if all three project phases were constructed concurrently, the proposed project would expose sensitive receptors to CO and diesel particulate matter (DPM) emissions that exceed applicable thresholds even with mitigation incorporated. During operation, the proposed project would expose sensitive receptors to ROGs, NO_X, and DPM levels that exceed applicable thresholds even after incorporation of identified mitigation resulting in a significant and unavoidable impact.

Page ES-50, Table ES-1: Executive Summary Matrix

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact AIR-1: The proposed project could conflict with or obstruct implementation of the applicable air quality plan.	Potentially Significant	**MM AIR-1a**: **NO_X Reduction Measures** Prior to the issuance of grading ~~or building~~ permits for each individual development proposal within the project site, the relevant applicant for each development proposal shall provide documentation to the City of Tracy demonstrating the following NO_X reduction measures would be adhered to during construction activities for the relevant development proposal: • For all construction equipment and vehicles used during project construction that are equal to or greater than 250 horsepower, the contractor shall use construction equipment and vehicles that meet the United States Environmental Protection Agency (EPA) Tier 4 Final engine standards; • For all construction equipment and vehicles used during project construction that are less than 250 horsepower, the contractor shall use electric construction equipment and vehicles. If the applicant can demonstrate that electric equipment and vehicles are not reasonably available, the next best reasonably available piece of equipment or vehicle shall be used, such as, for example, Tier IV final or alternative fueled equipment	Significant and Unavoidable

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		that is zero-emission. The foregoing requirement to use electric construction equipment shall not apply to handheld generator set ~~to the extent feasible, with the exception of handheld generator sets~~; and • All generator sets utilized during project construction shall be limited to 5 horsepower and shall only be used to power handheld power tools. The construction contractor shall maintain reasonable records concerning its efforts to comply with this requirement, including equipment lists. Documentation that each relevant applicant provides to the City shall include, but is not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number. **MM AIR-1b: "Super-Compliant" Architectural Coatings** Prior to the issuance of grading ~~or building~~ permits for each individual development proposal within the project site, the relevant applicant for each development shall provide the City with documentation demonstrating the use of "Super-Compliant" architectural coatings, as defined by the South Coast Air Quality Management District (South Coast AQMD), during construction of the proposed project. "Super-Compliant" architectural coatings, as defined by the South Coast AQMD, are paints which do not exceed 10 grams of reactive organic gas (ROG) per liter of paint. **MM AIR-1c**: **"Zero-VOC" Consumer Products** Prior to issuance of building permits for each individual development proposal within the project site, the relevant applicant for each development shall provide the City with documentation requiring the consumer products purchased by the building occupant(s) or by the cleaning business contracted by the building occupant(s) for on-site use shall consist of water-based or "zero volatile organic compound [VOC]" consumer products, to the maximum extent feasible. "Consumer products," as referred to in this mitigation measure, shall include detergents, cleaning compounds, polishes, and floor finishes. "Consumer products," as referred to in this mitigation measure, shall not include parking lot degreasers, architectural coatings, pesticides, or fertilizers. **MM AIR-1d**: **Clean Truck Fleet** Prior to the issuance of the certificate of occupancy for each individual development proposal within the project	

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating the use of a clean truck fleet that meets the California Air Resources Board's adopted 2013 Optional Low-NO_X Standard of 0.02 gram of nitrogen oxide (NO_X) per brake horsepower hour for all heavy-duty trucks during operation of the proposed project, to the maximum extent feasible. If the relevant applicant does not own the truck fleet that will be used during operation of the subject individual development, the relevant applicant shall provide the City with reasonable documentation from the truck fleet owner demonstrating that trucks utilized for operation of the subject individual development will meet the California 2013 Optional Low-NO_X Standard, to the maximum extent feasible. If any change occurs where a new truck fleet is utilized during operation of the subject individual development, the relevant applicant shall provide the City with reasonable documentation demonstrating that the new truck fleet meets the California 2013 Optional Low-NO_X Standard of 0.02 gram per brake horsepower hour, to the maximum extent feasible. Prior to the issuance of the certificate of occupancy for each phase of the proposed project, the relevant applicant for the individual development proposal within the project site shall provide the City with reasonable documentation demonstrating the use of a clean truck fleet that meets the California Air Resources Board's adopted 2013 Optional Low-NO_X Standard of 0.02 gram of nitrogen oxide (NO_X) per brake horsepower hour for all heavy-duty trucks during operation of the proposed project, to the maximum extent feasible. If the relevant applicant does not own the truck fleet that will be used during operation of each phase of the proposed project, the relevant applicant shall provide the City with reasonable documentation from the truck fleet owner demonstrating that trucks utilized for operation of the individual development at issue will meet the California 2013 Optional Low-NO_X Standard, to the maximum extent feasible. If any change occurs where a new truck fleet is utilized during operation of the individual development at issue, the relevant applicant shall provide the City with reasonable documentation demonstrating that the new truck fleet meets the California 2013 Optional Low-NO_X Standard of 0.02 gram per brake horsepower hour, to the maximum extent feasible.	

		MM AIR-1e: Operational Truck Fleet Routing Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that trucks used during project operation for the subject individual development proposal shall be prohibited from accessing Grant Line Road east of the project site, such as plans illustrating intended truck routes. Additionally: A. Prior to the issuance of grading permit, the project applicant shall submit to the City of Tracy Engineering Department plans or designs that show where the project's private drive intersects with Grant Line Road, the applicant shall use a combination of raised concrete medians (or islands) and/or bollards to prevent trucks from entering the left turn pocket. Truck drivers shall be directed into a dedicated right turn lane onto Grant Line Road. Signage and roadway striping within the project will also direct drivers to the appropriate lanes as they approach the intersection. The design shall be reviewed and approved by the City of Tracy Engineering Department. B. Prior to the issuance of occupancy permit for the first building, the Phase I Developer shall demonstrate to the City of Tracy Public Works Department that the development shall include new signage placed along Grant Line Road, warning truck drivers that truck travel through the Community of Banta is not permitted and is a finable offense shall be placed along Grant Line Road. Specifically, two signs shall be placed on the north and south sides of Grant Line Road near its intersection with the proposed project's private drive and visible to east bound traffic. The exact locations, design and text of the signs shall be approved by the City of Tracy Public Works Department. ~~All trucks used during project operation shall use routes that circumvent the use of Grant Line Road east of the project site.~~ **MM AIR-1f: Idling Limitation** Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that on-site truck idling during project operation for the subject individual development proposal shall be limited to no greater than 3 minutes. The documentation provided to the City shall include photos or a map of signage posted in strategic locations on-site identifying that truck idling does not exceed 3 minutes. The signage shall include a	

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		phone number to contact at the facility regarding idling violation complaints, and corrective action shall occur within 48 hours of receipt of the complaint. **MM AIR-1g: Electric On-site Off-Road and On-Road Equipment** Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that all on-site off-road and on-road equipment to be used during project operation of the subject individual development proposal shall be electric-powered. On-site off-road and on-road equipment shall include, but are not limited to, forklifts and pallet jacks. **MM AIR-1h: Vegetated Project Site Buffer** Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall demonstrate on their site plans the inclusion of a vegetative buffer along the eastern property line of the project site adjacent to sensitive receptors. Examples of vegetative buffers may include, but are not limited to, trees, bushes, shrubs, or a mix thereof. **MM AIR-1i: Tier 2 CALGreen Electric Vehicle Charging Infrastructure** Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation (e.g., shown on-site plans) showing that the proposed parking areas for passenger automobiles and trucks for project operation of the subject individual development proposal are designed and shall be built to include electric vehicle (EV) charging stations. At a minimum, the parking shall be designed to include a number of EV charging stations equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2.	
Impact AIR-2: The proposed project could result in a cumulatively considerable net increase of any criteria pollutant	Potentially Significant	MM AIR-1a through ~~MM AIR-1d~~MM AIR-1i	Significant and Unavoidable

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
for which the region is in nonattainment under an applicable federal or State ambient air quality standard.			
Impact AIR-3: The proposed project could expose sensitive receptors to substantial pollutant concentrations.	Potentially Significant	MMs AIR-1d through AIR-1i.	Significant and Unavoidable
Cumulative Impact	Potentially Significant	MM AIR-1a through MM AIR-1~~d~~i	Significant and Unavoidable
Impact TRANS-1: The proposed project would result in a substantial increase in vehicle miles traveled.	Potentially Significant	**MM TRANS-1(a): Transportation Demand Management Measures** Prior to issuance of the first building permit for the relevant individual development proposal, the relevant applicant for the individual development proposal at issue shall submit to the City of Tracy Planning Department a transportation demand management (TDM) program that incorporates all of the following six measures (as explained further in Table 3.14-6 of the Draft EIR): 1. Communication and Information Strategies–4 percent reduction; 2. Telecommuting for administrative staff (5 percent of staff population)–1 percent reduction; 3. Designated parking spaces for carpool vehicles–1 percent reduction; 4. Provide a transit stop along the project frontage on Grant Line Road, if agreed to by the City–2 percent reduction; 5. Provide bike lanes and sidewalks along the project frontage–1 percent reduction; and 6. Provide on-site bike racks and showers–1 percent reduction. Provided, however, that if the relevant applicant determines that one of more of the foregoing six TDM measures is not feasible in connection with the individual development proposal at issue, then the relevant applicant may obtain approval from the City of Tracy	Significant and Unavoidable

Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Planning Department of acceptable substitute TDM measure(s) pursuant to Table 3.14-6 of the Draft EIR. The relevant applicant's TDM program, as described above, shall reflect a 10 percent reduction in VMT for the relevant individual development proposal. **MM TRANS-1(b): Payment of Applicable Banking Fee.** In addition to the TDM program required in MM TRANS-1(a), each applicant for an individual development proposal shall pay its fair share of the applicable fee as set forth in the adopted VMT Mitigation Banking Fee in place and effective at the time the relevant applicant seeks to obtain building permits for its individual development proposal. Provided, however, that if the City Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, then the relevant applicant shall implement additional VMT reduction measures in order to meet the total minimum VMT reduction requirement of 15 percent. ~~then payment of $633.11 (cost per VMT reduction for the relevant individual development proposal) shall constitute compliance with this MM TRANS-1(b) then the relevant applicant shall implement additional VMT reduction measures in order to meet the minimum VMT reduction requirement of 15 percent.~~	

Section 3.3 Air Quality

Page 3.3-20

San Joaquin Valley Air Pollution Control District Rules and Regulations

The following Valley Air District rules and regulations are relevant to this analysis:

Rule 2010—Permits Required. This rule requires operators of emission sources to obtain an Authority to Construct and Permit to Operate from the District.

Rule 2201—New and Modified Stationary Source Review. This rule requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology, such as requiring a backup generator to meet Tier 4 emission standards.

Rule 2520—Federally Mandated Operating Permits. The purpose of this rule is to issue operating permits for new and modified sources of air contaminants pursuant to the requirements of 40 Code of Federal Regulations, Part 70.

Rule 4002—National Emissions Standards for Hazardous Air Pollutants. The purpose of this rule is to protect the public from uncontrolled emissions of asbestos by requiring a thorough inspection for asbestos before any demolition or renovation activities occur.

Rule 4102—Nuisance. The purpose of this rule is to protect the health and safety of the public and applies to any source operation that emits or may emit air contaminants or other materials.

Page 3.3-20

Regulation VIII—Fugitive PM_{10} Prohibitions. Rules 8011-8081 are designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

Rule 9410—Employer Based Trip Reduction. This rule applies to projects that result in the employment of 100 or more "eligible" employees and requires the employer to establish an Employer Trip Reduction Implementation Plan that encourages employees to reduce single-occupancy vehicle trips.

Rule 9510—Indirect Source Review. This rule reduces the impact of NO_X and PM_{10} emissions from growth within the Air Basin. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through on-site mitigation, off-site Valley Air District-administered projects, or a combination of the two. The proposed project must comply with Rule 9510 because it would develop more than 25,000 square feet of light industrial uses.

Page 3.3-30

MM AIR-1e Operational Truck Fleet Routing

Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that trucks used during project operation for the subject individual development proposal shall be prohibited from accessing Grant Line Road east of the project site, such as plans illustrating intended truck routes. Additionally:

A. Prior to the issuance of grading permit, the project applicant shall demonstrate to the City of Tracy Engineering Department plans or designs that show where the project's private drive intersects with Grant Line Road, the applicant shall use a combination of raised concrete medians (or islands) and/or bollards to prevent trucks from entering the left turn pocket. Truck drivers shall be directed into a dedicated right turn lane onto Grant Line Road. Signage and roadway striping within the project will also direct drivers to the appropriate lanes as they approach the intersection. The design shall be reviewed and approved by the City of Tracy Engineering Department.

B. Prior to the issuance of occupancy permit for the first building, the Phase I Developer shall demonstrate to the City of Tracy Public Works Department that the development shall include new signage warning truck drivers that truck travel through the Community of Banta is not permitted and a finable offense shall be placed along Grant Line Road. Specifically, two signs shall be placed on the north and south sides of Grant Line Road near its intersection with the proposed project's private drive and visible to east bound traffic. The exact locations, design and text of the signs shall be approved by the City of Tracy Public Works Department.

~~All trucks used during project operation shall use routes that circumvent the use of Grant Line Road east of the project site.~~

MM AIR-1f Idling Limitation

Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that on-site truck idling during project operation for the subject individual development proposal shall be limited to no greater than 3 minutes. The documentation provided to the City shall include photos or a map of signage posted in strategic locations on-site identifying that truck idling does not exceed 3 minutes. The signage shall include a phone number to contact at the facility regarding idling violation complaints, and corrective action shall occur within 48 hours of receipt of the complaint.

MM AIR-1g Electric On-site Off-Road and On-Road Equipment

Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that all on-site off-road and on-road equipment to be used during project operation of the subject individual development proposal shall be electric-powered. On-site off-road and on-road equipment shall include, but are not limited to, forklifts and pallet jacks.

MM AIR-1h Vegetated Project Site Buffer

Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall demonstrate on their site plans the inclusion of a vegetative buffer along the eastern property line of the project site adjacent to sensitive receptors. Examples of vegetative buffers may include, but are not limited to, trees, bushes, shrubs, or a mix thereof.

MM AIR-1i Tier 2 CALGreen Electric Vehicle Charging Infrastructure

Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation (e.g., shown on-site plans) showing that the proposed parking areas for passenger automobiles and trucks for project operation of the subject individual development proposal are designed and shall be built to include electric vehicle (EV) charging stations. At a minimum, the parking shall be designed to include a number of EV charging stations equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2.

Level of Significance After Mitigation

Significant and unavoidable impact.

Page 3.3-39

As shown in Table 3.3-12, unmitigated operational emissions would exceed Valley Air District thresholds of significance for ROG and NO_X. Therefore, MMs AIR-1c, ~~and~~ AIR-1d, AIR-1e, AIR-1f, AIR-1g, AIR-1h, and AIR-1i would be required to mitigate operational emissions to the extent feasible ~~to below Valley Air District thresholds~~.

Page 3.3-41

Nonetheless, the full implementation of MM AIR-1c and MM AIR-1d cannot be guaranteed during project operation; therefore, the emission estimates provided in Table 3.3-14 demonstrate a reasonable worst-case scenario for project operation after incorporation of identified mitigation. In addition, MM AIR-1f would restrict on-site vehicle idling to no greater than 3 minutes. MM AIR-1g would require the use of electric on-site on- and off-road equipment in place of non-electric alternatives. MM AIR-1i would require the installation of EV charging stations which meet the Tier 2 standards set forth in Section A5.106.5.3 of Appendix A5 – Nonresidential Voluntary Measures of CALGreen of the 2019 California Building Code. The inclusion of MMs AIR-1f, AIR-1g, and AIR-1i would help further incrementally reduce emissions below those disclosed in this Draft EIR; however, the quantified reductions from these measures cannot be accurately identified and guaranteed at this time. Because the operational emissions shown ~~therein~~ above would exceed the Valley Air District's significance thresholds for ROG and NO_X, ~~and~~ this impact would remain significant and unavoidable.

Operational Ambient Air Quality Analysis

Valley Air District Rule 2201 requires that an AAQA be conducted for a project when that project's maximum daily emissions exceed 100 pounds for any single criteria or precursor pollutant after incorporation of all mitigation. As shown in Table 3.3-14, due to the uncertainty of full implementation of MM AIR-1c and MM AIR-1d, and the uncertain extent and efficacy of quantified reductions resulting from MM AIR-1f, MM AIR-1g, MM AIR-1i, the potential emission reductions resulting from ~~MM AIR-1c and MM AIR-1d~~ identified mitigation are not considered in the proposed project's mitigated operational emissions. As such, maximum daily operational emissions generated by all phases of the proposed project would exceed the Valley Air District's screening threshold for

an AAQA for NO_X emissions. As a result, this impact would remain significant and unavoidable after mitigation is incorporated.

Page 3.3-42

Mitigation Measures

Implement MMS AIR-1a, AIR-1b, AIR-1c, ~~to~~ AIR-1d, AIR-1f, AIR-1g, and AIR-1i.

Page 3.3-49

The implementation of MM AIR-1d would contribute to the minimization of DPM emissions generated from trucking emissions; however, full implementation of MM AIR-1d cannot be guaranteed. In addition, MM AIR-1e would restrict truck traffic from accessing Grant Line Road east of the project site, where many sensitive receptors are located. MM AIR-1f would restrict on-site vehicle idling to no greater than 3 minutes. MM AIR-1g would require the use of electric on-site on- and off-road equipment in place of non-electric alternatives. MM AIR-1h would require the installation of a vegetated buffer around specified portions of the project site to reduce the potential off-site dispersion of TACs generated at the project site during operation. MM AIR-1i would require the installation of EV charging stations which meet the Tier 2 standards set forth in Section A5.106.5.3 of Appendix A5 – Nonresidential Voluntary Measures of CALGreen of the 2019 California Building Code. The inclusion of MMs AIR-1f, AIR-1g, and AIR-1i would help incrementally reduce emissions below those disclosed in this Draft EIR; however, the quantified reductions from these measures cannot be accurately identified and guaranteed at this time. As a result, this impact would be significant and unavoidable after the incorporation of mitigation.

Level of Significance Before Mitigation

Potentially Significant Impact

Mitigation Measures

MMs AIR-1d through AIR-1i.

Page 3.3-52

. . . constructed concurrently. In addition, because the full implementation of MMs AIR-1c and AIR-1d cannot be guaranteed during project operation, and the potential emission reduction from inclusion of MMs AIR-1f, AIR-1g, and AIR-1i cannot be accurately identified and guaranteed at this time, the proposed project could result in potentially significant impacts related to regional emissions significance thresholds for ROGs and NO_X, both ozone precursor pollutants, during project operation.

Page 3.3-55

Mitigation Measures

MMs AIR-1a to AIR-1i ~~and MM AIR-3~~

Section 3.8 Greenhouse Gas Emissions

Page 3.8-40

Table 3.8-5: Summary of Applicable Greenhouse Gas Regulations

Regulation	Project Applicability
Title 24 Energy Efficiency Standards	Project buildings would be required to be constructed to meet the latest version of Title 24 (currently 2019), which, among other standards, requires that nonresidential projects construct their roofs to be solar-ready to accommodate the future installation of solar panels. Reduction applies only to energy consumption subject to the regulation.
Green Building Code Standards	The project would be required to include water conservation features mandated by the standard.
Water Efficient Land Use Ordinance	The project landscaping would be required to comply with the regulation.
Renewable Portfolio Standard	Electricity purchased for use at the project site is subject to the 33 percent RPS mandate.
Solid waste	The solid waste service provider would be required to provide programs to increase diversion and recycling to meet the 75 percent mandate, to which the project would be required to adhere.

Page 3.8-52

Accordingly, taking into account the proposed project's emissions, and the progress being made by the State toward reducing emissions in key sectors such as transportation, industry, and electricity through the adoption and implementation of a comprehensive regulatory framework, the project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment.

Consistency with RTP/SCS

The San Joaquin COG 2018 RTP establishes regional transportation policy for San Joaquin County based on specific transportation goals and objectives. The RTP focuses on achieving a coordinated and balanced multimodal transportation system, while maintaining the integrity of the existing system. The RTP includes projects located throughout San Joaquin County for all forms or modes of transportation, including automobiles, transit, nonmotorized (including bicycle), passenger rail, freight, and aviation facilities. The goals and objectives contained in the RTP are focused on transportation initiatives, infrastructure, planning, and funding on the regional level. The proposed project would support these policies and strategies.

Policy 1 of the RTP/SCS would enhance the environment for existing and future generations and conserve energy. The Draft EIR evaluates the proposed project's impacts on the environment and provides feasible mitigation to address these potential impacts. As analyzed in Section 3.6, Energy, the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or

operation (Impact ENER-1) or conflict with or obstruct a State or local plan for renewable energy of energy efficiency (Impact ENER-2). The project site has a land use designation of "Industrial" in the City of Tracy General Plan, and the proposed project, which consists of the buildout of warehousing and other industrial space, is consistent with this land use designation. The RTP/SCS accounts for growth in the project site and vicinity, including industrial developments such as the proposed project. Strategy 3 is to improve air quality by reducing transportation-related emissions. Though the proposed project would result in significant and unavoidable impacts with respect to air quality and VMT, the proposed project would be required to implement feasible mitigation (MM AIR-1d, MM AIR-1e, MM AIR-1f, MM AIR-1i, MM TRANS-1a, and MM TRANS-1b), which would reduce transportation-related emissions to the maximum extent feasible thereby improving air quality, consistent with Strategy 3. Strategy 4 is to improve the regional transportation system efficiency. As described in Chapter 2, Project Description, and throughout the Draft EIR, the proposed project would set aside approximately 12.51 acres in the northwest corner of the project site, which would be sufficient to accommodate improvements to the City's expressway system, as well as a future I-205/Paradise Road/Chrisman Road interchange as shown in Exhibit 2-7c in Chapter 2, Project Description of the Draft EIR, consistent with the City of Tracy Transportation Master Plan (TMP). As noted in the TMP, it provides a comprehensive review of the City's transportation system and serves as a blueprint that can be utilized to identify and implement required improvements to the existing roadway system as well as expand upon the system to accommodate future development consistent with the General Plan. As an interstate, I-205 serves the region, and, therefore, the future I-205/Paradise Road/Chrisman Road interchange would improve the regional transportation system and support Strategy 4. Similarly, Strategy 8 requires the improvement of major transportation corridors to minimize impacts on rural roads. While these specific future regional transportation improvements would be considered and implemented as part of a separate process subsequent to approval of the proposed project, the approximately 12.51 acres of land set aside that would facilitate the improvements to the City's expressway system and the future I-205/Paradise Road/Chrisman Road interchange would result in such improvements by providing infrastructure for automobiles and trucks entering and exiting the project site. Furthermore, as discussed in Section 14, Transportation, of the Draft EIR, the proposed project would implement the following travel demand measures to reduce project VMT as is required by MM TRANS-1(a).

1. Utilize communication and information strategies–4 percent reduction;
2. Offer telecommuting for administrative staff (5 percent of staff population)–1 percent reduction;
3. Designate parking spaces for carpool vehicles–1 percent reduction;
4. Provide a transit stop along the project frontage on Grant Line Road, if agreed to by the City–2 percent reduction;
5. Provide bike lanes and sidewalks along the project frontage–1 percent reduction; and
6. Provide on-site bike racks and showers–1 percent reduction.

Through the implementation of project design features and required mitigation measures, as discussed above, the proposed project is considered to be consistent with the RTP/SCS.

Section 3.11 Land Use and Planning

Page 3.11-27 and -28, Table 3.11-3

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
10—Air Quality	Goal AQ-1	Improved air quality and reduced greenhouse gas emissions.	**Consistent:** The proposed project would be subject to various regulatory measures adopted to ensure ambient air quality standards are met to the extent feasible. The proposed project would implement MMs AIR-1a through AIR-1i to reduce emissions generated during construction and operation to the extent feasible ~~not be a source of significant toxic or hazardous air pollutants and odors~~, and was not found to have a significant impact with respect to GHG or odors. Refer to Section 3.3, Air Quality and Section 3.8, Greenhouse Gas, for further discussion. In addition, the project applicants have voluntarily agreed to the incorporation of enforceable conditions of approval to further address air quality and GHG emissions issues (see updated MMRP).
	AQ-1.2 P1	The City shall assess air quality impacts using the latest version of the CEQA Guidelines and guidelines prepared by the San Joaquin Valley Air Pollution Control District.	**Consistent:** The proposed project would be subject to various regulatory measures adopted to ensure ambient air quality standards are met. This Draft EIR evaluated the proposed project's potential air quality impacts pursuant to CEQA and San Joaquin Valley Air Pollution Control District (Valley Air District) Guidelines. Refer to Section 3.3, Air Quality, for further discussion.
	AQ-1.2 P3	Developers shall implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects.	**Consistent.** Section 3.3, Air Quality, in the Draft EIR and Section 4, Errata, include mitigation measures that the proposed project would be required to implement to reduce air pollutant emissions to the extent feasible. In addition, as described in Section 3.3, Air Quality, the proposed project would adhere to the applicable federal, State, and local laws and regulations, which include BMPs to reduce air pollutant emissions associated with the construction and operation of the proposed project. Moreover, the project applicants have voluntarily agreed to the incorporation of enforceable conditions of approval to further address air quality issues (see updated MMRP).
	AQ-1.2 P4	New development projects should incorporate energy efficient design features for HVAC, lighting systems and insulation that exceed Title 24.	**Consistent:** The proposed project's buildings, including the HVAC, lighting systems, and insulation, would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			Building Energy Efficiency Standards. These are widely regarded as the most advanced and stringent building energy efficiency standards and compliance would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary. In addition, the project applicants have voluntarily agreed to the incorporation of enforceable conditions of approval to further address energy efficiency issues (see updated MMRP).
	AQ-1.2 P6	Installation of solar voltaic panels on new homes and businesses shall be encouraged.	**Consistent.** The installation of solar voltaic panels is not a City of Tracy requirement for industrial development. As described in Draft EIR Section 3.6, Energy page 24, the proposed project would be required to design the proposed buildings according to Subchapter 6, Part 6 of the Title 24 standards, to structurally accommodate future installation of a rooftop solar system. As such, the design of the proposed project would facilitate the future commitment to renewable energy resources. The Draft EIR was prepared based on Valley Air District guidance and, with the implementation of BMPs, MMs AIR-1a through 1i, the proposed project would reduce air quality and GHG emissions to the maximum amount feasible. In addition, the project applicants have voluntarily agreed to the incorporation of enforceable conditions of approval to further address air quality, GHG emissions, and energy efficiency issues (see updated MMRP).
	AQ-1.2 P7	Trees should be planted on the south- and west-facing sides of new buildings or building undergoing substantial renovation in order to reduce energy usage.	**Consistent.** Project landscaping trees are included in the project design and would be consistent with the NEI Specific Plan requirements for placing one tree per five parking spaces, and otherwise would comply with all applicable landscaping requirements. In addition, the project applicants have voluntarily agreed to the incorporation of enforceable conditions of approval to further address buffer, landscaping, and energy efficiency issues (see updated MMRP).
	AQ-1.2 P12	New sources of toxic air pollutants shall prepare a Health Risk Assessment as required under the Air Toxics "Hot Spots" Act and based on the results of the Assessment,	**Consistent.** A Health Risk Assessment (HRA) is provided in Section 3.3, Air Quality, of the Draft EIR, and the Draft EIR concluded that the proposed project would exceed the San Joaquin Valley Air Pollution Control District's (Valley Air District's) significance thresholds, resulting in significant and

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		establish appropriate land use buffer zones around those areas posing substantial health risks.	unavoidable impacts. However, with the implementation of BMPs, MMs AIR-1a through 1i, the proposed project would reduce air quality and GHG emissions to the maximum amount feasible. For purposes of clarification and amplification, in terms of a land use buffer zone, MM AIR-1h, as provided in Section 4, Errata of the Final EIR, requires a vegetated project site buffer along the east property boundary near the sensitive receptors in compliance with this policy. The City has agreed to adopt, and the project applicants have agreed to implement this additional mitigation measure. In addition, the project applicants have voluntarily agreed to the incorporation of enforceable conditions of approval to further address air quality, buffer, and health impact issues (see updated MMRP).
	AQ-1.2 P13	Dust control measures consistent with the San Joaquin Valley Air Pollution Control District rules shall be required as a condition of approval for subdivision maps, site plans, and grading permits.	Consistent. Valley Air District Rule 8021 includes basic dust control measures as noted in Section 3.3, Air Quality in the Draft EIR. In compliance with this policy, these measures would be included as an enforceable condition of approval for the proposed project.
	AQ-1.2 P14	Developments that significantly impact air quality shall only be approved if all feasible mitigation measures to avoid, minimize or offset the impact are implemented.	**Consistent.** As described in Section 3.3, Air Quality, of the Draft EIR there are several significant, unavoidable air quality impacts. However, the proposed project would be required to implement all feasible MMs AIR-1a through MM AIR-1i. The basis for these determinations is detailed more fully in Section 3.3, Air Quality. In addition, the project applicants have voluntarily agreed to the incorporation of enforceable conditions of approval to further address air quality issues (see updated MMRP).
	AQ-1.2 P15	Encourage businesses to electrify loading docks or implement idling-reduction systems so that trucks transporting refrigerated goods can continue to power cab cooling elements during loading, layovers, and rest periods.	**Consistent.** The proposed project would not include refrigerated units. Therefore, no trucks transporting refrigerated goods would be accessing the site. Although not required to do so, the project applicants have voluntarily agreed to prohibit to use of TRUs or cold storage pursuant to COA No. 4 (see updated MMRP). In addition, the City has agreed to adopt, and the project applicants have agreed to implement MM AIR-1f, which would restrict on-site vehicle idling in any event to no greater than 3 minutes. (See also updated MMRP, COA No. 8(D).)

Section 3.14 Transportation

Page 3.14-29

As noted above, the City is currently pursuing a VMT Mitigation Banking Fee Program; the draft program currently calculates the cost per one (1) VMT reduction as $633.11. However, the VMT Mitigation Banking Fee Program has not yet been finalized and adopted; accordingly, the applicable fee would be the amount provided for under the Mitigation Banking Fee Program adopted by the City Council and effective at the time the relevant applicant for an individual development proposal within the project site obtained building permits. Provided, however, that if the Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, ~~then payment of $633.11 (cost per one (1) VMT reduction) shall constitute compliance for the payment component of MM TRANS-1(b)~~ then the relevant applicant shall implement additional VMT reduction measures in order to meet the minimum VMT reduction requirement of 15 percent.

Page 3.14-33

MM TRANS-1(b) Payment of Applicable Banking Fee

In addition to the Transportation Demand Management (TDM) program required in MM TRANS-1(a), each applicant for an individual development proposal shall pay its fair share of the applicable fee as set forth in the adopted Vehicle Miles Traveled (VMT) Mitigation Banking Fee in place and effective at the time the relevant applicant seeks to obtain building permits for its individual development proposal. Provided, however, that if the City Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, ~~then payment of $633.11 (cost per VMT reduction for the relevant individual development proposal) shall constitute compliance with this MM TRANS-1(b)~~ then the relevant applicant shall implement additional VMT reduction measures in order to meet the total minimum VMT reduction requirement of 15 percent.

Section 6 Alternatives

Page 6-1

6.2–Significant Unavoidable Impacts

- **Project-Level Impact Related to Implementation of the Applicable Air Quality Plan:** The proposed project is consistent with the site's General Plan designation which means the proposed industrial use was accounted for in the Air Quality Plan (AQP) land use projections. However, the proposed project could create a localized violation of State or federal air quality standards, significantly contribute to cumulative nonattainment pollutant violations, and expose sensitive receptors to substantial pollutant concentrations. The proposed project would be required to implement MM AIR-1a through MM AIR-~~4~~1i; however, because full implementation of the mitigation cannot be guaranteed due to potential technical and/or financial infeasibility, the proposed project's potentially significant impact is conservatively

identified as significant and unavoidable. Therefore, the proposed project is inconsistent with Criterion 1 of the AQP even after the incorporation of mitigation. The impact would be significant and unavoidable.

- **Project-Level Impact Related to Cumulatively Considerable Net Increase of reactive organic gases (ROG) and carbon monoxide (CO) During Construction, and ROG and oxides of nitrogen (NOX) During Operation:** The construction schedule for the proposed project assumed that none of the three project phases would overlap. In this scenario, after the incorporation of MMs AIR-1a and AIR-1b, construction of the proposed project would not exceed the San Joaquin Valley Air Pollution Control District (Valley Air District) daily emission screening levels for an Ambient Air Quality Analysis (AAQA), pursuant to District Rule 2201. However, the potential remains for project phases to be constructed concurrently. If the three phases of construction occur concurrently, emissions of ROG and CO would exceed the Valley Air District's significance thresholds if all three project phases were constructed concurrently. As such, this impact would remain significant and unavoidable after implementation of identified mitigation.

  During operation, unmitigated emissions would exceed Valley Air District thresholds of significance for ROGs and NO_X. Therefore, MM AIR-1c through MM AIR-1i~~and MM AIR-1d~~ would be required to mitigate operational emissions to below Valley Air District thresholds. However, the full implementation of MM AIR-1c through MM AIR-1i~~and MM AIR-1d~~ cannot be guaranteed during project operation; therefore, the reasonable worst-case operational emissions would exceed the Valley Air District's significance thresholds for ROG and NO_X and this impact would remain significant and unavoidable.

Appendix E

Page E-1

Tracy Alliance ~~Sunnyvale FCII~~ Project Energy Use Summary

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Attachment F

CEQA Findings of Fact and Statement of Overriding Considerations Tracy Alliance Project City of Tracy, San Joaquin County, California

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Table of Contents

CEQA Findings of Fact and Statement of Overriding Considerations 1
1.1 - Introduction 1
1.2 - Overview of the Statement of Findings 2
1.3 - Project Summary 2
1.4 - Procedural Background 6
1.5 - Statement of Findings 7
1.6 - Potential Environmental Effects Which are Not Significant Without Mitigation 10
1.7 - Potential Environmental Effects Which are Not Significant After Mitigation 58
1.8 - Potential Environmental Effects Which are Significant and Unavoidable 112
1.9 - Findings Regarding Alternatives 133
1.10 - Findings Regarding Cumulative Impacts 138
1.11 - Findings Regarding Growth Inducement 138
1.12 - Findings Regarding Significant Irreversible Environmental Changes 145
1.13 - Statement of Overriding Considerations 146

Appendix A: Mitigation Monitoring and Reporting Program

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CEQA FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS

1.1 - Introduction

The City of Tracy is the lead agency for the Tracy Alliance Project (State Clearinghouse [SCH] No. 2020080524) (proposed project). Having received, reviewed, and considered the EIR (as defined below) and other relevant information in the administrative record of proceedings, the Tracy City Council (City Council) hereby finds and adopts the findings set forth herein (collectively, "Findings") pursuant to the California Environmental Quality Act (CEQA) (California Government Code § 21000 *et seq*.) and the CEQA Guidelines (California Public Resources Code [PRC] § 15000 *et seq*.) (collectively, "CEQA").

Pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15091:

> No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
>
> (a) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR (hereinafter referred to as "finding (1)").
>
> (b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency (hereinafter referred to as "finding (2)").
>
> (c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR (hereinafter referred to as "finding (3)").

The required findings shall be supported by substantial evidence in the record. (CEQA Guidelines § 15091(b)).

As discussed in more detail below, for those impacts that cannot be mitigated below a level of significance, if the public agency intends to approve the project, the public agency must find that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects of the project. (CEQA Guidelines §§ 15092(b)(2)(B), 15093).

1.2 - Overview of the Statement of Findings

Based on the nature and scope of the proposed project, the City of Tracy, as lead agency, determined that the proposed project may have significant effects on the environment even after the application of all feasible mitigation measures. Therefore, a Draft Environmental Impact Report, including attached appendices (collectively, Draft EIR), was prepared, noticed, published, circulated, reviewed and completed in full compliance with CEQA. The Draft EIR was circulated for public review and comment (as described further below), after which the City of Tracy prepared a Final EIR/Responses to Comments, including attached appendices (collectively, "Final EIR"). References herein to the "EIR" are to the collective documentation contained in the Draft EIR and Final EIR. This City Council has heard, been presented with, reviewed, and considered all of the information and data in the administrative record, including, without limitation, the Draft and Final EIRs, and all oral and written evidence presented to it during the proposed project's entitlement process including, without limitation, evidence presented to it during all meetings and hearings on the matter. The EIR reflects the independent judgment of this City Council and is deemed adequate for purposes of making decisions on the merits of the proposed project.

The EIR for the proposed project identifies the effects on the environment which may occur as a result of the proposed project. Section 1.5 below sets forth the potential environmental effects which are not significant; because it has been determined that impacts would be less than significant, no mitigation is required. Section 1.6 below sets forth the potentially significant environmental effects that can feasibly be mitigated, as well as the feasible mitigation measures that would reduce them to less than significant levels. Section 1.7 below sets forth the potential environmental effects that cannot be mitigated to less than significant levels even after implementing all feasible mitigation measures, and therefore would remain significant and unavoidable. Section 1.8 summarizes the alternatives evaluated in the EIR and makes findings, with respect to each alternative, regarding its feasibility, its ability to achieve the project objectives, including whether and the extent to which it would lessen the significant environmental effects of the proposed project while still achieving most of the project objectives.

The following summarizes all significant effects of the proposed project and with respect to each environmental topic, makes one or more of the findings set forth in the Introduction above and states facts in support of such findings in accordance with CEQA's requirements.

The EIR as well as other documentation and materials set forth in the administrative record for the proposed project provide additional facts in support of these Findings. The mitigation measures set forth in the Mitigation Monitoring and Reporting Program (MMRP) (Attachment A) are incorporated by reference in these Findings, and the Findings in Sections 1.6 through 1.8 refer to individual mitigation measures as appropriate.

1.3 - Project Summary

Project Location

The 191.18-acre project site is located at the northeast corner of Grant Line Road and Paradise Road and consists of five Assessor's Parcel Numbers (APNs) 213-170-27, 213-170-24, -25, -26, and 213-170-14)

(project site) held by three different ownership groups: the Tracy Alliance Group, the Suvik Farms Group, and the Zuriakat Group, respectively, in connection with individual development proposals. The entire project site is within unincorporated San Joaquin County, adjacent to the northeastern city limits and within the City of Tracy's Sphere of Influence (SOI), 10-year planning horizon. The project site is directly east of the City's Northeast Industrial (NEI) Specific Plan boundary. The project site is bound by Interstate 205 (I-205) to the north, California Avenue to the northeast, Grant Line Road to the south, and Paradise Road to the west. In the EIR, and for purposes of these Findings of Fact and Statement of Overriding Considerations, the project site is described as consisting of a total of six parcels: the Tracy Alliance parcel, the Suvik Farms parcel and the Zuriakat parcel, collectively, and the term "proposed project" means the development of all three parcels.

Project Description

The Tracy Alliance Group, Suvik Farms, LLC, and Zuriakat (co-applicants) are pursuing the proposed project, which consists, collectively, of the development of up to 3,352,320 square feet of warehouse and distribution and related development on a total of approximately 191.18 acres comprising six parcels. The six parcels consist of two Tracy Alliance parcels (totaling approximately 122.44 acres), three Suvik Farms, LLC parcels (totaling approximately 46.61 acres), and one Zuriakat parcel (approximately 22.17 acres).

The approximately 122 acres of the Tracy Alliance parcels would be developed with three buildings (Building A, Building B, and Building C) consisting of approximately 1,849,500 square feet of warehouse and distribution space (including ancillary office uses), approximately 12.51 acres of the Tracy Alliance land to be reserved to accommodate a portion of a planned interchange at Paradise Road andI-205,[1] and an approximately 12.44-acre stormwater detention basin area with pump station.

Development plans for the Suvik Farms, LLC parcels (identified as Suvik Farms parcels) and the Zuriakat parcel are not specified at this time. For the purposes of analysis in the EIR, buildout of these parcels is estimated to consist of a total of approximately 1,502,820 square feet of warehouse and distribution development, consistent with the maximum allowable intensity per acre identified in the NEI Specific Plan. Specifically, it is assumed that the Suvik Farm parcels would have a maximum building square footage of 1,023,660 square feet on approximately 46.61 acres of land area (50 percent floor area ratio [FAR]) and the Zuriakat parcel would have a maximum building square footage of 479,150 square feet on approximately 22.17 acres of land area (50 percent FAR). These parcels would be required to adhere to all applicable development standards and design guidelines, including those related to landscaping and parking. The entire proposed project includes demolition of 11 existing residential and agricultural structures on approximately four acres located at the southwestern corner of the Tracy Alliance parcels, removal of all crops, and construction of warehouse facilities. The proposed project would include landscaping consistent with all applicable City requirements, including, for example, approximately 110,000 square feet of landscaped areas

[1] As explained in the EIR, the potential impacts of constructing this future interchange would undergo a separate environmental review process pursuant to CEQA and National Environmental Policy Act (NEPA) once funding is programmed and available and once the ultimate design of the interchange is finalized; accordingly, the construction is not considered part of the proposed project (although the interchange is assumed to be in place as part of the cumulative conditions within the Transportation Impact Analysis prepared by Kimley Horn).

associated with the site plan for the Tracy Alliance parcels. In connection with the individual development proposal for the Tracy Alliance parcels, the relevant site plan reflects approximately 1,134 automobile parking spaces, and approximately 572 trailer parking spaces. Parking for the proposed project would be provided pursuant to applicable parking requirements of Tracy Municipal Code Chapter 10.08 Article 26; Trailer parking and bike parking spaces would also be provided pursuant to applicable City requirements and standards.

The proposed project would also include off-site roadway improvements, including a westbound right-turn lane at the intersection of Grant Line Road and North MacArthur Drive with a right-turn overlap of the signal phase as well as an additional second westbound left turn lane at the intersection of Chrisman Road and Eleventh Street with the signal timing being modified to allow a lagging phase for the eastbound left turn and northbound left turn. The City of Tracy General Plan designates the project site as Industrial. The project site would be annexed into the City of Tracy upon the Local Agency Formation Commission (LAFCo) approval and detached from the Tracy Rural Fire District; at such time as the reorganization is complete, the current San Joaquin County General Plan designation (A/UR) would no longer apply to the project site. Because the project site is already designated Industrial by the City of Tracy General Plan, no land use re-designation (General Plan Amendment) would be required. The proposed project would be consistent with this City land use designation, for the reasons set forth in the EIR. The proposed project is expected to employ a total of approximately 1,871 people at full buildout. Upon annexation, the South San Joaquin County Fire Authority (South County Fire) would provide fire protection services to the project site.

Project Objectives

The quantifiable objectives of the proposed project include the following:

- Development of approximately 165 acres of industrial uses (building and parking areas).
- Development of 12.44 acres of public facilities (storm basin).
- Reserve 12.51 acres for future Interchange at Paradise Road and I-205.
- Build a maximum of 3,352,320 square feet of employment-generating industrial uses.

Qualitative objectives for the proposed project are as follows:

- **Employment Opportunities:** Provide for local and regional employment opportunities that take advantage of the proposed project area's high level of accessibility, allow for the expansion of the City's economic base, help improve the jobs/housing balance, and reduce the commute for regional residents.
- **Transportation:** Provide an efficient circulation system, including reserving land for a future interchange at Paradise Road and I-205 (construction of the interchange will not be completed as part of the proposed project).
- **Public Facilities and Services:** Provide infrastructure and services that meet applicable City standards and integrate with existing and planned facilities.
- **Phasing:** Establish a logical phasing plan designed to ensure that each phase of development would include necessary public improvements required to meet applicable City standards.

1.3.3–Required Approvals

The following discretionary approvals and permits are required by the City for implementation of the proposed project:

- EIR Certification
- Prezoning to Northeast Industrial Specific Plan
- Northeast Industrial Specific Plan Amendment
- Development review permit(s)
- Tentative Parcel Map or Lot Line Adjustment as needed to create final development lots
- Resolution of City Initiation of Reorganization Proceedings
- Cancellation of the Williamson Act Contract on the Suvik Farms parcels (if required)

In addition, the following actions would be required by the City for implementation of the proposed project:

- Demolition permits
- Grading permits
- Building permits
- Certificates of occupancy

This list is representative and does not provide an exhaustive list of all subsequent City actions that may be necessary to implement the project.

In addition to the City, several other agencies will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. The EIR provides environmental information that may be required to grant approvals or to support coordination with other agencies as part of project implementation. These agencies may include, but are not limited to the following:

- United States Army Corps of Engineers
- United States Fish and Wildlife Service
- California Department of Fish and Wildlife
- California Department of Transportation
- California Public Utilities Commission
- Central Valley Regional Water Quality Control Board
- County of San Joaquin
- San Joaquin Local Agency Formation Commission

Actions by other agencies that are necessary to implement the project:

- Annexation of the project site into the City of Tracy (San Joaquin LAFCo)
- Detachment of the project site from Tracy Rural Fire District (San Joaquin LAFCo)
- Coverage under General Construction Stormwater Permit (California State Water Resources Control Board/Central Valley Regional Water Quality Control Board)

- Approval of Indirect Source Review (San Joaquin Valley Air Pollution Control District)
- Issuance of Encroachment Permits for roadway or utility improvements within facilities under the jurisdiction of the California Department of Transportation (Caltrans) or the County of San Joaquin may also be necessary.

1.4 - Procedural Background

The City prepared and published a Notice of Preparation (NOP) for public review and comment by responsible and trustee agencies, as well as other interested agencies, organizations and individuals, from August 28, 2020 to September 30, 2020. The NOP and copies of comments received are included as Appendix A to the EIR.

On September 9, 2020, a scoping meeting was held as a virtual meeting via WebEx. The meeting was held at 7:00 p.m. during which individuals and organizations/agency representatives were provided an opportunity to submit oral and written comments pertaining to environmental concerns related to the proposed project and the proposed scope of the environmental review process.

Pursuant to Public Resources Code Sections 21161 and 21092 as well as CEQA Guidelines Sections 15085 and 15087(b), on April 20, 2022, a Notice of Completion (NOC)/Notice of Availability (NOA) document and copies of the Draft EIR were distributed to the State of California Governor's Office of Planning and Research State Clearinghouse, to those public agencies that have jurisdiction by law with respect to the proposed project, or that exercise authority over resources that may be affected by the proposed project, and to other interested parties and agencies as required by law.

The Draft EIR was publicly available at the City of Tracy Department of Development and Engineering Services at 333 Civic Center Plaza, Tracy, CA, 95376, as well as the Tracy Branch Library at 20 East Eaton Avenue, Tracy, CA 95376. In addition, the Draft EIR was posted on the City of Tracy Department of Development and Engineering Services website at https://www.cityoftracy.org/our-city/departments/planning/specific-plans-environmental-impact-reports-and-initial-studies during the public review period. The Draft EIR was circulated for a public review period between April 20, 2022, and June 3, 2022, for 45 days.

A public meeting was held by the Planning Commission on May 25, 2022, at 333 Civic Center Plaza, which took place both virtually and in person. The meeting was held at 7:00 p.m. and interested individuals, organizations, and agency representatives were invited to provide oral and written comments on the Final EIR.

The City of Tracy received and evaluated numerous comments from other public agencies, as well as other interested organizations and individuals. After the close of the public review period for the Draft EIR, the City of Tracy prepared the Final EIR in accordance with CEQA, consisting of the comments received on significant environmental issues during the 45-day public review period on the Draft EIR, written responses to those comments, revisions to the Draft EIR, and an errata making minor, non-substantive changes to the Final EIR. The Final EIR was prepared and originally published on January 17, 2023. In accordance with applicable CEQA requirements, the responses to comments

contained in the Final EIR address all written and verbal comments on environmental issues received by the City during the 45-day public review period. In addition, although not required to do so under CEQA, for purposes of providing for full disclosure and to further facilitate the EIR serving as an informational document, the City elected, in its discretion, to respond to written comments received by the City after the close of the 45-day public review period. Thereafter, on July 19, 2023, although not required to do so under CEQA, the City of Tracy updated the Final EIR to respond to additional late written comments received by the City; this action was taken by the City in its ongoing good faith effort to provide full disclosure and continue to facilitate the EIR serving as an informational document. For purposes of these Findings, the Final EIR published on January 17, 2023, combined with the updated version published on July 19, 2023, shall constitute the Final EIR.

As noted above, for purposes of these Findings, the "EIR" shall consist of the Draft EIR, all appendices attached to the Draft EIR, and the Final EIR (consisting of the Introduction, Errata, and Master and Individual Responses to Comments) and all appendices attached to the Final EIR. The conclusions and analyses set forth in the EIR are further supported by other documents and materials included in the administrative record.

1.5 - Statement of Findings

This City Council hereby finds that the EIR was prepared, published, circulated, reviewed, and considered in accordance with CEQA and constitutes an accurate, adequate, objective and complete EIR. This City Council has exercised its independent judgment and analysis in evaluating the EIR. In exercising this judgment, this City Council has reviewed and considered the EIR and other relevant information in the administrative record including, without limitation, public testimony.

The City Council further finds, based on all of the evidence presented, including, without limitation, the EIR, written and oral testimony given at public meetings and hearings in connection therewith, and the submission of comments from interested individuals, organizations and other public agencies, as well as all other relevant information in the administrative record, the following environmental impacts associated with the proposed project are: (1) less than significant and do not require mitigation; or (2) potentially significant but will be avoided or reduced to a level of insignificance through the identified mitigation measures; or (3) significant and cannot be fully mitigated to a level of less than significant but will be substantially lessened to the extent feasible by the identified mitigation measures.

This City Council concludes that implementation of the proposed project could result in potentially significant and adverse environmental impacts as described in Section 1.7. As discussed herein, this City Council is required to make certain findings with respect to these impacts pursuant to CEQA Guidelines Section 15091. Accordingly, this City Council hereby makes these required Findings, as set forth in this document. Among other things, these Findings summarize the environmental determinations about the proposed project's significant impacts before and after mitigation, and summarize the proposed project's individual and cumulative impacts. These Findings do not attempt to describe the full analysis of each environmental impact. Instead, they provide a summary description of each significant impact and the applicable mitigation measures identified in the EIR and adopted by this City Council (as reflected in the MMRP) and state the conclusions regarding the

significance of each impact after incorporation of the identified mitigation measures. A comprehensive explanation of these environmental impact conclusions can be found in the EIR, as supplemented and explained in staff reports and materials presented by the project applicants, City of Tracy staff, and various project consultants, and other relevant materials in the administrative record.

The EIR contains substantial evidence to support all the conclusions presented in these Findings.

As reflected in certain comments, there is disagreement among various parties regarding particular conclusions in the EIR. CEQA and relevant case law interpreting the CEQA statute and Guidelines provide the standards for the treatment of disagreement among experts in the context of an EIR, as follows: Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR and/or related findings must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information on the controversy. In making a decision on a project where there is disagreement among experts, the lead agency is not obligated to select the viewpoint that purports to be the most environmentally sensitive. Instead, in the context of an EIR, such as the case at hand, decision-makers are vested with the discretion to weigh expert opinion and choose which they intend to rely on and are not required to resolve a dispute among experts. In their proceedings, decision-makers must consider comments received concerning the adequacy of the EIR and address any objections raised in these comments pursuant to CEQA's mandate to facilitate disclosure and informed decision-making. However, decision-makers are not obligated to follow any directives, recommendations, or suggestions presented in comments on an EIR, and can certify an EIR without needing to resolve disagreements among experts.

In making its decision to certify the EIR and approve the proposed project, this City Council recognizes that a range of technical and scientific opinion exists with respect to certain environmental issues, including air quality, energy, greenhouse gas (GHG) emissions impacts, and transportation, among others. This City Council has acquired a comprehensive and well-rounded understanding of the range of this technical and scientific opinion by its review of the EIR; as well as by its review of the information provided by the experts who prepared the EIR; the City's other consultants and its staff; along with testimony, letters, reports, and other relevant materials in the administrative record, as well as its own experience and expertise in these matters. The materials reviewed by this City Council include conflicting expert opinions and conflicting interpretations of facts and law, as well as other comments on the environmental issues set forth in the EIR. This comprehensive review has enabled this City Council to make its decisions after weighing and considering the various viewpoints on these important issues, and this City Council has made determinations of significant effects based on substantial evidence, not public controversy or speculation. Accordingly, this City Council hereby certifies that its Findings and determinations are based on all of the evidence contained in the EIR, as well as the evidence and other information in the record addressing the environmental impacts of the proposed project, and hereby elects to rely on the analysis and evidence set forth in the EIR.

The EIR is incorporated into these Findings in its entirety. Without limitation, this incorporation is intended to elaborate on the scope and nature of mitigation measures, the basis for determining the

significance of impacts, the comparative analysis of alternatives, and the reasons for approving the proposed project despite the potential for associated significant and unavoidable adverse impacts.

This City Council hereby adopts, and incorporates as enforceable conditions of approval of the proposed project, the mitigation measures set forth in the Mitigation, Monitoring and Reporting Program (MMRP) (Attachment A), which has been prepared in accordance with CEQA Guidelines Section 15097. This City Council adopts this MMRP as it pertains to the proposed project and finds that the mitigation measures set forth in the MMRP will reduce or avoid the potentially significant environmental effects of the proposed project to the extent feasible for the reasons described in the EIR. In the event a mitigation measure recommended in the EIR has inadvertently been omitted from the MMRP, this City Council hereby adopts such mitigation measure(s) as stated in the EIR and hereby incorporates said mitigation measure into these Findings by reference.

The mitigation measures (as well as the additional voluntary measures/features to which the applicants have agreed), as set forth in the MMRP are being made enforceable as conditions of approval. Accordingly, changes or alterations have been required in, or incorporated into the proposed project, which avoid or substantially lessen the significant environmental effects identified in the EIR. The proposed project has several significant and unavoidable impacts, as discussed further in Section 1.8 below.

Various measures were suggested by commenters as proposed additional mitigation measures or modifications to the mitigation measures identified in the EIR. Other comments requested mitigation measures for impacts that were determined by the City to be less than significant or requested additional mitigation measures for impacts that were already determined by the City to be reduced to a less than significant level by the already-identified mitigation measures. These requests are declined as unnecessary except as otherwise set forth in the Final EIR. This City Council adopts the reasons set forth in the EIR and as otherwise further supported by materials and other information in the administrative record as its grounds for rejecting the suggested adoption of new and/or modified mitigation measures beyond those detailed in the Final EIR.

In addition, certain commenters suggested that additional analyses be completed and/or that analyses be conducted utilizing different modeling, methodologies, thresholds and/or assumptions. These requests are declined as unnecessary except as otherwise set forth in the Final EIR. This City Council adopts the reasons set forth in the EIR and as otherwise further supported by materials and other information in the administrative record as its grounds for rejecting the suggested additional and/or modified analyses beyond that which is detailed in the Final EIR.

Regarding the potential for growth-inducing impacts of the proposed project, this City Council adopts the conclusions set forth in the EIR, including but not limited to the conclusions in Section 5.2 of the Draft EIR (Growth-Inducing Effects), based upon the evidence and reasoning they reflect, and adopts the findings as set forth in Section 1.10 below.

With respect to the potential significant and irreversible environmental effects of the proposed project, this City Council hereby adopts the conclusions set forth in the EIR, including but not limited to the conclusions in the Draft EIR, Section 3.16 (Utilities and Service Systems), Section 3.6 (Energy),

and Section 5.3 (Significant Irreversible Changes), based upon the evidence and reasoning they reflect, and adopts the Findings as set forth in Section 1.11 below.

1.6 - Potential Environmental Effects Which are Not Significant Without Mitigation

Based on the information in the administrative record of proceedings, including, without limitation, the EIR, the following environmental effects are found to be less than significant, and therefore do not trigger the need for any mitigation. (CEQA Guidelines § 15091)

The section numbering used below is the same numbering used in the EIR. In addition to the supporting information presented below, please refer to the EIR, under separate cover, for greater detail.

To provide more meaningful public disclosure, reduce the time and cost required to prepare an environmental impact report, and focus on potentially significant effects on the environment of a proposed project, the EIR focuses on those potential effects on the environment of the proposed project which the City of Tracy has determined are or may be significant. Accordingly, consistent with Public Resources Code Sections 21100 and 21002.1 and CEQA Guidelines Section 15128s, the EIR focused its analysis on potentially significant and significant impacts. For other impacts for which it can be seen with certainty there is no potential for significant adverse environmental impacts, the EIR has limited discussion on these other effects with respect to a brief explanation as to why those effects are not potentially significant.

Accordingly, this City Council, based on the evidence and reasoning set forth in the EIR, finds that there are no mineral resource recovery sites or known mineral resources on or in the vicinity of the project site; therefore, there are no impacts to mineral resources (Draft EIR, Page 4-1). Because the proposed project is industrial in nature and would not develop single-family or multi-family residential uses, no direct population growth would be expected to occur because of the proposed project; therefore, there would be no impacts to Population and Housing (Draft EIR, Page 4-2). Additionally, because the quantity of existing visitors and total facility usage would not likely increase significantly as a result of the proposed project, the City Council finds there would be no impacts to Parks and Recreation (Draft EIR, Page 4-3).

The EIR discusses and analyzes all other environmental topical areas for potential impacts. CEQA Guidelines Section 15091 does not require specific findings to address environmental effects that an EIR identifies as “no impact” or a “less than significant” impact and for which no mitigation is necessary. Nevertheless, based on its independent judgment and the entire administrative record before it, this City Council finds that the following potential environmental effects would not be significant and no mitigation is necessary for the reasons stated below and as further detailed in the EIR.

1.6.1 - Aesthetics

Potential Effect

Impact AES-1: The proposed project would not have a substantial adverse effect on a scenic vista. (Draft EIR, Page 3.1-15).

Findings: Less than significant impact.

Facts in Support of Findings: The General Plan identifies scenic resources, rather than scenic vistas. During construction, views of scenic resources could be impacted because of construction vehicles and dust generated from construction of the proposed project. Scenic resources include views of the Diablo Range, natural landscapes surrounding the Paradise Cut, Old River, Tom Paine Sloughs, expansive agricultural areas and hillside areas, as well as views from the exits on I-205 off MacArthur Drive, Tracy Boulevard, Grant Line Road and Eleventh Street, and exits from I-580 at Lammers Road and Corral Hollow Road. The scenic resources visible from the project site and from adjacent, publicly accessible roadways (Grant Line Road, Paradise Road, and California Avenue) include views of the "entry corridors" from eastbound I-205 off MacArthur Drive, views of expansive agricultural lands, and views of the Diablo Range to the west.

Construction of the proposed project would obstruct, to a certain degree, views of expansive agricultural lands on and adjacent to the project site from these roadways. Though the project site is located far from the Diablo Range (approximately 9 miles to the east of the range), the Diablo Range is still visible from California Avenue. Views of expansive agricultural lands or views of the Diablo Range from California Avenue would only be partially obstructed while the structures of the buildings are being erected. Dust caused by construction would be kicked up intermittently throughout the day but would not obstruct these views for long periods of time, and any such minor impacts would be reduced by dust control measures to which the applicants for individual development proposals would be required to adhere. Therefore, construction of the proposed project would not result in a substantial impact to publicly accessible views from certain roadways of certain scenic resources (expansive agricultural lands and certain views of the Diablo Range) as defined in the General Plan.

The area surrounding the project site is a transition zone between rural and agricultural lands to an urban environment, and the General Plan seeks to enhance the City's identity by creating a soft transition between urban and non-urban uses around the edge of the City. Techniques used to achieve this goal are addressed in Goal CC-4, which recommends the use of buffer zones and landscaping to create appropriate transitions. The proposed project would be required to adhere to this goal and associated policies.

During operation, the buildings would not significantly interrupt views from the entry corridor off MacArthur Drive because of the distance to those corridors as well as intervening development and trees, all of which would remain, and drivers along I-205 are considered to have a relatively low sensitivity because of the speed of travel along the highway.

The proposed project would provide setbacks, and the proposed buildings would be similar in height to the existing industrial development located between the publicly accessible roadways and the Diablo Range. In addition, pursuant to the NEI Specific Plan, the maximum height for the proposed buildings would be 60 feet. Even with the setback and adherence to applicable development standards and design guidelines, given the change in the project site from expansive agriculture land to a large industrial site and the proximity of the project site to Grant Line Road, Paradise Road, and California Avenue, operation of the proposed project would impact views of expansive agricultural lands on and adjacent to the project site from publicly accessible roadways. However, this type of change was envisioned by the City in the General Plan and is in keeping with the General Plan goals, objectives and policies described above, as well as other surrounding urbanized uses in the general vicinity.

The proposed project would result in further obstruction of views of the Diablo Range from drivers along California Avenue; however, this roadway is considered to have a low sensitivity because of the typical speed of travel. In addition, this type of industrial development would be a continuation of the type of development that was envisioned by the General Plan and the already increasingly urbanized nature of the general vicinity (Draft EIR, Page 3.1-15–17). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact AES-2: The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. (Draft EIR, Page 3.1-17).

Findings: Less than significant impact.

Facts in Support of Findings: I-580 is officially designated as a State Scenic Highway between I-205 and I-5 and is the nearest State Scenic Highway from the project site. The project site is located approximately 7.2 miles northeast of I-580 and is not visible from that highway. Intervening trees and development, all of which would remain, would obscure the project site from being viewed from this portion of the highway. Therefore, the proposed project would not substantially damage any scenic resources during construction or operation. The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact AES-3: The proposed project is in an urbanized area. The proposed project would not conflict with applicable zoning and other regulations governing scenic quality. (Draft EIR, Page 3.1-18–19).

Findings: Less than significant impact.

Facts in Support of Findings: The proposed project is in an urbanized area. Primary land uses allowed under this designation consist of flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs (e.g., restaurants, parks, consumers services, etc.). The maximum allowed FAR is 0.5. The project site is not currently within City limits although it is

within the City's current SOI (10-year planning horizon); accordingly, the City of Tracy does not currently provide a zoning designation for the project site, although the City has designated the project site as "Industrial" in its General Plan. The co-applicants are requesting prezoning to a designation of NEI Specific Plan and an amendment to the boundaries of the NEI Specific Plan to include the project site.

Pursuant to the NEI Specific Plan, the maximum height for the proposed project would be 60 feet (similar to other industrial buildings in the area) and the proposed buildings would not be allowed to exceed this height. This height would also be consistent and thus compatible with adjacent existing industrial uses to the south and west. The proposed project would be required to adhere to General Plan Goal CC-4 and associated policies, including the use of a buffer zone and landscaping, which could be provided by the proposed stormwater detention basin. The proposed buildings would be set back (by at least 10 feet) from California Avenue, which would provide a transition between the residential uses and agricultural lands adjacent to the project site. In addition, the proposed project would be required to include a vegetative buffer along the eastern property boundary of the project site pursuant to MM AIR-1h. The proposed project would be required to comply with applicable General Plan and NEI Specific Plan design guidelines, policies and development standards set forth therein to ensure that it does not conflict with applicable zoning and other regulations governing scenic quality; its adherence to same would also ensure consistency and enhance overall visual compatibility with surrounding existing and planned uses (Draft EIR, Page 3.1-18–19). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact AES-4: The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (Draft EIR, Page 3.1-19).

Findings: Less than significant impact.

Facts in Support of Findings: Construction-related impacts would include a certain amount of light and glare from construction equipment and machinery as well as nighttime security lighting. However, light and glare during the construction phase would be temporary and limited to the duration of construction. Pursuant to Section 4.12.820 of the Municipal Code, construction activities would be limited to the hours of 7:00 a.m. and 10:00 p.m. on weekdays or between the hours of 7:00 a.m. and 10:00 p.m. on weekends and federal holidays, which would limit the amount of nighttime construction lighting. Though there would be some nighttime lighting, it would not occur during the most sensitive time period (after 10:00 p.m.) when sleeping activities would most likely occur.

The project site contains minimal existing light and glare due to the small amount of existing development on-site. Additional exterior lighting would be located around and within the project site for security and safety reasons. As a result, the proposed project would increase the amount of light and glare on the project site. The light fixtures used for the proposed project would meet all applicable standards pursuant to the latest adopted edition of the California Building Standards Code (CBC) and would be installed throughout the length of the New Private Drive pursuant to applicable

provisions of the Municipal Code. The proposed project would be required to adhere to all applicable development standards and design guidelines provided in the NEI Specific Plan intended to reduce daytime glare and nighttime lighting. Project signage would be required to conform to the applicable requirements of Municipal Code Chapter 10.08, Article 35, except as modified by the NEI Specific Plan. A site-specific sign program would be prepared and integrated into the total design concept for each individual development proposal within the proposed project, and all signs would be approved prior to installation. Sign illumination would be confined to the area of the sign except when such illumination is back lighting for an otherwise non-illuminated sign. No sign illumination would cast a glare which is visible from any street. Landscaping would further reduce light spillage off-site and help to block glare from significantly impacting nearby uses to the extent feasible.

Windows installed as part of the proposed project could result in glare, although it would be partially obscured by landscaping. Glare may also occur from on-site vehicles; however, such glare would be transient. Because of the proposed project's location adjacent to other existing urban development, the proposed project would not add significant nighttime lighting or glare in an area with no existing lighting impacts. (Draft EIR, Page 3.1-19–20). The proposed project's impacts would be less than significant. No mitigation is necessary.

Cumulative Impact

The proposed project's cumulative impacts related to aesthetics would be less than significant. (Draft EIR, Page 3.1-21).

Findings: Less than significant impact.

Facts in Support of Findings: The relevant geographic scope of review is within the immediate vicinity surrounding the project site. This is the area within view of the proposed project. The cumulative setting includes relevant past, present and reasonably foreseeable future development. There are three probable future cumulative projects located within 1 mile of the project site. The cumulative projects are subject to applicable City Code provisions, development standards and design policies and guidelines related to building heights, setbacks, undergrounding of utilities, landscaping, signage, and permitted land uses as described in the EIR, which would serve to reduce visual impacts to a certain extent. The past, present and reasonably foreseeable cumulative projects would be consistent with the types of projects envisioned in the General Plan, would reflect the increasingly urbanized nature of this area, and would adhere to all applicable regulations and policies. As described above, the proposed project would not result in significant impacts with respect to visual character and views and would not have a cumulatively considerable contribution to the already less than significant cumulative impact.

Existing and new buildings associated with the existing and foreseeable cumulative projects could result in an increase in light and glare impacts on surrounding uses. Because these cumulative projects would be adjacent to other existing urban development, they would add significant nighttime lighting or glare in an area with relatively limited existing lighting. The cumulative projects are required to adhere to all applicable development standards and design guidelines provided in the NEI Specific Plan intended to reduce daytime glare and nighttime lighting; the City would confirm

consistency with these requirements as part of the development review process. Therefore, there is a less than significant cumulative impact to light and glare. As discussed above, the proposed project would have a less than significant impact with respect to light and glare and its contribution to the already less than significant cumulative impact would not be considered cumulatively considerable.

The proposed project combined with the relevant cumulative projects would include sources of daytime glare such as direct beam sunlight and reflections from windows, architectural coatings, glass, and other reflective surfaces. Nighttime illumination would include stationary sources such as structure lighting and decorative landscaping, lighted signs, solar panels, and streetlights. Mobile nighttime sources would primarily be from headlights from motor vehicles. As described above, the proposed project would be adding a certain amount of lighting and glare in an area with relatively limited existing lighting, but would be required to adhere to all applicable development standards provided in the NEI Specific Plan intended to reduce daytime glare and nighttime lighting. Accordingly, the proposed project would not result in a cumulatively considerable contribution to the already less than significant cumulative impact (Draft EIR, Page 3.1-20–21).

1.6.2 - Agriculture and Forestry Resources

Potential Effect

Impact AG-2: The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act Contract (Draft EIR, Page 3.2-9).

Findings: Less than significant impact.

Facts in Support of Findings: The existing zoning for the project site is AG-40 under the County's General Plan. However, the co-applicants are requesting prezoning to "Northeast Industrial (NEI) Specific Plan," which would take effect upon annexation into the City. The prezoning allows for the proposed industrial use, and the change in zoning from AG-40 under the County's General Plan to NEI Specific Plan zoning would ensure there is no conflict with existing zoning.

The Suvik Farms parcels are covered by an active Williamson Act Contract; none of the other land within the project site is covered by an active Williamson Act Contract. Pursuant to the applicable provisions of the California Government Code, the Suvik Farms landowners initiated a Notice of Nonrenewal in 2017 for the contract, beginning a 9-year process to formally expire the contract. Based on the date of the Notice of Nonrenewal, the contract will expire on August 21, 2026. Additionally, State law provides a detailed procedure to terminate a Williamson Act Contract. Accordingly, should development of the Suvik Farms parcels be pursued prior to the Williamson Act Contract expiration date, then pursuant to the provisions of the Williamson Act, the applicant for the development of the Suvik Farms parcels would be required to petition the City Council for cancellation, or agree to the imposition of a condition of approval such that no permit for development on the Suvik Farms parcels would be issued prior to the August 21, 2026, expiration date. Accordingly, because the Suvik Farms parcels applicant would be required to follow applicable provisions of State law, the proposed project would not result in any conflicts with a Williamson Act Contract (Draft EIR, Page 3.2-9–10). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact AG-3: The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. (Draft EIR, Page 3.2-10).

Findings: No impact.

Facts in Support of Findings: The project site does not contain any forest land or timberland, as defined by Public Resource Code Section 4526, nor does it contain any timberland zoned Timberland Production, as defined by Government Code Section 51104(g). This condition precludes the possibility of the proposed project conflicting with forest zoning of forest land or timberland (Draft EIR, Page 3.2-10). The proposed project would have no impact. No mitigation is necessary.

Potential Effect

Impact AG-4: The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. (Draft EIR, Page 3.2-10).

Findings: No impact.

Facts in Support of Findings: The project site is adjacent to urbanized, industrial land uses (with these surrounding uses also not containing any forest land) and does not contain any forest land. This condition precludes the possibility of the proposed project converting forest land to non-forest use (Draft EIR, Page 3.2-10). The proposed project would have no impact. No mitigation is necessary.

Potential Effect

Impact AG-5: The proposed project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use. (Draft EIR, Page 3.2-11)

Findings: Less than significant impact.

Facts in Support of Findings: The County of San Joaquin zones areas north, east, and south of the project site (outside City limits) as AG-40, General Agriculture (40 acres), and designates these lands under the County General Plan as General Agriculture (A/G). Similar to the project site, the land directly northwest of the project site (north of I-205) is within the City's SOI and is designated Industrial by the City's General Plan. For this land to be converted to nonagricultural uses, it would need to be annexed into the City of Tracy (or seek the appropriate discretionary approvals from the County to modify the agricultural land use and zoning designations) and would require the completion of CEQA analysis prior to the discretionary approval of any urban development. However, the proposed project does not include the annexation of these lands and, therefore, would not result in a change in the existing environment that could result in conversion of Farmland to nonagricultural use. Though there is a possibility this land would be converted to nonagricultural uses in the future, the proposed project would not be the cause of that conversion. Moreover, the proposed project would be required to adhere to applicable Right-to-Farm provisions described in the EIR, which would help to avoid any potential land use incompatibility issues that could otherwise

facilitate the eventual conversion of other agricultural lands. The project site is adjacent to urbanized, industrial land uses and does not contain any forest land. This condition precludes the possibility of the proposed project converting forest land to non-forest use (Draft EIR, Page 3.2-11). The proposed project's impacts would be less than significant or no impact. No mitigation is necessary.

1.6.3 - Air Quality

Potential Effect

Impact AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Draft EIR, Page 3.3-52).

Findings: Less than significant impact.

Facts in Support of Findings: Odor impacts occur when a new odor source is located near an existing sensitive receptor or when a new sensitive receptor locates near an existing source of odor. Impacts to new receptors is generally outside the scope of CEQA review but is included in the Draft EIR analysis for informational purposes.

Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, feed lots, coffee roasters, asphalt batch plants, and rendering plants. The proposed project would not involve any of these or similar activities. Therefore, the proposed project would not be considered to have the potential to expose nearby persons to substantial sources of objectionable odors.

During construction, the various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and would not likely be noticeable for extended periods of time beyond the project’s site boundaries. The proposed project would neither constitute a land use which would generate odors affecting a substantial amount of people nor place new sensitive receptors that could be affected by any existing odor sources (Draft EIR, Page 3.3-52–53). The proposed project's impacts would be less than significant. No mitigation is necessary.

1.6.4 - Biological Resources

Potential Effect

Impact BIO-2: The proposed project would not have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or United Sates Fish and Wildlife Service. (Draft EIR, Page 3.4-26).

Findings: Less than significant impact.

Facts in Support of Findings: A small portion of the project site contains approximately 0.07 acre of cattail marsh. The majority of the cattails consisted of broadleaf cattails; this vegetation type is not classified as a sensitive natural community, but rather a California Natural Community by the California Department of Fish and Wildlife (CDFW) (Type 52.050.04–Typha [*latifolia, angustifolia*])

and is not applicable to this resource category. The project site does not contain any riparian habitat or sensitive natural communities identified in local or regional plans, policies, or regulations, by the CDFW or United States Fish and Wildlife Service (USFWS) (Draft EIR, Page 3.4-26–27). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact BIO-4: The proposed project would not substantially interfere with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (Draft EIR, Page 3.4-29).

Findings: Less than significant impact.

Facts in Support of Findings: The project site is surrounded by industrial developments and is situated in a semi-urban landscape with high amounts of traffic from local industrial operations. Further, I-205 separates the project site from the closest wildlife corridor to the north, and I-5 and Business I-205 preclude non-volant wildlife movement from the east and southeast. The project site is not part of or within a wildlife movement corridor and, for this reason, impacts would be less than significant under CEQA (Draft EIR, Page 3.4-29–30). No mitigation is necessary.

Potential Effect

Impact BIO-5: The proposed project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Draft EIR, Page 3.4-30).

Findings: No impact.

Facts in Support of Findings: The proposed project would be required to adhere to the relevant provisions of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Participation in the SJMSCP ensures that potential impacts for covered species are mitigated below a level of significance in compliance with CEQA as well as the Endangered Species Act and California Endangered Species Act (CESA). Therefore, the proposed project would be subject to compliance to the SJMSCP, which may include payment of development fees and implementation of other identified mitigation measures (Draft EIR, Page 3.4-30–31). The proposed project would have no impact. No mitigation is necessary.

Potential Effect

Impact BIO-6: The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan. (Draft EIR, Page 3.4-30)

Findings: Less than significant impact.

Facts in Support of Findings: Because the project site is located within the SJMSCP Planning Area, and the City is a signatory to the SJMSCP, the proposed project would be required to adhere to the relevant provisions of the SJMSCP. Participation in the SJMSCP ensures that potential impacts for

covered species are mitigated below a level of significance in compliance with CEQA as well as the Endangered Species Act and CESA. Therefore, the proposed project would be subject to compliance with the SJMSCP, which may include payment of development fees for the conversion of lands that may provide habitat for covered special-status species as well as implementation of other identified mitigation measures. Implementation of the SJMSCP would ensure that specific impacts to listed species are less than significant under CEQA. Additionally, any potential conflicts with the SJMSCP would be limited to the construction phase of the proposed project, and construction would need to proceed in accordance with all applicable laws and regulations including those set forth in the SJMSCP. Therefore, no impacts related to conflicts with the SJMSCP would occur. Impacts would be less than significant.

1.6.5 - Energy

Potential Effect

Impact ENER-1: The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. (Draft EIR, Page 3.6-22).

Findings: Less than significant impact.

Facts in Support of Findings: For purposes of a conservative analysis, the anticipated construction schedule for all three phases of development was assumed to begin in April 2022 and conclude in March 2025. Construction equipment is estimated to consume a total of approximately 446,864 gallons of diesel fuel over the entire construction duration. In total, the proposed project is estimated to generate approximately 2,937,391 Vehicle Miles Traveled (VMT) and a combined approximately 155,123 gallons of gasoline and diesel for vehicle travel during construction. Equipment could include singlewide mobile office trailers, which are commonly used in construction staging areas and generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 21,562 kWh during the 3-year construction phase. Limitations on idling of vehicles and equipment along with requirements that equipment be properly maintained would result in fuel savings. Similarly, compliance with applicable State laws and regulations would limit idling from both on-road and off-road diesel-powered equipment and are part of a comprehensive regulatory framework that is implemented by the California Air Resources Control Board (ARB). Additionally, as a practical matter, it is reasonable to assume that the overall construction schedule and process would be designed to be as efficient as feasible in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for further future efficiency gains during construction are limited. For the foregoing reasons, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy.

During operation, the proposed project would consume energy as part of building operations and transportation activities. Project energy consumption is summarized in Table 3.6-1 of the Draft EIR (Draft EIR, Page 3.6-23). Operation of the proposed project would consume an estimated 16,056,160 kWh of electricity and an estimated 21,072,650 kBTU of natural gas on an annual basis. The

proposed project's buildings would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Title 24 Energy Efficiency Standards for Nonresidential Buildings and Green Building Code Standards. The proposed project would be required to install electric vehicle (EV) charging stations for passenger automobiles and trucks which shall be designed to include the number of stations equal to the Tier 2 standards set forth in Section A5.106.5.3 of Appendix A5–Nonresidential Voluntary Measures of the California Green Building Standards Code (CALGreen) of the 2019 CBC and would be required to design the proposed buildings to structurally accommodate future installation of a rooftop solar system as well as apply to participate in the State of California's Community Solar Program (Assembly Bill [AB] 2316). The project applicants have also voluntarily agreed to incorporate and/or otherwise implement a number of additional measures/design features as conditions of approval to further address energy efficiency issues (see updated MMRP). As such, the design of the proposed project would facilitate the future commitment to renewable energy resources. Therefore, building energy consumption would not be considered wasteful, inefficient, or unnecessary.

Project-related vehicle trips would consume an estimated 805,478 gallons of gasoline and diesel annually. The proposed project would include the installation of bicycle parking fixtures at 5 percent of the proposed automobile parking spaces, encouraging the use of alternative modes of transportation for worker commutes. Regional access to the project site is provided via I-205, which borders the project site. Moreover, the proposed project would be required to implement various Transportation Demand Management (TDM) strategies that would contribute to fuel savings through incentives for project staff to utilize nonmotorized transportation modes. Thus, transportation fuel consumption would not be wasteful, inefficient, or unnecessary (Draft EIR, Page 3.6-22–24). The proposed project's impacts would be less than significant or no impact. No mitigation is necessary.

Potential Effect

Impact ENER-2: The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. (Draft EIR, Page 3.6-24).

Findings: Less than significant impact.

Facts in Support of Findings: The proposed project would be served with electricity provided by Pacific Gas and Electric Company (PG&E). In 2018, PG&E's electricity-generating portfolio contained 39 percent electricity generated from renewable sources. The utility is required to meet the future objective of 60 percent of electricity from renewable energy sources by 2030. The buildings would be required to be designed in accordance with all applicable laws and regulations including the provisions of Title 24, California's Energy Efficiency Standards for Nonresidential Buildings and Title 24, Green Building Code Standards.

The City's Sustainability Action Plan and General Plan contain goals, objectives and policies related to energy conservation. Compliance with applicable Title 24 standards would ensure that the proposed project would not conflict with any of the Sustainability Action Plan energy conservation policies related to the proposed project's building envelope, mechanical systems, and indoor and outdoor lighting. The proposed project would be required to comply with applicable State energy standards

and with energy conservation policies contained in the Tracy Sustainability Action Plan, as well as the identified CEQA mitigation measures and additional voluntary measures/features (as set forth in the updated MMRP) for the purpose of further supporting energy efficiency and renewable energy objectives. As such, the proposed project would not conflict with or obstruct the applicable State plans and policies for renewable energy and energy efficiency (Draft EIR, Page 3.6-24–25). The proposed project's impacts would be less than significant. No mitigation is necessary.

Cumulative Impact

The proposed project's cumulative impacts related to energy would be less than significant. (Draft EIR, Page 3.6-26).

Findings: Less than significant impact.

Facts in Support of Findings

Electricity and Natural Gas

The geographic scope of the cumulative energy analysis is the portion of PG&E's service area that covers incorporated and unincorporated San Joaquin County. During operation, the buildings and other improvements that would be constructed as part of the various cumulative projects would be required to be designed in accordance with Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings as applicable. Future cumulative development would also be required to meet even more stringent energy efficiency requirements through local and Statewide policy. Furthermore, PG&E, which supplies electricity to the project site and vicinity, would be required by Senate Bill (SB) 100 to incrementally increase the proportion of renewable electricity generation supplying its in-state retail sales until it reaches 100 percent carbon-free electricity generation by 2045. Electricity consumed during construction of the cumulative projects would also be subject to the renewable electricity generation requirements established by SB 100, as PG&E would be the anticipated electricity supplier for the cumulative project areas. Similarly, the proposed project's energy use would be limited to that which is necessary for the construction and operation of the proposed project. As discussed above, the proposed project would be required to comply with applicable Statewide and local policies and standards pertaining to energy efficiency, as well as CEQA mitigation measures and other enforceable conditions of approval, and can reasonably be assumed to pursue greater energy efficiencies to the extent commercially practicable in its operation, in the interest of reducing operating costs.

Fuel

Cumulative projects would be required to comply with California Code of Regulations Title 13, Sections 2449(d)(3) and 2485, which limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. Additionally, various federal and State regulations, including the Low Carbon Fuel Standard (LCFS), Pavley Clean Car Standards, and Low Emission Vehicle (LEV) Program, would serve to reduce the transportation fuel demand of cumulative projects. The proposed project would consume vehicle fuel during both construction and operation. The proposed project would also be required to use fuels which conform to various federal and State regulations, such as the LCFS, Pavley Clean Car Standards, and LEV Program. In addition, the proposed project would consume fuels in an amount necessary to construct and operate the

proposed project and it is reasonable to assume that it would not consume excessive amounts of fuel beyond what is necessary in the interest of avoiding unnecessary construction or operation costs. Therefore, the proposed project's incremental contribution to the less than significant cumulative impact would not be cumulatively considerable (Draft EIR, Page 3.6-25–26). The proposed project's impacts would be less than significant. No mitigation is necessary.

1.6.6 - Geology and Soils

Potential Effect

Impact GEO-2: The proposed project would not result in substantial soil erosion or the loss of topsoil. (Draft EIR, Page 3.7-13).

Findings: Less than significant impact.

Facts in Support of Findings: During construction, the proposed project would include grading and excavation that would expose approximately 500,000 cubic yards of soils. The proposed project would disturb at least 1 acre of land and therefore would be required to obtain a Construction General Permit from the State Water Resources Control Board (State Water Board), consistent with the City's General Permit (No. CAS000004) and to comply with its conditions and requirements, which are designed to minimize potential erosion issues. Consistent with Chapter 11.34 of the Municipal Code, compliance with the City's National Pollutant Discharge Elimination System (NPDES) permit would ensure the applicant(s) for individual development proposals within the project site would each obtain and implement a Storm Water Pollution Prevention Plan (SWPPP) in connection with the individual development proposal at issue where BMPs are implemented that would prevent sediments and other pollutants from entering the stormwater system. Additionally, compliance with Municipal Code Chapter 11.28 would ensure that each relevant development proposal would obtain and implement a grading plan during construction, which would prevent significant erosion of soils. Impacts related to soil erosion or loss of topsoil are limited to construction impacts. No respective operational impacts would occur. (Draft EIR, Page 3.7-13–14). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact GEO-5: The proposed project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. (Draft EIR, Page 3.7-16).

Findings: Less than significant impact.

Facts in Support of Findings: Impacts related to soil capability of supporting the use of alternative wastewater disposal systems are limited to operational impacts. No respective construction impacts would occur. All development on the project site would connect to the City's wastewater collection system and no alternative wastewater disposal system would be operated. Furthermore, General Plan Objective 7.3 requires that new development within the City demonstrate adequate wastewater treatment for the proposed project. Wastewater treatment capacity impacts are

discussed further under Section 3.16, Utilities and Service Systems (Draft EIR, Page 3.7-16). The proposed project's impacts would be less than significant. No mitigation is necessary.

1.6.7 - Greenhouse Gas Emissions

Potential Effect

Impact GHG-1: The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. (Draft EIR, Page 3.8-35).

Findings: Less than significant impact.

Facts in Support of Findings: Draft EIR Section 3.8, Greenhouse Gas Emissions, robustly evaluates the proposed project's GHG impacts, both from a quantitative and qualitative perspective. Section 3.8.4 describes the significance criteria, assumptions and methodologies used by the City, in its discretion, to conduct this impact analysis. As described in the ARB 2017 Scoping Plan, "achieving net-zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net-zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State's long-term GHG goals, and climate change science."

Total GHG emissions generated during the three construction phases were estimated using California Emissions Estimator Model (CalEEMod) Version 2016.3.2. To provide a robust and conservative analysis, the City, in its discretion, has determined to include construction emissions, which were quantified for all phases of the development and then amortized over a 30-year period. Project operation is assumed to begin in 2023 for Phase 1, 2024 for Phase 2 and 2025 for Phase 3. In addition to being required to comply with applicable rules and regulations, the proposed project would provide benefits in terms of its appropriate location and infrastructure that would reduce project VMT compared with default values. The proposed project would locate industrial uses close to major transportation corridors, for example. Results of this analysis for the three phases are presented in the Draft EIR, Table 3.8-6, Table 3.8-7, and Table 3.8-8. A second set of analyses for 2030 is presented in the Draft EIR, Table 3.8-9 through Table 3.8-11.

The City of Tracy has not adopted its own GHG thresholds or prepared a Climate Action Plan that can be used as a basis for determining project significance, although it has adopted a Sustainability Action Plan, which is a non-qualifying GHG Reduction Plan. The City, in its discretion as lead agency, has acted in accordance with the San Joaquin Valley Air Pollution Control District's (Valley Air District) recommendation that its quantitative air pollution thresholds be used to determine the significance of project emissions. The applicable Valley Air District thresholds and methodologies are contained under each impact statement in Section 3.3 (Air Quality) and Section 3.8 (Greenhouse Gas Emissions), which are based on relevant and robust scientific and factual data and the Valley Air District's expertise in this regard. The Valley Air District Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA includes thresholds is based on

whether the project will reduce or mitigate GHG levels by 29 percent from Business as Usual (BAU) levels compared with 2005 levels. This level of GHG reduction is based on the target established by ARB's AB 32 Scoping Plan, approved in 2008. The 2008 recession and slower growth in the years since 2008 resulted in a reduction of the growth forecasted for 2020, and the concomitant amount needed to be reduced to achieve 1990 levels as required by AB 32. The California Department of Finance population forecast for 2020 to 2030 predicts growth in the State of 8.1 percent by the 2030 target year or 0.8 percent per year. As explained more fully in Section 3.8.4 of the Draft EIR, the 2010 Cap and Trade Inventory Update provided revised inventory projections to reflect slower growth in emissions during the recession and lower future year projections. The State's 2020 BAU inventory was reduced from 596 million metric tons (MMT) carbon dioxide equivalent (CO_2e) to 545 MMT CO_2e. The new GHG reduction level for the State to reach 1990 emission levels by 2020 is 21.7 percent from BAU in 2020.

As shown in the Draft EIR, with applicable regulations and design features incorporated: Phase 1 would achieve a reduction in GHG emissions of 49.7 percent from the BAU scenario (compared to the threshold of 21.7 percent reduction BAU) by the year 2023, Phase 2 would achieve a 48.7 percent reduction by 2024, and Phase 3 would achieve a 31.6 percent reduction by 2025. Each phase would achieve well above the 21.7 percent average reduction from all sources of GHG emissions now required to achieve AB 32 targets.

The percent reductions from BAU for the three phases are all well in exceedance of the average 21.7 percent reduction required by the State from all sources to achieve the AB 32 2020 target and therefore addresses the concern expressed in the *Newhall Ranch* decision that projects should likely do more than the average to ensure they are providing a fair share of emission reductions. In addition, the percent reductions from BAU for the three phases are all well in exceedance of the average 29 percent reduction recommended by the SJVAPCD (as described further below). The emission reductions achieved by the proposed project would primarily come from improved building energy efficiency, increasing transportation fuel content standards, and increasing vehicle fuel efficiency standards when compared with a 2005 BAU scenario.

For purposes of a conservative evaluation, the analysis also addresses consistency with the SB 32 targets and the 2017 Scoping Plan Update with an assessment of the proposed project's reduction from BAU levels based on emissions in 2030 compared with the Valley Air District's Guidance for Valley Land Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA includes thresholds based on whether the project will reduce or mitigate GHG levels by 29 percent from BAU levels compared with 2005 levels. Therefore, because the proposed project's buildout would occur after 2020, operational emissions from the proposed project beginning in 2030 are summarized in the Draft EIR, Table 3.8-9 through Table 3.8-11 and compared with the applicable Valley Air District's threshold of a 29 percent reduction from BAU emission levels.

As shown in the Draft EIR, with applicable regulations and design features incorporated: Phase 1 would achieve a reduction of 43.9 percent as compared to the Valley Air District-established target of 29 percent reduction from BAU by the year 2030, Phase 2 would achieve a 43.3 percent reduction by 2030, and Phase 3 would achieve a 44 percent reduction by 2030. No new threshold has been

adopted by the City of Tracy for the 2030 target, so in the interim the proposed project must make continued progress toward the 2030 goal.

In conclusion, this City Council has determined, in its discretion, that the foregoing GHG thresholds are the proper ones to utilize for this analysis. Each of the project phases would achieve reductions well in exceedance of both targets: (1) the ARB 2020 21.7 percent target and (2) the Valley Air District 29 percent reduction from BAU requirements from adopted regulations in their respective operational years. No new threshold has been adopted by the City for the SB 32 2030 target and for the reasons set forth in the EIR, the City has determined that a net-zero emissions threshold is not required under CEQA and would not be appropriate for purposes of this analysis. The emission estimates presented in the Draft EIR demonstrate that the proposed project would achieve greater reductions than the Valley Air District-established threshold of 29 percent, resulting in annual reductions ranging from 43.3 to 44 percent. With respect to the 21.7 percent reduction BAU, the proposed project would achieve greater reductions in this regard as well, resulting in annual reductions ranging from 31.6 to 49.7 percent. Based on this progress and the 2017 Scoping Plan Update, it is reasonable to conclude that the proposed project is consistent with the 2017 Scoping Plan and would make a reasonable fair share contribution to achieving the 2030 target and would not result in barriers to achieving net-zero emissions.

In addition, compliance with the VMT targets, to the extent feasible, adopted to comply with SB 375 and implemented through the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and updated VMT guidelines adopted by the Governor's Office of Planning and Research (OPR) and implemented by the City may be considered to appropriately address GHG emissions from passenger cars and light-duty trucks. (See Section 14, Transportation, for additional details of the VMT analysis as well as proposed mitigation measures to reduce impacts to the extent feasible, which would also reduce GHG emissions.) Additionally, the State strategy relies on the Cap-and-Trade Program to make up any shortfalls that may occur from the other regulatory strategies. The costs of Cap-and-Trade emission reductions will ultimately be passed on to the consumers of fuels, electricity and products produced by regulated industries which include future residents of development projects and other purchasers of products and services. Finally, the project applicants have agreed to voluntarily implement additional conditions/features that would further reduce GHG emissions (see updated MMRP). Given the above information and that the proposed project would not exceed Valley Air District-established GHG significance thresholds, which is the expert public agency charged with regulating emissions in the region, this impact would be less than significant (Draft EIR, Page 3.8-35–45). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact GHG-2: The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. (Draft EIR, Page 3.8-46).

Findings: Less than significant impact.

Facts in Support of Findings: While the City of Tracy has adopted a Citywide Sustainability Action Plan, it has not adopted a GHG Reduction Plan. In addition, the City has not completed the GHG inventory, benchmarking, or goalsetting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines amendments adopted for SB 97 and clarifications provided in the CEQA Guidelines amendments adopted on December 28, 2018. The Valley Air District has adopted a Climate Action Plan, but it does not contain measures that are applicable to individual development projects such as the proposed project. Therefore, the Valley Air District Climate Change Action Plan (CCAP) cannot be applied to the proposed project for purposes of streamlining under CEQA. Since no other local or regional Climate Action Plan is in place, the proposed project was assessed for its consistency with ARB's adopted Scoping Plans.

Consistency with California's Post-2020 Targets

Executive Order S-3-05 sets goals to reduce emissions to 1990 levels by 2020 and 80 percent below 1990 levels by 2050. The goal of Executive Order S-3-05 to reduce GHG emissions to 1990 levels by 2020 was codified by AB 32. The proposed project, for the reasons summarized above and analyzed in detail in the EIR, is consistent with AB 32. Therefore, the proposed project does not conflict with this component of Executive Order S-3-05. Executive Order B-30-15 establishes an interim goal to reduce GHG emissions to 40 percent below 1990 levels by 2030.

The 2030 goal was codified under SB 32 and is now addressed by the 2017 Scoping Plan Update. The Scoping Plan Update provides a strategy that is capable of reaching the SB 32 target if the measures included in this plan are implemented and achieve reductions within the ranges expected. Under the Scoping Plan Update, each local government plays a supporting role through its land use authority and control over local transportation infrastructure. The 2017 Scoping Plan Update includes reductions from implementation of SB 375 that applies to VMT from passenger vehicles. San Joaquin County targets for SB 375 are a 12 percent per capita reduction by 2020 and a 16 percent per capita reduction by 2035 relative to 2005 levels. SB 375 is implemented with the San Joaquin Council of Governments (San Joaquin COG) RTP/SCS. The RTP/SCS envisions an increase in development density and intensity that would encourage fewer and shorter trips and more trips by transit, walking, and bicycling in amounts sufficient to achieve the SB 375 targets.

The Executive Order S-3-05 2050 target has not been codified by legislation. However, studies have shown that, in order to meet the 2050 target, aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. Quantitatively analyzing the proposed project's impacts further relative to the 2050 goal is speculative for purposes of CEQA.

The proposed project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets. Recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the Statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends—such as the increasing importance of web-based shopping, the emergence of different driving patterns, and the increasing effect of web-based applications on transportation choices—are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years and will require the creation of new models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions. For the reasons summarized above and described more fully in the EIR, the proposed project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets.

Consistency with SB 32

As explained above and at length in the EIR, the 2017 Scoping Plan Update includes the strategy that the State intends to pursue to achieve the 2030 targets of Executive Order S-3-05 and SB 32. The Draft EIR, Table 3.8-12, provides an analysis of the proposed project's consistency with the 2017 Scoping Plan Update measures. Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed project would be required to comply with whatever measures are enacted that State lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. In its 2008 Scoping Plan, the ARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the First Scoping Plan Update; however, the ARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately." The 2017 Scoping Plan Update provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target.

Accordingly, taking into account the nature of the proposed project's use, design features, location and infrastructure, as well as the proposed project's emissions coupled with its compliance with identified CEQA mitigation measures and other enforceable conditions of approval, and the progress being made by the State toward reducing emissions in key sectors such as transportation, industry, and electricity, the proposed project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050, and would not obstruct their attainment. (Draft EIR, Page 3.8-46–51). As detailed in Draft EIR Section 3.8, Greenhouse Gas Emissions, each of the project phases would achieve reductions beyond the ARB 2020 21.7 percent target and the Valley Air District 29 percent reduction from BAU requirements from adopted regulations in their respective operational years. The emission estimates presented in Tables 3.8-9 through 3.8-11 of the Draft EIR demonstrate that the proposed project would achieve greater reductions than the Valley Air District-established threshold of 29 percent, resulting in annual reductions ranging from 43.3 to 44 percent. With respect to the 21.7 percent reduction BAU, the proposed project would achieve greater reductions in this regard as well, resulting in annual reductions ranging from 31.6 to 49.7 percent. Based on this

progress and the 2017 Scoping Plan Update, it is reasonable to conclude that the proposed project would be consistent with the 2017 Scoping Plan and would make a reasonable fair share contribution to achieving the 2030 target. Furthermore, Table 3.8-12 describes how the proposed project would be consistent with the 2017 Scoping Plan Update measures.

Consistency with the RTP/SCS

The SJCOG 2018 RTP establishes regional transportation policy for San Joaquin County based on specific regional transportation goals and objectives. The RTP focuses on achieving a coordinated and balanced multimodal transportation system, while maintaining the integrity of the existing system. The RTP includes projects located throughout San Joaquin County for all forms or modes of transportation, including automobiles, transit, nonmotorized (including bicycle), passenger rail, freight, and aviation facilities. The goals and objectives contained in the RTP are focused on transportation initiatives, infrastructure, planning, and funding on the regional level. The proposed project would support these policies and strategies.

Policy 1 of the RTP/SCS focuses on enhancing the environment for existing and future generations and conserve energy. The EIR evaluates the proposed project's impacts on the environment and provides feasible mitigation to address these potential impacts. As analyzed in Section 3.6, Energy, and further documented in the Final EIR, the proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation (Draft EIR, Page 3.6-22–24; see also Ind. Responses to Comments, Final EIR) or conflict with or obstruct a State or local plan for renewable energy or energy efficiency (Draft EIR, Page 3.6-24–25; see also Ind. Responses to Comments, Final EIR). The project site has a land use designation of "Industrial" in the City of Tracy General Plan, and the proposed project, which consists of the buildout of warehousing and industrial space and ancillary office uses and related improvements, is consistent with this land use classification. The RTP/SCS accounts for growth in the project area, including industrial developments such as the proposed project. Strategy 3 is to improve air quality by reducing transportation-related emissions. Though the proposed project would result in significant and unavoidable impacts with respect to air quality and VMT, the proposed project would be required to implement feasible mitigation (Mitigation Measure [MM] AIR-1d, MM AIR-1e, MM AIR-1f, MM AIR-1i, MM TRANS-1(a), and MM TRANS-1(b)), which would reduce transportation-related emissions to the maximum extent feasible thereby improving air quality, consistent with Strategy 3. The proposed project would also be required to comply with additional enforceable conditions of approval (see updated MMRP) for which the applicants have voluntarily agreed to incorporate, which would further address air quality, energy, GHG emissions, and transportation-related impacts.

Strategy 4 is to improve the regional transportation system efficiency. As noted above, the proposed project involves industrial uses that would be strategically located near major transportation corridors, and as described in Chapter 2 of the Draft EIR, Project Description, and throughout the EIR, the proposed project would provide for an efficient on-site circulation system and off-site public transit, bicycle and pedestrian facilities as well as set aside approximately 12.51 acres in the northwest corner of the project site, which would be sufficient to accommodate improvements to the City's expressway system, as well as a future I-205/Paradise Road/Chrisman Road interchange as

shown in Exhibit 2-7c in Chapter 2, Project Description of the EIR, consistent with the City of Tracy Transportation Master Plan (TMP). The TMP provides a comprehensive review of the City's transportation system and serves as a blueprint that can be utilized to identify and implement required improvements to the existing roadway system as well as expand upon the system to accommodate planned development consistent with the General Plan, such as the proposed project. As an interstate, I-205 serves the region, and, therefore, the future I-205/Paradise Road/Chrisman Road interchange would improve the regional transportation system and support Strategy 4. Similarly, Strategy 8 requires the improvement of major transportation corridors to minimize impacts on rural roads. While not part of the proposed project, the 12.51 acres of land set aside that would facilitate the improvements to the City's expressway system and the future I-205/Paradise Road/Chrisman Road interchange would result in such improvements, once constructed by the relevant public agencies, by providing regional infrastructure for automobiles and trucks entering and exiting the site and beyond. Furthermore, as discussed in Section 14, Transportation, of the EIR, the proposed project would be required to implement the following travel demand measures to reduce project VMT as is required by MM TRANS-1(a).

1. Utilize communication and information strategies–4 percent reduction;
2. Offer telecommuting for administrative staff (5 percent of staff population)–1 percent reduction;
3. Designate parking spaces for carpool vehicles–1 percent reduction;
4. Provide a transit stop along the project frontage on Grant Line Road, if agreed to by the City–2 percent reduction;
5. Provide bike lanes and sidewalks along the project frontage–1 percent reduction; and
6. Provide on-site bike racks and showers–1 percent reduction.

In addition, the proposed project would pay toward the City's VMT Mitigation Banking Fee Program for a further VMT reduction of an additional 5 percent (see MM TRANS-1(b)). Through the implementation of project design features and required mitigation measures, as discussed above, the proposed project is considered to be consistent with the RTP/SCS.

The proposed project's impacts would be less than significant. No mitigation is necessary.

Cumulative Impact

The proposed project's cumulative impacts related to GHGs would be less than significant. (Draft EIR, Page 3.8-51).

Findings: Less than significant impact.

Facts in Support of Findings: GHG emissions and global climate change inherently represent cumulative impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the GHG emissions from past, present,

and reasonably foreseeable future projects and activities have contributed to and would contribute to global climate change and its associated environmental impacts. According to the Valley Air District and as discussed at length above, GHG emissions from development projects are inherently cumulative and do not require the estimation of cumulative projects in the region of the project. Thus, the determination of GHG cumulative impacts is based on the State target established by AB 32 to reduce GHG emissions to 1990 levels by 2020 and the project's consistency with the State's post-2020 GHG emission reduction targets. In order to ensure that these goals would be achieved, as discussed above in detail, Air Districts and Lead Agencies developed GHG thresholds to ensure compliance with the State's AB 32 target. Projects with GHG emissions in conformance with these thresholds, therefore, would not be considered significant for purposes of CEQA. In addition, although the emissions from such cumulative projects would add an incremental amount to the overall GHG emissions that cause global climate change impacts, emissions from projects consistent with these thresholds would not be a "cumulatively considerable" contribution under CEQA. Such projects would not be "cumulatively considerable," because they would be helping to solve the cumulative problem as a part of the AB 32 process. Given that it has been determined the proposed project would be consistent with the applicable thresholds as explained in detail above and further in the EIR, it would result in a less than significant cumulative impact related to generation of GHG emissions (Draft EIR, Page 3.8-51).

1.6.8 - Hazards and Hazardous Materials

Potential Effect

Impact HAZ-2: The proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. (Draft EIR, Page 3.9-24).

Findings: Less than significant impact.

Facts in Support of Findings: Construction activity would be expected to involve the transport, use, and disposal of hazardous materials, such as diesel fuels, aerosols, and paints, which are typical for this type of light industrial use. Transport, use, and disposal of hazardous materials can increase the risk of upset and accident conditions that could involve the likely release of hazardous materials into the environment. However, the use of these materials would be subject to applicable provisions of the Hazardous Materials Transportation Act, California Public Resources Code, and other State and local laws and regulations that would reduce risks of accident by limiting the use of hazardous materials and thereby reducing the associated risks of exposure. Any handling, transporting, use, or disposal by the proposed project would be required to comply with applicable laws, regulations, policies, and programs set forth by various federal, State, and local agencies, including the United States Environmental Protection Agency (EPA), RCRA, Caltrans, the Hazardous Materials Transportation Act, and the City of Tracy Hazard Mitigation Plan (HMP), which are designed to reduce risk of upset and accident conditions involving the release of hazardous materials into the environment.

During operation, tenants/operators of the proposed project may use potentially hazardous substances that are typical for this type of light industrial use, including lubricants, hydraulic oils, and

other substances. Small quantities of hazardous materials would be used on-site during operation of the proposed project, but not in sufficient quantities to create a significant hazard in the unlikely event of upset or accident. These types of materials are common in such light industrial projects and represent a low risk to people and the environment when used and handled as intended and would not be expected to result in the release of hazardous materials into the environment. The handling, transport, and disposal of such substances by the proposed project would be required to comply with all local, State, and federal laws and regulations, which would reduce risks of accident conditions. (Draft EIR, Page 3.9-24–25). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact HAZ-3: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Draft EIR, Page 3.9-25).

Findings: Less than significant impact.

Facts in Support of Findings: The project site is not located within 0.25 mile of an existing or proposed school. The closest school, Banta Elementary School, is located approximately 0.35 mile to the east (Draft EIR, Page 3.9-25–26). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact HAZ-5: The proposed project would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area. (Draft EIR, Page 3.9-32).

Findings: No impact.

Facts in Support of Findings: The proposed project is located greater than 5 miles northeast from the Tracy Municipal Airport. At this distance, the proposed project would not be located within an airport land use plan or within 2 miles of a public airport. Therefore, no impact related to exposure of people to safety hazards or excessive noise in proximity to an airport would occur. (Draft EIR, Page 3.9-32–33). The proposed project would have no impact. No mitigation is necessary.

Potential Effect

Impact HAZ-6: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Draft EIR, Page 3.9-33).

Findings: Less than significant impact.

Facts in Support of Findings: During construction, it is expected that construction equipment and vehicles would be accessing and leaving the project site, which in turn could potentially impede

evacuation or EVA. During operation, employee vehicles would need to access and leave the project site. Neither the San Joaquin County Local HMP nor the City of Tracy Local HMP include specific evacuation routes. However, main arterial roads into and out of the project vicinity that would serve as evacuation routes in case of emergency would be I-205 in the east–west direction and I-5 in the north–south direction as well as Paradise Road and Grant Line Road. Given the nature of the proposed project and the fact that there are several alternate routes that provide access to these evacuation routes, the proposed project would not impair implementation of or physically interfere with these evacuation routes. With adherence to the applicable procedures of the San Joaquin County Local HMP and the City of Tracy Local HMP, the proposed project would not conflict with the relevant General Plan safety policies (Draft EIR, Page 3.9-33). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact HAZ-7: The proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires (Draft EIR, Page 3.9-33).

Findings: Less than significant impact.

Facts in Support of Findings: The project site is surrounded by urban development and managed land without steep terrain or unmanaged open space areas prone to wildfires. The closest open space area is located approximately 7 miles south of the project site. The project site has not previously experienced wildfire. Given that the project site is not located in or near an area of steep terrain or historical wildfire burn, there is a low likelihood that the project site would be prone to greater wildfire risk as compared to existing conditions. Neither the City nor the project site is in a High or Very High Fire Hazard Severity Zone as designated by California Department of Forestry and Fire Protection (CAL FIRE). According to the California Public Utilities Commission (CPUC), there are no Tier 2-Elevated Zones or Tier 3-Extreme Zones within the City of Tracy. The closest fire prone areas located in a designated fire hazard zone are the southwest areas of the City’s SOI, over 7 miles southwest of the project site.

The proposed project would be adequately served by fire protection services from South County Fire. Furthermore, project structures would be required to comply with applicable provisions of the California Fire Code with respect to emergency access and use of building materials that would limit the spread of wildfire to the greatest extent feasible. Compliance with applicable State and local plans, laws and regulations would decrease the risk of impacts related to wildland fire hazards. Specifically, the General Plan includes goals (Goal SA-3), objectives (Objective SA-3.1), and policies (PI and P3) that incorporate requirements for fire-safe construction into the land use planning process (Draft EIR, Page 3.9-33–34). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

The proposed project’s cumulative impacts related to hazards and hazardous materials would be less than significant. (Draft EIR, Page 3.9-34).

Findings: Less than significant impact.

Facts in Support of Findings: The geographic scope of the cumulative hazards and hazardous materials cumulative analysis is the City. The types and sizes of cumulative development anticipated in the project vicinity would not be anticipated to involve large quantities of hazardous materials or activities that transport or handle hazardous materials. Cumulative projects would be subject to the Hazardous Materials Transportation Act, California Public Resources Code, and other State and local laws and regulations that would reduce and limit the associated risks. Any handling, transporting, use, or disposal would be required to comply with applicable laws, regulations, policies, and programs set forth by various federal, State, and local agencies, including the EPA, RCRA, Caltrans, and HMP. However, cumulative projects may include demolition of existing structures that have the potential to contain hazardous building materials. Building materials may contain asbestos-containing material (ACM) and lead-based paint (LBP). To address potential release of hazardous materials, the City would require the applicants of cumulative developments to assess structures and comply with standard conditions of approval/ mitigation measures. Additionally, a comprehensive regulatory framework involving regional, State, and federal laws and regulations would apply to these cumulative projects, which would further ensure a less than significant cumulative impact related to exposure to hazardous materials. With respect to the proposed project, it would similarly be required to adhere to standard conditions of approval and identified mitigation, and otherwise ensure compliance with all applicable laws, regulations, plans and policies related to transport, use, and disposal of hazardous materials.

Planned uses as proposed by the cumulative projects are contemplated in the General Plan, would result in predominantly infill development, and would not significantly increase the need for emergency services, including those related to wildfires. Furthermore, all construction would be required to adhere to all applicable laws and regulations, including those in the California Fire Code, which are designed to minimize the potential for the release of hazardous materials or uncontrolled fires. Once development is proposed, the City would assess the needs for fire protection services and inform efforts to improve or expand needed facilities. Cumulative development would increase the population, as contemplated in the City's General Plan. All cumulative development would, however, be required to comply with emergency access requirements as standard conditions of approval. Furthermore, the cumulative development in the City would be required to ensure no permanent road closures and would not be permitted to impede established emergency access routes, or interfere with emergency response requirements. With respect to the proposed project, it would similarly be required to adhere to standard conditions of approval and identified mitigation, and otherwise ensure compliance with all applicable laws, regulations, plans and policies related to emergency access routes and emergency response requirements (Draft EIR, Page 3.9-34–35). The proposed project's impacts would be less than significant. No mitigation is necessary.

1.6.9 - Hydrology

Potential Effect

Impact HYD-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. (Draft EIR, Page 3.10-24).

Findings: Less than significant impact.

Facts in Support of Findings: Impacts related to depletion of groundwater supplies or interference with groundwater recharge are limited to operational impacts. Implementation of the proposed project would result in a significant amount of new impervious surfaces, which could interfere with groundwater recharge rates. The Geotechnical Engineering Report determined that stormwater would percolate at a rate of 0.36 inch per hour or 167 minutes per inch. Project site soils contain finely layered, fine-grained alluvial soils (silt) that impede vertical percolation of stormwater. As such, groundwater recharge on the project site is currently limited. Percolation rates could be further reduced if stormwater pollutants are present in the runoff, such as sediment, organic materials, and/or oil residue. However, the design of the proposed project's on-site stormwater detention basin includes filters to remove sediments and organic materials that might otherwise reduce groundwater percolation rates and thus would help facilitate groundwater recharge. Therefore, despite the significant increase in impervious surfaces that would occur with the proposed project, implementation of the proposed project would not significantly impact groundwater recharge rates for the foregoing reasons.

Historically, groundwater accounted for up to 50 percent of the City's water supply. Prior to 2001, groundwater extraction in the City totaled less than 6,000 AFY. Between 2001 and 2004, to meet increased demands for water, the City extracted additional groundwater, ranging from 7,321 to 7,176 AFY. In 2005, the rate of groundwater extraction decreased back to the historic 6,000 AFY, reflecting two key factors: (1) the South County Water Supply Project (SCWSP) was completed and the City began receiving Stanislaus River water, and (2) rainfall was above normal, meaning that the City received a higher percentage of its Delta-Mendota Canal/Central Valley Project contractual entitlements. From 2006 to 2010, groundwater extraction ranged from 2,034 AFY to 498 AFY, declining as more water was used from the South San Joaquin Irrigation District. (Draft EIR, Page 3.10-24). The City's estimated groundwater yield is 9,000 AFY. An assessment of the aquifer beneath the City indicates that there is an average annual operational potential yield of 9,000 AFY. Since the City's groundwater is hard and consists of high TDS levels, the City has scaled back its groundwater extraction in most years, but it is anticipated that the City will continue to rely on groundwater for peaking and drought and emergency water supply. As described in more detail in the EIR, the City anticipates that total extraction during a normal year would be 2,500 AFY through the planning horizon. By reducing groundwater extraction on an average annual basis during normal years, the City would: (1) increase the overall quality of its drinking water, thus increasing customer satisfaction and reducing system maintenance and repair caused by the lower-quality groundwater; and (2) recharge the underlying aquifer, effectively increasing the availability of groundwater during a drought or emergency condition (i.e., effectively "banking" groundwater). At the production volumes shown in the EIR, Table 3.10-3, the City's groundwater supplies are considered to be 100 percent reliable. In the event of a severe water supply shortage or emergency, the City could increase production dramatically, up to 22,000 AFY.

The 2020 UWMP addressed the sufficiency of the City's groundwater supplies, in conjunction with the City's other existing and additional water supplies, to meet the City's existing and planned future uses. Based on the information summarized above, described further in the EIR, and included in the

2020 UWMP, the City's groundwater supply, together with the City's other existing and additional planned future water supplies, are sufficient to meet the water demands of the proposed project, in addition to the City's existing and other planned uses. Although the City can sustainably extract up to 9,000 AFY of groundwater on a continuous basis, the City's use of groundwater under normal hydrologic conditions is anticipated to be lower, as available higher-quality surface water supplies would be utilized first. Assuming normal year hydrologic conditions, annual groundwater use is anticipated to be 2,500 AFY. This anticipated future groundwater pumpage is significantly below the City's maximum historical groundwater pumpage and the average annual operational yield of 9,000 AFY. The proposed project would not significantly decrease groundwater supplies because, among other things, the design of the proposed project's on-site stormwater detention basin includes filters to remove sediments and organic materials that might further reduce groundwater percolation rates. Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge (Draft EIR, Page 3.10-24–30). The proposed project's impacts would be less than significant. No mitigation is necessary.

Cumulative Effect

The proposed project's cumulative impacts related to hydrology and water quality would be less than significant. (Draft EIR, Page 3.10-39–41).

Findings: Less than significant impact.

Facts in Support of Findings

Hydrology

All cumulative developments within the San Joaquin River Basin including those cumulative projects listed in the EIR, Table 3-1, have been considered in the EIR's analysis since they are located within the San Joaquin River Basin which eventually drains into the San Joaquin River and ultimately into the Pacific Ocean. All cumulative projects would be required to comply with applicable laws and regulations implemented by the relevant public agencies including the Central Valley Regional Water Quality Control Board (Central Valley RWQCB), as well as relevant policies in the General Plan and other applicable codes, ordinances, and policies, which prevent a project from increasing off-site surface water flow from existing conditions and further ensures that projects adhere to BMPs during construction to prevent pollutants from being carried off-site. Additionally, cumulative development would be required to comply with applicable regional, State and federal laws and regulations regarding flooding to ensure impacts are less than significant in this regard. These laws and regulations, in combination with implementation of applicable provisions in the General Plan (including, but not limited to, Objective PF-7.3: Policies P1, P2, P3, P4, and P5, Objective PF-7.4: Policy P3, and Objective PF-8.2: Policies, P1, P2, P3, P4), would result in a less than significant cumulative impact related to hydrology.

The proposed project would also be required to comply with applicable laws and regulations implemented by the relevant public agencies including the Central Valley RWQCB, as well as relevant policies in the General Plan and other applicable codes, ordinances, and policies related to preventing pollutants from being conveyed off-site.

Water Quality

The geographic context for consideration of cumulative impacts related to surface water quality is the San Joaquin River Basin. All cumulative project construction would be required to obtain a Construction General Permit from the State Water Board, which would require preparation of a SWPPP that would control potential discharges of contaminants into the San Joaquin River. These cumulative projects would also be required to prepare a Storm Water Management Plan (SWMP) and comply with the applicable General Plan policies and relevant provisions of the Municipal Code during operation. Similarly, the proposed project would also be required to obtain a Construction General Permit from the State Water Board and prepare a SWPPP as well as a SWMP. In addition, the proposed project would be mandated to comply with applicable General Plan policies (including, but not limited to, Objective PF-7.3: Policies P1, P2, P3, P4, and P5, Objective PF-7.4: Policy P3, and Objective PF-8.2: Policies, P1, P2, P3, P4), and applicable provisions of the Municipal Code during operation.

The geographic context for consideration of cumulative impacts related to groundwater quality and management is the Tracy Groundwater Subbasin. Construction of cumulative projects would be required to obtain a Construction General Permit from the State Water Board, which would require preparation of a SWPPP that would control pollutants that could seep into groundwater. Operations of these cumulative projects would be required to comply with all applicable laws and regulations imposed by the relevant public agencies including the Central Valley RWQCB, thereby ensuring that stormwater is pre-treated via bioretention and is otherwise handled pursuant to all applicable standards and requirements to ensure that percolation to the groundwater table would not result in degradation of groundwater quality. In addition, the cumulative projects would include bioretention areas to remove sediments and organic materials that might reduce groundwater percolation rates and other project features that would help facilitate groundwater recharge. Similarly, the proposed project would include these types of features and would otherwise be mandated to comply with applicable General Plan policies and applicable provisions of the Municipal Code, as well as other governing laws and regulations, during operation.

Flooding

The geographic context for consideration of cumulative impacts related to flooding is the NEI Specific Plan area. A small portion of the northern part of the NEI Specific Plan area is within the 100-year flood zone and flooding impacts would affect other parcels in the NEI Specific Plan area. According to the City's General Plan, the City anticipates urban growth in this portion of the City. Flooding occurs mainly near the northern areas of the City closer to I-205. Cumulative development projects in the floodplain would be required to install stormwater facilities pursuant to applicable standards to ensure projects would not be susceptible to flooding. The City would review cumulative development proposals to ensure they are in accordance with applicable guidelines, ordinances, permitting requirements, including, among others, General Plan policies (including, but not limited to, Objective PF-8.1: Policies P1, P2, P3, P4, P5, P6, P7, Objective PF-8.2: Policies P1, P2, P3, and P4, Objective SA-2.1: Policies P1, P2, P3, and P4). Thus, there would be a less than significant cumulative impact related to flooding.

The proposed project would also be required to install stormwater facilities and prepare a Final Drainage Plan in connection with each individual development proposal, which would be required to adhere to the stringent criteria set forth in the City's Design Standards. For example, the proposed project would incorporate an on-site stormwater detention basin into its design that would be required to adhere to all applicable performance standards to ensure no flooding impacts. For these reasons and as further summarized and discussed more fully in the EIR, the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable (Draft EIR, Page 3.10-39–41).

1.6.10 - Land Use

Potential Effect

Impact LAND-1: The proposed project would not physically divide an established community. (Draft EIR, Page 3.11-17). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings: Impacts related to physical division of an established community are limited to operational impacts. The development of the proposed project would not involve construction of any type of linear feature that would impair mobility within an existing community, nor would it remove a means of access in a manner that would impede travel or otherwise constitute division of an established community. Rather, the proposed project would be designed in accordance with relevant NEI Specific Plan policies, which would help ensure a cohesive, integrated site and circulation plan, taking into account ready access to nearby transportation corridors (Draft EIR, Page 3.11-17–18).

Potential Effect

Impact LAND-2: The proposed project would not cause a significant environmental impact due to conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (Draft EIR, Page 3.11-18). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings: Impacts related to consistency with applicable land use plans and policies are limited to operational impacts.

Local Agency Formation Commission General Standards for Annexation Consistency

Spheres and Municipal Service Reviews

The project site is within the City's existing SOI (10-year horizon), and therefore has already been contemplated for future inclusion within the City's municipal boundaries. The City's inclusion of the project site via its designation under the City's General Plan as Industrial is consistent with the land use vision for the proposed project and the SOI.

The City's Municipal Services Review (MSR) update determined that the City would have adequate capacity and funds to support expanded services as part of the anticipated development of the SOI (which, as noted above, includes the project site). This included a capital improvement program that identified and planned funds for specific infrastructure improvements and master plans that identified necessary infrastructure upgrades. Accordingly, the proposed project would be consistent with the LAFCo policy requiring a Municipal Service Review and SOI Plan to demonstrate that adequate services can be provided within the timeframe needed by the inhabitants of the annexed area.

Contiguity

The project site is contiguous to the existing City of Tracy limits and the existing NEI Specific Plan area. The boundaries of the proposed reorganization, which would involve the annexation of the project site into the City's municipal boundaries (along with the related detachment from the Fire District) would not create or result in areas that are difficult to serve.

Progressive Urban Pattern

The proposed project would represent a progressive step toward filling in the SOI in this area of the City, consistent with the longtime planning vision of this City for the area as reflected in the City's General Plan. The project site is adjacent to existing City limits and is furthering outward growth that is not isolated and would not constitute "leapfrog" development or otherwise facilitate urban sprawl. Rather, the proposed reorganization would reflect a logical and orderly extension of the City's boundaries.

Piecemeal Annexation Prohibited

The proposed project does not reflect a piecemeal annexation approach. The project site has been included within the City's SOI and designated for urban development under the City's General Plan for the last approximately 29 years. The proposed reorganization reflects a logical and orderly extension of urban growth and the City's boundaries, which would ensure the project site is developed in a comprehensive and thoughtful manner consistent with other nearby lands in the NEI Specific Plan area.

Definite and Certain Boundaries

It is anticipated that project site boundaries that would be presented in the reorganization application would be definite and conform to Assessor's Parcel Number (APN) lines and/or ownership of legal lots and would not contain any split parcels.

Service Requirements

The City has the capacity to adequately serve the areas within its municipal boundaries as well its existing SOI. Moreover, the project site is contiguous to the City's municipal boundaries and other existing urban development, which facilitates the efficient extension of existing utilities. The proposed project would connect to and/or otherwise utilize existing utility lines for service to the proposed project, and would also construct and/or pay applicable development impact fees toward the construction of identified infrastructure and improvements, consistent with the City's Master Plans.

Adverse Impact of Annexation on the Other Agencies

The City has the capacity to adequately serve the areas within its municipal boundaries as well its existing SOI without impairing the City's ability to serve existing and other proposed uses, and the proposed reorganization reflects a logical and orderly extension of service boundaries and would result in the efficient delivery of services. All applicable impact fees would be paid by each co-applicant for individual development proposals within the project site, which would further ensure that new development "pays its own way."

Annexation of Streets

The proposed project would be a logical and orderly extension of the City's boundaries and would include the annexation of territory such that the circulation plan and street network would not fragment governmental responsibility between the City and the County.

Prezoning Required

The project site would be pre-zoned NEI Specific Plan and this zoning designation would not be permitted to be changed within 2 years of the completion of the reorganization.

Airport Land Use Compatibility Plan Consistency

The proposed project is not within the Airport Land Use Compatibility Zone. The proposed project does not reach the standard height and distance from an airport that would require Airport Land Use Commission (ALUC) review and Federal Aviation Administration (FAA) notification.

General Plan Consistency

The County General Plan land use designation for the project site is A/UR. However, with project approval and completion of the related reorganization proposal, the County General Plan would no longer apply to the proposed project, as the project site would be annexed into the City of Tracy. One of the factors LAFCo must consider when reviewing a proposal for reorganization is the effect of the proposal on maintaining the physical and economic integrity of agricultural lands, as defined by Government Code Section 56016. Similar to the discussion reflected in the EIR, although the proposed project would result in a reduction of agricultural land, the proposed project is consistent with the City of Tracy General Plan land use designation of Industrial for the project site and reflects the planned urban development vision for the project site. The EIR provides a consistency analysis in Table 3.11-3, finding that the project is consistent.

Northeast Industrial Specific Plan Consistency

Implementation of the proposed project would require an amendment to the NEI Specific Plan to include the project site within its boundaries (and other conforming amendments to ensure consistency). As such, the proposed Specific Plan Amendment and prezoning, if approved, constitute a self-mitigating aspect of the proposed project that would serve to correct what would otherwise be a conflict. The proposed project would be designed to incorporate applicable development standards and design guidelines that comply with relevant provisions in the NEI Specific Plan. Proposed land uses on the project site are currently permitted in the NEI Specific Plan. Accordingly, the proposed project would be consistent with the urban, industrial character of the surrounding NEI Specific Plan area.

Tracy Municipal Code Consistency

Planning and Zoning Code

The project site would be pre-zoned "Northeast Industrial Specific Plan." In connection therewith, the proposed project includes an amendment to the NEI Specific Plan boundaries to incorporate the project site (and other conforming amendments to ensure consistency). With these actions, the provisions of the NEI Specific Plan would serve as zoning for the lands within its boundaries, including the project site. The proposed light industrial, warehouse and distribution and ancillary office uses would be consistent with this zoning. Development of the proposed project would be required to adhere to all applicable development standards and design guidelines set forth in the NEI Specific Plan and the Municipal Code.

Off-Street Parking Code

At full buildout, the proposed project would be required to provide the required number of parking spaces and bicycle stalls, which, based on current development assumptions and parameters, would be approximately 1,153 automobile spaces and approximately 59 bicycle stalls.

Street Tree Ordinance

The applicant of each individual development proposal would be required to submit an application to the Parks and Community Services Department in connection with the proposed removal of any street trees. The Director of Parks and Community Services can authorize or prohibit the tree from being removed pursuant to the City's Street Tree Ordinance and can provide conditions of approval. (Draft EIR, Page 3.11-18–29). The proposed project's impacts would be less than significant. No mitigation is necessary.

Cumulative Impact

The proposed project's cumulative impacts related to land use and planning would be less than significant. (Draft EIR, Page 3.11-30). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant.

Facts in Support of Findings: The cumulative setting includes past, present and reasonably foreseeable probable future developments within the City and its SOI. Development within the City is governed primarily by the City's General Plan and Municipal Code. These guiding laws and regulations and planning documents set forth the land use vision for the community, facilitate logical and orderly development, and ensure consistency with the General Plan as required under State Planning and Zoning laws. All cumulative developments would be required to be consistent with and conform to these planning documents and governing regulations. For cumulative projects, the relevant land use agency is required to issue findings demonstrating consistency with applicable General Plan and Municipal Code requirements to be approved. Projects listed in Table 3-1 that are within the boundaries of the Tracy Municipal Airport Land Use Compatibility Zone would be required to demonstrate consistency with the applicable airport land use compatibility criteria. For cumulative projects that are within the City's SOI and would be annexed into the City, these would be required to demonstrate consistency with applicable provisions of LAFCo regulations and local

LAFCo policies. For the foregoing reasons, there would not be a significant cumulative impact related to division of an established community to a level of less than significant or conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The project would not make a cumulatively considerable contribution to cumulative impacts and no mitigation is required (Draft EIR, Page 3.11-29–30).

1.6.11 - Noise

Potential Effect

Impact NOI-1: The proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (Draft EIR, Page 3.12-17).

Findings: Less than significant impact.

Facts in Support of Findings: For purposes of determining the existing ambient noise levels, traffic noise is the primary noise source affecting the project site. Background traffic noise levels in the project vicinity range from approximately 63 A-weighted decibel (dBA) to 75 dBA day/night average sound level (L_{dn}) along modeled roadway segments adjacent to the project site as measured at 50 feet from the centerline of the outermost lane. The nearest proposed façade to Grant Line Road would be set back a minimum of 150 feet from the centerline of the outermost travel lane. At this distance, traffic noise levels would attenuate to below 69 dBA $L_{dn.}$ These noise levels are within the City's "normally acceptable" noise land use compatibility range for the relevant type of new industrial land use development (Draft EIR, Page 3.12-18). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact NOI-3: The proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels. (Draft EIR, Page 3.12-26).

Findings: Less than significant impact.

Facts in Support of Findings: The City of Tracy has not adopted criteria for construction groundborne vibration impacts or for operational groundborne vibration impacts that would be applicable to the proposed project. Therefore, for purposes of this analysis, as noted above, the City, in its discretion, elects to utilize the Federal Transit Administration (FTA) construction vibration impact criteria. For operational impacts, a significant impact would occur if ongoing project activities would produce groundborne vibrations that are perceptible without instruments by a reasonable person at the property lines of the site.

Construction

The FTA impact assessment criteria for construction is 0.2 in/sec PPV for nonengineered timber and masonry buildings. Table 3.12-3 of the Draft EIR provides approximate vibration levels for various construction activities. Of the variety of equipment used during the construction component of the proposed project, the small vibratory rollers that would be used in the site preparation phase of

construction would produce the greatest groundborne vibration levels. Small vibratory rollers produce groundborne vibration levels ranging up to 0.101 in/sec PPV at 25 feet from the operating equipment.

The nearest off-site structure to where the heaviest construction equipment would operate during construction of the proposed structures on the western parcels is the barn structure located west of the project site near the intersection of Grant Line Road and Paradise Avenue. This structure would be located approximately 150 feet from the nearest construction footprint where a small vibratory roller would operate. At this distance, operation of a small vibratory roller could result in groundborne vibration levels up to 0.007 in/sec PPV. This is well below the FTA's damage threshold criteria of 0.2 PPV for nonengineered timber and masonry buildings.

The nearest off-site structure is located over 45 feet from the project site boundary. Therefore, operation of a small vibratory roller at the nearest project boundary could result in groundborne vibration levels up to 0.04 in/sec PPV. This also is well below the FTA's damage threshold criteria of 0.2 PPV for nonengineered timber and masonry buildings. Therefore, construction activities would not result in generation of excessive groundborne vibration levels.

Operation

Implementation of the proposed project would not include any permanent sources of vibration that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the vicinity of the project site; this is given the nature of the project and the type of proposed on-site operations (parking lot and truck loading/unloading activity) which, due to distance to off-site receptors, would be less than perceptible without instruments as measured at sensitive receptors in the project vicinity (Draft EIR, Page 3.12-26–28). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact NOI-4: The proposed project would not expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. (Draft EIR, Page 3.12-28). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings: The project site is not located within the vicinity of a private airstrip. Additionally, there is not a private airstrip located within a 5 mile radius of the project. The closest public airport is the Tracy Municipal Airport located 5.3 miles southwest of the project site. The project site is also not located within the 55 dBA CNEL airport noise contours of any public or public use airport. As such, operation of the proposed project would not expose people working at the project site to excessive noise levels associated with public airport or public use airport noise (Draft EIR, Page 3.12-28). The proposed project's impacts would be less than significant. No mitigation is necessary.

Cumulative Impact

The proposed project's cumulative noise impacts would be less than significant. (Draft EIR, Page 3.12-28).

Findings: Less than significant impact.

Facts in Support of Findings

Noise Land Use Compatibility Consistency

Cumulative development would be required to comply with all applicable design review and development standards and regulations directing the siting, design, and insulation of new development and redevelopment and all applicable noise policies, standards and requirements in the General Plan and Municipal Code, which would ensure that noise impacts are less than significant. Combined cumulative year traffic noise levels along modeled roadway segments in the project vicinity would result in noise levels that the City of Tracy considers to be "normally acceptable" for the relevant land use category (with projected traffic noise levels attenuating due to distance to below 70 dBA L_{dn} at the nearest existing or proposed façades). This is the only noise land use compatibility category that would apply to existing and planned development for parcels adjacent to the modeled roadway segments. Cumulative traffic noise impacts would be less than significant. The incremental contribution of project traffic would also not be cumulatively considerable.

Construction Noise

Noise impacts tend to be localized; therefore, the area surrounding the project site (approximately 1,000 feet) would be the area most affected by proposed project activities. Cumulative development would be required to comply with all applicable construction hour requirements and would also be anticipated to incorporate appropriate Best Management Practices (BMPs) to help reduce construction noise. The proposed project would comply with design review and development standards and regulations directing the siting, design, and insulation of new development and redevelopment and all applicable noise policies, standards and requirements in the General Plan and Municipal Code. The incremental contribution of project construction noise would not be cumulatively considerable.

Operational Traffic Noise

Combined cumulative year traffic noise levels along modeled roadway segments in the project vicinity would result in noise levels that the City of Tracy considers to be "normally acceptable" for existing and planned land use development along modeled roadway segments in the project vicinity. Therefore, cumulative traffic noise levels would be a less than significant impact for existing and planned development along modeled roadway segments in the project vicinity. Because there is not a cumulative significant traffic noise impact to existing or planned land uses in the project vicinity, even under Cumulative Plus Project traffic conditions, the incremental contribution of project traffic would also not be cumulatively considerable.

Operational Stationary Noise

The source of operational stationary noise within 1,000 feet of the project site that would produce the highest noise levels would be truck loading activities. Existing truck loading facilities in the project vicinity are set back more than 100 feet from receptors on adjoining properties. Assuming compliance with applicable minimum setback requirements for all parcels within the project site, proposed truck loading areas would also be set back more than 100 feet from receptors on adjoining properties. Assuming a reasonable worst-case scenario of a truck loading event for every proposed truck loading dock within a single hour would result in an hourly average noise level of 67 dBA equivalent sound level (L_{eq}) as measured at a cumulative project's boundary adjoining other properties. These noise levels are well below the City's hourly average noise performance threshold of 75 dBA L_{eq}(h). In addition, these noise levels would not exceed existing background ambient noise levels. Therefore, there is a less than significant cumulative impact related to operational stationary noise sources in the project vicinity, and the incremental contribution of project operational stationary source noise would not be cumulatively considerable.

Construction Vibration

Construction vibration impacts are very localized; therefore, the area surrounding the project site (approximately 100 feet) would be the area most affected by proposed project construction activities. While there would be cumulative projects undergoing construction in the general vicinity, none of these are within 100 feet of the site and therefore, do not have to potential to create significant cumulative construction vibration impacts that would exceed potential impact criteria as measured at any sensitive receptor in the project vicinity. Thus, there would be a less than significant cumulative impact related to construction vibration, and the incremental contribution of project construction noise would not be cumulatively considerable.

Operational Vibration

The only major source of groundborne vibration in the project vicinity is railroad activity along the rail line located approximately 3,670 feet southeast of the project site. Groundborne vibration levels from these cumulative sources would not be perceptible without instruments at any sensitive receptor in the project vicinity, therefore there is no significant cumulative impact. The proposed project's incremental contribution to these less than significant cumulative operational vibration levels would not be cumulatively considerable. Implementation of the proposed project would not introduce any new permanent sources of vibration to the project vicinity that would result in groundborne vibration levels that would be perceptible without instruments as measured at sensitive receptors in the project vicinity, and would also not increase railroad activity (Draft EIR, Page 3.12-28–31). The proposed project's impacts would be less than significant. No mitigation is necessary.

1.6.12 - Public Services

Potential Effect

Impact PUB-1: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant

environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection. (Draft EIR, Page 3.13-8). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings: South County Fire would provide fire protection for the proposed project. The proposed project would require a detachment from Tracy Rural as part of project approval from the San Joaquin LAFCo of the proposed reorganization. Fire Station 92 is the nearest station approximately 1.4 miles west of the project site. Fire Station 92 is a City-owned fire station; however, South County Fire responds the closest resources to all emergency and non-emergency calls for service. The next closest station is Fire Station 96, approximately 3.6 miles west of the project site. The proposed project would be required to comply with applicable provisions of the CBC, which is adopted by the Tracy Municipal Code (Chapter 9.04 Building Code), and the California Fire Code, which is adopted by the Tracy Municipal Code (Chapter 9.06 Fire Protection and Prevention). In compliance with the California Fire Code, Part 9 of the CBC, during construction the proposed project would be required to follow fire safety standards related to provision of fire apparatus access and acquisition of building permits. Specifically, CBC Section 105.7.17 requires plans be submitted and a permit to install, improve, modify, or remove public or private roadways, driveways, and bridges for which Fire Department access is required by the Fire Code; this would ensure adequate driveway/entry turning radius, height clearance, and fire hydrant access for fire trucks and engines at the project site during construction. In addition, CBC Section 105.7.18 requires plans be submitted to the Fire Code official for all land developments or for the construction, alteration, or renovation of a building within the jurisdiction where a building permit is required; this would ensure that construction and alteration would not obstruct Tracy Fire Department from delivering adequate levels of fire protection services and otherwise help to ensure that all applicable standards and requirements are satisfied.

Operation

The City has an appropriate process in place to plan and fund fire protection services that would ensure that adequate fire protection staffing, performance levels, and facilities are maintained to serve the City's existing population as well and future growth within the SOI. New industrial uses on the project site would result in new employees, which could result in an increase in calls for fire protection and emergency medical services. However, given the nature of the proposed uses, this increase is not expected to be atypical or substantial. Given that the City has adequate fire protection staffing, performance levels, and facilities, and the proposed use would not require substantial use of hazardous materials, the proposed project would not cause a significant impact to fire protection services. The proposed project would be required to comply with applicable provisions of the Tracy Municipal Code, the CBC, and the California Fire Code. It is not expected that the proposed project would adversely affect response times or increase use of existing fire protection or emergency medical response facilities such that substantial physical deterioration, alteration, or expansion would be required, thereby triggering environmental impacts. Furthermore, the project applicant would be required to pay applicable review and development impact fees

toward fire protection facilities and apparatus (Draft EIR, Page 3.13-8–10). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact PUB-2: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection. (Draft EIR, Page 3.13-10). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings

Construction

The City has an appropriate process in place to plan and fund police protection services to ensure that adequate police staffing, performance levels, and facilities are maintained to serve the City's existing population as well as future growth within the SOI. After annexation, the Tracy Police Department would provide law enforcement services to the project site. Tracy Police Department headquarters is approximately 2.3 miles southwest of the project site; however, responses to calls for service would likely be from patrolling officers who are already consistently patrolling the area. During construction, the proposed project would also implement appropriate security measures such as provision of adequate lighting and a project boundary fence around the subject construction area to prohibit access to unauthorized persons other than construction personnel. With adequate police capacity as noted above and provision of security measures, project construction would not create the need for new or altered police protection facilities, and impacts would be less than significant.

Operation

New industrial uses on the project site would result in new employees, which would result in an increase in calls for police protection services. However, given the nature of the proposed uses, this increase is not expected to be atypical or substantial. Primary access to the project site during operation would be from Grant Line Road and Paradise Road. Responses to calls for service would likely be from patrolling officers. As the Police Department's area of responsibility is increased through the annexation and development, the need may arise to add sectors or beats, which are assigned to officers to patrol. The increase in this responsibility may trigger the need for additional staffing (sworn and professional staff) in order to maintain the response standards and quality of services currently provided by the Tracy Police Department.

A significant increase in vehicle traffic, both personal vehicles and delivery trucks, is expected, consistent with the Police Department's experience and observations at other similar sites in its jurisdiction. This would likely trigger another need for increase of personnel involved in traffic enforcement, particularly commercial vehicle regulations. However, this proposed project is part of the anticipated growth contemplated by the City in its General Plan. As new specific plans and

development projects within the SOI are considered, the City will review the specific details of each proposal. Prior to approving any new development project (including individual development proposals for the project site), the City will have the opportunity to ensure that any Community Facilities District associated with the subject proposal, any relevant development agreement provisions for funding police services, and the development impact fee schedule are appropriately adjusted, in accordance with applicable laws, to reflect anticipated funding gaps. Each project applicant would be required to pay applicable review and development impact fees to help provide for the costs associated with a police facilities building, equipment, and staffing to serve additional demands for police services (Draft EIR, Page 3.13-10–11). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact PUB-3: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools. (Draft EIR, Page 3.13-12). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings: Impacts related to provision of or need for construction of new or expanded school facilities are limited to operational impacts. The proposed project could result in indirect population growth due to the creation of employment opportunities. Based on the light industrial nature of the proposed project, it is expected that approximately 1,871 employees would work on-site at full buildout. Because the population of the City is currently estimated at 95,931, the total number of employees that may work at the proposed project represents a relatively nominal increase of approximately 2 percent of the current population of the City. Moreover, the proposed project would not include residential units that would directly result in new school-aged children or a substantial unplanned increase in population growth (Draft EIR, Page 3.13-12). In addition, the proposed project would be required to pay any applicable school impact fees pursuant to State law. The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact PUB-4: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for parks. (Draft EIR, Page 3.13-12). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings: Impacts related to provision of and need for construction of new or expanded park facilities are limited to operational impacts. It is expected that approximately 1,871 employees would work on-site at full buildout. Because the population of the City is currently estimated at 95,931, the total number of employees that may work at the proposed project represents a relatively nominal increase of approximately 2 percent of the current population of the City. While it is reasonable to assume that some employees would utilize park facilities during their workday to a certain degree, this use would be limited given the nature of the industrial use and the location of the project site. The proposed project would not include residential units that would directly result in the creation of additional park demand that would result in a significant increase in population or existing park use. Therefore, the proposed project would not require new or altered park facilities and would not result in significant environmental impacts to existing park facilities. (Draft EIR, Page 3.13-12–13). No mitigation is necessary.

Potential Effect

Impact PUB-5: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for libraries or other public facilities. (Draft EIR, Page 3.13-13). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings: Impacts related to provision of and need for construction of new or expanded library facilities are limited to operational impacts. Because of the nature of the proposed industrial use and the location of the project site, the proposed project is not expected to result in an increase in use of the Tracy Branch Library. The proposed project would not create a need to construct new or expand existing library facilities and impacts would be less than significant. (Draft EIR, Page 3.13-14). No mitigation is necessary.

Cumulative Impact

The proposed project would not result in cumulative impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for public facilities. (Draft EIR, Page 3.13-14). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings: Cumulative development would result in an increased demand for fire protection facilities. To help offset increased demand, similar to the proposed project, other past, present and reasonably foreseeable future cumulative projects would be required to pay all applicable fees to South County Fire. All cumulative developments would also be required to adhere

to applicable provisions of the California Fire Code, Part 9 of the CBC, in terms of meeting standards for fire safety such as fire flow requirements for buildings, fire hydrant location and distribution criteria, automated sprinkler systems, and fire-resistant building materials. With adherence to the CBC and payment of applicable fees, cumulative projects would not result in additional needs for new or altered fire protection or emergency medical facilities not already analyzed within the City and County General Plans, and cumulative impacts would be less than significant. As summarized above and discussed further in the EIR, the proposed project would have a less than significant impact related to fire protection services, and would not have a cumulatively considerable contribution to the already less than significant cumulative impact.

In addition, to help offset increased demand for police protection, the proposed project and other cumulative projects would be required to pay applicable fees to the Tracy Police Department. Similar to the proposed project, all cumulative developments would also be reviewed for impacts on law enforcement services and required to address any potentially significant impacts with mitigation. Because demand for law enforcement services varies substantially by project (clientele, hours of operation, crime prevention measures, etc.), it is unlikely that there would be substantial overlap in demand that would result in a cumulatively significant impact such that new or expanded police protection facilities are necessary beyond the City's existing capacity and regular review of service levels for future developments. With payment of applicable fees, cumulative projects would not result in additional need for new or altered police protection facilities not already analyzed within the City General Plan, and impacts would be less than significant. Since the proposed project would have a less than significant impact related to fire protection services, the proposed project would not have a cumulatively considerable contribution to the already less than significant cumulative impact.

Planned projects including cumulative projects would result in residential development, though none include any educational facilities. All approved developments would be required to pay applicable development impact fees toward school district facilities. Pursuant to Government Code Section 65995, payment of adopted development fees is considered "full and complete mitigation" for impacts to school facilities, and local governments are prohibited from assessing additional fees or exactions for school impacts. As part of project entitlement processes, cumulative project applicants would be responsible for paying their fair share of school facility fees. With payment of impact development fees, cumulative projects would not result in additional need for new or altered school facilities not already analyzed within the City General Plan, and impacts would be less than significant. As summarized above and discussed further in the EIR, the proposed project would not include the development of any residences, and therefore, would not increase the population in the area, the proposed project would not contribute to any cumulative impacts associated with schools.

Residential cumulative projects would be required to provide parkland or pay applicable development fees. With payment of applicable park impact fees and/or otherwise satisfying park dedication obligations by cumulative projects, there would be a less than significant cumulative impact related to additional increased use and physical deterioration of existing parks and recreational facilities not already analyzed within the City General Plan. Because the proposed project would not include the development of any residences, and therefore, would not increase the

population in the area, the proposed project would not contribute to any cumulative impacts associated with parks.

Cumulative developments would be required to pay applicable development impact fees. With payment of fees by cumulative projects, there would be a less than significant cumulative impact regarding additional need for new or altered library facilities not already analyzed within the City General Plan. As summarized above and discussed further in the EIR, the proposed project would not include the development of any residences, and therefore, would not increase the population in the area, the proposed project would not contribute to this already less than significant cumulative impact associated with libraries (Draft EIR, Page 3.13-14–16).

1.6.13 - Transportation

Potential Effect

Impact TRANS-3: The proposed project would not result in inadequate emergency access. (Draft EIR, Page 3.14-36). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings

Construction

During the construction period for each individual development proposal within the project site, it is anticipated that a two-way travel would be maintained on Paradise Road and Grant Line Road. Should Paradise Road or Grant Line Road experience temporary one-way travel restrictions or be closed to travel, there are multiple access routes to I-205 and I-5 which act as the main evacuation routes into and out of the project vicinity. Construction detour signage would be provided.

Operation

Fire Station 92 at 1035 East Grant Line Road is the nearest fire station to the project site, approximately 1.4 miles to the west. Fire Station 92 is a City-owned fire station; however, South County Fire responds the closest resources to all emergency and non-emergency calls for service. The nearest Tracy Fire Station is Station 96, located at 1800 West Grant Line Road, approximately 3.6 miles west of the project site. Primary fire protection access to the project site would occur from existing roadways that would not be changed as part of the proposed project.

The proposed project would be served by eight points of vehicular access (the northerly access point along Paradise Road would be for Emergency Vehicle Access [EVA] only):

- Grant Line Road: four access points to the project site.
- Paradise Road: four access points to the project site (the northerly access point along Paradise Road would be for EVA only).

Since no application for individual development proposal(s) for either the Suvik Farms or Zuriakat parcels has been submitted to the City as of this writing, it is too speculative and uncertain to

identify the exact location(s) of access points from the New Private Drive to the Suvik and Zuriakat parcels. Therefore, the EIR reasonably assumed that a driveway would be placed at the Banta Road intersection and opposite other existing driveways to the south. Thus, the proposed project would provide a total of eight vehicular access points to the project site from surrounding roadways. The provision of these access points would satisfy the applicable California Fire Code's emergency access requirements. Moreover, the width of these access points and internal roadways would need to adhere to all other applicable requirements and standards, including the following. All access points and internal roadways for the project site would be required to be compliant with Section 503, Fire Apparatus Access Roads, of the California Fire Code, as well as Chapter 9.06 of the Tracy Municipal Code, which would ensure that access roadways can accommodate fire apparatus vehicles via a minimum width of 20 feet and an unobstructed vertical clearance of not less than 13 feet 6 inches, along with adequate turning radius as determined by the fire code official (Draft EIR, Page 3.14-36). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact TRANS-4: The proposed project would not conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. (Draft EIR, Page 3.14-37). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings

Construction

Because there are no sidewalks currently provided along the proposed project frontage or along California Avenue, construction of the proposed project would not adversely affect or otherwise conflict with existing pedestrian access to TRACER Bus Service or Altamont Corridor Express (ACE) or the service for these transit agencies. Should Paradise Road or Grant Line Road be temporarily shut down during construction, there are alternative roadway connections to these transit facilities and access to these facilities would remain available throughout construction.

No Class I facilities currently exist near the project site. Class II facilities currently exist along Grant Line Road in eastbound and westbound directions, west of Paradise Road. No Class III facilities currently exist near the project site. Because there are no existing bicycle facilities along the frontage of Paradise Road or Grant Line or California Avenue, road construction of the proposed project would not result in the temporary closure of bicycle facilities during construction.

There are no sidewalks currently provided along Grant Line Road or Paradise Road along the proposed project frontage or along California Avenue. Because there are no sidewalks along Grant Line Road or Paradise Road along the proposed project frontage or along California Avenue, construction of the proposed project would not result in temporary closures of sidewalk facilities.

Operation

As part of the proposed project's frontage improvements, it is anticipated that the proposed project would construct a Class I path (that would accommodate both pedestrians and bicycles) per the TMP for both Grant Line Road and Paradise Road. Therefore, the proposed project would provide a bicycle and pedestrian connection to the Class II bicycle facilities and sidewalks that exist along Grant Line Road in eastbound and westbound directions west of Paradise Road that would ultimately provide access to the nearest transit facility. Additionally, under MM TRANS-1(a), the proposed project would provide a transit stop along project frontage on Grant Line Road, if agreed to by the City. Paradise Road and Grant Line Road would still provide roadway access to these transit facilities. However, given the nature of the proposed project and its location, it is anticipated that many employees would drive to the project site and the proposed project would add a minimal number of additional transit riders and would not exceed existing transit capacity.

As part of the proposed project's frontage improvements, it is anticipated that the proposed project would construct a Class I path per the TMP for both Grant Line Road and Paradise Road. Therefore, the proposed project would provide a bicycle connection to the Class II facilities that exist along Grant Line Road in eastbound and westbound directions west of Paradise Road, which would improve the existing bicycle network. In addition, pursuant to the parking requirements of Tracy Municipal Code Chapter 10.08 Article 26, the proposed project would provide the required number of bicycle spaces, which based on the current development parameters and assumptions, would be approximately 59 bicycle parking spaces at full buildout in accordance with applicable City requirements. Bicycle racks (single-sided or double-sided racks or equivalent) would be located near the office entrances of each building to provide for the secured parking of bicycles. The required spaces for bicycle parking would be evenly distributed among the office locations within each building pursuant to applicable standards and requirements. Overall, the proposed project would not conflict with adopted policies, plans, or programs regarding bicycle facilities or otherwise decrease the performance or safety of such facilities.

As part of the proposed project's frontage improvements and as noted above, it is anticipated that the proposed project would construct a Class I path (that would accommodate both pedestrians and bicycles) per the TMP for both Grant Line Road and Paradise Road that would provide access to the existing sidewalk network. Therefore, the proposed project would improve the existing pedestrian network. The proposed project would not impede the use of existing sidewalks, and it is not anticipated that the proposed project would substantially increase pedestrian activity in the project vicinity (Draft EIR, Page 3.14-37–39). The proposed project's impacts would be less than significant. No mitigation is necessary.

1.6.14 - Utilities and Service Systems

Potential Effect

Impact UTIL-4: The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. (Draft EIR, Page 3.16-58). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings: During construction, the proposed project would generate solid waste from demolition and removal of existing structures on the project site. The EPA estimates 4.34 pounds per square foot for a nonresidential construction project (defined as lodging, office, commercial, health care, educations, religious, public safety, and manufacturing facilities). The proposed industrial buildings and related improvements would cover approximately 191 acres; therefore, at buildout, the proposed project is expected to generate approximately 36,108,800 pounds or 18,054.4 tons of solid waste during construction, equating to approximately 16.48 tons per day. The Foothill Landfill is permitted to receive 1,500 tons of waste per day. As such, the approximately 16.48 tons per day of construction/demolition debris generated by the proposed project represents a nominal percent (approximately 1 percent) of the quantity of solid waste that the landfill currently accepts on a daily basis. In addition, compliance with applicable local and State laws and regulations would ensure that all construction waste would be conveyed to the appropriate solid waste facility and would be disposed of properly.

During operation at full buildout, the proposed project's approximately 1,871 employees would generate an estimated 16,708.03 pounds of solid waste per day (8.35 tons), and 6,098,430.95 pounds per year (3,049 tons), assuming operation 365 days per year. The Tracy Material Recovery Facility and Solid Waste Transfer (MRF) has a daily intake capacity of 1,500 tons of solid waste per day, and the permitted capacity of the Foothill Landfill is 138 million cubic yards, of which 125 million cubic yards remains available, with an anticipated closure year of 2082. As a result, the proposed project's estimated 8.35 tons of solid waste per day and 3,049 tons per year represent less than 1 percent of daily permitted capacity and overall landfill capacity. Pursuant to AB 939, cities are required to redirect at least 50 percent of municipal waste; as of 2009, the City of Tracy has exceeded this diversion requirement, in accordance with its goal of reaching 75 percent reduction. The proposed project would be required to adhere to the Tracy Municipal Code Section 5.20.250 "Multi-family, commercial and industrial recycling programs," which requires diversion of waste from landfills through recycling. (Draft EIR, Page 3.16-58–59). The proposed project's impacts would be less than significant. No mitigation is necessary.

Potential Effect

Impact UTIL-5: The proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. (Draft EIR, Page 3.16-59). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings: During construction, the proposed project would be required to comply with Chapter 5.20 of the Tracy Municipal Code related to solid waste reduction and recycling measures. Compliance with this regulation would ensure compliance with AB 939 by ensuring construction waste is transferred to facilities that can adequately recycle solid waste. Thus, the proposed project would be required to comply with applicable solid waste regulations and statutes.

During operation, the proposed project would be required to comply with applicable State and local laws and regulations related to solid waste such as AB 939 and Chapter 5.20 of the Tracy Municipal Code. Adherence to AB 939 and the Tracy Municipal Code would ensure sufficient solid waste collection and transportation is available and would ensure that disposal sites contain sufficient capacity through permit review and inspections and recycling programs are implemented to divert waste. As such, operation of the proposed project would not impede the ability of the City to meet waste diversion requirements or cause the City to violate State and local statutes and regulations related to solid waste. (Draft EIR, Page 3.16-60). The proposed project's impacts would be less than significant. No mitigation is necessary.

Cumulative Impact

The proposed project's cumulative impacts related to utilities and service systems would be less than significant. (Draft EIR, Page 3.16-63). The proposed project's impacts would be less than significant. No mitigation is necessary.

Findings: Less than significant impact.

Facts in Support of Findings

Water

The geographic scope of the cumulative potable water analysis is the service area of the City. Cumulative projects are located within the areas of the City of Tracy, San Joaquin County, and on Caltrans-owned land within 10 miles of the project site for which the City provides water treatment service. Water demand within the City's water service area is not expected to exceed the City's supplies at buildout under normal hydrologic conditions based on the City's existing supplies coupled with the implementation of its additional future planned projects, which include Aquifer Storage and Recovery (ASR) Program Expansion, Recycled Water Distribution Network and Exchange Program for additional Central Valley Project (CVP) water supplies, and recycled water distribution for non-potable use. During a single dry year or a multiple dry year period, the City must depend more heavily on water conservation efforts, groundwater, and the proposed future supply projects to overcome the gap between supply and demand. Investments in wet year water supplies will also be needed to refill storage in Semitropic and expand the City's ASR Program. Developers of the other cumulative projects would be required to pay their proportionate share of required funding to the City for completion of water infrastructure improvements. Cumulative projects would be required to comply with provisions of the applicable laws and regulations in the Municipal Code and CALGreen related to water conservation. The proposed project would also be required to comply with City/County ordinances and General Plan policies, as well as other laws and regulations that address water supply. The proposed project would also be required to pay applicable impact fees.

Wastewater

The geographic scope of the cumulative wastewater analysis is the service area of the City. Cumulative projects located in the City are within the service area and would generate volumes of wastewater conveyed to and treated at the Wastewater Treatment Plant (WWTP). The City has anticipated planned growth and determined that capacity would exist to service the demand for wastewater treatment facilities given the existing capacity coupled with the upgrades discussed in

Impact UTL-3. Projects within the service area would participate in the implementation of the Wastewater Master Plan (WWMP) in effect at the time building permits are applied for through the payment of applicable fees and/or the construction of WWMP facilities with corresponding applicable fee credits/reimbursements, as established by the WWMP in effect at the time building permits are issued. The proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable. Each applicant for individual development proposals on any of the parcels within the project site would be required to comply with the applicable WWMP requirements and be responsible for the payment of applicable impact fees and/or construction of wastewater facilities.

Storm Drainage

The geographic scope of the cumulative analysis of storm drainage is projects within the East Side Industrial future service area, consisting of areas that drain to the storm drainage system and to the San Joaquin Delta. Consistent with measures in the Tracy Municipal Code and other applicable standards and requirements, all development in the City would be required to incorporate a stormwater control plan and stormwater collection systems into the development that would in turn reduce the volume and velocity of stormwater runoff that cumulative projects would generate to adhere to applicable performance standards. The proposed project would provide sufficient capacity to accommodate stormwater runoff associated with the project and other cumulative projects; the proposed project's contribution would not be cumulatively considerable.

Solid Waste

The geographic scope of the cumulative solid waste analysis is the service area of Tracy Delta Solid Waste Management, Inc. New cumulative development (residential and nonresidential) would increase demand on solid waste facilities to receive, process, and store solid waste. Existing solid waste facilities provide sufficient capacity to serve all development anticipated in the City, as well as existing, planned, and probable future land uses in the City for the foreseeable future. The Foothill Landfill has a permitted capacity of 138 million cubic yards, with 125 million cubic yards of remaining capacity that can meet anticipated demand. Additionally, other cumulative projects within the cumulative geographic context, would be required to comply with applicable federal, State and local laws, regulations and policies to address and mitigate any potentially significant impacts. The proposed project's contribution to this less than significant cumulative impact would not be cumulatively considerable. The anticipated waste volume of development associated with the proposed project represents less than 1 percent of the landfill's permitted daily capacity.

Telecommunications

Cumulative projects would coordinate with telecommunication providers to provide service and would be required to ensure there is sufficient capacity to serve each project, through analysis and adequate mitigation. The proposed project would also coordinate with telecommunication providers to provide service, which has capacity to serve project operations, and the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable. (Draft EIR, Page 3.16-60–63). No mitigation is necessary.

1.6.15 - Wildfire

Potential Effect

Impact WILD-1: The proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan. (Draft EIR, Page 3.17-8). The proposed project would have no impact. No mitigation is necessary.

Findings: No impact.

Facts in Support of Findings: Because the project site is not located in a "Fire Hazard Severity Zone," nor is it located in a State Responsibility Area (SRA) or a "Very High Fire Hazard" in a local, State, or federal responsibility area, it does not meet the threshold for a potentially significant impact. Furthermore, the proposed project would be required to be designed in compliance with applicable provisions of the HMP, ensuring efficient response to emergency incidents associated with emergencies affecting the City. The proposed project would be adequately served by police and fire services and would not create a permanent residential increase in population unaccounted for in the General Plan that could lead to overwhelming calls for emergency services and would not block an emergency evacuation route. The proposed project would be required to be consistent with applicable City standards and would be consistent with all applicable Fire Code requirements and standards. As required by General Plan Policies SA-3-1, Policy 1, and SA-3-1, Policy 2, the proposed project would be required to include the mandated clearance around structures and would be required to incorporate fire-resistant building materials, fire flow and hydrant requirements, and adequate street widths to ensure compliance with applicable General Plan safety goals, and with the applicable requirements of the San Joaquin County Emergency Operations Plan and relevant Fire Code provisions (Draft EIR, Page 3.17-8–9). The proposed project would have no impact. No mitigation is necessary.

Potential Effect

Impact WILD-2: Due to slope, prevailing winds, and other factors, the proposed project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. (Draft EIR, Page 3.17-9). The proposed project would have no impact. No mitigation is necessary.

Findings: No impact.

Facts in Support of Findings: As noted above, the project site is not located in a "Fire Hazard Severity Zone," nor is it located in a SRA or a "Very High Fire Hazard" in a local, State, or federal responsibility area. The project site is relatively flat and surrounded by urban development without steep terrain or unmanaged open space areas that would be prone to wildfires. The closest open space area, the Ohlone Regional Wilderness, is located approximately 7 miles southwest of the project site.

The ARB monitors air quality in the San Joaquin Valley at a number of stations. The closest station to the project site is located at the Tracy Airport, at 5749 South Tracy Boulevard, approximately 5.12 miles southwest of the project site. According to the ARB, the maximum wind speed ranged from approximately 6 to 33 miles per hour (mph) in 2020. In addition, the project site has not previously

experienced wildfire. Given that the project site does not experience consistent high winds and it is not located in or near an area of steep terrain or an area experiencing historical wildfire, the project site would not be prone to greater wildfire risk. The proposed project would be adequately served by fire protection and emergency services from South County Fire. Furthermore, project structures would be required to comply with applicable provisions of the California Fire Code with regard to emergency access and use of building materials that would limit the spread of wildfire to the greatest extent feasible. (Draft EIR, Page 3.17-9–10). The proposed project would have no impact. No mitigation is necessary.

Potential Effect

Impact WILD-3: The proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. (Draft EIR, Page 3.17-10). The proposed project would have no impact. No mitigation is necessary.

Findings: No impact.

Facts in Support of Findings: As noted above, the project site is not located in a "Fire Hazard Severity Zone," nor is it located in an SRA or a "Very High Fire Hazard" in a local, State, or federal responsibility area. Moreover, the proposed project would be served by eight points of vehicular access. The project site is located in a primarily urbanized area surrounded by existing roadways. The proposed project would not require the installation of firebreaks, because it is in a generally urbanized area surrounded by existing development with little natural vegetation. The proposed project would not require emergency water sources, because potable water would be provided by the City of Tracy, which has adequate water supplies available to serve the proposed project and other existing and planned future development during normal, dry, and multiple dry years as described in Section 3.16, Utilities and Service Systems, Impact UTIL-1. Certain existing overhead lines on the project site (as described more fully in application materials) as well as new electrical power and natural gas lines on and connecting to the project site would be installed below ground, minimizing potential ignition and related fire risk above ground, according to applicable provisions of the CBC and Tracy Municipal Code Chapter 11.08. (Draft EIR, Page 3.17-10–11). The proposed project would have no impact. No mitigation is necessary.

Potential Effect

Impact WILD-4: The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. (Draft EIR, Page 3.17-11). The proposed project would have no impact. No mitigation is necessary.

Findings: No impact.

Facts in Support of Findings: As noted above, the project site is not located in a "Fire Hazard Severity Zone," nor is it located in an SRA or a "Very High Fire Hazard" in a local, State, or federal

responsibility area. The project site is not located on or near steep slopes susceptible to landslides or downstream flooding. The project site has also not been affected by previous wildfires that could have resulted in drainage changes or loss of vegetation. Additionally, the project site is not located in or near fire prone areas, such as unmanaged open space, or a designated fire hazard zone. As a result, the proposed project would not expose people or structures to significant risks due to post-fire slope instability or drainage changes. (Draft EIR, Page 3.17-11–12). The proposed project would have no impact. No mitigation is necessary.

Cumulative Impact

The proposed project would not have any cumulative impacts related to wildfire. (Draft EIR, Page 3.17-13). The proposed project would have no impact. No mitigation is necessary.

Findings: No impact.

Facts in Support of Findings: The geographic scope of the cumulative wildfire analysis is the City of Tracy and southwestern portion of San Joaquin County. Because of the topography and existing urban development (including natural and man-made fire breaks), a fire event beyond this geographic scope is unlikely to affect the proposed project and any fires starting in the project site and vicinity would not likely significantly affect lands beyond this geographic scope. The cumulative setting includes the built development and the wildland areas in the southwestern portion of the County. A combination of federal, State, and local laws and regulations limit or minimize the potential for exposure to wildfires by reducing the amount of development in wildland urban interface (WUI) areas, ensuring new development is developed according to the CBC, and incorporating requirements for fire-safe construction into land use planning. Planned uses proposed by the cumulative projects would not significantly increase the need for emergency services and all development would be required to comply with emergency access requirements, which would be imposed as enforceable, standard conditions of approval. Cumulative development would not result in permanent road closures, nor impede established emergency access routes or interfere with emergency response requirements. Accordingly, cumulative projects would not exacerbate wildfire risk. (Draft EIR, Page 3.17-12–13). The proposed project would have no impact. No mitigation is necessary.

1.7 - Potential Environmental Effects Which are Not Significant After Mitigation

The City of Tracy hereby finds that feasible mitigation measures have been identified in the EIR that would avoid or substantially lessen the following potentially significant environmental impacts to a less than significant level. The potentially significant impacts, and the mitigation measures that would reduce them to a less than significant level, are as follows:

1.7.1 - Biological Resources

Potential Effect

Impact BIO-1: The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status

species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service (Draft EIR, Page 3.4-17).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.4-22). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

MM BIO-1a Song Sparrow and Tricolored Blackbird Mitigation

Implementation of the following avoidance and minimization measures would avoid or minimize potential effects to song sparrow and tricolored blackbird as a result of project implementation within the Zuriakat parcel in and adjacent to the project site. These measures shall be implemented for construction work that occurs during the nesting season (February 1 through August 31):

- If construction or habitat removal is proposed during the breeding/nesting season (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for song sparrow and tricolored blackbird within potential nesting habitat of the construction area, (special attention should be paid to the cattail marsh within the Zuriakat parcel) including a 500-foot survey buffer for tricolored blackbird and a 75-foot survey buffer for song sparrow, no more than 7 days prior to the start of ground-disturbing activities in the construction area. If no active nests are detected within the construction area on the project site or within the relevant buffer survey area, then no additional measures are required.
- If an active nest is located during pre-construction surveys, the California Department of Fish and Wildlife (CDFW) (as appropriate) shall be notified (as appropriate) regarding the status of the nest. A setback of 500 feet (for tricolored blackbird) and 75 feet (for song sparrow) shall be established and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Furthermore, construction activities shall be restricted in the construction area as necessary to avoid disturbance of the nest until it is abandoned, or a qualified Biologist deems disturbance potential to be minimal. Restrictions shall include consultation with a qualified Biologist to determine appropriate buffer zones or alteration relevant area.
  - A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

MM BIO-1b Swainson's Hawk

Foraging: Prior to any activities that would result in ground disturbance to the project site, the relevant applicant(s) for the subject development on any portion of the project site shall each ensure coverage of the relevant portion(s) of the project site under the SJMSCP and pay the applicable fee purchase adequate mitigation through the SJMSCP for 140.59 acres of potential foraging habitat (recommended) or alternatively provide applicant-responsible compensatory mitigation at a 1:1 ratio (such as procurement of credits through a mitigation bank or dedicated of a conservation easement).

Nesting: The following measures shall be implemented for construction work during the nesting season (February 1 through August 31):

- Implementation of the following avoidance and minimization measures would avoid or minimize potential effects to Swainson's hawk as a result of project implementation and adjacent to the project site. These measures shall be implemented for construction work that occurs during the nesting season (February 1 through August 31):
  - If construction or habitat removal is proposed during the breeding/nesting season (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for Swainson's hawk within the construction area, (special attention should be paid to trees with past recorded occurrences) including a 0.5-mile foot survey buffer, no more than 7 days prior to the start of ground-disturbing activities in the construction area. If no active nests are detected within the construction area site or within the buffer survey area, then no additional measures are required.
  - If active Swainson's hawk nests are found within the construction area or the 0.5-mile survey buffer of the project site, a qualified Biologist shall determine what nest avoidance buffers may be necessary so that construction-related activities do not cause nest abandonment. The avoidance buffer shall be submitted to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) for approval. The qualified Biologist shall monitor construction activities to ensure construction activities do not result in adverse effects to the nest, fledglings, or adults. The Biologist shall submit a memorandum documenting construction compliance to the appropriate agencies.

MM BIO-1c Burrowing Owl

- A qualified Biologist shall conduct a pre-construction survey no later than 30 days prior to commencement of any ground-disturbing construction activities on the construction area. The survey shall be conducted in accordance with the Staff report on Burrowing Owl Mitigation. All suitable habitats within the construction

area site and adjacent buffer (within 500 feet) shall be surveyed. If no burrowing owl are detected during the surveys, then no additional measures are required.

- If pre-construction surveys during the breeding season (February 1- August 31) detect active burrows within the construction area or near the adjacent buffer survey area site, a qualified Biologist shall establish and delineate an appropriate buffer zone around the nest until the breeding season is over as determined by the Biologist. Buffer areas shall be established using the guidelines within the Staff report on Burrowing Owl Mitigation.
- If pre-construction surveys detect active burrows during the nonbreeding season (September 1- January 31) the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) allows for eviction or passive relocation of owls. A passive relocation plan shall be prepared and submitted to SJMSCP for approval.

MM BIO-1d San Joaquin Kit Fox

Measures to protect San Joaquin kit fox shall consist of the following:

- A qualified Biologist shall conduct a pre-construction survey of the construction area and a 200-foot buffer, between 14 and 30 days prior to the commencement of ground disturbance. If the surveys do not identify any San Joaquin kit fox activity or locate any potential dens, then no further measures are necessary.
- If the survey identifies potential dens (potential dens are defined as burrows at least 4 inches in diameter that open up within 2 feet), den entrances shall be dusted for 3 calendar days to register track of any San Joaquin kit fox present. If no San Joaquin kit fox activity is identified, potential dens may be destroyed. If San Joaquin kit fox activity is identified, then dens shall be monitored by a qualified Biologist to determine whether occupation is by an adult fox only or is a natal den (natal dens usually have multiple openings).
- If the den is occupied by an adult only, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den until the Biologist determines that the den has been vacated. Where San Joaquin kit fox are identified, the provisions of the United States Fish and Wildlife Service's published Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance shall apply (except that pre-construction survey protocols shall remain as established in this paragraph). These standards include provisions for educating construction workers regarding the San Joaquin kit fox and keeping heavy equipment operating at safe speeds.

MM BIO-1e Migratory Birds

- To prevent significant impacts to Migratory Bird Treaty Act (MBTA)-protected birds, nesting raptors, and their nests, removal of trees shall be limited to only

those necessary to feasibly construct the proposed project as shown on the individual development plans approved by the City pursuant to the mapping and/or development review process.

- If any tree removal is necessary, then it should occur outside the nesting season between September 1 through January 31 to the extent feasible. If trees cannot feasibly be removed outside the nesting season, pre-construction surveys shall be conducted no more than 7 days prior to tree removal to verify the absence of active nests.
- If an active nest is located during pre-construction surveys, the United States Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW) (as appropriate) shall be notified regarding the status of the nest. Construction activities shall be restricted in the construction area as necessary to avoid disturbance of the nest until it is abandoned, or the agencies deem disturbance potential to be minimal. Restrictions shall consist of the include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around an active raptor nest and an appropriate radius around an active migratory bird nest depending on the species) or alteration of the construction schedule.
- A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

MM BIO-1f Roosting Bats

- A qualified wildlife Biologist shall conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the construction area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.).
- Visual surveys shall include trees within 0.25 mile of project construction activities. Not more than two weeks prior to building demolition, the Tracy Alliance parcel applicants for development on any project parcel, shall ensure that a qualified Biologist (i.e., one familiar with the identification of bats and signs of bats) survey buildings proposed for demolition for the presence of roosting bats or evidence of bats. If no roosting bats or evidence of bats are found in the structure, demolition may proceed. If the Biologist determines or presumes bats are present (if there are site access issues or structural safety concerns), the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices.
- After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Building demolition of the subject structure shall only commence

after the Biologist verifies seven to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid significant impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts shall also be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

Facts in Support of Findings: Special-status plant species or communities are unlikely to occur on-site, based on multiple database searches, literature review, and on-site field survey observations. The project site does not contain suitable habitat components for any special-status plant species, including valley and foothill grasslands, native perennial bunch grass communities, or alkaline soils. None of the six special-status plant species identified in the Special-status Species Table were observed or expected to be present on-site.

Eight special-status wildlife species as well as birds protected under the MBTA have the potential to occur on the project site, including song sparrow, tricolored blackbird, Swainson's hawk, burrowing owl, San Joaquin kit fox, pallid bat, Townsend big-eared bat, and western mastiff bat. Therefore, MM BIO-1a requires a pre-construction survey be conducted to confirm that no song sparrow nest (or nest of other protected bird species) is present, and to implement setbacks if they are present. The presence of a tricolored blackbird nesting colony on the project site before or during construction is highly unlikely, but cannot be ruled out. Therefore, MM BIO-1a requires a pre-construction survey to clear the applicable portion(s) of the project site (and setback area, if applicable) of tricolored blackbird (if any), and minimization measures specific to tricolored blackbird nesting colonies, such as setbacks, would be imposed on applicable areas of project development. Swainson's hawk nests have been observed within the greater project site vicinity; the closest recorded occurrence is across Paradise Street, directly west of the project site and during the field survey. Project construction would result in the loss of foraging habitat, totaling approximately 140.59 acres. Therefore, MM BIO-1b details the requirements to address the loss of foraging habitat and requires a pre-construction survey and further avoidance and minimization measures (if necessary). Multiple recorded occurrences of burrowing owl have been documented in the vicinity of the project site, but habitat has since been developed. The closest record of an active nest that is still suitable habitat is located approximately 1.5 miles to the south. While no suitable burrows or signs of presence of burrowing owls were observed during the field survey, it cannot be ruled out that a burrowing owl may occupy the project site before or during construction. Therefore, MM BIO-1c requires a pre-construction survey and further avoidance and minimization measures (if necessary) to reduce potential impacts to burrowing owl. San Joaquin kit fox has been sporadically reported in the southern areas of Tracy, approximately 4 miles from the project site. While San Joaquin kit fox is unlikely to occur on the project site and no dens or other signs of San Joaquin kit fox were observed during the field survey, it cannot be ruled out that a stray or migrating San Joaquin kit fox may be found on the project site before or during construction. Therefore, MM BIO-1d requires a pre-construction survey and further avoidance and minimization measures (if necessary, based on the survey) to reduce potential impacts to San Joaquin kit fox.

The trees along the southwestern boundary and trees located on-site and within the immediate vicinity may provide suitable nesting habitat for birds protected under the MBTA and other special-status birds. Nesting birds can be impacted by noise, vibrations, and increased activity levels associated with various construction activities. Furthermore, construction activities that occur during the nesting season (generally February 1 to August 31) could disturb nesting sites. Therefore, MM BIO-1e requires the relevant applicant(s) for development on any areas within the project site to each conduct a pre-construction survey and implement further avoidance and minimization measures (if necessary and required by the survey) to reduce potential impacts to nesting birds. Buildings located within the southwestern portion of the project site may provide suitable nesting habitat for bats. Direct and indirect impacts could occur to roosting bats during project construction due to removal of potential roosting habitat. Therefore, MM BIO-1f requires the relevant applicant(s) for development on any areas within the project site to each conduct a pre-construction survey and further avoidance and minimization measures (if necessary), would reduce potential impacts to roosting bats.

An impact to special-status plant and wildlife species would be considered significant if operation of the proposed project resulted in a substantial, adverse change in ambient noise. As discussed in more detail in Section 12, Noise, the proposed project would increase traffic on local roadways and would introduce stationary noise sources through the operation of new industrial facilities; however, noise emitted from the operation of the proposed project would be required to adhere to applicable established standards and would not result in a significant increase in the ambient noise environment. There is a potential impact related to bird mortality caused from collisions with the glass windows on the buildings. However, the reflective window material used would not pose a greater hazard than any other typical industrial buildings in the project vicinity or in the City. Window elements would not be expansive and would be predominately located at building corners or inset into the buildings. As such, all operational impacts would be considered less than significant (Draft EIR, Page 3.4-17–22).

The City finds that MM BIO-1a through MM BIO-1f are feasible, are adopted, and will further reduce impacts related to biological resources. Accordingly, the City Council finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with biological resources would be less than significant with mitigation incorporated.

Potential Effect

Impact BIO-3: The proposed project could have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (Draft EIR, Page 3.4-27).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.4-27). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

MM BIO-3 Conduct Delineation of Potentially Jurisdictional Aquatic Resources (Channels and Wetlands)

The applicant(s) for development on any project parcel shall complete a formal jurisdictional delineation to document and quantify the full extent of potentially jurisdictional waters for the relevant project parcel(s) in coordination with the applicable regulatory agencies. The applicant(s) for development on any project parcel shall also coordinate, to the extent required under applicable laws and regulations, with the applicable regulatory agencies (United States Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB], and/or California Department of Fish and Wildlife [CDFW]) to determine whether the irrigation/drainage channels and/or cattail marsh on the project site is protected under Section 404 and 401 of the Clean Water Act (CWA) and/or Section 1602 of the California Fish and Game Code.

Obtain CWA Sections 401 and 404 Permits Prior to Construction

- Prior to the fill of any potentially jurisdictional waters within the project site, the relevant project applicant(s) for the subject project parcel(s) shall consult with the USACE and Regional Water Quality Control Board, to the extent required under applicable laws and regulations, to determine the extent, if at all, that waters of the United States and State may be impacted by the proposed project.
- If required, the relevant applicant(s) for development of the subject project parcel(s) shall obtain a Section 404 CWA permit for impacts to waters of the United States. That same applicant, for development of the subject project parcel(s), will also obtain a Section 401 Water Quality Certification from the RWQCB, if required. Any such required permit and certification shall be obtained prior to issuance of grading permits for the implementation of the individual development proposal on the subject project parcel(s).
- The applicant(s) for development on any project parcel shall design the project to result in no net loss of functions and values of waters of the United States and State by incorporating impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as set forth in the subject Section 404 permit and 401 water quality certification.
- Compensatory mitigation may consist of (1) obtaining credits from a mitigation bank; (2) making a payment to an in lieu fee program that would conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or reservation activities; and/or (3) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This final type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). This

project/permit applicant shall retain responsibility for the implementation and success of the mitigation approach.

Obtain Approval of and File Notification of Streambed Alteration Agreement Prior to Construction

The applicant(s) for development on any project parcel shall ensure that the cattail marsh is not obstructed and human intrusion into the area is minimized. In compliance with Section 1600 of the California Fish and Game Code, the relevant applicant(s) of an individual development proposal within the project site shall obtain approval and file a notification of a Streambed Alteration Agreement prior to conducting any construction activities within irrigation/drainage channels that qualify as streams under CDFW jurisdiction (i.e., those having bed and bank and at least periodical flow) if and to the extent required under applicable laws and regulations. Those same applicant(s) shall implement all mitigation measures imposed by the CDFW related to the subject Streambed Alteration Agreement, which may include but not be limited to the implementation of erosion and bank stabilization measures, riparian habitat enhancement, and/or restoration and revegetation of the stream corridor habitat at no less than a 1:1 ratio, as determined by the CDFW.

Facts in Support of Findings: There are aquatic resources located within the project site in the form of irrigation/drainage channels (approximately 10,344 linear feet) and a potential ditch wetland/cattail marsh (approximately 0.07 acre) located on the Zuriakat parcel. The ditch wetland/cattail marsh likely formed due to the drainage patterns created as a result of surrounding agricultural production. This potential wetland feature contained standing water during the field visit, contained dense stands of broadleaf cattail (rated an obligate wetland plant by the USACE and a California Natural Community), and supports Northern Pacific tree frogs. This potentially jurisdictional wetland feature is approximately 300 feet long by 8 feet wide.

The irrigation/drainage channels appear to have a potential hydrological connection to the San Joaquin River, a traditional navigable water of the United States. These features are generally not considered jurisdictional; however, California Water Code Section 13050(a) defines “waters of the State” broadly to include “any surface water or groundwater, including saline waters, within the boundaries of the State,” and the determination whether impacts to parts of the irrigation/drainage ditches and/or the cattail marsh on-site are regulated as waters of the State is be made by the RWQCB. If the proposed project would result in the placement of fill that would potentially result in impacts to these aquatic resources, then implementation of MM BIO-3 would reduce potential impacts (Draft EIR, Page 3.4-27–28).

The City finds that MM BIO-3 is feasible, is adopted, and will further reduce impacts related to wetlands and related biological resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid

the potentially significant impacts as identified in the EIR. Therefore, impacts associated with biology would be less than significant with mitigation incorporated.

Cumulative Impact

Define impact: The proposed project's cumulative impacts related to biological resources would be less than significant with mitigation incorporated. (Draft EIR, Page 3.4-33).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.4-33). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM BIO-1a through MM BIO-1f and MM BIO-3.

Facts in Support of Findings: Planned developments listed in the EIR are predominantly located in areas that have already been built out or are located within highly fragmented habitats with limited potential to support special-status wildlife and plant species. The cumulative geographic context is partially developed and partially agricultural land, and there is a low likelihood of special-status wildlife and plants occurring within the cumulative project areas due to past urban development.

Numerous laws and regulations are in place to protect biological resources within the cumulative project area, including, but not limited to, CESA, Endangered Species Act, and the CWA. Future projects within the cumulative geographic context, would be required to comply with applicable federal, State, and local laws, regulations, and policies and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts. Cumulative development would be required to comply with the above requirements, as well as General Plan and Municipal Code requirements (standard pre-construction surveys and, if necessary, avoidance procedures would be required for cumulative projects with the potential to impact special-status wildlife species (see, e.g., MM BIO-1a through MM BIO-1f). The proposed project's incremental contribution to these less than significant cumulative impacts would not be significant with adherence to the mitigation measures related to special-status wildlife species identified above and compliance with other applicable standards and requirements under the comprehensive regulatory framework.

Aquatic resources are largely found outside the cumulative project areas, which are concentrated south of I-205 and north of West Linne Road within the City of Tracy's SOI, as project activities would only affect the surrounding project areas. The majority of cumulative developments have been designed to address future growth problems and minimize developmental impacts to sensitive natural communities by designing projects, to the extent feasible, to occur in previously developed or highly disturbed areas that lack significant sensitive natural communities.

Within the cumulative project areas, development would not directly and significantly impact sensitive natural communities and/or the aquatic resources outlined above because they are largely

sited in previously developed or highly disturbed areas, and applicants would be required to consult with the applicable regulatory agencies, quantify their potential impacts in a formal jurisdictional delineation, and mitigate accordingly. Moreover, as explained in Impact BIO-2 and Impact BIO-3, the proposed project would implement mitigation measures to address potential impacts. The proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable.

The City of Tracy regulates the alteration or removal of street trees. While other cumulative projects may result in the removal of street trees, these projects would be governed by the applicable local protection ordinance as well as relevant General Plan policies. Therefore, development of the proposed project and any related development of private property, combined with other cumulative development, would not result in any conflicts with local tree policies or ordinances protecting trees or other biological resources. As such, there is a less than significant cumulative impact. Moreover, the proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable.

The cumulative project areas contain a variety of aquatic resources that act as potential movement corridors for fish and wildlife, such as Corral Hollow Creek and Tom Paine Slough. Any future development that occurs within the cumulative project areas would have to take into account the potential impact to these corridors and mitigate as required under applicable laws and regulations. As such, there is a less than significant cumulative impact. The project site is not part of or within a wildlife movement corridor. Therefore, the proposed project's contribution to the less than significant cumulative impact related to fish and wildlife movement would not be cumulatively considerable.

The proposed project, in addition to other cumulative projects, would be subject to compliance with the SJMSCP, which may include payment of development fees for conversion of lands that may provide habitat for covered special-status species and implementation of other identified mitigation measures under the SJMSCP. Compliance by the proposed project and other cumulative projects located within the cumulative project areas to the SJMSCP would fully mitigate any potentially significant impacts in this regard. The proposed project's contribution to the less than significant cumulative impact would not be cumulatively considerable given that it also would be required to comply with all applicable provisions and mitigation requirements under the SJMSCP (Draft EIR, Page 3.4-31–33).

The City finds that MM BIO-1a through MM BIO-1f, and MM BIO-3 are feasible, are adopted, and will further reduce cumulative impacts related to biological resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with biological resources would be less than significant with mitigation incorporated.

1.7.2 - Cultural Resources

Potential Effect

Impact CUL-1: The proposed project could cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5. (Draft EIR, Page 3.5-20).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.5-20). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

MM CUL-1 Archaeological Spot-Monitoring and Halt of Construction Upon Encountering Historical or Archaeological Materials

An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology shall inspect the site once grubbing and clearing are complete for the purpose of determining whether there are any previously undiscovered resources on-site, and prior to any grading or trenching into previously undisturbed soils. This shall be followed by regular periodic or "spotcheck" archaeological monitoring as determined by the Archaeologist. If the Archaeologist believes that a reduction in monitoring activities is prudent, then a letter report detailing the rationale for making such a reduction and summarizing the monitoring results shall be provided to the City of Tracy for concurrence. In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers shall avoid altering the materials until an Archaeologist has evaluated the situation. The applicants for the development of the Tracy Alliance, Suvik Farms, and Zuriakat parcels shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. The Archaeologist shall evaluate any finding(s) and determine whether they are significant, and if so, shall make recommendations concerning appropriate measures that will be implemented to protect the significant resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered significant resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and shall be submitted to the City of Tracy, the Northwest Information Center (NWIC), and the California Office of Historic Preservation (OHP), as required.

Facts in Support of Findings: The closest known historical resources are located on the southwest corner of the project site and along the southern boundary of the project site. The southwest corner

of project site contains buildings and structures over 50 years old associated with the Mattos Dairy Farm complex. The Mattos Dairy Farm complex was evaluated relative to the four California Register of Historical Resources (CRHR) eligibility criteria and found to be ineligible to meet any of the criteria for historic and/or architectural significance required for listing on the NRHP, CRHR, or at the local level.

While unlikely, subsurface construction activities always have the potential to damage or destroy previously undiscovered historic resources such as wood, stone, foundations, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramic, and other refuse, if encountered. Therefore, MM CUL-1 would require an inspection and spot-monitoring by a qualified Archaeologist after clearing and grubbing but before digging and trenching, when any historic resources would be visible (Draft EIR, Page 3.5-20).

The City finds that MM CUL-1 is feasible, is adopted, and will further reduce impacts related to historical resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with historical resources would be less than significant with mitigation incorporated.

Potential Effect

Impact CUL-2: The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. (Draft EIR, Page 3.5-21).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.5-21). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM CUL-1.

Facts in Support of Findings: Records search from the Central California Information Center (CCIC) indicated that one prehistoric archaeological resource has previously been recorded within the 0.5-mile radius of the project site and is not located within the project site boundary. The presence of a prehistoric archaeological site within the 0.5-mile radius, coupled with poor soil visibility across the Tracy Alliance and Zuriakat project parcels increases the possibility that undiscovered cultural resources may be encountered during project construction. Such resources could consist of, but are not limited to stone, bone, wood, or shell artifacts or features, including hearths and structural elements. Therefore, MM CUL-1 requires inspection and spot-monitoring by a qualified Archaeologist after clearing and grubbing are complete, but before any digging or trenching begin. (Draft EIR, Page 3.5-21–22).

The City finds that MM CUL-1 is feasible, is adopted, and will further reduce impacts related to archaeological resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with archaeological resources would be less than significant with mitigation incorporated.

Potential Effect

Impact CUL-3: The proposed project could disturb human remains, including those interred outside of formal cemeteries. (Draft EIR, Page. 3.5-22).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page. 3.5-22). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures:

MM CUL-3 Stop Construction Upon Encountering Human Remains

In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during the course of project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98.
2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission.
   - The descendant identified fails to make a recommendation.

- The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

- When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicants for the development of the Tracy Alliance, Suvik Farms, and Zuriakat parcels may each develop a plan with respect to their individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.

Facts in Support of Findings: The potential for human remains to be discovered during ground-disturbing activities is considered low because no human remains have previously been discovered on the project site or in its vicinity. While it is unlikely that the presence of human remains exists within or near the project site, there is always the possibility that subsurface construction activities associated with the proposed project, such as grading or trenching, could potentially damage or destroy previously undiscovered human remains. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and 5097.98 must be followed. MM CUL-3 further specifies the procedures to follow in the event human remains are uncovered. (Draft EIR, Page. 3.5-22–23).

The City finds that MM CUL-3 is feasible, is adopted, and will further reduce impacts related to accidental discovery of human remains. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts would be less than significant with mitigation incorporated.

Cumulative Impact

The proposed project's cumulative impacts related to cultural resources would be less than significant with mitigation incorporated. (Draft EIR, Page 3.5-25).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.5-25). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM CUL-1 and MM CUL-3.

Facts in Support of Findings: The Mattos Dairy Farm complex located on-site, while of historic age, is ineligible for local listing under City of Tracy Resolution 3232 and was found to be ineligible for listing on the CRHR. The dairy complex therefore does not qualify as a historic resource under CEQA, and its demolition will not contribute to a cumulative impact to cultural resources. Potential cumulative impacts would be mitigated at an individual project level by adherence to applicable current State and federal laws and regulations, as well as other City and County laws, regulations and mitigation, such as adherence to standard conditions of approval that require monitoring of construction sites in proximity to known resources (by implementing similar measures as the proposed project's MM CUL-1). The combination of these efforts would reduce potential cumulative impacts related to historical resources.

Given that the proposed project would not have a known, direct impact on any known archaeological resources, project impacts are less than significant in this regard. Construction activities associated with the proposed project have the potential to encounter undiscovered cultural resources. The proposed project would be required to mitigate for impacts through compliance with applicable federal and State laws and regulations governing cultural resources. Additionally, the implementation of standard construction mitigation measures (MM CUL-1 and MM CUL-3) would ensure that undiscovered cultural resources are not adversely affected by project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources in the project vicinity.

Cumulative projects within an 0.5-mile radius would be subject to applicable current State and federal laws and regulations, as well as other local and City and County laws, regulations, and mitigation, such as adherence to standard conditions of approval that require monitoring of construction sites in proximity to known resources, immediate cessation of construction activity upon discovery of unidentified human remains, and the protection of cultural resources that are discovered. The combination of the above-mentioned efforts and other standard construction conditions and mitigation measures (similar to the proposed project's MM CUL-1 and MM CUL-3) would reduce potential cumulative impacts (Draft EIR, Page 3.5-24–25).

The City finds that MM CUL-1 and MM CUL-3 are feasible, are adopted, and will further reduce cumulative impacts related to cultural resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with cultural resources would be less than significant with mitigation incorporated.

1.7.3 - Geology and Soils

Potential Effect

Impact GEO-1: The proposed project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
ii. Strong seismic ground shaking.
iii. Seismic-related ground failure, including liquefaction.
iv. Landslides.

(Draft EIR, Page 3.7-11).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.7-11). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

MM GEO-1 Prepare Grading and Construction Plans that Incorporate Geotechnical Engineering Report Recommendations

Prior to issuance of the grading permits for the proposed project, development of the final grading, foundation, and construction plans shall incorporate the site-specific earthwork, foundation, floor slab, lateral earth pressure, and pavement design recommendations, as detailed in the Geotechnical Engineering Report prepared by Terracon dated January 30, 2019. The applicant(s) for development of individual development proposal(s) within the project site shall each coordinate with a City-approved Geotechnical Engineer and Engineering Geologist to tailor the grading and foundation plans for the relevant development proposal, as needed, to reduce risk related to known soil and geologic hazards. The final grading and construction plans for the relevant development proposal shall be reviewed by the City-approved Geotechnical Engineer to confirm compliance with this MM GEO-1.

Grading operations shall meet the applicable requirements of the recommendations included in the Geotechnical Engineering Report prepared by Terracon on January 30, 2019. During construction, the City-approved Geotechnical Engineer shall monitor construction of the relevant development proposal to ensure the earthwork operations are properly performed in accordance with the foregoing recommendations.

Facts in Support of Findings: Impacts related to risks associated with seismic-related hazards are limited to operational impacts. No respective construction impacts would occur.

Ground Rupture

Based on Geotechnical Engineering Report, the potential for ground rupture is low. There are no known active faults directly crossing the project site or the City of Tracy, and neither the project site nor the City is located within a designated Alquist-Priolo Earthquake Fault Zone. The closest fault to

the project site is the San Joaquin Fault located in the southeast portion of the City approximately 7 miles away, precluding the potential for ground rupture to occur. There would be no impact.

Strong Seismic Ground Shaking

The project site is located in a seismically active region that could experience strong ground shaking during a seismic event. It could experience significant ground shaking from maximum credible earthquakes occurring on the Calaveras, Hayward, San Andreas, or Greenville Faults. Therefore, MM GEO-1 requires implementation of the recommendations contained in the Geotechnical Engineering Report prior to the issuance of grading permits. Additionally, the project is required to implement all applicable seismic safety building standards contained in the CBC including seismic design provisions, which would reduce the risk of loss, injury or death. Furthermore, compliance with General Plan Policy P2 and Chapter 9.02 of the Municipal Code requires all construction to conform to the most recent edition of the CBC. With adherence to the requirements of MM GEO-1 and all applicable building codes and regulations, impacts would be less than significant.

Seismic-related Ground Failure

The project site is not listed as a liquefaction hazard zone by the California Geologic Survey (CGS); however, the Geotechnical Engineering Report determined that on-site soils are susceptible to liquefaction because of the shallow groundwater depth and soil conditions. The Geotechnical Engineering Report provided liquefaction modeling and determined that the project site could experience up to 1 inch of soil settlement and included earthwork recommendations that contained criteria for grading, excavation, and fill replacement. The recommendations are incorporated into the proposed project and must be fulfilled prior to issuance of grading permits as detailed in MM GEO-1. Therefore, MM GEO-1 would ensure that the recommendations contained in the Geotechnical Engineering Report are incorporated into the proposed project construction and design plans.

As explained in the EIR, the project site does not contain steep slopes, exposed hillsides, or vertical cuts. Because of the gently sloping nature of the project site, it does not contain a significant potential for landslides (Draft EIR, Page 3.7-11–12). Therefore, there is no impact from potential landslides.

The City finds that MM GEO-1 is feasible, is adopted, and will further reduce impacts related to seismic activity. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with geology would be less than significant with mitigation incorporated.

Potential Effect

Impact GEO-3: The proposed project could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse (Draft EIR, Page 3.7-14).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.7-14). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM GEO-1.

Facts in Support of Findings: Impacts related to risks associated with location on an unstable geologic unit or soil are limited to operational impacts. No respective construction impacts would occur.

The Geotechnical Engineering Report identified soils that could be expected to experience up to 1 inch of liquefaction-induced settlement. Any such settlement across the project site would represent a significant impact. Additionally, project site soils would be corrosive to concrete used in building foundations and slabs, which could result in unstable building conditions leading to building collapse or damage. Recommendations included criteria for grading, excavation, and fill replacement that would prevent significant settlement of soils. In addition, the recommendations included concrete mix specifications that would prevent significant impacts from corrosive soils. MM GEO-1 requires implementation of all recommendations prior to the issuance of grading permits and would ensure that the recommendations contained in the Geotechnical Engineering Report are incorporated into the project construction and design plans (Draft EIR, Page 3.7-14).

The City finds that MM GEO-1 is feasible, is adopted, and will further reduce impacts related to geologic resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with geology would be less than significant with mitigation incorporated.

Potential Effect

Impact GEO-4: The proposed project could be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property (Draft EIR, Page 3.7-15).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.7-15). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM GEO-1.

Facts in Support of Findings: The Geotechnical Engineering Report determined that expansive soils exist on-site. Without mitigation, the near-surface stiff to hard medium plasticity lean clay and high plasticity clay could become unstable during construction activity and after precipitation events. The Geotechnical Engineering Report includes recommendations that are incorporated as requirements to be imposed on the proposed project as reflected in MM GEO-1, for site preparation, excavation, and replacement fill that would include ground modifications that would spread out the loads from foundations and reduce the influence of the construction loads on soft soil layers, thus reducing the potential for unacceptable settlements. These requirements must be achieved prior to the issuance of grading permits. In addition, the Geotechnical Engineering Report provides options for providing stable foundations by including building floor slabs with foundation systems on a minimum of 18 inches of lime treated subgrade, or excavation and replacement with engineered fill or a sand/slurry mixture. Implementation of MM GEO-1 establishes requirements based on the Geotechnical Engineering Report that must be included in the grading plans and design of the proposed project.

Additionally, during operation, these soils have the potential to swell and shrink as they gain and lose moisture, which could cause building foundations to crack or heave, resulting in substantial risks to life or property, which represents a potentially significant impact. However, the Geotechnical Engineering Report includes recommendations for site preparation, excavation, and foundation design that would address the site-specific conditions. Implementation of MM GEO-1 would ensure recommendations contained in the Geotechnical Engineering Report are included in the design of the proposed project (Draft EIR, Page 3.7-15).

The City finds that MM GEO-1 is feasible, is adopted, and will further reduce impacts related to geologic resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with geology would be less than significant with mitigation incorporated.

Potential Effect

Impact GEO-6: The proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Draft EIR, Page 3.7-16).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.7-16). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

MM GEO-6 Inadvertent Discovery of Paleontological Resources During Project Construction

In the event a fossil is discovered during construction for the proposed project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist in accordance with Society of

Vertebrate Paleontology standards. The applicants for development of individual proposals within the project site shall each include a standard inadvertent discovery clause in every proposed project-related construction contract to inform their respective contractors of this requirement. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and implement a data recovery plan that is consistent with the applicable Society of Vertebrate Paleontology standards. Any recovered fossil should be deposited in an appropriate repository, such as the UCMP, where it will be properly curated and made accessible for future studies.

Facts in Support of Findings: The project site is located on Holocene alluvium, which is too young to be fossiliferous. The valley fill on the project site is at least hundreds of feet thick; thus, subsurface late Pleistocene or older deposits, which have the potential to be fossiliferous, are located at depths well below any excavation required for project construction. Additionally, the Paleontological Report states that the closest paleontological resources to the project site were microfossils uncovered 7 miles to the east. While it is unlikely that paleontological resources exist within or near the project site, there is always the possibility that subsurface construction activities associated with the proposed project, such as grading or trenching, could potentially damage or destroy previously undiscovered paleontological resources. Therefore, MM GEO-6 specifies the procedures to follow in the event a paleontological resource is uncovered. Impacts related to the potential to cause substantial adverse change in the significance of a unique paleontological resource or unique geologic feature are limited to construction. No respective operational impacts would occur (Draft EIR, Page 3.7-16).

The City finds that MM GEO-6 is feasible, is adopted, and will further reduce impacts related to inadvertent discovery of paleontological resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with paleontological resources would be less than significant with mitigation incorporated.

Cumulative Impact

The proposed project's cumulative impacts related to geology and soils would be less than significant with mitigation incorporated (Draft EIR, Page 3.7-18).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.7-18). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM GEO-1 and MM GEO-6.

Facts in Support of Findings: The cumulative setting includes Cumulative Projects No. 19 and No. 35 (Draft EIR, Table 3-1) along with existing agricultural and industrial uses. Cumulative projects have the potential to experience strong ground shaking from earthquakes. Cumulative projects would be required to adhere to the applicable provisions of the CBC, and policies of the General Plan and Tracy Municipal Code reducing potential hazards associated with seismic ground shaking and ground failure.

Soil conditions associated with the proposed project, such as differential settlement, liquefaction, expansive soils, and soil creep, are specific to the project site and generally do not contribute to a cumulative effect. Some or all other cumulative projects may have similar conditions, but they also would not contribute to a general geologic or soil cumulative effect. Therefore, there is no potentially significant cumulative impact. Furthermore, the proposed project would be subject to all applicable General Plan policies, Municipal Code provisions, and the CBC, as well as being required to implement the required mitigation, all of which would reduce soil-related hazard impacts to a less than significant level. Other cumulative projects would similarly be required to adhere to standards and practices that include stringent geologic and soil-related hazard mitigation.

Construction activities associated with development of cumulative projects within the vicinity of the project site may have the potential to encounter undiscovered geologic resources and paleontological resources. These cumulative projects would be required to mitigate for impacts through compliance with applicable federal and State laws governing geologic resources and paleontological resources and other applicable mitigation measures. Moreover, the likelihood that geologic resources and paleontological resources are present on the cumulative project areas is relatively low, given that the majority of soil disturbance associated with these cumulative projects would take place within Holocene soils too young to be fossiliferous. Although there is the possibility that previously undiscovered resources could be encountered by subsurface earthwork activities, the implementation of standard construction mitigation measures and General Plan Objective CC-3.1 and Policy 5 would ensure that undiscovered geologic and paleontological resources are not adversely affected by cumulative project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources in the vicinity of the project site. Therefore, potential cumulative impacts are less than significant. (Draft EIR, Page 3.7-17–18).

The City finds that MM GEO-1 and MM GEO-6 are feasible, are adopted, and will further reduce cumulative impacts related to geologic and paleontological resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, cumulative impacts would be less than significant with mitigation incorporated.

1.7.4 - Hazards and Hazardous Materials

Potential Effect

Impact HAZ-1: The proposed project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (Draft EIR, Page 3.9-20).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.9-20). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

MM HAZ-1a Conduct Soil Sampling (Tracy Alliance, Zuriakat, and Suvik Farms parcels)

Prior to the issuance of grading permits, the relevant applicant for an individual development proposal within the project site shall provide evidence of soil testing within the project boundary to confirm presence or absence of hazardous compounds such as lead and arsenic. The testing shall be conducted pursuant to a San Joaquin Environmental Health-approved sampling plan. If hazardous levels of hazardous compounds are found, excavated soils shall be sent off-site for disposal and any affected soils encountered should be properly characterized, treated and/or disposed of in accordance with applicable local, State, and federal laws and regulations. The relevant applicant shall complete any residual soil remediation in connection with the relevant individual development proposal to the satisfaction of San Joaquin Environmental Health, as evidenced by the submittal of a no further action letter. In addition, if hazardous contaminants related to the former agricultural use of the site (such as lead or arsenic) are found, a construction worker health and safety plan shall be prepared and shall be implemented during construction of the relevant individual development proposal.

MM HAZ-1b Proper Disposal and Decommission of Underground Storage Tanks, Aboveground Storage Tanks, and Unlabeled Drums (Tracy Alliance Parcel only)

If any of the reported underground storage tanks (USTs) or aboveground storage tanks (ASTs) are discovered during excavation activities, the applicant for the development of the Tracy Alliance parcels shall dispose of and decommission the USTs and ASTs in accordance with applicable laws and regulations of the Local Oversight Program (LOP) and the American Petroleum Institute Standards, respectively. The unlabeled drums and containers observed during the site reconnaissance for the Phase I Environmental Site Assessment (Phase I ESA) for the Tracy Alliance parcels shall be characterized and disposed of in accordance with applicable local, State, and federal laws and regulations.

MM HAZ-1c Conduct Asbestos and Lead Surveys Prior to Demolition (Tracy Alliance parcels only)

Prior to the issuance of demolition permits for the existing buildings, the applicant for the development of the Tracy Alliance parcels shall retain a licensed professional to conduct asbestos and lead paint surveys. These surveys shall be conducted prior to the disturbance or removal of any suspect asbestos-containing materials (ACM) and lead-based paint (LBP), and these materials shall be characterized for asbestos

and lead by a reliable method. All activities involving ACM and LBP shall be conducted in accordance with applicable laws and regulations, and all removal shall be conducted by properly licensed abatement contractors.

MM HAZ-1d Dust Mitigation and Soil Evaluation (Tracy Alliance, Zuriakat, and Suvik Farms parcels)

During any grading or excavation activities in connection with an individual development proposal within the project site, relevant development personnel shall be made aware to look for unusual conditions suggesting buried debris or other potential adverse environmental conditions. If any abnormal soils are discovered during development activities, such as stained soils, hydrocarbon odors, or any other unusual odors, all construction activities near the discovery shall be stopped immediately and the applicant for the relevant individual development proposal shall contact a qualified hazardous material consulting firm for further assessment and implementation of any appropriate actions as may be required under applicable laws and regulations before construction of the relevant individual proposal can begin again.

MM HAZ-1e Consultation with Chevron and DigAlert (Tracy Alliance and Suvik Farms parcel only)

Prior to any ground disturbance and construction along the northern side of West Grant Line Road, adjacent to the southern boundary of the Tracy Alliance and Suvik Farms parcels, the relevant applicant(s) for the development of the Tracy Alliance and/or Suvik Farms parcels shall consult with Chevron (www.chevronpipeline.com; 800.762.3404) and DigAlert 811 to determine the location of the existing underground petroleum pipeline to facilitate avoidance during ground disturbance and construction activities.

Facts in Support of Findings: During construction, the proposed project would be expected to involve the routine transport, use, and disposal of hazardous materials, such as diesel fuels, aerosols, and paints, which are typical for this type of industrial construction. The proposed project would be subject to the Hazardous Materials Transportation Act, California Public Resources Code, and other applicable State and local laws and regulations that would reduce and limit the associated risks. Any handling, transporting, use, or disposal would be required to comply with applicable laws, policies, and programs set forth by various federal, State, and local agencies and regulations, including the EPA, RCRA, California Department of Transportation (Caltrans), and HMP.

Tracy Alliance Parcels

The Phase I ESA for the Tracy Alliance parcels noted several RECs including a wastewater pond (western portion of the site), absence of removal records associated with historic UST(s), historical AST fueling areas, petroleum hydrocarbon staining, unlabeled 55-gallon drum storage area, burn disposal areas, and off-site groundwater impacts from an adjoining western open-inactive Leaking Underground Storage Tank (LUST) facility. A Limited Site Investigation did not find a significant

contaminant release from historical or current use of the parcels in the immediate area of the investigation. The Limited Site Investigation concluded that no further investigation or remediation was required.

Arsenic-impacted soils are present in the soil samples collected from the site. The arsenic impacts are within regional background concentrations, except for the ASH-2 sample. Therefore, MM HAZ-1a would be implemented to test soils for arsenic and to require remediation and documentation of no further action by the California Department of Toxic Substances Control (DTSC) if site soils contain hazardous levels of arsenic.

Evidence of reported USTs on-site was identified. However, information pertaining to the location of the reported USTs was not identified in the regulatory databases or local agencies inquiries. In addition, three gasoline and/or diesel fueling ASTs ranging between approximately 200 gallons and 500 gallons in size were observed at the southwestern portion of the site. During the site reconnaissance, the ASTs were observed on soil and not within secondary containment. Therefore, if any of the reported USTs or ASTs are discovered during excavation activities, MM HAZ-1b would be implemented, which would require disposal and decommission of the USTs and ASTs in accordance with applicable regulations of the LOP and the American Petroleum Institute Standards, respectively.

Approximately ten 55-gallon unlabeled drums stored on soil were observed south of the cattle storm shed. Staining was not observed beneath the former drum area after removal; however, based on the unknown nature of materials stored in the drums and poor housekeeping practices, the former drum storage area represents a Recognized Environmental Condition (REC). MM HAZ-1b requires that any remaining unlabeled drums and containers be disposed of in accordance with applicable local, State, and federal laws and regulations.

Three domestic groundwater wells were found on-site. Because the wells are not to be used in the planned redevelopment of the project site, they must be properly abandoned, closed, or destroyed in accordance with local, State, and federal laws, regulations and guidelines.

The proposed project would demolish the existing buildings on-site. Given the age of the existing structures on the project site, it is conceivable that ACM and LBP may exist within these structures. MM HAZ-1c would require the applicant for the development of the Tracy Alliance parcels to conduct asbestos and lead paint surveys prior to demolition activities and safely remove and dispose of any such materials in accordance with applicable State standards and other legal requirements.

Standard dust mitigation measures would be implemented during all development and soil handling activities. During any grading or excavation activities of the Tracy Alliance parcels, development personnel must be made aware to look for unusual conditions suggesting buried debris or other potential adverse environmental conditions. In addition, if any abnormal soils are discovered during redevelopment, such as stained soils, hydrocarbon odors, or any other unusual odors, all construction activities would be stopped immediately and a qualified hazardous material consulting firm would be contacted for further assessment and monitoring, pursuant to MM HAZ-1d.

Zuriakat and Suvik Farms Parcels

There is a potential for accumulation of elevated levels of lead and arsenic. On-site soils may contain pesticides/herbicides above actionable levels. Therefore, it is recommended that soil sampling and testing be performed on the Zuriakat and Suvik Farms parcels prior to redevelopment; MM HAZ-1a would be implemented to test soils for lead and arsenic and to require remediation and documentation of no further action by the San Joaquin Environmental Health Department if site soils contain hazardous levels of lead or arsenic.

Because of the nature of the agricultural uses on-site, implementation of standard dust mitigation measures during all redevelopment and soil handling activities would be required by MM HAZ-1d. During any grading or excavation activities of the Zuriakat or Suvik Farms parcels, development personnel must be made aware to look for unusual conditions suggesting buried debris or other potential adverse environmental conditions. In addition, if any abnormal soils are discovered during development, construction activities would be stopped immediately and a qualified hazardous material consulting firm would be contacted for further assessment and monitoring, pursuant to MM HAZ-1d.

Markers indicating the presence of an underground petroleum pipeline owned by Chevron Pipeline Company were observed along the northern side of West Grant Line Road, adjacent to the Tracy Alliance and Suvik Farms parcels. Pursuant to MM HAZ-1e, the applicant for development of the Suvik Farms parcels (as well as the Tracy Alliance parcels) shall consult with Chevron and contact DigAlert prior to any ground disturbance and construction in that area.

Two on-site irrigation wells were observed within the unpaved access roads along the western property line (the Suvik Farms parcels). Because the wells are not proposed to be used in the planned development of the project site, they would be required to be properly abandoned/closed or destroyed in accordance with local, State, and federal laws and regulations. This would be applied as a standard condition of approval. Routine inspections of facilities that are subject to Hazardous Materials Business Plan (HMBP) requirements would be performed to ensure compliance with existing laws and regulations concerning HMBP requirements. Any routine storage, handling, transport, use, or disposal of hazardous materials during operation of the proposed project would be required to comply with all applicable laws, regulations, policies, and programs set forth by various federal, State, and local agencies, including the EPA, RCRA, Caltrans, the Hazardous Materials Transportation Act, and the City of Tracy HMP. Removal and disposal of hazardous materials would be conducted by a permitted and licensed contractor. Required compliance with applicable hazardous material laws and regulations would ensure that operation-related hazardous material use would not result in a significant hazard to the public or environment (Draft EIR, Page 3.9-20).

The City finds that MM HAZ-1a through MM HAZ-1e are feasible, are adopted, and will further reduce impacts related to hazards and hazardous materials. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with hazards would be less than significant with mitigation incorporated.

Potential Effect

Impact HAZ-4: The proposed project is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment (Draft EIR, Page 3.9-26).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.9-26). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM HAZ-1a and MM HAZ-1b.

Facts in Support of Findings

Tracy Alliance Parcels

Several facilities are identified on the regulatory databases, and two facilities of interest are discussed below.

Legacy Real Estate (6599 West Grant Line Road) and Mattos Farms (6735 West Grant Line Road)

Legacy Real Estate (6599 West Grant Line Road) and Mattos Farms (6735 West Grant Line Road), which are former users of the Tracy Alliance parcels, are identified on the regulatory database Facility and Manifest Data (HAZNET) and two Hazardous Substance Storage Container Database (HIST UST) listings. Approximately 4.8 tons of ACM was removed from the site in the year 2014 and reported to have been disposed at a landfill. The HAZNET listing corresponds to a building removal identified by the City of Tracy in the year 2014. Two 350-gallon gasoline USTs were installed in the year 1973. During the site reconnaissance, Mr. Mattos pointed out an empty rusting AST located west of the cattle barn which was a former UST. During a telephone conversation on November 26, 2018, Mr. Mattos recalled a UST was located approximately 5 feet south of the residence garage and recalled the UST had a crank pump attached to it. Mr. Mattos did not recall when the UST was removed and was not aware of a second UST on the site. Terracon requested UST removal records on file with the City, State and local agencies; however, information associated with the reported USTs was not found. Based on the absence of UST removal records, the historical USTs represent a significant data gap and REC in connection with these lands. Therefore, if any of the reported USTs are discovered during excavation activities, MM HAZ-1b would be implemented, which would require disposal and decommission of the USTs in accordance with applicable laws and regulations of the LOP.

Haley Flying Service (2395 East Pescadero Avenue, formerly 21000 Paradise Road)

Haley Flying Service (2395 East Pescadero Avenue), located to the adjoining west and hydrogeologically and topographically cross-gradient relative to the site, is identified on the Statewide Spills, Leaks, Investigation and Cleanup (SLIC) Cases GeoTracker (CPS-SLIC) and the California Environmental Reporting System (CERS) databases. The facility is an open and active cleanup case with potential pesticide and herbicide contamination. The facility was a former crop-

dusting operation with concerns regarding stormwater runoff and wastewater discharge. Wastewater from aircraft washings discharged to a ditch behind the property which runs parallel to a water district irrigation distribution canal. Low levels of pesticides and herbicides including 2,4-D, diuron, linuron, and endosulfan were identified in the samples collected from an irrigation ditch at the facility. The facility's discharge system, including a sump and evaporation system, were not within regulatory compliance.

The facility was additionally identified at 21000 Paradise Road, a former property address, and was identified on the Superfund Enterprise Management System (SEMS-ARCHIVE), RCRA–Small Quantity Generator (RCRA-SQG), DTSC Envirostor website (ENVIROSTOR), LUSTs, Voluntary Cleanup Program (VCP), Waste Management Unit Database/Solid Waste Disposal Sites (WMUDS/SWAT), Environmental Liens Listings (LIENS), Facility Index System (FINDS), Enforcement Compliance History Information (ECHO), Hazardous Waste and Substance Site List (HIST CORTESE), SWEEPS UST, HIST UST, CA FID UST, and CERS databases. Based on a review of the listings, the facility was a small quantity hazardous waste generator of industrial waste which treats and/or disposes of liquid or semisolid waste; however, the facility did not have reporting requirements. Based on a review of the LUST listings, in 1988, a gasoline release affecting drinking water was reported and was listed as closed as of 1998. A HIST UST listing indicated two 1,000-gallon gasoline USTs, and two 2,000-gallon waste USTs were reported on the property in the 1970s. The SWEEPS UST listing indicated a 1,000-gallon gasoline UST and 5,000-gallon aviation fuel UST were reported on the property in the 1990s.

Based on a review of the ENVIROSTOR website, the facility was a former agricultural aerial operation which applied herbicides and pesticides to local agricultural fields. Spray tanks and airplanes were rinsed on the property and the tank rinse water was pumped into a concrete lined washout pit. The website noted improper hazardous material handling practices as the probable cause of soil contamination on the property. The website indicated in 1982 an unspecified amount of hazardous material was removed from the property. A site screening was performed in 1987 followed by a preliminary assessment in 1988. The facility entered a Voluntary Cleanup Act (VCP) agreement in 2005 and a Preliminary Endangerment Assessment (PEA) was prepared by Geo-Phase Environmental (Geo-Phase) in 2006. Based on a review of diagrams contained in the Geo-Phase PEA, the facility washdown areas and loading docks were located on the eastern portion of the property approximately 100 feet west of the Tracy Alliance parcels. The PEA indicated elevated levels of pesticides and herbicides were detected in soil and groundwater samples collected from the property. The PEA included a Human Health Hazard Assessment and indicated detected levels of chlordane, DDD, DDE, DDT, dieldrin, endosulfan, endrin, and toxaphene were above California Human Health Screening Levels (CHHSLs). Groundwater was reported at 11 feet below ground surface (bgs). The PEA recommended further site characterization including additional soil and groundwater analysis. A PEA approval letter dated February 9, 2006, from the DTSC to the property owner, indicated the property was "highly contaminated" and concurred with the Geo-Phase PEA recommendations.

Additionally, 1990 soil and groundwater samples identified elevated levels of petroleum hydrocarbons. Soil samples collected from the 5,000-gallon UST tank excavation identified gasoline hydrocarbons (610 mg/kg), benzene (6.5 mg/kg), toluene (62 mg/kg), ethylbenzene (41 mg/kg), and

xylene (169 mg/kg) above Tier 1 Environmental Screening Levels (ESLs). Benzene (3.9 ug/L), toluene (19.4 ug/L), ethylbenzene (7.5 ug/L) and xylene (32 ug/L) were identified in a groundwater sample collected from the 5,000-gallon tank excavation of which benzene and xylene were reported above ESLs. The PEA noted mitigation records associated with the petroleum hydrocarbon LUST were misplaced in the County records and presumed the LUST release had been adequately mitigated and closed. There were no additional reports for the property after the year 2006. Based on proximity to the site, open regulatory status, reported impacts to soil and groundwater, and shallow depth to groundwater (11 feet), Haley's Flying Service represents a REC to the site.

A Limited Site Investigation concluded that there does not appear to be a significant contaminant release from historical or current use of the parcels in the immediate area of the investigation. The Limited Site Investigation concluded that no further investigation or remediation was required.

Arsenic-impacted soils are present in the soil samples collected from the site. The arsenic impacts are within regional background concentrations, except for the ASH-2 sample. Therefore, MM HAZ-1a would be implemented to test soils for arsenic and to require remediation and documentation of no further action by the San Joaquin Environmental Health Department if site soils contain hazardous levels of arsenic.

Zuriakat and Suvik Farms Parcels

Based on the findings of this assessment, including a regulatory records review of the following federal, State, and local regulatory agencies, the Zuriakat and Suvik Farms parcels were not included on any institution/engineering control databases that track activity and use limitation on properties. Therefore, impacts related to potential location on a hazardous materials site and, thus, creating a hazard to the public or environment would be less than significant. (Draft EIR, Page 3.9-26–32).

The City finds that MM HAZ-1a and MM HAZ-1b are feasible, are adopted, and will further reduce impacts related to hazards and hazardous materials. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with hazards would be less than significant with mitigation incorporated.

1.7.5 - Hydrology and Water Quality

Potential Effect

Impact HYD-1: The proposed project could violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality (Draft EIR, Page 3.10-21).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.10-21). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

MM HYD-1a Prepare Stormwater Pollution Prevention Plan

Prior to the issuance of a grading permit, the relevant applicant for each individual development proposal within the project site shall submit a draft of the Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) in connection with its individual development proposal pursuant to the then-applicable Multi-Agency Post-Construction Stormwater Standards Manual at the time the relevant grading permit is submitted. After City approval of the relevant grading permit, the relevant NOI and SWPPP shall be sent to the California State Water Resources Control Board (State Water Board) for approval. Approval by the State Water Board is a prerequisite for issuance of the relevant grading permit by the City. The SWPPP shall address stormwater management during each phase of construction of the relevant individual development proposal. Best Management Practices (BMPs) shall be integrated into the relevant SWPPP as identified by the City of Tracy, which will result in the reduction or elimination of pollutants in stormwater discharges and the stabilization of BMPs to reduce or eliminate pollutants after construction of the relevant individual development proposal is completed. The relevant SWPPP shall be consistent with the applicable Regional Water Quality Control Board (RWQCB) standards and National Pollutant Discharge Elimination System (NPDES) permit requirements to protect water quality over the period of construction of the relevant individual development proposal.

MM HYD-1b Prepare Stormwater Management Plan

Prior to the issuance of a grading permit, the relevant applicant for each individual development proposal within the project site shall prepare a Stormwater Management Plan in connection with its individual development proposal for review and approval by the City of Tracy. The relevant Storm Water Management Plan (SWMP) shall include two fundamental components: (1) treatment for pollutants collected in stormwater using Low Impact Development (LID) measures, and (2) no net increase in the erosion potential of the receiving stream over the pre-project (existing) condition. All LID treatment measures would be required to be designed in accordance with applicable engineering criteria in the then-applicable Multi-Agency Post-Construction Stormwater Standards Manual. Implementation of the relevant SWMP would require the preparation of a clearly defined Operations and Maintenance (O&M) Plan by the relevant applicant in connection with its development proposal to ensure that installed stormwater treatment measure(s) and hydromodification management control(s) are inspected and properly operated and maintained for the life of the relevant individual development proposal.

Facts in Support of Findings: Construction activity would expose soils to potential erosion, and to potential pollutants related to the use of construction equipment. Runoff from graded areas could carry eroded soils and pollutants into the storm drainage systems and into the Old River and

eventually the San Joaquin River, increasing sedimentation, degrading downstream water quality, and potentially affecting the groundwater table. The proposed project would be required to comply with all applicable laws and regulations including the terms of the Construction General Permit, which require the preparation and implementation of a SWPPP that includes BMPs to ensure reduction of pollutants from construction activities that could potentially enter surface waters as required by MM HYD-1a. Additionally, implementation of the SWPPP would also prevent pollutants from entering the Tracy Subbasin by requiring the inclusion of BMPs, such as the use of biofiltration swales and bioretention basins, that would prevent pollutants from moving off-site through the treatment of stormwater on-site. The intention would be to keep all products of erosion from moving off-site into receiving waters by treatment on-site. Furthermore, compliance with Chapter 11.34 of the Municipal Code would ensure that each applicant, in connection with its respective individual development proposal, implements the BMPs contained in the relevant SWPPP which would be verified by a City inspector during the construction period. Compliance with applicable policies, laws and regulations would minimize the potential to degrade water quality in downstream water bodies to the maximum extent feasible.

During operation, the proposed project would result in new impervious surfaces compared to existing conditions that would in turn generate stormwater runoff, which may carry pollutants such as pesticides, fertilizers, and deposits of fluids and metals from motor vehicles into the Old River or allow seepage of such pollutants into the associated groundwater table. The proposed project would be subject to applicable C.3 requirements, which includes implementation of a SWMP applicable to the proposed project's design and post-project O&M. Two fundamental components are associated with the SWMP: (1) treatment for pollutants collected in stormwater using Low Impact Development (LID) measures, and (2) no net increase in the erosion potential of the receiving stream over the pre-project (existing) condition. All LID treatment measures would be required to be designed in accordance with applicable engineering criteria in the Multi-Agency Post-Construction Stormwater Standards Manual. Implementation of the SWMP would require the preparation of a clearly defined Operations and Maintenance (O&M) Plan to ensure that installed stormwater treatment measure(s) and hydromodification management control(s) are inspected and properly operated and maintained for the life of the project. The preparation, approval, and implementation of a SWMP is included as MM HYD-1b.

The primary treatment control measure would be the proposed project's on-site stormwater detention basin with a pump station that would be owned and managed by the City. Following Phase 1, each subsequent applicant for its respective individual development proposal within the project site would be required to confirm that the proposed project's on-site stormwater detention basin and bioretention treatment areas could accommodate project flows to the satisfaction of the City and that post-development stormwater flow rates would not substantially exceed predevelopment rates pursuant to the applicable C.3 requirements. The proposed project's on-site stormwater detention basin would be required to comply with applicable provisions of the Multi-Agency Post-Construction Stormwater Standards Manual which identifies BMPs to control the potential pollutant load of stormwater runoff. Additionally, Chapter 11.32 of the Municipal Code requires each applicant for its respective individual development proposal within the project site to pay applicable stormwater impact fees in connection with their respective development proposals, which would

ensure the operation, maintenance, and replacement of existing and future stormwater facilities. Each applicant for its respective individual development proposal within the project site would be required to prepare a clearly defined O&M Plan in connection with its respective individual development proposal to ensure that installed stormwater treatment measures and hydromodification management controls are inspected and properly operated and maintained for the life of the relevant individual development proposal (Draft EIR, Page 3.10-21–23).

The City finds that MM HYD-1a through MM HYD-1b are feasible, are adopted, and will further reduce impacts related to water quality standards or water quality. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with hydrology and water quality would be less than significant with mitigation incorporated.

Potential Effect

Impact HYD-3: The proposed project could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site;
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
iv. impede or redirect flood flows? (Draft EIR, Page 3.10-30).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.10-30). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM HYD-1a and MM HYD-1b

MM HYD-3 Prepare Final Drainage Plan Prior to Grading

Each applicant for an individual development proposal within the project site shall, in connection with the relevant individual development proposal:

- Comply with all applicable rules, regulations, and procedures of the National Pollutant Discharge Elimination System (NPDES) for municipal, construction and industrial activities as promulgated by the California State Water Resources Control Board (State Water Board), or any of its Regional Water Quality Control Boards (RWQCBs).

- Submit a Final Stormwater Control Plan and a Stormwater Control Operations and Maintenance Plan (O&M Plan) to the City of Tracy Public Works and Community Development Department, which shall be reviewed for compliance with the County's National Pollutant Discharge Elimination System (NPDES) Permit and shall be determined consistent with the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.34 of the Municipal Code, Ordinance 1072) prior to issuance of a grading permit for the relevant individual development proposal. Improvement Plans shall be reviewed to verify consistency with the relevant Final Stormwater Control Plan and compliance with Provision C.3 of the City's NPDES Permit and the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.34 of the Municipal Code, Ordinance 1072).
- Prior to issuance of grading permits for each relevant individual development proposal, the relevant applicant shall submit a Final Drainage Plan in connection with the relevant individual development proposal that incorporates the measures included in the Flood Protection Technical Memorandum. The City of Tracy Public Works and Community Development Department shall review the relevant Final Drainage Plan to ensure it is in compliance with all applicable requirements and standards, including the recommendations provided in the Flood Protection Technical Memorandum and in the Citywide Storm Drainage Master Plan in effect at the time building permits are issued, to reduce risk related to flooding within a designated floodplain. The relevant Final Drainage Plan shall be reviewed by City of Tracy Public Works and Community Development Department staff to ensure that all building minimum floor elevations for the relevant development proposal are at 26 feet or 1 foot above the maximum flood elevation and will accommodate the 200-year storm event as detailed in the Flood Protection Technical Memorandum. In addition, the on-site stormwater detention basin shall be designed in accordance with the recommendations provided in the Flood Protection Technical Memorandum and in accordance with the Citywide Storm Drainage Master Plan in effect at the time building permits are issued. Additionally, the relevant Final Drainage Plan shall determine if discharge of pre-project runoff rates and/or volumes into the Tom Paine Slough drainage area can continue after project construction pursuant to applicable standards and requirements. Should the relevant Final Drainage Plan determine it is feasible to discharge some runoff (possibly up to the pre-project runoff volume) into the existing downstream system, this design shall be submitted to the City of Tracy as part of the relevant Final Drainage Plan for review and approval.

Facts in Support of Findings

Construction-related Erosion and Siltation

The project site is not located adjacent or near any creek beds and the proposed project does not propose any alteration to a stream, creek bed, or river. Construction activity could result in substantial erosion or siltation due to a drainage pattern alteration and could therefore result in

polluted runoff entering the City's stormwater drainage system and the Old River. This would represent a potentially significant impact. However, the proposed project would be required to implement a SWPPP as part of its Construction General Permit, pursuant to MM HYD-1a. The SWPPP is designed to ensure that erosion and siltation are prevented or minimized to the maximum extent feasible during construction through the implementation of standard BMPs. Consistent with Chapter 11.34 of the Municipal Code, each applicant for an individual development proposal within the project site would be required to implement the BMPs contained in the relevant SWPPP in connection with the relevant individual development proposal, which would be verified by a City inspector during the construction period. Pursuant to the relevant Storm Drainage Master Plan (SDMP) in effect at the time building permits are requested, the SWPPP would include a construction site monitoring program that demonstrates the site is in compliance with the Construction General Permit; therefore, the proposed project would also be required to adhere to this monitoring program mandate. Compliance with applicable policies, laws and regulations would minimize the potential to increase sedimentation or siltation to the maximum extent practicable.

Operation-related Erosion and Siltation

Development of the project site would increase impervious surfaces compared to existing conditions. Thus, project operation could result in increased amounts of stormwater runoff that could carry pollutants into Old River and ultimately San Joaquin River. The proposed project would include an on-site stormwater detention basin with pump station that would be designed pursuant to all applicable standards and requirements to treat stormwater on-site and prevent erosion and siltation from increasing pollutant loads in the stormwater system and Old River. With respect to the Tracy Alliance parcels, bioretention treatment areas would be constructed around the proposed buildings and would also be interspersed throughout the parking lots. Stormwater that would be collected in the bioretention treatment areas would either evaporate or infiltrate through a bioretention filter into surrounding soils. The proposed project would be required to comply with the City of Tracy NPDES program, SWMP, and all relevant provisions of the Municipal Code related to stormwater pollution. The proposed project would be required to implement MM HYD-3 that would require each applicant for an individual development proposal within the project site to prepare a Final Drainage Plan in connection with the relevant individual development proposal prior to site grading, for review and approval by the City. Each Final Drainage Plan would be required to abide by the Multi-Agency Post-Construction Stormwater Standards Manual and require the incorporation of BMPs such as those described above, prior to discharging stormwater off-site. Through adherence to applicable policies, standards, and requirements and implementation of MM HYD-3, the proposed project's operation would not substantially increase erosion or siltation.

Operation-related Surface Runoff

Impacts related to the potential for the proposed project to increase the rate or amount of surface runoff resulting in flooding are limited to operational impacts. The proposed project's increase in impervious surfaces is accounted for in the design of the proposed project's on-site stormwater detention basin with pump station, which would ensure that post-project flows do not exceed pre-project flows in accordance with applicable C.3 requirements. Therefore, operation of the proposed project would not result in any increase in flooding on or off-site. The proposed project includes an on-site stormwater detention basin designed to reduce runoff volume and pollutants from the

project site from entering the City stormwater drainage system or waterways, in accordance with Provision C.3 in the Municipal Regional Permit as implemented by the Central Valley RWQCB.

Construction-related Exceedance of Storm Drain Capacity

The proposed project could increase stormwater runoff generation, which could potentially lead to flooding on or off-site. However, each applicant for an individual development proposal would be required to implement a SWPPP as part of its Construction General Permit, as required by MM HYD-1a. The SWPPP is designed to ensure that stormwater generation and pollutants are prevented or minimized to the maximum extent feasible during construction through the implementation of standard BMPs. Consistent with Chapter 11.34 of the Municipal Code, each individual development proposal within the project site would be required to implement the BMPs contained in the relevant SWPPP in connection with the relevant individual development proposal, which would be verified by a City inspector during the construction period.

Operation-related Exceedance of Storm Drain Capacity

The existing stormwater sheet flows from the site to the northeast toward I-205 and into Pescadero Irrigation District facilities; this stormwater does not currently enter into a City-maintained facility. The proposed project would install an on-site stormwater detention basin with a pump station along the northeast site boundary that would be owned and managed by the City. Bioretention treatment areas would be located around the buildings on the Tracy Alliance parcels and would also be interspersed throughout the parking lots. Stormwater that would be collected in the bioretention treatment areas would either evaporate or infiltrate through a bioretention filter into surrounding soils. Though the bioretention treatment areas for Suvik Farms and Zuriakat parcels are not currently known, each applicant for an individual development proposal on the foregoing parcel(s) would also have to prepare a Final Drainage Plan (similar to the applicant for the Tracy Alliance parcels) upon submittal of a development application that would be required to abide by the Multi-Agency Post-Construction Stormwater Standards Manual and require the incorporation of BMPs.

Proposed bioretention treatment areas would be required to be designed to reduce runoff volume entering the City stormwater drainage system or waterways, in accordance with Provision C.3 in the Municipal Regional Permit as implemented by the Central Valley RWQCB, and all other applicable standards and requirements. In addition, the proposed project would be required to comply with the City of Tracy NPDES program, SWMP, and all relevant provisions of the Municipal Code related to stormwater pollution, including the provision of appropriately sized bioretention areas for pretreatment of stormwaters in accordance with C.3 guidelines. Furthermore, implementation of MM HYD-3 would ensure that stormwaters are collected and conveyed in accordance with Chapter 11.34 of the Municipal Code. MM HYD-3 would also ensure that the proposed project complies with applicable regulations of the NPDES permit, and that each applicant for an individual development proposal within the project site prepares and submits a Final Storm Water Control Plan and Stormwater Control O&M Plan. These plans would prevent pollutants from moving off-site through the treatment of stormwater on-site.

Operation-related Impacts to Flood Flows

Impacts related to impedance of flood flows would only occur during the operational phase of the proposed project. The project site could be subject to flooding in the event of a levee failure along the San Joaquin River or Paradise Cut, which is a distributary of the San Joaquin River. The levees along the San Joaquin River and Paradise Cut near the City do not currently meet Federal Emergency Management Agency (FEMA) criteria for Urban Level of Flood Protection (ULOP). Therefore, the analysis to determine the flood levels must consider failure of the levees along the river.

The 200-year flood levels at the project site would be virtually the same as the FEMA 100-year flood levels, which is estimated to be 24 feet. Maximum flood depths at the project site would be controlled by existing ground elevations of tributaries of the San Joaquin River, including Old River and Sugar Cut Channel, which would influence potential flows to the project site. Because the ground elevations around the southern end of the Sugar Cut Channel (21.2 feet) are greater than the projected 200-year flood elevation in the Old River (estimated at 17 feet), flood flows would be limited to existing drainage channels. The Flood Protection Technical Memorandum concluded that a levee breach at the Paradise Cut would result in 200-year flood elevations of at most 24 feet on the project site, which is similar to the 100-year flood elevation. Consequently, the Flood Protection Technical Memorandum determined it would be reasonable to plan for a 200-year flood elevation of 25 feet and all new structures within the project site would need to have a lowest finished floor elevation at least one foot, 26 feet, above the 200-year flood level associated with levee failure. The same minimum finished floor elevation would apply to all portions of the proposed project. Implementation of MM HYD-3 would require each applicant for individual development proposals within the project site to prepare a Final Drainage Plan in connection with the relevant individual development proposal prior to site grading to ensure that all relevant project buildings are built at a minimum finished floor elevation of 26 feet (i.e., 8.5 feet higher than the existing lowest ground elevation of 17.5 feet) and all measures and recommendations included in the Flood Protection Technical Memorandum are included in the project design. MM HYD-3 would ensure the proposed project is consistent with applicable provisions of the City's Municipal Code (Title 9 Building Regulations, Chapter 9.52 Floodplain Regulations), which requires that all new construction and substantial construction pertaining to buildings have the lowest floor, including basement, elevated to or above the base flood elevation.

The proposed project's on-site stormwater detention basin would be located within a known flood hazard zone. The City of Tracy Design Standards (City's Design Standards) requires basins to be emptied within 10 days. The proposed project's on-site stormwater detention basin would need to drain at 3 cubic feet per second (cfs) to fulfill this requirement.

The 100-year floodplain impacts on the project site would only result from the unlikely event of a levee failure along the San Joaquin River or Paradise Cut. Furthermore, the volume of the breach flow would need to be sufficient to inundate over 10 square miles prior to flows reaching the project site, which is an extreme and unlikely event. If flood flows reached the project site, they would fill available storage in the proposed project's on-site stormwater detention basin below the flood level and any additional flood flow volumes would be pumped into the Eastside Channel. The Flood Protection Technical Memorandum determined that it would not matter if the proposed project's

on-site stormwater detention basin contained sufficient capacity in the event of regional flooding because runoff upstream from the project site would not make flooding worse and the impact of additional stormwater volumes being pumped into the Eastside Channel would be less than significant.

MM HYD-3 would require the proposed project's on-site stormwater detention basin to be designed in accordance with, and meet the applicable objectives, standards and requirements set forth in the Citywide SDMP in effect at the time building permits are requested for the relevant individual development proposal.

The Flood Protection Technical Memorandum notes that unlike most other areas of the City, the location of the proposed project's on-site stormwater detention basin has a defined existing conveyance downstream from it. Although it may be reasonable to pump all of the increased runoff from the area tributary to the proposed project's on-site stormwater detention basin into the City's Eastside Channel drainage system, it may be feasible to discharge some runoff (possibly up to the pre-project runoff volume) into the existing downstream system. Any allowable discharge into the Tom Paine Slough system could reduce the capacity required for the proposed project's on-site stormwater detention basin. This design-level review would be completed as part of the Final Drainage Plan for each individual development proposal as required in MM HYD-3. Pursuant to the foregoing and with the applicants' compliance with all other applicable laws and regulations including designing the proposed project's on-site stormwater detention basin and all structures on-site consistent with City's Design Standards, recommendations provided in the Flood Protection Technical Memorandum, performance standards included in the Citywide SDMP in effect at the time building permits are requested, and implementation of MM HYD-3, impacts related to impedance of flood flows would be less than significant with mitigation incorporated (Draft EIR, Page 3.10-30–36).

The City finds that MM HYD-1a, MM HYD-1b, and MM HYD-3 are feasible, are adopted, and will further reduce impacts related to existing drainage patterns and hydrologic resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with hydrology would be less than significant with mitigation incorporated.

Potential Effect

Impact HYD-4: The proposed project would be located in a flood hazard zone, tsunami, or seiche zone, or risk release of pollutants due to project inundation (Draft EIR, Page 3.10-37).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.10-37). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM HYD-3.

Facts in Support of Findings: In the event of a levee failure along the San Joaquin River or Paradise Cut, which is a distributary of the San Joaquin River, sufficient to inundate over 10 square miles prior to flows reaching the project site, the project site could be inundated as it is located within a flood hazard zone as determined by FEMA. To address potential inundation, compliance with MM HYD-3 and applicable provisions of the City's Municipal Code (Title 9 Building Regulations, Chapter 9.52 Floodplain Regulations) would require each applicant for individual development proposals within the project site to submit a Final Drainage Plan in connection with the relevant individual development proposal that incorporates the recommendations included in the Flood Protection Technical Memorandum and project-specific Hydrology Study. Additionally, the relevant Final Drainage Plan shall determine if discharge of pre-project runoff rates and/or volumes into the Tom Paine Slough drainage area can continue after project construction pursuant to applicable standards and requirements. Should the relevant Final Drainage Plan determine it is feasible to discharge some runoff (possibly up to the pre-project runoff volume) into the existing downstream system, this design shall be submitted to the City as part of the relevant Final Drainage Plan for review and approval. These improvements would ensure that the proposed project would not be subject to a substantial risk of inundation and drainage would be improved such that the proposed project would not be at significant risk of pollutant release.

The project site is not located near the ocean and would not be susceptible to inundation from a tsunami. The project site is not located near a large, enclosed body of water and is not susceptible to inundation from a seiche (Draft EIR, Page 3.10-37–38).

The City finds that MM HYD-3 is feasible, is adopted, and will further reduce impacts related to potential inundation and hydrologic resources. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with hydrology would be less than significant with mitigation incorporated.

Potential Effect

Impact HYD-5: The proposed project could conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan (Draft EIR, Page 3.10-38).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.10-38). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM HYD-1a.

Facts in Support of Findings: The proposed project would not conflict with the City's NPDES program. Given that construction for the proposed project would disturb more than one acre of land, the proposed project would be required to comply with the terms of the Construction General Permit, which would require the preparation and implementation of SWPPPs in connection with each individual development proposal within the project site, which would include BMPs to ensure reduction of pollutants from construction activities potentially entering surface waters in accordance with MM HYD-1a.

The project site is located within the San Joaquin Hydrologic Basin Planning Area under the jurisdiction of the Central Valley RWQCB. The proposed project would be required to comply with applicable goals and policies as set forth by the Central Valley RWQCB. The Tracy Regional Groundwater Management Plan (GMP) is the sustainable GMP that would govern development that occurs on the project site. As described in Impact HYD-2, the project site is located within the boundaries of the Tracy Subbasin and has limited potential to adversely impact groundwater recharge rates due to existing poorly drained soils and shallow groundwater levels. Annual groundwater use within the City's service area is anticipated to be 2,500 AFY. This anticipated future groundwater pumpage is significantly below the City's maximum historical groundwater pumpage and the average annual operational yield of 9,000 AFY, and the proposed project would not significantly decrease groundwater supplies because the design of the proposed project's on-site stormwater detention basin includes filters to remove sediments and organic materials that might further reduce groundwater percolation rates. Given that the City has determined it would have adequate groundwater supplies to serve the project site, the proposed project would not conflict with or obstruct implementation of the relevant water quality control plan or the relevant sustainable GMP (Draft EIR, Page 3.10-38–39).

The City finds that MM HYD-1a is feasible, is adopted, and will further reduce impacts related to hydrology. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with hydrology would be less than significant with mitigation incorporated.

1.7.6 - Noise

Potential Effect

Impact NOI-2: The proposed project could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (Draft EIR, Page 3.12-18).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.12-25). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Improvement Mitigation Measures

IMM NOI-2 To reduce potential construction noise impacts, the following multi-part Improvement Mitigation Measure (IMM) shall be implemented for the project:

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary operational noise-generating equipment as far as feasible from sensitive receptors when sensitive receptors adjoin or are near a construction area. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site to the extent feasible.
- Utilize "quiet" air compressors and other stationary operational noise sources where such technology exists and is commercially practicable.
- The construction contractor shall prohibit unnecessary idling (i.e., idling in excess of 5 minutes) of internal combustion engines.
- The construction contractor shall, to the maximum extent practicable, locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- The construction contractor shall ensure that all construction activities that would occur within 550 feet of a residential land use property line shall be limited to daylight hours or to the hours of 7:00 a.m. and 7:00 p.m.

Facts in Support of Findings

Construction

Noise impacts from construction activities associated with development of the proposed project would be a function of the noise generated by construction traffic, construction equipment, equipment location, sensitivity and location of nearby land uses, and the timing and duration of the construction activities. All project construction would be required to take place within the permissible hours (7:00 a.m. to 7:00 p.m.). Accordingly, no significant impact related to construction noise would occur. A discussion of the potential impacts associated with each of these types of activities is provided below for informational purposes.

Construction-related Traffic Noise

The proposed project would be required to adhere to the above-referenced construction hours and therefore no significant impact would occur. Because project construction workers and construction equipment would use existing routes, noise from passing trucks would be similar to existing vehicle-generated noise on these local roadways. In addition, these trips would not result in a doubling of daily traffic volumes on any of the local roadways in the project vicinity and would thus, as explained more fully in the EIR, not result in a perceptible change in existing traffic noise levels.

Construction Equipment Operational Noise

The proposed project would be required to adhere to the above-referenced construction hours and therefore no significant impact would occur. Each construction phase would change the character of the noise generated on-site. Thus, the noise levels vary as construction progresses. Despite the variety in the types and sizes of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction noise ranges to be categorized by work phase. The site preparation phase, which includes excavation and grading activities, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. The maximum noise level generated by each scraper is assumed to be 85 dBA maximum noise level (L_{max}) at 50 feet from this equipment. Each bulldozer would generate 85 dBA L_{max} at 50 feet. The maximum noise level generated by graders is approximately 85 dBA L_{max} at 50 feet. Each doubling of sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this step in the construction process would be 90 dBA L_{max} at a distance of 50 feet from the acoustic center of a construction area. This would result in a reasonable worst-case hourly average of 86 dBA L_{eq}.

The nearest off-site noise-sensitive receptor to the proposed construction footprint is the single-family residence located west of the proposed building in the southwest corner of the project site, which would be located approximately 150 feet from the acoustic center of construction activity. At this distance, construction noise levels at the exterior façade of this nearest residential home would be expected to range up to approximately 80 dBA L_{max}, with a reasonable worst-case hourly average of approximately 76 dBA L_{eq}, intermittently.

The closest receptor to the eastern portions of the project site where anticipated project development would occur is the single-family residence located southeast of the project site. This receptor would be located approximately 95 feet from the nearest potential construction footprint where multiple pieces of heavy machinery would operate simultaneously. At this distance, construction noise levels at the exterior façade of this residential home would be expected to range up to approximately 84 dBA L_{max}, with a reasonable worst-case hourly average of approximately 80 dBA L_{eq}, intermittently.

The closest receptor to the northern portions of the project site where future project development would occur is the single-family residence located north of the project site. This receptor would be located approximately 130 feet from the nearest potential construction footprint where multiple pieces of heavy machinery would operate simultaneously. At this distance, construction noise levels at the exterior façade of this nearest residential home would be expected to range up to approximately 82 dBA L_{max}, with a reasonable worst-case hourly average of approximately 78 dBA L_{eq}, intermittently.

All of these reasonable worst-case construction noise levels would be required to occur only during permissible work hours, would be intermittent, and would be reduced as equipment moves over the project site further from sensitive receptors. Although there would be single event noise exposure potential causing intermittent noise nuisance from project construction activity, the effect on longer-term (hourly or daily) ambient noise levels, as measured at nearby sensitive receptors, would be

small, but could result in annoyance or sleep disturbances at nearby sensitive receptors if construction activities are not limited to daylight hours. Improvement Mitigation Measure (IMM) NOI-2, which requires compliance with the City's permissible construction hours and implementation of best management noise reduction measures would further ensure that construction noise levels would not result in a substantial temporary increase in ambient noise levels that would result in a violation of the City's applicable construction hours requirements or sleep disturbance of nearby sensitive receptors.

Operations

The proposed project would result in an increase in traffic on local roadway segments in the project vicinity. In addition, implementation of the proposed project would introduce new stationary operational noise sources to the ambient noise environment in the project vicinity, including parking lot and loading/unloading activity, and new mechanical ventilation equipment operation.

Traffic (mobile source) Noise

As shown in Table 3.12-6 of the EIR, the highest traffic noise level increase with implementation of the proposed project would occur along Paradise Avenue, under Cumulative Plus Project conditions. Along this roadway segment, the proposed project would result in an increase in traffic noise levels of 1.7 dBA over cumulative conditions without the project. The resulting noise levels for this roadway segment would be 70.9 dBA L_{dn} as measured at 50-feet from the centerline of the outermost travel lane under Cumulative Plus Project conditions. These noise levels would be considered "conditionally acceptable" under the relevant land use category. Thus, the applicable significance criteria of a 3 dBA increase would not be exceeded, and therefore the proposed project would not result in a substantial permanent increase in traffic noise levels in excess of applicable standards.

Stationary Operational Noise–Parking Lot Activities

Assuming a reasonable worst-case scenario of one parking movement for every parking stall within a single hour would result in an hourly average noise level of 59 dBA L_{eq} as measured at the project boundary adjoining other properties. These noise levels are well below the City's hourly average noise level threshold of 75 dBA L_{eq}(h). Therefore, proposed parking lot activity noise levels would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of the City's established noise performance threshold.

The nearest noise-sensitive receptor to the proposed parking areas of the western parcels is the single-family residence located west of the project site near the intersection of Grant Line Road and Paradise Avenue, which would be located approximately 180 feet from the acoustic center of the nearest parking area. At this distance, assuming a reasonable worst-case scenario of one parking movement for every parking stall every hour of the day would result in day-night average noise level of 50 dBA L_{dn} as measured at the nearest residential façade. This is well below the City's "normally acceptable" threshold of 60 dBA L_{dn} for residential land uses. This is also below the existing traffic noise levels along roadway segments adjacent to this receptor. Therefore, parking lot noise levels would not exceed existing ambient noise levels as measured at the nearest residential receptor and

would not result in a substantial permanent increase in ambient noise levels in the project vicinity above the applicable standard.

Mechanical Equipment Operations

Proposed rooftop mechanical ventilation systems would be set back by more than 50 feet from project property lines that adjoin other properties. At this distance, hourly average noise levels from operation of these systems would attenuate to below 54 dBA L_{eq} as measured at the nearest project boundary adjoining other properties. These noise levels are well below the City's hourly average noise level threshold of 75 dBA L_{eq}(h). Therefore, proposed rooftop mechanical ventilation system operational noise levels would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of the City's established noise performance threshold. The nearest noise-sensitive receptor to proposed rooftop mechanical ventilation systems on the western parcels is the single-family residence located west of the project site near the intersection of Grant Line Road and Paradise Avenue, which would be located approximately 320 feet from the nearest location where rooftop mechanical ventilation systems could be installed. At this distance, hourly average noise levels from operation of proposed ventilation systems would attenuate to below 22 dBA L_{eq} as measured at the nearest residential façade. Assuming a reasonable worst-case scenario of the ventilation system operating every hour of the day would result in day-night average noise level of 35 dBA L_{dn} as measured at the nearest residential façade. This is well below the City's "normally acceptable" threshold of 60 dBA L_{dn} for residential land uses. This is also below the existing traffic noise levels along roadway segments adjacent to this receptor. Therefore, noise levels from proposed mechanical ventilation equipment operations would not exceed existing ambient noise levels as measured at the nearest residential receptor and would not result in a substantial permanent increase in ambient noise levels in the project vicinity above the applicable standard.

Truck Loading Activities

Proposed truck loading areas would be set back more than 100 feet from the nearest project property line adjoining other properties. Assuming a reasonable worst-case scenario of a truck loading event for every proposed truck loading dock within a single hour would result in an hourly average noise level of 67 dBA L_{eq} as measured at the project boundary adjoining other properties. These noise levels are well below the City's hourly average noise level threshold of 75 dBA L_{eq}(h). Therefore, proposed truck loading activity noise levels would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of the City's established noise performance threshold. The nearest noise-sensitive receptor to the proposed truck loading areas of the western parcels is the single-family residence located west of the project site near the intersection of Grant Line Road and Paradise Avenue, which would be located approximately 400 feet from the nearest truck loading areas. At this distance, assuming a reasonable worst-case scenario of a truck loading event for every truck loading dock every hour of the day would result in day-night average noise level of 60 dBA L_{dn} as measured at the nearest residential façade. Therefore, truck loading activities would not result in an increase in noise levels at the nearest sensitive receptor in excess of 5 dBA above the City's "normally acceptable" threshold of 60 dBA L_{dn} for residential land uses. This is also below the existing traffic noise levels along roadway segments adjacent to this receptor. Therefore, truck loading noise levels would not exceed existing

ambient noise levels as measured at the nearest residential receptor and would not result in a substantial permanent increase in ambient noise levels in the project vicinity above the applicable standard (Draft EIR, Page 3.12-18–25).

The City finds that MM NOI-2 is feasible, is adopted, and will further reduce impacts related to ambient noise. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with noise would be less than significant with mitigation incorporated.

1.7.7 - Transportation and Traffic

Potential Effect

Impact TRANS-2: The proposed project could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Draft EIR, Page 3.14-33).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.14-33). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

MM TRANS-2 Prepare and Implement Construction Traffic Control Plan

Prior to the start of construction for an individual development proposal, the relevant applicant shall prepare and submit a Construction Traffic Control Plan for the individual development proposal at issue. Each plan shall include the following items. Each approved plan shall be implemented during construction of the individual development proposal at issue.

- Project staging plan to maximize on-site storage of materials and equipment.
- Permitted construction hours.
- Location of construction staging.
- Provisions for street sweeping to remove construction-related debris on public streets.
- A set of comprehensive traffic control measures including preparation of traffic control plans, as needed; scheduling of major truck trips and deliveries to avoid peak-hours; lane closure proceedings; signs, cones, and other warning devices for drivers; and designation of construction haul routes.
- Survey of the pavement condition on roadways within the relevant individual development to be used as part of haul route prior to the commencement of any work on-site. The survey shall include a video tape of the roadways. Each relevant applicant shall complete any remedial work prior to initiation of use and provide a

bond assuring completion of the remediation work triggered by the individual development proposal, the amount which shall be deemed sufficient by the Public Works Department.

- The relevant applicant shall provide a pavement analysis for those roads along the proposed haul routes or any alternate route(s) that are proposed to be utilized by hauling operation for the individual development proposal at issue. This study shall analyze the existing pavement conditions and determine what impact the hauling operation will have over the construction period of the relevant individual development. The study shall provide recommendations to mitigate identified impacts, which shall be implemented by the relevant applicant for the individual development proposal at issue.

Facts in Support of Findings: Construction of the proposed project would require regular deliveries of equipment and materials to the project site as well as daily trips by construction workers. Given the location of the project site, nearly all construction traffic would be expected to access the project site from Grant Line Road and Paradise Road via I-205. This routing would generally avoid residential streets. Project construction activities may result in some temporary lane closures in the area. However, the resulting daily and peak-hour traffic volumes during the construction period are anticipated to be less than during project operation as analyzed in the Transportation Impact Analysis (TIA). In a reasonable worst-case scenario where all three project phases overlap, it is estimated that during the highest trip generation stage of construction the total passenger car and truck trips would be 56 percent and 47 percent, respectively, of the proposed project trip generation analyzed in the TIA. Therefore, a reasonable worse-case concurrent construction of all phases would not worsen the Level of Service (LOS) more than the project LOS operational analyses analyzed in the TIA. Standard construction traffic control measures would be implemented consistent with applicable Caltrans and City policies, such as MM TRANS-2, which would require the preparation and implementation of a Construction Traffic Control Plan that would reduce the potential for construction vehicle conflicts with other roadway users. Construction-related impacts would be less than significant with mitigation.

At operation, primary vehicle access to the project site would be provided from four access points on Grant Line Road and four access points on Paradise Road; the northerly access point along Paradise Road would be for EVA only. A new signalized intersection on Grant Line Road would provide access to a New Private Drive that would facilitate on-site circulation for the warehouses and distribution and related uses on the Tracy Alliance parcels as well as access to the Suvik Farms and Zuriakat parcels, as shown in Exhibit 2-7a in the Project Description. The New Private Drive, located along the Tracy Alliance parcels' eastern boundary, would also provide access to the detention basin area. Since no individual development proposal(s) for either the Suvik Farms and Zuriakat parcels have been submitted to the City as of the writing of the EIR, the exact location(s) of access points from the New Private Drive to the Suvik and Zuriakat parcels have not been identified at this time. Therefore, for purposes of this analysis, this evaluation assumes that a driveway would be placed at the Banta Road intersection and opposite other existing driveways to the south.

Entrances and roadways providing access to the proposed project would be required to be in compliance with applicable provisions of the City's Fire Code and other applicable laws and regulations as well as relevant conditions of approval, and would thus operate at acceptable service levels. Furthermore, the proposed roadway improvements would increase roadway safety by being designed according the applicable City of Tracy, Caltrans, and industry standards.

Section 3.08.290 of the Tracy Municipal Code establishes truck routes throughout the City, restricting vehicle routes within the City for vehicles with a gross vehicle weight of 5 tons or more or that are licensed commercially as a truck in the state of origin and used for carrying goods for pickup and delivery. Vehicles meeting either of these criteria would be restricted to specific truck routes and designated streets, except when necessary.

Larger trucks are called Surface Transportation Assistance Act (STAA) vehicles. The NEI Specific Plan includes the construction of new truck route signage to direct trucks toward truck routes, the conversion of Grant Line Road to a STAA route, and the construction of new STAA routes in the project vicinity. These improvements would further improve roadway safety by providing appropriate and adequate roadway infrastructure for the trucks that would access the project site. As a result, existing and planned roadways would be able to support proposed STAA trucks that would access the project site consistent with applicable provisions of the Municipal Code (Draft EIR, Page 3.14-33–35).

The City finds that MM TRANS-2 is feasible, is adopted, and will further reduce impacts related to design features and uses of the proposed project. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Additionally, to further ensure safe transit and address concerns regarding truck traffic through the Banta community located east of the project site, the project applicants voluntarily agreed to implement signage along the project frontage on Grant Line Road to deter trucks from traveling on Grant Line Road east of the project site. The project applicant also voluntarily agreed to implement routine communications between property managers and tenants to ensure tenant understanding that trucks accessing the project site are prohibited from using Grant Line Road east of the project site. These measures will be incorporated as enforceable conditions of approval (see updated MMRP) and would further improve roadway safety by limiting truck traffic. Therefore, impacts associated with transportation would be less than significant with mitigation incorporated.

1.7.8 - Tribal Cultural Resources

Potential Effect

Impact TCR-1: The proposed project could cause a substantial adverse change in the significance of a Tribal Cultural Resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). (Draft EIR, Page 3.15-13).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.15-13). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measure

Implement MM CUL-1 and MM CUL-3.

Facts in Support of Findings: Review of the CRHR, local registers of historic resources, a records search conducted at the South Central Coastal Information Center (SCCIC), and an NAHC Sacred Lands File search failed to identify any listed tribal cultural resources that may be adversely affected by the proposed project. While it is possible that potentially eligible tribal cultural resources may be encountered during project construction, implementation of MM CUL-1 and MM CUL-3 would reduce potential impacts to a less than significant level. Impacts are limited to construction (Draft EIR, Page 3.15-13).

The City finds that MM CUL-1 and MM CUL-3 are feasible, are adopted, and will further reduce impacts related to Tribal Cultural Resources (TCRs). Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with TCRs would be less than significant with mitigation incorporated.

Potential Effect

Impact TCR-2: The proposed project could cause a substantial adverse change in the significance of a Tribal Cultural Resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. (Draft EIR, Page 3.15-14).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.15-14) Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM CUL-1 and MM CUL-3.

Facts in Support of Findings: On March 31, 2020, a letter was sent to the NAHC. A response was received on April 2, 2020, indicating the search returned negative results for TCRs in the project study area and recommended contacting tribal representatives for additional information. The NAHC response letter included a list of two tribal representatives available for consultation. FirstCarbon Solutions (FCS) sent a letter containing project information and requesting any additional information was sent to each of the tribal representatives on April 2, 2020.

On April 15, 2020, the City of Tracy Department of Development Services notified applicable tribal representatives of an opportunity to consult on the project pursuant to SB 18 (California Government Code § 65352.3). No responses have been received to date. The City of Tracy has not identified any known TCRs with respect to the project site. Although there is the possibility that previously undiscovered TCRs could be encountered by subsurface earthwork activities associated with the proposed project, the implementation of construction mitigation measures MM CUL-1 and MM CUL-3 would ensure that undiscovered TCRs are not adversely affected. Impacts are limited to construction. (Draft EIR, Page 3.15-14).

The City finds that MM CUL-1 and MM CUL-3 are feasible, are adopted, and will further reduce impacts related to TCRs. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with TCRs would be less than significant with mitigation incorporated.

Cumulative Impact

The proposed project's cumulative impacts related to TCRs would be less than significant with mitigation incorporated. (Draft EIR, Page 3.15-15).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.15-15). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM CUL-1 and MM CUL-3.

Facts in Support of Findings: The geographic scope for the cumulative analysis is the project vicinity. The cumulative setting includes existing agricultural and industrial uses and projects within a 0.5-mile radius of the project site. Compliance with federal and State laws and regulations and relevant General Plan policies requiring standard conditions of approval for all cumulative projects and measures (similar to those imposed on the project, i.e., MM CUL-1 and CUL-3) would reduce potentially cumulative impacts related to TCRs to a less than significant level. Implementation of construction mitigation measures (MM CUL-1 and MM CUL-3) would ensure that the project's contribution to the less than significant cumulative impact to undiscovered TCRs would not be cumulatively considerable. (Draft EIR, Page 3.15-14–15).

The City finds that MM CUL-1 and MM CUL-3 are feasible, are adopted, and will further reduce cumulative impacts related to TCRs. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, cumulative impacts associated with TCRs would be less than significant with mitigation incorporated.

1.7.9 - Utilities and Service Systems

Potential Effect

Impact UTIL-1: The proposed project would require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (Draft EIR, Page 3.16-33).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.16-33) Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

MM UTIL-1a Adherence to Applicable Performance Standards and Payment of Infrastructure Fees

Prior to the issuance of building permits for an individual development proposal, the relevant applicant shall demonstrate compliance of the individual development proposal at issue with applicable performance standards pursuant to the then-current Urban Water Management Plan, Citywide Water System Master Plan, Wastewater Master Plan, and Citywide Storm Drainage Master Plan. In addition, each applicant for an individual development proposal shall pay its respective proportionate share of required funding, subject to applicable laws governing nexus requirements, to the City for completion of relevant planned City Capital Improvement Plan improvements.

MM UTIL-1b Submittal of Final Engineering Plans for Tracy Alliance Parcels

Prior to the issuance of the building permit for the first building on the Tracy Alliance parcels, the applicants for the development of the Tracy Alliance parcels shall submit engineering plans to the City of Tracy for review and approval to confirm compliance with this MM UTIL-1b. These plans shall include additional 12-inch diameter pipelines on-site as shown on Exhibit 3.16-6 of the EIR and the fire service laterals shall be upsized to 14-inch diameter.

MM UTIL-1c Submittal of Final Engineering Plans for Suvik Farms and Zuriakat Parcels

Prior to the issuance of the building permit for the first building on the subject parcel, each relevant applicant for the individual development proposal of the Suvik Farms or Zuriakat parcels, respectively, shall each submit final engineering plans to the City of Tracy for review and approval to confirm compliance with the relevant performance standards, including, but not limited to, those pursuant to the current Urban Water Management Plan, Citywide Water System Master Plan, Wastewater

Master Plan, and Citywide Storm Drainage Master Plan in effect at the time building permits are requested.

MM UTIL-3 Payment of Wastewater Infrastructure Fees/Construction of Wastewater Facilities

Prior to the issuance of the first building permit for the subject individual development proposal, the relevant applicant shall participate in the implementation of the Wastewater Master Plan (WWMP) in effect at the time the relevant building permit is requested through the payment of the applicable impact fees as included in the City's Capital Improvement Plan.

Facts in Support of Findings

Water

During construction, because construction would require a minimal, limited quantity of water, it is reasonable to conclude that the City would have adequate water supply capacity to serve construction demands in addition to its other existing commitments, and new or expanded entitlements in connection with augmenting the City's water supply would not be necessary. Potential construction impacts related to expansion of existing water infrastructure are included in the construction analyses throughout this Draft EIR. There are no additional impacts associated with the construction or expansion of water infrastructure.

Regarding operation, the City currently has sufficient storage capacity in Zones 1 and 2 to meet the needs of the proposed project. With future planned projects implemented, water supply is sufficient during normal years. However, during a single dry year or a multiple dry year period, the City must depend more heavily on conservation efforts, groundwater, and the proposed future supply projects, described in more detail below, to overcome the gap between supply and demand. As described in the Water Supply Assessment (WSA) and the 2020 UWMP, these findings are primarily due to projected reduced reliability of the City's CVP supplies and South San Joaquin Irrigation District (SSJID) supplies in dry years. During multiple dry years, the City anticipates increasing its groundwater production on a short-term basis from the normal year production of 2,500 AFY to 4,500 AFY. The groundwater supply is considered to be 100 percent reliable. To close any gap between supply and demand during dry years, the City would need to implement its Water Shortage Contingency Plan to reduce water demands. As discussed in Section 5.3 in the WSA, the City has shown that it can achieve its water conservation goals. During the 2012-2016 Statewide drought, the City exceeded its water conservation goal of 25 percent. Further, the City must fully implement its proposed future water supply projects, including the Recycled Water Distribution Network and Exchange Program and expansion of the ASR Program. Investments in wet year water supplies will also be needed to refill storage in Semitropic and expand the City's ASR Program. Delays in implementing the proposed future water supply projects could result in greater water supply shortages and the need for additional water conservation to meet demands. The City has developed several strategies and actions to address the projected supply shortfalls. The identified improvements to the recycled water infrastructure as part of the Recycled Water Distribution Network and Exchange Program have been incorporated into the City's Capital Improvement Plan (CIP). Each applicant for development of individual proposals for any of the parcels within the project

site would be required to pay applicable development impact fees to ensure they each provide their respective proportionate share of required funding to the City for the completion of the water infrastructure improvements (which includes recycled water infrastructure) as required by MM UTIL-1a. In addition, each applicant for development of individual proposals for any of the parcels within the project site would be required to pay applicable development impact fees to ensure they each provide their respective proportionate share of required funding to the City for the acquisition, treatment, and delivery of treated potable and recycled water supplies to the project site.

Under peak-hour demand conditions, the City's existing water system infrastructure can provide adequate flows and pressures to the proposed project and adjacent sites in the NEI Specific Plan area. Under maximum day demands plus fire flow conditions, the distribution system can deliver fire flows to the proposed project while maintaining 20 psi residual pressure, but the 12-inch diameter dead-end pipeline in Grant Line Road has a velocity exceeding 12 feet per second. Pursuant to MM UTIL-1b, each applicant for individual development proposals within the project site would be required to provide final engineering plans to the City that include 12-inch diameter pipelines on-site, as shown on Exhibit 3.15-5, and upsized fire service lateral pipelines for review and approval. With implementation of this mitigation measure, the proposed project would meet the City's pipeline velocity criteria.

Wastewater

During construction, the WWTP would treat wastewater generated by construction of the proposed project consistent with applicable standards established by the Central Valley RWQCB. As discussed under Impact UTIL-3, the WWTP would have sufficient capacity to serve the proposed project (both construction and operation) and a new or expanded wastewater treatment facility would not be required. The proposed project is anticipated to include connections to the existing City sanitary sewer system operated by the Public Works Department. Since no individual development proposals have been submitted to the City for either the Suvik Farms or Zuriakat parcels at this time, the exact location and sizing of an on-site sanitary sewer system is not currently known. Rather, this information would be identified and reviewed by the City as part of subsequent engineering and related plans when individual development applications are submitted for these parcels; all proposed infrastructure in connection with these applications would be required to meet all applicable standards and requirements. These parcels are within the City's SOI and were planned for as industrial sites by the City. Potential construction impacts related to construction or expansion of wastewater infrastructure are included in the construction analyses throughout the EIR. There are no additional impacts associated with the construction or expansion of wastewater infrastructure.

At operation, the proposed project would require upgraded infrastructure and would result in an increase in wastewater generation compared to existing conditions. As discussed under Impact UTIL-3, because the City of Tracy General Plan (General Plan) designates the site as Industrial, the City has anticipated the industrial use of the project site. With the existing available capacity along with the anticipated improvements to the WWTP, there would be sufficient wastewater capacity and infrastructure facilities available to serve the proposed project. Each applicant for an individual development proposal of any of the parcels within the project site would be required to participate

in the implementation of the currently adopted WWMP through the payment of applicable impact fees as required by MM UTIL-3a.

Stormwater

During construction, the project would not result in the need for increased stormwater infrastructure improvements beyond those proposed on-site to serve the proposed project. Impacts are included in the construction analysis throughout the EIR. There are no additional impacts associated with the construction of new or expanded stormwater facilities.

During operation, the proposed project would result in a substantial increase of impervious surfaces, with a commensurate increase in stormwater runoff. The proposed project includes construction of an approximately 12.44-acre on-site stormwater detention basin with pump station on-site. The stormwater detention basin would be required to comply with applicable provisions of the Multi-Agency Post-Construction Stormwater Standards Manual which identifies BMPs to control the potential pollutant load of stormwater runoff. Additionally, Chapter 11.32 of the Municipal Code requires each applicant for its respective individual development proposal within the project site to pay applicable stormwater impact fees in connection with their respective development proposals, which would ensure the operation, maintenance, and replacement of existing and future stormwater facilities.

The proposed project would construct a 12-inch forced main storm drain line. Bioretention treatment areas would intermittently surround the buildings on the project site and would also be interspersed throughout the parking lots. Stormwater detention basins would be sized to accommodate the stormwater discharge for the Tracy Alliance parcels prior to the start of operations on the Tracy Alliance parcels. Following Phase 1, each subsequent applicant for its respective individual development proposal within the project site would be required to confirm that the proposed project's on-site stormwater detention basin and bioretention treatment areas could accommodate project flows to the satisfaction of the City and that post-development stormwater flow rates would not substantially exceed predevelopment rates pursuant to the applicable C.3 requirements. The exact location and sizing of on-site stormwater drainage facilities for the Suvik Farms and Zuriakat parcels and how they would connect to the proposed project's on-site stormwater detention basin are not currently known. However, each applicant for its respective individual development proposal within the project site would be required to prepare a clearly defined O&M Plan in connection with its respective individual development proposal to ensure that installed stormwater treatment measures and hydromodification management controls are inspected and properly operated and maintained for the life of the relevant individual development proposal. This information would be identified and reviewed as part of subsequent engineering and related plans when individual development applications are submitted for these parcels. MM UTIL-1c would require the relevant applicant for the development of the Suvik Farms and Zuriakat parcels to submit engineering plans for the parcels that are the subject to the individual development proposal at issue for review and approval by the City.

Electric Power

As discussed more fully in the Draft EIR, Section 3.6, Energy, due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, construction demand and consumption of electricity would not be significant. Potential construction impacts related to expansion of existing electrical infrastructure are included in the construction analysis throughout the EIR. There are no additional impacts associated with the construction or expansion of electrical facilities.

At operation, PG&E would provide electricity to the project site for lighting, appliances, and other associated uses. As discussed in the Draft EIR, Section 3.6, Energy, the proposed project would be required to comply with the State's then-current Title 24 energy efficiency standards. These standards contain advanced energy efficiency standards and would ensure that the proposed project would not require significant or unplanned new electrical sources. The proposed project would not require the relocation or expansion of electrical infrastructure to serve the increased demand.

Natural Gas

During construction, the proposed project would not consume natural gas. Potential construction impacts associated with the expansion of existing natural gas infrastructure are included in the construction analysis throughout the EIR. There are no additional impacts associated with the expansion of existing natural gas infrastructure.

During operation, the proposed project could utilize natural gas for heating, which would be provided by PG&E. As discussed in the Draft EIR, Section 3.6, Energy, the proposed project would be required to be designed and constructed consistent with the State's then-current Title 24 energy efficiency standards. These standards would ensure that the proposed project would not require significant or unplanned new natural gas sources. The proposed project would not require the relocation or expansion of electrical infrastructure to meet project demand.

Telecommunications

During construction, the proposed project would use telecommunications (phone and internet) for construction field services (office trailers). Implementation of the proposed project would not result in a substantial demand for service. Potential construction impacts related to expansion of existing telecommunications infrastructure are included in the construction analysis throughout the EIR. There are no additional impacts associated with extension and expansion of existing telecommunications infrastructure.

At operation, the proposed project would increase demand for internet and telephone services provided by local telecommunications providers. The building tenants/operators would coordinate with telecommunication providers in order to provide service, which have the capacity to serve project operations. The proposed project is located in an area where existing telecommunications providers already offer internet and telephone services and have sufficient capacity to meet project operational demands; therefore, the proposed project would not require the relocation or expansion of telecommunications infrastructure (Draft EIR, Page 3.16-33–56).

The City finds that MM UTIL-1a through MM UTIL-1c, and MM UTIL 3 are feasible, are adopted, and will further reduce impacts related to utilities. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with utilities and service systems would be less than significant with mitigation incorporated.

Potential Effect

Impact UTIL-2: The proposed project would have sufficient water supplies available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years. (Draft EIR, Page 3.16-56).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.16-56). Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM UTIL-1a.

Facts in Support of Findings: Impacts related to water supplies are limited to operational impacts. Water demand within the City's water service area is not expected to exceed the City's supplies at buildout under normal hydrologic conditions based on the City's existing supplies and implementation of the City's additional future planned projects. During a single dry year or a multiple dry year period, the City must depend more heavily on water conservation efforts, groundwater, and the proposed future supply projects to overcome the gap between supply and demand. Investments in wet year water supplies would also be needed to refill storage in Semitropic and expand the City's ASR Program. The identified improvements to the recycled water infrastructure as part of the Recycled Water Distribution Network and Exchange Program have been incorporated into the City's CIP. Each applicant for development of individual proposals for any of the parcels within the project site would be required to pay applicable development impact fees to ensure they each provide their respective proportionate share of required funding to the City for the completion of the necessary water infrastructure improvements (which includes recycled water infrastructure) as required by MM UTIL-1a. In addition, each applicant for development of individual proposals for any of the parcels within the project site would be required to pay applicable development impact fees to ensure they each provide their respective proportionate share of required funding to the City for the acquisition, treatment, and delivery of treated potable and recycled water supplies to the project site. (Draft EIR, Page 3.16-56–57).

The City finds that MM UTIL-1a is feasible, is adopted, and will further reduce impacts related to water supplies. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially

significant impacts as identified in the EIR. Therefore, impacts associated with water supply would be less than significant with mitigation incorporated.

Potential Effect

Impact UTIL-3: The proposed project would result in a determination by the wastewater treatment provider, which serves or may serve the proposed project, that it has adequate capacity to serve the proposed project's projected demand in addition to the provider's existing commitments. (Draft EIR, Page 3.16-57).

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, Page 3.16-57) Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines § 15091(a)(1)).

Mitigation Measures

Implement MM UTIL-3.

Facts in Support of Findings: Impacts related to adequate wastewater treatment capacity are limited to operational impacts. Because the General Plan designates the site as Industrial, the City has anticipated development of the project site with industrial uses. Each applicant for individual development proposals of any of the parcels within the project site would be required to participate in the implementation of the infrastructure improvements described in the WWMP in effect at the time building permits are requested through the payment of fees as required by MM UTIL-3. (Draft EIR, Page 3.16-57–58).

The City finds that MM UTIL-3 is feasible, is adopted, and will further reduce impacts related to wastewater. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or avoid the potentially significant impacts as identified in the EIR. Therefore, impacts associated with wastewater would be less than significant with mitigation incorporated.

1.8 - Potential Environmental Effects Which are Significant and Unavoidable

This City Council hereby finds that, despite the incorporation of all feasible mitigation measures as identified in the EIR and the attached MMRP, the following impacts from the proposed project and related approvals cannot be fully mitigated to a less than significant level and a Statement of Overriding Considerations is therefore included herein.

1.8.1 - Agriculture and Forestry Resources

Impact AG-1: The proposed project would convert Farmland pursuant to the Farmland Mapping and Monitoring Program (FMMP), to nonagricultural use.

Findings: Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR (State CEQA Guidelines § 15091(a)(1)). However, impacts would still remain significant and unavoidable even with mitigation incorporated. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measure or project alternatives identified in the EIR (State CEQA Guidelines § 15091(a)(3)).

Mitigation Measures

MM AG-1 Payment of Agricultural Mitigation Fees

At the time of issuance of building permits for each individual development proposal, the relevant applicant(s) for the subject development proposal shall pay the applicable Agriculture Mitigation Fee in accordance with Chapter 13.28 of the Municipal Code.

Facts in Support of Findings: The project site contains approximately 188 acres of Prime Farmland. Conversion of the project site to industrial use was envisioned as part of buildout under the General Plan and evaluated and disclosed under the General Plan EIR. Nevertheless, for purposes of a conservative analysis, the EIR acknowledged that the proposed project would result in the loss of Prime Farmland as a result of its conversion of Prime Farmland to urban uses. On June 7, 2005, the City Council adopted Chapter 13.28, Agricultural Mitigation Fee to its Municipal Code. In addition, the City Council adopted a resolution approving the Central Valley Farmland Trust as a qualifying agency to receive funds. This program serves as mitigation to the extent feasible for the conversion of Prime Farmland. In accordance with Chapter 13.28 of the Municipal Code, Agricultural Mitigation Fee, the developers of the Suvik Farms, Zuriakat, and Tracy Alliance parcels would each be required to pay applicable Agricultural Mitigation fees in connection with individual development proposals as implemented by MM AG-1. The proposed project would be required to comply with applicable provisions of the SJMSCP. Even with the payment of City mitigation fees and adherence to the SJMSCP, the proposed project would result in significant and unavoidable impacts related to the conversion of Farmland as identified by FMMP mapping to nonagricultural use since the foregoing would not fully avoid the impacts of this conversion (Draft EIR, Page 3.2-8–9).

The City finds that MM AG-1 is feasible, is adopted, and will reduce agricultural impacts to the extent feasible. The City further finds that no additional mitigation or project alternatives are feasible to further reduce this impact. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project that mitigate or reduce the potentially significant impacts as identified in the EIR to the extent feasible. However, impacts associated with conversion of Farmland would remain significant and unavoidable even with mitigation incorporated.

Cumulative impact: The proposed project would result in significant and unavoidable impacts with respect to agricultural resources. The proposed project would have less than significant impacts with respect to forestry resources (Draft EIR, Page 3.2-12).

Findings: Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR (State CEQA Guidelines § 15091(a)(1)). However, impacts would still remain significant and unavoidable even with mitigation incorporated. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measure or project alternatives identified in the EIR (State CEQA Guidelines § 15091(a)(3)).

Mitigation Measures

Implement MM AG-1.

Facts in Support of Findings: Much of the NEI Specific Plan area consists of Prime Farmland that has already been and would be converted to nonagricultural uses with implementation of the relevant cumulative projects, as already envisioned by the Industrial general plan and specific plan designations. Like the proposed project, any of the cumulative projects that would convert Farmland to nonagricultural uses would pay the applicable Agricultural Mitigation Fee. All of the cumulative projects are within San Joaquin County and would be required to adhere to the SJMSCP, which may include payment of development fees for conversion of lands. Even with payment of this fee and adherence to the SJMSCP, the development of the cumulative projects would result in a significant and unavoidable impact, which the General Plan EIR previously disclosed and for which the City Council previously adopted a Statement of Overriding Considerations in connection with the Council's adoption of the General Plan. That Statement of Overriding Considerations explained that the General Plan contains policies to preserve agricultural lands, in addition to policies in the SJMSCP and the City's Agricultural Mitigation Fee Ordinance. Despite these policies and regulations, development permitted under the General Plan would result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to urban uses. The City Council found that there are no other feasible mitigation measures that may avoid or reduce these impacts to a less than significant level, and therefore these impacts are significant and unavoidable.[2]

As discussed above, development of the proposed project would result in the loss of approximately 188 acres of Prime Farmland, which would result in a project-level significant and unavoidable impact.

There are no National Forest lands within the City or the City's SOI, which includes the NEI Specific Plan area. The project site and the cumulative project sites do not contain forest land or timberland, as defined by Public Resource Code Section 4526, nor do they contain any timberland zoned

[2] City of Tracy. Resolution 2006-183 Certified the Final Environmental Report for the City of Tracy General Plan of 2006; Making Findings Relating to Significant Impacts, Alternatives, and Statement of Overriding Considerations and Adopting a Mitigation Monitoring and Reporting Program.

Timberland Production, as defined by Government Code Section 51104(g). Therefore, the cumulative projects would not conflict with forest zoning or converting forest land to non-forest use, and thus there would be no significant cumulative impact in this regard (Draft EIR, Page 3.2-11–12).

The City finds that MM AG-1 is feasible, is adopted, and will reduce cumulative impacts to agricultural resources to the extent feasible. The City further finds that no additional mitigation or project alternatives are feasible to further reduce this cumulative impact. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or reduce the potentially significant impacts as identified in the EIR to the extent feasible. However, cumulative impacts associated with conversion of Farmland would remain significant and unavoidable even with mitigation incorporated.

1.8.2 - Air Quality

Impact AIR-1: The proposed project could conflict with or obstruct implementation of the applicable air quality plan (Draft EIR, Page 3.3-26).

Findings: Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR (State CEQA Guidelines § 15091(a)(1)). However, impacts would still remain significant and unavoidable even with mitigation incorporated. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measure or project alternatives identified in the EIR (State CEQA Guidelines § 15091(a)(3)).

Mitigation Measures

MM AIR-1a **NO_X Reduction Measures**

Prior to the issuance of grading or building permits for each individual development proposal within the project site, the relevant applicant for each development proposal shall provide documentation to the City of Tracy demonstrating the following NO_X reduction measures would be adhered to during construction activities for the relevant development proposal:

- For all construction equipment and vehicles used during project construction that are equal to or greater than 250 horsepower, the contractor shall use construction equipment and vehicles that meet the United States Environmental Protection Agency (EPA) Tier 4 Final engine standards;
- For all construction equipment and vehicles used during project construction that are less than 250 horsepower, the contractor shall use electric construction equipment and vehicles to the extent feasible, with the exception of handheld generator sets; and

- All generator sets utilized during project construction shall be limited to 5 horsepower and shall only be used to power handheld power tools.

The construction contractor shall maintain reasonable records concerning its efforts to comply with this requirement, including equipment lists. Documentation that each relevant applicant provides to the City shall include, but is not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

MM AIR-1b "Super-Compliant" Architectural Coatings

Prior to the issuance of grading or building permits for each individual development proposal within the project site, the relevant applicant for each development shall provide the City with documentation demonstrating the use of "Super-Compliant" architectural coatings, as defined by the South Coast Air Quality Management District (South Coast AQMD), during construction of the proposed project. "Super-Compliant" architectural coatings, as defined by the South Coast AQMD, are paints which do not exceed 10 grams of reactive organic gas (ROG) per liter of paint.

MM AIR-1c "Zero-VOC" Consumer Products

The consumer products purchased by the building occupant(s) or by the cleaning business contracted by the building occupant(s) for on-site use shall consist of water-based or "zero volatile organic compound [VOC]" consumer products, to the maximum extent feasible. "Consumer products," as referred to in this mitigation measure, shall include detergents, cleaning compounds, polishes, and floor finishes. "Consumer products," as referred to in this mitigation measure, shall not include parking lot degreasers, architectural coatings, pesticides, or fertilizers.

MM AIR-1d Clean Truck Fleet

Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating the use of a clean truck fleet that meets the California Air Resources Board's adopted 2013 Optional Low-NO_X Standard of 0.02 gram of nitrogen oxide (NO_X) per brake horsepower-hour for all heavy-duty trucks during operation of the proposed project, to the maximum extent feasible. If the relevant applicant does not own the truck fleet that will be used during operation of the subject individual development, the relevant applicant shall provide the City with reasonable documentation from the truck fleet owner demonstrating that trucks utilized for operation of the subject individual development will meet the California 2013 Optional Low-NO_X Standard, to the maximum extent feasible. If any change occurs where a new truck fleet is utilized during operation of the subject individual development, the relevant applicant shall provide the City with reasonable

documentation demonstrating that the new truck fleet meets the California 2013 Optional Low-NO_X Standard of 0.02 gram per brake horsepower-hour, to the maximum extent feasible.

MM AIR-1e Operational Truck Fleet Routing

Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that trucks used during project operation are prohibited from accessing Grant Line Road east of the project site. Additionally:

A. Prior to the issuance of grading permit, the project applicant shall demonstrate to the City of Tracy Engineering Department plans or designs that show where the project's private drive intersects with Grant Line Road, the applicant shall use a combination of raised concreate medians (or islands) and/or bollards to prevent trucks from entering the left turn pocket. Truck drivers shall be directed into a dedicated right turn lane onto Grant Line Road. Signage and roadway stripping within the project will also direct drivers to the appropriate lanes as they approach the intersection. The design shall be reviewed and approved by the City of Tracy Engineering Department.
B. Prior to the issuance of occupancy permit for the first building, the Phase I Developer shall demonstrate to the City of Tracy Public Works Department that the development shall include new signage warning truck drivers that truck travel through the Community of Banta is not permitted and a fineable offense shall be placed along Grant Line Road. Specifically, two signs shall be placed on the north and south sides of Grant Line Road near its intersection with the project's private drive and visible to east bound traffic. The exact locations, design and text of the signs shall be approved by the City of Tracy Public Works Department.

MM AIR-1f Idling Limitation

Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that on-site truck idling shall be limited to no greater than 3 minutes. The documentation provided to the City shall include, at a minimum, photos or a map of signage posted in strategic locations on-site identifying that truck idling does not exceed 3 minutes. The signage shall include a phone number to contact at the facility regarding idling violation complaints, and corrective action shall occur within 48 hours of receipt of the complaint.

MM AIR-1g Electric On-Site Off-Road and On-Road Equipment

Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that all on-site off-road and on-road equipment will be electric-powered. On-site off-road and on-road equipment shall include, but are not limited to, forklifts and pallet jacks.

MM AIR-1h Vegetated Project Site Buffer

Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall demonstrate on their site plans the inclusion of a vegetative buffer along the eastern property line of the project site adjacent to sensitive receptors. Examples of vegetative buffers may include, but are not limited to, trees, bushes, shrubs, or a mix thereof.

MM AIR-1i Tier 2 CALGreen Electric Vehicle Charging Infrastructure

Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation (e.g., shown on-site plans) showing that the proposed parking areas for passenger automobiles and trucks for project operation of the subject individual development proposal are designed and will be built to include electric vehicle (EV) charging stations. At a minimum, the parking shall be designed to include, at a minimum, a number of EV charging stations equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2.

Facts in Support of Findings: The EIR uses the following criteria for determining project consistency with the current Air Quality Plans (AQPs):

- Criterion 1: Does the project support the primary goals of the AQP?
- Criterion 2: Does the project include applicable control measures from the AQP?
- Criterion 3: Does the project disrupt or hinder implementation of any AQP control measures?

Criterion 1

The City of Tracy General Plan Land Use Element designates the project site as Industrial, which is intended to accommodate flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs. Therefore, the proposed project, which involves the development of light industrial, warehouse and distribution and related uses is considered consistent with the site's General Plan land use designation and its traffic would be included in volumes projected for analysis of the General Plan.

Nonetheless, as further discussed under Impact AIR-2 and Impact AIR-3, the proposed project could create a localized violation of State or federal air quality standards, significantly contribute to cumulative nonattainment pollutant violations, and expose sensitive receptors to substantial pollutant concentrations. The proposed project would be required to implement the mitigation measures identified under Impact AIR-2. Moreover, the project applicants would be required to adhere to the additional voluntary measures/features set forth in the updated MMRP that are designed to further reduce air quality emissions. However, because full implementation of the mitigation cannot be guaranteed due to potential technical or financial infeasibility, the proposed project's potentially significant impact is conservatively identified as significant and unavoidable. The proposed project is, therefore, considered inconsistent with Criterion 1 after the incorporation of mitigation.

Criterion 2

The proposed project would be required to comply with all applicable Valley Air District rules and regulations. Therefore, the proposed project would comply with this criterion through compliance with existing regulations.

Criterion 3

As discussed in Impact AIR-2 in the Draft EIR, annual emissions of ROG, nitrogen oxides (NO_X), PM_{10}, and $PM_{2.5}$ associated with the construction of the proposed project (whether phases are constructed sequentially or concurrently) would not exceed the Valley Air District's significance thresholds after incorporation of mitigation. However, daily emissions of ROG would exceed the Valley Air District's localized significance thresholds if all three project phases were constructed concurrently, even after implementation of identified mitigation. Operation of the proposed project would also have the potential to exceed regional significance thresholds for ROG and NOX and would have the potential to result in a violation of localized standards after incorporation of mitigation. As shown in Impact AIR-2, the proposed project could also result in CO hotspots that would violate applicable CO standards. Therefore, as the proposed project has the potential to exceed Valley Air District significance thresholds during construction and operation, even after incorporation of the identified mitigation, this impact would remain significant and unavoidable (Draft EIR, Page 3.3-26–28).

The City finds that MM AIR-1a though MM AIR-1i are feasible, are adopted, and will reduce impacts related to implementation of applicable air quality plans to the extent feasible. The City further finds that no additional mitigation or project alternatives are feasible to further reduce this impact. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or reduce the potentially significant impacts as identified in the EIR to the extent feasible. However, impacts associated with air quality would remain significant and unavoidable even with mitigation incorporated.

Impact AIR-2: The proposed project could result in a cumulatively considerable net increase of any criteria pollutant for which the region is in nonattainment under an applicable federal or State ambient air quality standard (Draft EIR, Page 3.3-30).

Findings: Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR (State CEQA Guidelines § 15091(a)(1)). However, impacts would still remain significant and unavoidable even with mitigation incorporated. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measure or project alternatives identified in the EIR (State CEQA Guidelines § 15091(a)(3)).

Mitigation Measures

Implement MM AIR-1a through MM AIR-1i.

Facts in Support of Findings: Regional emissions generated by the proposed project would exceed applicable thresholds after compliance with all rules, regulations, and mitigation measures during operation. Localized operational emissions would also present a potentially significant impact after incorporation of identified mitigation. This impact would be significant and unavoidable.

The Air Basin is in nonattainment for PM_{10}, $PM_{2.5}$, and ozone. Regional emissions include those generated from all on-site and off-site activities. Regional significance thresholds have been established by the Valley Air District because emissions from projects in the Air Basin can potentially contribute to the existing emission burden and possibly affect the attainment and maintenance of ambient air quality standards. Projects within the Air Basin with regional emissions that exceed any of the thresholds presented previously are considered to have a significant regional air quality impact.

Construction Emissions

The proposed project involves three different applicants, each of which would have individual development proposals for their respective properties within the project site; it is assumed the proposed project would involve three separate construction phases that would occur over a 12-month period from April through March. Phase 1 would occur from April 2022[3] through March 2023, Phase 2 would occur from April 2023 through March 2024, and Phase 3 would occur from April 2024 through March 2025. However, the analysis provided in the EIR also discloses the potential impacts that would occur if phasing overlapped. The default construction equipment utilized in the California Emissions Estimator Model (CalEEMod) were adjusted to match the assumed construction schedule and to preserve the CalEEMod default horsepower-hours during construction activities.

Based on the analysis provided in Section 3.3, Air Quality, of the Draft EIR, criteria pollutant emissions would exceed Valley Air District thresholds of significance during unmitigated construction for ROG and NO_X during construction of the proposed project. It should be noted that unmitigated construction emissions incorporate the basic dust control measures required under District Rule 8021, which requires that vehicle speeds on unpaved roads and surfaces be reduced to no more

[3] As indicated in the Draft EIR, it should be noted that if project construction moves to later years, resulting emissions are anticipated to reduce because equipment efficiency and fuel content standards generally improve with each year and construction fleet operators periodically replace old equipment with new, more efficient equipment.

than 15 miles per hour and exposed construction areas are watered during earthmoving activities. Because the proposed project would exceed significance thresholds for ROG and NO_X during construction activities, MM AIR-1a and MM AIR-1b would be required during construction of the proposed project to reduce ROG and NO_X emissions to below Valley Air District significance thresholds. MM AIR-1a would require the use of Tier 4 Final engines for construction equipment equal to or greater than 250 horsepower and electric alternatives for all construction equipment less than 250 horsepower. MM AIR-1a would not preclude the use of generators; however, generators would be limited to no greater than 5 horsepower under MM AIR-1a to ensure that only handheld power tools are powered by generators and no electric alternative for any specific construction equipment which exceeds 250 horsepower is powered by diesel-fueled generators during construction. As detailed more fully above, MM AIR-1b would require the use of "Super-Compliant" architectural coatings during construction of the proposed project. "Super-Compliant" architectural coatings refer to paints which do not exceed 10 grams of ROG per liter of paint. As shown in Table 3.3-8 of the Draft EIR, construction of the proposed project would not exceed the Valley Air District's annual significance threshold with MM AIR-1a and MM AIR-1b incorporated. Additionally, construction emissions would be mitigated to below the Valley Air District's annual significance thresholds for ROG and NO_X after implementation of identified mitigation, even if all three project phases were constructed concurrently (Draft EIR, Page 3.3-32).

Construction Ambient Air Quality Analysis

As shown in Table 3.3-9 of the Draft EIR (Page 3.3-36), after the incorporation of MM AIR-1a and MM AIR-1b, construction of the proposed project would not exceed the Valley Air District's daily emission screening levels for an Ambient Air Quality Analysis (AAQA), pursuant to District Rule 2201, assuming that none of the project phases were to be constructed concurrently. However, emissions of ROG and CO would exceed the Valley Air District's significance thresholds after implementation of identified mitigation if all three project phases were constructed concurrently and there is no feasible mitigation that can be implemented to reduce this impact to a less than significant level. As such, this impact would remain significant and unavoidable after implementation of identified mitigation (Draft EIR, Page 3.3-36).

Operational Emissions

Operation of the proposed project at full buildout would involve the operation of light industrial, warehouse and distribution and related uses on the project site. As contained in the TIA and shown in Table 3.3-10 of the EIR (Page 3.3-38), Phase I (Tracy Alliance parcels) would generate an estimated 1,775 daily passenger vehicle trips and 836 daily truck trips; Phase 2 (Suvik Farms parcels) would generate an estimated 974 daily passenger vehicle trips and 459 daily truck trips; and Phase 3 (Zuriakat parcel) would generate an estimated 456 daily passenger vehicle trips and 215 daily truck trips.

The proposed project would involve the removal of existing structures, including two residences and nine agricultural outbuildings for equipment storage and maintenance. In order to demonstrate the net increase in emissions generated by the proposed project during operation beyond what is currently generated by existing land uses, the existing land uses were modeled. As shown in Table 3.3-12 of the Draft EIR (Page 3.3-39), unmitigated operational emissions would exceed Valley Air

District thresholds of significance for ROG and NO_X. Therefore, MM AIR-1c, MM AIR-1d, MM AIR-1e, MM AIR-1f, MM AIR-1g, MM AIR-1h, and MM AIR-1i would be required to mitigate operational emissions to below Valley Air District thresholds. Incorporation of MM AIR-1d into operation of the proposed project would reduce annual NO_X emissions. As detailed more fully above, MM AIR-1d would require all phases of the proposed project to use a "clean truck fleet" that meets a performance standard of 0.02 gram of NO_X per brake horsepower-hour for all heavy-heavy-duty (HHD) trucks during project operation, to the maximum extent feasible. In addition, as detailed more fully above, MM AIR-1c would require the use of consumer products (detergents, cleaning compounds, polishes, and floor finishes) that contain zero VOCs during operation of the proposed project.

MM AIR-1d would require all phases of the proposed project to use a "clean truck fleet" that meets or exceeds specified performance standards. This mitigation reflects a feasible strategy to reduce emissions from the trucks utilized during operation. In contrast, as explained in more detail in the Final EIR, imposing an obligation to use zero-emission heavy duty trucks during operation is not feasible; among other reasons, neither the project applicants nor the City could effectively impose, implement, and enforce such an obligation for the life of the proposed project, given the current very significant cost and lack of widespread availability of such vehicles and the fact that the project applicants would not own the truck fleets. Instead, it is reasonable to conclude that project operations, including the truck fleets utilized by project operators, would adhere to the comprehensive regulatory framework, including applicable NO_x standards for vehicles. The ARB, as the expert state agency that is charged to promote and protect public health, welfare, and ecological resources, continues to pursue and refine regulations to effectively reduce air pollutants while recognizing and considering effects on the economy. The ARB is the lead agency for climate change programs and oversees all air pollution control efforts in California to attain and maintain health-based air quality standards. For example, the ARB continues to revise the heavy-duty in-use testing program to ensure that newer trucks would still meet the applicable NO_X standards. This Statewide, comprehensive approach based on robust data evaluated by the public agency with the expertise in this complicated area is considered the most effective and feasible means of reducing emissions associated with heavy truck use over time.

MM AIR-1d, which would require the use of a HHD truck fleet that meets the 2013 Optional Low-NO_X Standard of 0.02 gram of NO_X per brake horsepower-hour to the maximum extent feasible, would represent an approximately 90 percent reduction in NO_X emissions from the current heavy-duty truck NO_X standard of 0.2 gram of NO_X per brake horsepower-hour.

Nonetheless, the full implementation of MM AIR-1c and MM AIR-1d cannot be guaranteed during project operation; therefore, the emission estimates provided in the EIR demonstrate a reasonable worst-case scenario for project operation after incorporation of identified mitigation. In addition, MM AIR-1f would restrict on-site vehicle idling to no greater than 3 minutes. MM AIR-1g would require the use of electric on-site on- and off-road equipment in place of non-electric alternatives. MM AIR-1i would require the installation of EV charging stations for passenger automobiles/trucks which meet the Tier 2 standards set forth in Section A5.106.5.3 of Appendix A5 – Nonresidential Voluntary Measures of CALGreen of the 2019 CBC. The inclusion of MM AIR-1f, MM AIR-1g, and MM

AIR-1i would incrementally reduce emissions below those disclosed in the Draft EIR as explained in the Final EIR; however, the quantified reductions from these measures cannot be accurately quantified at this time. Moreover, the project applicants have voluntarily agreed to incorporate additional measures/features (such as, for example, installation of conduit to facilitate the installation of future EV charging stations to serve HHD trucks), as enforceable conditions of approval, to further address the foregoing issues as detailed in the updated MMRP. Nevertheless, despite the foregoing, because the operational emissions would exceed the Valley Air District's significance thresholds for ROG and NO_X, this impact would remain significant and unavoidable, even with implementation of the identified mitigation.

Operational Ambient Air Quality Analysis

As shown in Table 3.3-14 of the EIR (Page 3.3-41), due to the uncertainty of full implementation of MM AIR-1c and MM AIR-1d, and the uncertain efficacy of quantified reductions resulting from MM AIR-1f, MM AIR-1g, MM AIR-1i, the potential emission reductions resulting from identified mitigation are not considered in the proposed project's mitigated operational emissions. As such, maximum daily operational emissions generated by all phases of the proposed project would exceed the Valley Air District's screening threshold for an AAQA for NOX emissions. As a result, this impact would remain significant and unavoidable after mitigation is incorporated (Draft EIR, Page 3.3-30–42).

The City finds that MM AIR-1a though MM AIR-1i are feasible, are adopted, and will reduce impacts related to criteria pollutants to the extent feasible. The City further finds that no additional mitigation or project alternatives are feasible to further reduce this impact. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or reduce the potentially significant impacts as identified in the EIR to the extent feasible. However, impacts associated with air quality would remain significant and unavoidable even with mitigation incorporated.

Impact AIR-3: The proposed project could expose sensitive receptors to substantial pollutant concentrations (Draft EIR, Page 3.3-42).

Findings: Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR (State CEQA Guidelines § 15091(a)(1)). However, impacts would still remain significant and unavoidable even with mitigation incorporated. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measure or project alternatives identified in the EIR (State CEQA Guidelines § 15091(a)(3)).

Mitigation Measures

Implement MM AIR-1d to MM AIR-1i.

Facts in Support of Findings: The closest sensitive receptors to the project site are single-family residences and Banta Elementary School. The closest sensitive receptors to the project site are located at the following distances:

- Residences as close as 145 feet west of the project site across Paradise Road;
- Residences immediately adjacent to the project site to the east along Grant Line Road;
- Residences as close as 120 feet south of the project site across Grant Line Road;
- Residences as close as 60 feet north of the project site across California Avenue; and
- Banta Elementary School approximately 1,500 feet to the east at its closest outside area.

It should be noted that while the above receptors represent the closest sensitive receptors to the proposed project, the Maximally Impacted Sensitive Receptor (MIR), as will be discussed under the "Construction: Toxic Air Contaminant" discussion below, during each construction phase of the proposed project may be different. The MIR during pollutant-generating activity is influenced by the distance of that receptor to the pollutant source(s), the amount and type of pollutants generated by each source, the topography and direction of the MIR as it relates to the pollutant source(s), and the prevailing meteorological conditions. Therefore, the closest sensitive receptor and the MIR may not be the same.

Construction–Reactive Organic Gas

ROG generated during construction activities are primarily emitted during the application of architectural coatings (painting). Construction of the proposed project would incorporate MM AIR-1b, which would require the use of "super-compliance" architectural coatings, reducing potential health impacts from ROG exposure. Therefore, exposure to ROGs during architectural coatings would be a less than significant health impact.

ROG generated during construction activities are also emitted during the pouring and curing of asphalt. District Rule 4641 prohibits the use of certain types of asphalt. Residents are not in the immediate vicinity of the fumes because asphalt laying would principally occur within the interior of the project site and subsequent fumes would dissipate as they are emitted; therefore, they would not be subjected to concentrations high enough to evoke a negative response. In addition, the restrictions that are placed on asphalt in the San Joaquin Valley would serve to further reduce ROG emissions from asphalt and exposure. The impact to nearby sensitive receptors from ROG generation during construction would be less than significant.

Construction–NOx, PM_{10}, $PM_{2.5}$, and CO

As discussed in Impact AIR-2, after incorporation of identified mitigation, emissions of CO generated during project construction have the potential to exceed the Valley Air District maximum daily emission AAQA screening threshold if all three project phases were constructed concurrently. Therefore, emissions during construction could exceed the significance thresholds (in the case of all three phases being constructed concurrently) even after incorporation of mitigation and could result in concentrations that would exceed ambient standards, contribute substantially to an existing exceedance of an ambient air quality standard, or expose sensitive receptors to substantial pollutant concentrations.

Construction–Toxic Air Contaminants

Construction of the proposed project would involve the use of diesel-fueled vehicles and equipment that emit diesel particulate matter (DPM), which has been identified by the ARB as a toxic air contaminant (TAC). Construction DPM emissions (PM_{10} exhaust) were estimated using CalEEMod, Version 2016.3.2, as presented under Impact AIR-2. The Draft EIR Table 3.3-15 (Page 3.3-44) summarizes the mitigated emission rates of DPM during the construction of the proposed project, incorporating dust control measures required by District Rule 8021 and implementation of MM AIR-1a and MM AIR-1b. As illustrated in Table 3.3-16 (Draft EIR, Page 3.3-45), unmitigated project construction would result in cancer risks experienced by nearby residents which exceed the Valley Air District's significance threshold of 20 cancer cases per 1 million people. As such, mitigation would be necessary to reduce impacts to nearby residents to less than significant levels.

Table 3.3-16 (Draft EIR, Page 3.3-45) provides the estimated health and hazard impacts from unmitigated construction emissions at the MIRs for each construction phase and sensitive receptor age group using the Hot Spots Analysis and Reporting Program (HARP2). The MIRs for Phase 1 construction were a single-family residence located approximately 1,025 feet east of the project site and Banta Elementary School approximately 2,495 feet east of the project site. The MIRs for Phase 2 construction were a single-family residence located approximately 35 feet east of the project site and Banta Elementary School approximately 1,500 feet east of the project site. The MIRs for Phase 3 construction were a single-family residence located approximately 550 feet southeast of the project site and Banta Elementary School approximately 2,150 feet southeast of the project site. Unmitigated construction emissions with sequential phasing would exceed the Valley Air District's cancer risk health threshold.

The estimates shown in Table 3.3-17 (Draft EIR, Page 3.3-46) include the application of measures required by District Rule 8021 and implementation of MM AIR-1a and MM AIR-1b. As shown therein, the proposed project's construction DPM emissions would not exceed the Valley Air District's cancer risk or chronic non-cancer hazard index thresholds of significance at the maximum impacted receptor for any of the sensitive receptor age groups analyzed assuming that phases are constructed sequentially. Nonetheless, the potential exists for all three project phases to be constructed concurrently, which would substantially increase the daily quantity of DPM emissions generated during project construction. As a result, the health risk impacts associated with project construction where phasing would be concurrent has the potential to generate DPM emissions resulting in cancer risks to nearby residents that exceed the Valley Air District's significance threshold of 20 cases per 1 million people even after incorporation of feasible mitigation. As such, this impact would be significant and unavoidable after mitigation.

Operation–Reactive Organic Gas

During operation, ROG would be emitted primarily from consumer products and motor vehicles. MM AIR-1c would require that the proposed project use zero-VOC consumer products during operation. Therefore, nearby sensitive receptors would not be exposed to substantial ROG concentrations during project operations as a result of consumer products. Direct exposure to ROG from motor vehicles would not result in health effects because the ROG emissions would be distributed across several miles of roadway and in the air. Therefore, these concentrations would not be great enough to result in direct health effects.

Operation–PM_{10}, $PM_{2.5}$, CO, and NO_X

Emissions during operation of the proposed project could result in emission concentrations that exceed ambient standards, contribute substantially to an existing exceedance of an ambient air quality standard, or expose sensitive receptors to substantial pollutant concentrations.

Operation–Toxic Air Contaminants

Operation of the proposed project would involve the operation of heavy-duty, diesel-fueled vehicles that emit DPM, which has been identified by the ARB as a TAC. Table 3.3-18 (Draft EIR, Page 3.3-47–48) summarizes the mitigated emission rates of DPM during operation of the proposed project, incorporating measures required by District Rule 8021 and implementation of MM AIR-1c and MM AIR-1d. The MIRs for Phase 1 operation were a single-family residence located approximately 75 feet north of the project site, Banta Elementary School approximately 2,495 feet east of the project site, and on-site workers.

As shown in Table 3.3-19 (Draft EIR, Page 3.3-48–49), the proposed project's operational DPM emissions during Phase I would not exceed the Valley Air District's cancer risk or chronic non-cancer hazard index thresholds of significance at the maximum impacted receptor for any of the sensitive receptors analyzed. Because of a lack in operational information for Phases 2 and 3 of the proposed project, such as freight product origin, local truck circulation, or other details necessary to perform a site-specific health risk assessment, Phase 1 of the proposed project was the only project phase modeled for health risk and chronic non-cancer hazard impacts. As Phase 1 represents approximately 55 percent of the potential operational trucking impact, although operation of Phase 1 (Tracy Alliance) would not result in a significant impact in this regard, operation at full buildout of the proposed project could have a potentially significant health impact on nearby sensitive receptors, particularly the residential MIRs. The implementation of MM AIR-1d would contribute to the minimization of DPM emissions generated from trucking emissions to the extent feasible; however, full implementation of MM AIR-1d cannot be guaranteed. In addition, MM AIR-1e would restrict truck traffic from accessing Grant Line Road east of the project site, where many sensitive receptors are located. MM AIR-1f would restrict on-site vehicle idling to no greater than 3 minutes. MM AIR-1g would require the use of electric on-site on- and off-road equipment in place of non-electric alternatives. MM AIR-1h would require the installation of a vegetated buffer around the project site to reduce the potential off-site dispersion of TACs generated at the project site during operation. MM AIR-1i would require the installation of EV charging stations for passenger automobiles/trucks which meet the Tier 2 standards set forth in Section A5.106.5.3 of Appendix A5 – Nonresidential Voluntary Measures of CALGreen of the 2019 CBC. Moreover, the project applicants have voluntarily agreed to incorporate additional measures/features (such as, for example, installation of conduit to facilitate the installation of future EV charging stations to serve HHD trucks), as enforceable conditions of approval, to further address the foregoing issues as detailed in the updated MMRP.

In addition, in an effort to further address concerns about truck traffic through the Banta community located east of the project site, the project applicants are willing to voluntarily implement signage along project frontage on Grant Line Road to deter trucks from traveling on Grant Line Road east of the project site, and voluntarily implement routine communications between property managers

and tenants to ensure tenant understanding that trucks accessing the project site are prohibited from using Grant Line Road east of the project site. These measures will be incorporated as enforceable conditions of approval.

Moreover, the project applicants have voluntarily agreed to incorporate additional measures/features, which would be imposed on the proposed project as enforceable conditions of approval, to further address the foregoing issues as detailed in the updated MMRP.

The inclusion of MM AIR-1e, MM AIR-1f, MM AIR-1g, and MM AIR-1i and the additional voluntary measures/features as reflected in additional enforceable conditions of approval would help incrementally reduce emissions below those disclosed in the Draft EIR; however, the quantified reductions from these measures cannot be accurately identified at this time. As a result, this impact would be significant and unavoidable after the incorporation of mitigation (Draft EIR, Page 3.3-42–50).

Valley Fever

The San Joaquin Valley is considered an endemic area for Valley Fever, caused by inhalation of the spores of the fungus Coccidioides immitis (*C. immitis*). Avoidance, when feasible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. The project site is relatively undeveloped and is surrounded by undeveloped, agricultural, industrial, and residential land uses which are semi-rural to urban in character. Because the majority of the project site and the immediately surrounding vicinity consists of urbanized development or cultivated fields, the project site is an area that would lead to a low probability of having *C. immitis* growth sites and exposure from disturbed soil. Furthermore, the proposed project would be required to minimize the generation of fugitive dust during construction activities by complying with District Rule 8021. Therefore, this regulation would ensure that Valley Fever impacts during construction are less than significant. During operations, dust emissions are anticipated to be negligible, and impacts would be less than significant.

The City finds that MM AIR-1a through MM AIR-1i are feasible, are adopted, and will reduce impacts related to sensitive receptors to the extent feasible. The City further finds that no additional mitigation or project alternatives are feasible to further reduce this impact. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or reduce the potentially significant impacts as identified in the EIR to the extent feasible. However, impacts associated with air quality would remain significant and unavoidable even with mitigation incorporated.

Cumulative Impact: The proposed project's cumulative impacts related to air quality would be significant and unavoidable. (Draft EIR, Page 3.3-55).

Findings: Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR (State CEQA Guidelines § 15091(a)(1)). However, impacts would still remain significant and unavoidable even with mitigation incorporated. Specific

economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measure or project alternatives identified in the EIR (State CEQA Guidelines § 15091(a)(3)).

Mitigation Measures

Implement MM AIR-1a through MM AIR-1i.

Facts in Support of Findings: If a project would exceed the identified construction or operational significance thresholds, its emissions would be cumulatively considerable. The Air Basin is in nonattainment for ozone, PM_{10}, and $PM_{2.5}$, which means that the background levels of those pollutants are at times higher than the ambient air quality standards and a cumulative air quality impact currently exists for the region. As discussed in Impact AIR-2, MM AIR-1a and MM AIR-1b would reduce the proposed project's impacts related to ozone precursor emissions during construction; however, as discussed in Impact AIR-2, construction emissions for ozone precursors would remain potentially significant after implementation of identified mitigation. In addition, the proposed project could result in a potentially significant impact related to regional emissions of ROGs and NO_X, both ozone precursor pollutants, during project operation. Moreover, because full implementation of MM AIR-1c and MM AIR-1d cannot be guaranteed, the proposed project could result in a potentially significant localized violation during operation.

The proposed project would be required to implement the identified CEQA mitigation measures as well as the additional measures/features described in the MMRP which the applicants have agreed to implement, to reduce, to the extent feasible, air quality impacts. Nevertheless, even after incorporation of identified mitigation and implementation of the required rules and regulations and incorporation of additional voluntary measures/features, the proposed project could result in construction and operational emissions which are greater than the respective Valley Air District significance thresholds and could therefore have a cumulatively considerable contribution that is cumulatively significant and unavoidable.

With regard to impacts on sensitive receptors, the DPM emissions from construction of the proposed project could result in significant health impacts if all three project phases are constructed concurrently. The combined operation of the proposed project could result in exposing nearby sensitive receptors to substantial amounts of pollutants, and such impacts could not be feasibly mitigated to a less than significant level. The cumulative impact associated with construction and operation of the proposed project would be cumulatively considerable.

Odor impacts that would be associated with the proposed project would principally be temporary in nature and limited to the combustion of diesel fuels during construction and operation and would not be cumulatively considerable.

The proposed project would result in a cumulatively considerable contribution to significant cumulative air quality and health impacts with respect to consistency with the applicable AQP (Impact AIR-1), cumulative criteria pollutant emissions during both construction and operation

(Impact AIR-2) and impacts to sensitive receptors during both construction and operation (Impact AIR-3). (Draft EIR, Page 3.3-54–55).

The City finds that MM AIR-1a though MM AIR-1i are feasible, are adopted, and will reduce cumulative impacts to the extent feasible. The City further finds that no additional mitigation or project alternatives are feasible to further reduce this impact. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project that mitigate or reduce the potentially significant impacts as identified in the EIR to the extent feasible. However, cumulative impacts associated with air quality would remain significant and unavoidable even with mitigation incorporated.

1.8.3 - Transportation and Traffic

Impact TRANS-1: The proposed project would result in a substantial increase in vehicle miles traveled (Draft EIR, Page 3.14-28).

Findings: Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR (State CEQA Guidelines § 15091(a)(1)). However, impacts would still remain significant and unavoidable even with mitigation incorporated. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measure or project alternatives identified in the EIR (State CEQA Guidelines § 15091(a)(3)).

Mitigation Measures

MM TRANS-1(a) Transportation Demand Management Measures

Prior to issuance of the first building permit for the relevant individual development proposal, the relevant applicant for the individual development proposal at issue shall submit to the City of Tracy Planning Department a Transportation Demand Management (TDM) program that incorporates all of the following six measures (as explained further in Table 3.14-6 of the Draft EIR):

1. Communication and Information Strategies–4 percent reduction;
2. Telecommuting for administrative staff (5 percent of staff population)–1 percent reduction;
3. Designated parking spaces for carpool vehicles–1 percent reduction;
4. Provide a transit stop along the project frontage on Grant Line Road, if agreed to by the City–2 percent reduction;
5. Provide bike lanes and sidewalks along the project frontage–1 percent reduction; and
6. Provide on-site bike racks and showers–1 percent reduction.

Provided, however, that if the relevant applicant determines that one of more of the foregoing six TDM measures is not feasible in connection with the individual development proposal at issue, then the relevant applicant may obtain approval from the City of Tracy Planning Department of acceptable substitute TDM measure(s) pursuant to Table 3.14-6 of the Draft EIR.

The relevant applicant's TDM program, as described above, shall reflect a 10 percent reduction in VMT for the relevant individual development proposal.

MM TRANS-1(b) Payment of Applicable Banking Fee

In addition to the TDM program required in MM TRANS-1(a), each applicant for an individual development proposal shall pay the applicable fee as set forth in the adopted VMT Mitigation Banking Fee in place and effective at the time the relevant applicant seeks to obtain building permits for its individual development proposal. Provided, however, that if the City Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, then payment of $633.11 (cost per VMT reduction for the relevant individual development proposal) shall constitute compliance with this MM TRANS-1(b).

Facts in Support of Findings: The proposed project's potential increase in VMT would result in a significant transportation impact. The Draft EIR, Table 3.14-6, lists the potential TDM measures that could partially mitigate the proposed project's VMT impact and also shows the estimated maximum TDM reduction that each strategy could achieve. Potential strategies include offering telecommuting work schedules, transit subsidies, an employer-sponsored shuttle program, and marketing of TDM strategies. Implementation of MM TRANS-1(a), (b) would require the relevant applicant for each individual development proposal within the project site to implement the identified site-specific TDM measures to feasibly reduce project-generated VMT. The City also is currently working to establish a VMT banking program through which, once adopted, would provide another way to mitigate impacts. The VMT Mitigation Banking Fee Program is a programmatic approach to respond to the need for feasible VMT mitigation programs. The EIR proposes mitigation that enables the relevant applicant of each individual development proposal within the project site to mitigate its respective VMT impact, to the extent feasible, by implementing an approved TDM program and paying the applicable banking fee. Pursuant to foregoing mitigation measures, each relevant applicant would need to reduce VMT associated with its individual development proposal that would otherwise occur in connection with implementation of the relevant individual development proposal by 15 percent.

TDM measures are listed on Page 3.14-29 of the Draft EIR. If the relevant applicant for an individual development proposal (1) incorporates the TDM measures into a project-specific TDM program, and (2) pays the applicable banking fee (as discussed further in the EIR), this would satisfy MM TRANS-1(a) and MM TRANS-1(b). If TDM measures are not feasible, the relevant applicant may obtain approval from the City of acceptable substitute TDM measure(s) and the applicable banking fee would be adjusted to equate to the required 15 percent reduction.

The applicable fee would be the amount provided for under the Mitigation Banking Fee Program adopted by the City Council and effective at the time the relevant applicant for an individual development proposal within the project site obtained building permits. Provided, however, that if the Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, then payment of $633.11 (cost per one VMT reduction) shall constitute compliance for the payment component of MM TRANS-1(b).

Even with implementation of the TDM strategies and payment of the applicable banking fee, as discussed above, the proposed project would still be above the City's VMT threshold of 9.4 VMT per employee and this impact would be significant and unavoidable (Draft EIR, Page 3.14-28–32).

The City finds that MM TRANS-1(a) and MM TRANS-1(b) are feasible, are adopted, and will reduce impacts related to VMT to the extent feasible. The City further finds that no additional mitigation or project alternatives are feasible to further reduce this impact. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed project that mitigate or reduce the potentially significant impacts as identified in the EIR to the extent feasible. However, impacts associated with VMT would remain significant and unavoidable even with mitigation incorporated.

Cumulative Impact: The proposed project's cumulative impacts related to transportation and traffic would be significant and unavoidable. (Draft EIR, Page 3.14-54).

Findings: Changes or alterations have been required in, or incorporated into, the proposed project which avoid or substantially lessen the significant environmental effects as identified in the EIR (State CEQA Guidelines § 15091(a)(1)). However, impacts would still remain significant and unavoidable even with mitigation incorporated. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measure or project alternatives identified in the EIR (State CEQA Guidelines § 15091(a)(3)).

Mitigation Measures

Implement MM TRANS-1(a) and MM TRANS-(b).

Facts in Support of Findings

VMT

Cumulative projects would be required to comply with applicable State and local laws and regulations. If found to result in significant VMT impacts, the cumulative projects would be required to implement feasible TDM measures that would reduce VMT and encourage alternative modes of transportation. Cumulative projects would also be required to include facilities based on future transportation studies prepared for that project and to pay into the City's VMT banking program once established. However, even with implementation of all available feasible mitigation, the

cumulative VMT would still exceed City standards and would be significant and unavoidable. The proposed project, in conjunction with other cumulative projects, would have a significant and unavoidable impact with respect to VMT, and the proposed project's contribution would be cumulatively considerable.

Roadway Safety and Emergency Access

Trucks used during the construction of cumulative projects would be required to utilize truck routes designated by the City and therefore would not conflict with the automobile traffic and bicycle and pedestrian activity. Local jurisdictions' engineering and planning departments would review project plans prior to construction permits. Cumulative projects would not redesign City streets in such a way that would significantly impact roadway safety, they would be required by the City to mitigate such impacts as feasible. Roadways constructed as part of the cumulative projects would be constructed to meet then-current applicable City and California Fire Code design standards. Cumulative project driveways and access points would be constructed in compliance with applicable provisions of the California Fire Code and other applicable regulations related to roadway safety and emergency access. Impacts to Roadway Safety and Emergency Access would not be cumulatively considerable.

Transit, Bicycle, and Pedestrian Circulation and Facilities

Each project sponsor for the relevant cumulative project(s) would be required to coordinate with the City and the transit providers to provide alternative transit access. There is only one reasonably foreseeable future project that shares a street with the proposed project. Paradise Road would be realigned with the construction of the I-205 and Chrisman Road Interchange. There are no bicycle or pedestrian facilities provided on Paradise Road along the proposed project frontage or I-205. Therefore, cumulative impacts would be less than significant.

The proposed project would construct a Class I path (that would accommodate both pedestrians and bicycles) to improve pedestrian and bicycle infrastructure. Neither the proposed project nor the I-205 and Chrisman Road Interchange project would remove existing bicycle or pedestrian infrastructure, nor would either make a cumulatively considerable contribution to this less than significant cumulative impact. Therefore, cumulative impacts related to the circulation system in terms of transit, bicycle, and pedestrian facilities would be less than significant. (Draft EIR, Page 3.14-52–54).

The City finds that MM TRANS-1(a) and MM TRANS-1(b) are feasible, are adopted, and will reduce cumulative impacts related to VMT to the extent feasible. The City further finds that no additional mitigation or project alternatives are feasible to further reduce this impact. Accordingly, the City finds that, pursuant to Public Resources Code Section 21081(a)(1) and State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project that mitigate or reduce the potentially significant impacts as identified in the EIR to the extent feasible. However, cumulative impacts associated with VMT would remain significant and unavoidable even with mitigation incorporated.

1.9 - Findings Regarding Alternatives

1.9.1 - Introduction

This section presents findings regarding alternatives to the proposed project. Because not all significant effects could be substantially reduced to a less than significant level by either adoption of feasible mitigation measures or by standard conditions of approval, the EIR considered the feasibility of project alternatives compared to the proposed project. As explained below, these Findings summarize the alternatives studied (as well as the alternatives that were initially considered and then dismissed from further evaluation) and summarizes the basis for rejecting each one of the project alternatives. Further evidence supporting these Findings is set forth in Chapter 5 of the Draft EIR (Alternatives) and in various responses to comments in the Final EIR.

The section provides a summary and discussion of the feasibility of the following alternatives evaluated in the EIR:

- **No Project (No Build) Alternative:** Under this alternative, development of the project site would not occur, and the project site would remain in its current existing condition.
- **Outside Storage Allowable Use Alternative:** The Outside Storage Allowable Use Alternative contemplates a reduction in building square footages, an increase in outside storage areas, and the preservation of 25 percent of the existing agricultural operations (approximately 48 acres). This alternative contemplates a combination of "Equipment Storage Yards," which is a Permitted Use under the NEI Specific Plan and/or "Building Materials Sales, Lumberyards (outside storage)," which is a Conditional Use permitted under the NEI Specific Plan. The project site would be developed in such a way to protect some of the on-site Prime Farmland by reducing the overall footprint of the developed areas. The outside storage uses would require less building coverage and the number of employees would be reduced as compared to the proposed project.
- **Agricultural Protection Alternative:** Under this alternative, the proposed project would be developed in such a way as to protect some of the on-site Prime Farmland by reducing the overall footprint of the developed areas and providing a buffer for existing residences along California Avenue. The northern half (approximately 11 acres) of the Zuriakat parcel would not be converted to nonagricultural uses and could remain in agricultural production.

In accordance with CEQA Guidelines Section 15126.6, this City Council finds that the EIR contained a comparative impact assessment of alternatives to the proposed project, which included sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. The primary purpose of this analysis is to provide decision-makers and interested agencies, organizations and individuals with information about a reasonable range of potentially feasible project alternatives, which could avoid or reduce any of the proposed project's significant adverse environmental effects. The EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a

range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives.

Important considerations for this alternatives analysis are noted below:

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives identified in Section 6.5 of the Draft EIR.
  - Infeasibility; or
  - Inability to avoid significant environmental effects of the proposed project.

When addressing the feasibility of alternatives, the lead agency may take into account a number of factors including site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). None of these factors establishes a fixed limit on the scope of reasonable alternatives.

Section 6.3 of the Draft EIR discusses alternatives that were initially considered but then rejected. Regarding alternative locations, CEQA does not require that an analysis of alternate sites always be included in an EIR. Pursuant to CEQA Guidelines Section 15126.6(f)(2), in making the decision to include or exclude analysis of an alternate site, the "key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR."

For purposes of the EIR for the proposed project, alternative locations were initially considered in an effort to identify a site that would not involve the conversion of 188 acres of Prime Farmland; however, for reasons summarized below and explained in the EIR (see Section 6.3) this alternative was ultimately rejected from further consideration. This alternative involves review of the potential to construct a development of similar size and scale as the proposed project at alternative location(s), thereby lessening or avoiding site-specific impacts to Prime Farmland. Under this alternative, the development would need to be located at another large, predominantly vacant property that could meet most of the project proponent's objectives. One key constraint is that the applicant does not own, control, or otherwise have access to any other sites. Nonetheless, potential off-site alternative locations were screened for consideration based on size and zoning/use requirements. The City of Tracy is mostly urbanized so it was assumed that there would be availability of infrastructure should this alternative occur elsewhere within the City. Potential sites within the City of appropriate size generally consisted of other agricultural parcels that are mostly designated as Prime Farmland located along the City's SOI, which would result in similar impacts to agricultural resources as the proposed project and/or increased impacts to other topical areas,

and/or would not achieve most of the project objectives. For example, one appropriately sized parcel is located adjacent to Bohn Elementary School and large tracts of residential development. This site was initially considered but rejected as an alternative location because it could potentially result in increased impacts to sensitive receptors, increased traffic congestion due to its proximity to residential areas and distance from transit hubs, as well as increased air quality impacts. This area is also designated as Prime Farmland and thus significant agricultural resource impacts related to conversion of Prime Farmland would still occur. In addition, this area is designated as Urban Reserve in the City's General Plan for potential future residential development as opposed to having a current, specific land use designation (such as Industrial, like the project site). Constructing a similar industrial development on this site would thus be inconsistent with the General Plan (without triggering the need for a GPA) and would have potentially more significant population and housing and land use and planning impacts than the proposed project. In summary, City staff was not able to identify any vacant parcels within the City that are not Prime Farmland, could accommodate an industrial development of similar size and scope of the proposed project, and are zoned/designated for industrial uses. For these reasons, although alternative sites were initially considered, an alternative location was therefore eliminated from further discussion in the Draft EIR, consistent with CEQA Guidelines Section 15126.6(c).

This City Council hereby determines that the EIR evaluated a reasonable range of potentially feasible alternatives, which is sufficient to permit informed decision-making and public participation. This City Council recognizes that commenters suggested additional alternatives and stated that additional detail should be provided for the alternatives that were studied. For the reasons set forth in the EIR and other relevant evidence in the administrative record, none of the requested information is necessary to ensure that a reasonable range of alternatives was studied at a sufficient level of detail.

For the reasons documented in the EIR and summarized below, this City Council hereby rejects each of the alternatives and approves the proposed project, based on the specific legal, economic, and other considerations that make each of the below-identified alternatives infeasible.

Alternative 1: No Project (No Build) Alternative.

Description

Under the No Project Alternative, the 3,353,320 square feet of warehouse development, infrastructure improvements, I-205/Paradise Road/Chrisman Road interchange, and off-site roadway improvements would not be constructed on the project site and in its vicinity. In this alternative, the project site's existing agricultural uses, outbuildings, two existing single-family homes, and garage would remain; road improvements would not occur; reservation of land for the future interchange would not occur; trees and crops would not be removed or impacted; and grading would not take place. This alternative would not require a prezoning, minor subdivision, or Final Development Plan.

Findings

The No Project Alternative would avoid the majority of the proposed project's significant impacts by leaving the project site in its existing condition, thus avoiding impacts caused by the demolition of on-site buildings, construction of warehouse buildings, infrastructure and off-site improvements, and impacts caused by the operation of the proposed project. However, the No Project Alternative would

not advance any of the overall project objectives (Draft EIR, Page 6-7–6-12). Based on the analysis in the EIR and all other relevant evidence in the administrative record before it, this City Council finds that the No Project (No Build) Alternative does not meet any of the project objectives. The City Council rejects this alternative as infeasible.

Alternative 2: Outside Storage Allowable Use Alternative.

Description

Under the Outside Storage Allowable Use Alternative, there would be a reduction in building square footages, an increase in outside storage areas, and the preservation of 25 percent of the existing agricultural operations (approximately 48 acres). This alternative contemplates a combination of "Equipment Storage Yards," which is a Permitted Use under the NEI Specific Plan and/or "Building Materials Sales, Lumberyards (outside storage)," which is a Conditional Use permitted under the NEI Specific Plan. The project site would be developed in such a way to protect some of the on-site Prime Farmland by reducing the overall footprint of the developed areas. The outside storage uses would require less building coverage, and the number of employees would be reduced as compared to the proposed project.

Findings

The Outside Storage Allowable Use Alternative would have a lower level of impacts for aesthetics, agriculture and forest resources, air quality, biological resources, cultural resources, energy, GHG emissions, hydrology and water quality, noise, public services, TCRs, utilities and service systems, and wildfire. This is because overall, impacts would be reduced due to a smaller square footage of the buildings and the reduced number of employees. However, although reduced to a certain degree, all significant and unavoidable impacts to Agriculture, Air Quality and Transportation would still occur under this alternative and the identified mitigation measures would still be required under this alternative. Furthermore, this alternative would not meet most of the project objectives at all or to the same degree as the proposed project. For example, employment-generating industrial uses would be significantly less, and this alternative would also only partially meet qualitative objectives related to reducing the commute for regional residents, providing an improved circulation system, and providing public facilities and services such as stormwater drainage improvements (Draft EIR, Page 6-12–6-19). Based on the analysis in the EIR and all other relevant evidence in the administrative record before it, the City Council finds that the Outside Storage Allowable Use Alternative would not eliminate any of the significant and unavoidable impacts, and would not satisfy most of the project objectives at all or to the same degree as the proposed project. This City Council rejects this alternative as infeasible.

Alternative 3: Agricultural Protection Alternative.

Description

Under the Agricultural Protection Alternative, the project site would be developed in such a way to protect some of the on-site Prime Farmland by reducing the overall footprint of the developed areas while maintaining a buffer between existing residences along California Avenue. The northern half (approximately 11 acres) of the Zuriakat parcel would remain in agricultural production.

Findings

The Agricultural Protection Alternative would reduce to a certain extent those impacts related to ground disturbance by reducing the overall footprint of developed areas, preserving some of the site's Prime Farmland. Additionally, wildfire impacts (which are already considered to be "no impact") would be further reduced under this alternative because the overall footprint of the developed areas would be reduced. However, while it would result in some degree of reduction, it would not eliminate any of the significant and unavoidable impacts with respect to agricultural resources, air quality, or transportation, and the identified mitigation measures would still be required. While this alternative would meet, to a certain degree, some of the project objectives related to employment opportunities, reducing the commute for regional residents, providing an efficient circulation system, and providing public facilities and services, such as stormwater drainage improvements, this alternative would not achieve these objectives to the same degree as the proposed project. Moreover, reducing the size of the warehouse and distribution buildings would reduce the amount of employment-generating industrial uses, thereby not facilitating the achievement of the City's General Plan objectives related to employment growth and expanding the City's industrial base to the same degree as the proposed project (Draft EIR, Page 6-19–6-25). Based on the analysis in the EIR and all other relevant evidence in the administrative record before it, this City Council finds that the Agricultural Protection Alternative would not eliminate significant and unavoidable impacts and would not achieve most of the project objectives at all or to the same degree as the proposed project. This City Council rejects this alternative as infeasible.

Environmentally Superior Alternative

Section 15126.6(e)(2) of the State CEQA Guidelines requires that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR. If the No Project Alternative is the environmentally superior alternative—which is the case here, as it avoids all significant project impacts, but fails to satisfy any of the project objectives—the EIR must also identify another environmentally superior alternative among the remaining alternatives.

Each of the three project alternatives would lessen the environmental impacts relative to the proposed project to a certain degree (as summarized above and further described in the EIR). Overall, based on these Findings, the Outside Storage Allowable Use Alternative (Alternative 2) would be considered the environmentally superior alternative because it has the potential to yield the greatest reductions in the severity of the proposed significant and unavoidable impacts and would preserve approximately 48 acres of the existing agricultural operations including Prime Farmland. However, this alternative fails to eliminate any of the significant and unavoidable impacts, and would also not achieve most of the project objectives at all or to the same degree as the proposed project. For example, it would substantially reduce the employment-generating opportunity objective as it would not provide as many local and regional employment opportunities to take advantage of the project site's high level of accessibility; it would not allow for the expansion of the City's economic base to the same degree; nor would it help improve the jobs/housing balance and reduce the commute for regional residents to the same degree. (Draft EIR, Page 6-25–6-27). Based on the analysis in the EIR and all other relevant evidence in the administrative record before it, the City Council finds that, while identified as environmentally superior, this alternative would not

eliminate any significant and unavoidable impacts and would not achieve most of the project objectives at all or to the same degree as the proposed project. The City Council rejects this alternative as infeasible.

1.10 - Findings Regarding Cumulative Impacts

Consistent with CEQA's requirements, the EIR includes a thoughtful analysis of cumulative impacts. As summarized above in Sections 1.5 through 1.7 and as analyzed in the EIR, except as to cumulative impacts related to the conversion of Farmland, air quality emissions and VMT impacts, all other cumulative impacts associated with the proposed project would be less than significant with, for example, the implementation of applicable laws and regulations (including General Plan goals, policies and implementing actions) and for the other reasons documented in the EIR's relevant sections. The proposed project's contribution to the less than significant cumulative impacts would not be cumulatively considerable. Cumulative agricultural, air quality and VMT impacts would remain significant and unavoidable even with incorporation of all available feasible mitigation. As discussed in Section 1.8, the proposed project would have a cumulatively considerable impact related to air quality and transportation. These impacts are considered cumulatively significant and unavoidable. No feasible project alternatives would reduce these impacts to a less than significant level while meeting most of the project objectives.

1.11 - Findings Regarding Growth Inducement

State CEQA Guidelines Section15126.2(e) requires a discussion of the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Typical growth-inducing factors might be the extension of urban services or transportation infrastructure to a previously unserved or underserved area, or the removal of major barriers to development.

Because the proposed project is industrial in nature and would not develop single-family or multi-family residential uses, no direct population growth would be expected to occur. In terms of the removal of any direct barriers to growth, this would not occur as a result of the project because the proposed project would not remove any existing obstacles that currently prevent growth within the City. For example, the proposed project would not require expansion of existing water, wastewater and public facilities and services beyond what was already planned for in the General Plan, NEI Specific Plan, and relevant City and other public agency master infrastructure plans. The utility infrastructure installed as part of the proposed project would be sized and located expressly to serve the proposed project and would not, therefore, induce growth in the project vicinity. Therefore, because the proposed project does not involve housing, nor would it remove any direct barriers to growth, the proposed project would not directly increase population.

Once operational, the proposed project at full buildout is expected to employ up to approximately 1,871 people on-site for daily operation. Given the nature of the proposed uses, it is anticipated that the employees would come primarily from the local job market and therefore would not likely trigger significant additional housing development to serve these employees, and the proposed project would help to support the City's jobs-to-housing ratio goal of 1.5 as established by the

California Department of Housing and Community Development (HCD). The current ratio is 1.3. Furthermore, the project site is within the City's existing SOI and has been designated by the General Plan for industrial uses and therefore, the City has anticipated this growth in employment opportunities that would result from the proposed project. Infrastructure and services would be expanded to serve the proposed project, but would not require expansion of existing water, wastewater and other facilities and services beyond what was already planned for in the General Plan and relevant City master infrastructure plans, and thus would not encourage additional unplanned growth. For these reasons, implementation of the proposed project would not induce substantial indirect population growth within the City.

The proposed project would employ approximately 1,871 people at full buildout, representing approximately 30 percent of the City's forecasted employment growth between 2020-2045.[4] As discussed above, the proposed project's contribution to employment in the City is consistent with the forecasted employment anticipated in the General Plan.

According to the U.S. Census data, it is estimated that approximately 45,000 of the City's residents are employed. In addition, the average travel time to work for Tracy's employed residents is 44.5 minutes, indicating that most residents probably travel out of the City to work. The General Plan assumes employment growth to improve the jobs-to-housing balance to provide more employment opportunities for the City's residents. Therefore, it is reasonably foreseeable that many of the employees of the project would come from the labor pool within Tracy, and the proposed project, combined with other planned cumulative projects would not induce unplanned indirect population growth. (Final EIR, Page 3-99–100) For these reasons, this City Council finds there would be no adverse cumulative growth-inducing impacts.

Accordingly, this City Council finds that the proposed project would not result in unplanned direct, indirect or cumulative growth that would negatively alter the existing jobs/housing balance, or be inconsistent with the General Plan, the NEI Specific Plan, or relevant City or other public agency master infrastructure plans (Draft EIR, Page 5-3–5-4).

[4] City of Tracy. 2022. City of Tracy New Construction Industrial & Commercial Development Pipeline Report. Website: https:///www.cityoftracy.org/home/showpublisheddocument/13056/637882942906530000. Accessed: August 5, 2022.

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Response to GSEJA-15
The commenter states that the proposed project's employment would exceed the amount planned for in the 10-year horizon from the MSR. The commenter requests that this information be discussed in a revised EIR, and that a finding of significance be made in this regard.

As discussed in Response to GSEJA-14, it is anticipated that the proposed project would employ a total of approximately 1,871 employees at buildout. Therefore, the anticipated employment projections associated with the proposed project are within the projections provided in Table 2-7 of the MSR for 2029 to 2049. The commenter notes the construction schedule provided in the Draft EIR assumes project operation commencing in 2025. However, this schedule was utilized to provide a conservative analysis, and, given that demolition has not occurred by April 28, 2022, as provided in the schedule, it is unlikely that the proposed project would be operational by 2025. Moreover, see Response to GSEJA-7, which explains the purpose of the MSR (which relates to LAFCo decisions about boundary changes). For example, there is a note included under Table 2-7 that states "this table is intended to demonstrate the potential pace of growth in the City and Sphere of Influence (SOI) and is not intended to place limitations on growth or otherwise be used to control the rate, type, or location of growth."

The Draft EIR properly evaluated the potential impacts of this growth utilizing the planning and land use assumptions reflected in the City's General Plan. As discussed in more detail in Section 4, Effects Found not to be Significant, of the Draft EIR, the industrial uses on the project site were anticipated by the City in the General Plan, and thus, the City anticipated this number of employees needed for such a project. Therefore, the proposed project would not result in a significant, unplanned change to the population of the City.

Response to GSEJA-16
The commenter states that the proposed project's estimate of 3,354 employees exceeds the capacity of the 2019 MSR, which indicates that the proposed project would result in a significant, unplanned change to the population of the City resulting in a significant and potentially cumulatively significant impact. For this reason, the commenter states that the Draft EIR must be revised.

See Responses to GSEJA-14 and GSEJA-15. The City, in its discretion as the Lead Agency, utilized 1,871 employees consistently throughout the Draft EIR as the most accurate employee projection based on the best available data, and as explained in GSEJA-15, the proposed project would not result in unplanned growth. Though the proposed project would generate employment, as explained in Chapter 4, Effects Found not to be Significant, the proposed project is industrial in nature (consistent with the long-planned vision for the project site and vicinity as reflected in the Industrial land use designation) and would not develop single-family or multi-family residential uses, and no direct population growth would be expected. With respect to indirect population growth, the project would create substantial employment opportunities, and therefore, could lead to indirect growth inducement. As discussed in Section 4 of the Draft EIR, according to the U.S. Census data, it is estimated that approximately 45,000 of the City's labor force is employed.[8] In addition, the average

[8] United States Census. 2020. Tracy, CA, Employment Data. Accessed: September 15, 2022.

travel time to work for Tracy's employed residents is 44.5 minutes, which strongly suggests that most residents travel a significant distance out of the City to work.

As detailed more fully in Section 4 of the Draft EIR, the General Plan assumes employment growth to improve the jobs-to-housing balance and provide more employment opportunities for the City's residents. Therefore, it is reasonably foreseeable that many of the employees of the project would come from the labor pool within Tracy, and the proposed project would not induce unplanned indirect population growth.

Response to GSEJA-17
The commenter requests that the Draft EIR should provide an analysis of the projects approved since 2020 and in the pipeline to determine consistency with the SJCOG employment growth forecast. The commenter then provides examples of planned projects as of May 2022 and requests that a revised EIR determine whether the proposed project employees would exceed growth forecasts in the General Plan or NEI Specific Plan.

CEQA Guidelines Section 15125, Environmental Setting, requires that an EIR include a description of the physical environmental conditions in the vicinity of the project site viewed from a "local and regional perspective." This environmental setting will normally constitute the baseline physical conditions by which a lead agency measures the changes to the environment that would result from a project and for determining whether those environmental effects would be significant. The purpose of this requirement is to give the public and the decision-makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts.

In general, consistency in the description of the environmental setting is critical to ensure an accurate evaluation of environmental impacts. In other words, to provide the impact assessment that is a fundamental purpose of an EIR, the EIR must delineate environmental conditions absent the project, thereby defining a "baseline" against which predicted effects can be described and quantified.[9] An EIR's description of this environmental setting should be sufficiently comprehensive to allow the project's significant impacts "to be considered in the full environmental context" (CEQA Guidelines *§* 15125(c)). However, the description should be no longer than necessary to provide an understanding of the significant effects of the project and of the alternatives analyzed in the EIR (CEQA Guidelines *§* 15125(a)). CEQA provides the lead agency with significant discretion in determining the appropriate "existing conditions" baseline.[10] As indicated in CEQA Guidelines Section 15125(a)(1), generally, the lead agency should describe the physical environmental conditions as they exist at the time the notice of preparation is published. This is consistent with the related CEQA provision addressing the evaluation of a project's environmental effects. Under CEQA Guidelines Section 15126.2(a), in assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published.

The Draft EIR is consistent with the foregoing requirements. The Draft EIR's notice of preparation was published on August 28, 2020, and thus the environmental setting reflected in the Draft EIR

[9] See, e.g., *Neighbors For Smart Rail v. Exposition Metro Line Constr. Auth*. (2013) 57 Cal.4th 439, 447.
[10] See, e.g., *Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 336.

1.12 - Findings Regarding Significant Irreversible Environmental Changes

According to Sections 15126(c) and 15126.2(d) of the State CEQA Guidelines, the lead agency shall address any significant irreversible environmental changes that would occur should the proposed project be implemented. Generally, a project would result in significant irreversible environmental changes if any of the following would occur:

- The proposed project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of the proposed project would generally commit future generations to similar uses;
- The proposed project involves uses in which irreversible damage could result from any potential environmental accidents; or
- The proposed consumption of resources are not justified.

The proposed project involves construction and operation of multiple light industrial, warehouse and distribution uses and related improvements and ancillary uses (e.g., office), which at buildout, would total approximately 3,352,320 square feet. As described more fully in the EIR, Chapter 2, Project Description, three warehouse and distribution buildings and related improvements are proposed for the Tracy Alliance parcels, totaling approximately 1,849,500 square feet. With respect to the Suvik Farms and Zuriakat parcels, there are no current development proposals; therefore, for purposes of a conservative analysis, it is assumed that at buildout, these parcels would be developed with approximately 1,502,820 square feet, consistent with the maximum allowable density per acre identified in the NEI Specific Plan. Other project components would include the construction of an approximately 12.44-acre stormwater detention basin with a pump station, as already envisioned in the current City of Tracy Citywide Storm Drainage Master Plan. Existing trees and ornamental plants associated with existing residential uses and all crops would be removed as part of the proposed project. The proposed project would be developed within the NEI Specific Plan area (as amended to include the adjacent project site), which would help ensure the efficient, cohesive construction and operation of the proposed project near other similar, compatible uses.

Construction would include the use of building materials, such as petroleum-based products and metals, which cannot reasonably be recreated. Construction also would involve significant consumption of energy, consisting predominantly of petroleum-based fuels that deplete supplies of nonrenewable resources. Construction of structures, other improvements and infrastructure would also consume energy and water.

However, construction debris recycling practices would be expected to result in the recovery and reuse of building materials such as concrete, lumber, and steel; these practices would also limit disposal of these materials, some of which are nonrenewable. Additionally, construction equipment would have to meet applicable Valley Air District standards as described in the EIR, Section 3.3, Air Quality. The EIR, Section 3.6, Energy, addresses energy consumption during construction and explains in more detail why impacts would be less than significant in this regard.

Once construction is complete, land uses associated with the proposed project would use some nonrenewable fuels to heat and light structures. New industrial uses would be required to adhere to the latest adopted edition of the California Green Building Standards Code (CALGreen), which includes a number of standards and features (viewed as some of the most stringent requirements in the country) that would reduce energy demand, water consumption, and wastewater and solid waste generation that would collectively conserve and reduce the demand for resources. This would result in reduced emissions and the generation of less pollution and effluent and lessen the severity of corresponding environmental effects. Although the proposed project would result in an irretrievable commitment of nonrenewable resources and water for irrigation and plumbing, these would not be consumed inefficiently, unnecessarily, or wastefully. Moreover, the project applicants have voluntarily agreed to additional measures/features, to be implemented as enforceable conditions of approval, which would further address the foregoing energy issues.

Furthermore, the proposed industrial uses do not have the potential to cause significant environmental accidents through releases into the environment, as they would not involve large quantities of hazardous materials (see Section 3.9, Hazards and Hazardous Materials). Future tenants/operators would be required to submit a HMBP to San Joaquin Environmental Health for review and approval if the tenants/operators intend to store significant amounts of hazardous materials on-site. According to the California Department of Forestry and Fire Protection (CAL FIRE), there are no Very High Fire Hazard Severity Zones in San Joaquin County, and therefore none in the project site. Because the project site has not previously experienced wildfire and is not located in or near an area of steep terrain or historical wildfire burn, nor does it experience consistent high winds, the project site would not be prone to wildfire risk (see Draft EIR, Section 3.17, Wildfire). In addition, existing fire protection facilities would be adequate to serve the project site, and the proposed project would not result in a significant impact related to need for new or altered fire protection facilities. Thus, implementation of the proposed project's industrial uses would not have the potential to result in significant environmental accidents related to wildfire hazards and would not result in significant irreversible environmental changes (Draft EIR, Page 5-4–5-5). Furthermore, the proposed project would be located directly adjacent to a developed urbanized area, including major transportation corridors, and would accommodate bicycle and pedestrian access for the project vicinity as well as transit improvements and other TDM measures, which would also help to ensure that it would not result in the inefficient, wasteful, or unnecessary consumption of transportation energy during operational activities.

1.13 - Statement of Overriding Considerations

The City of Tracy is the lead agency under CEQA for the preparation, review, and certification of the EIR for the proposed project. As the lead agency, the City is also responsible for determining the potential environmental impacts of the proposed action, which of those impacts are significant, and which impacts can be mitigated through imposition of feasible mitigation measures to avoid or minimize such impacts to a level of less than significant.

If significant and unavoidable impacts are identified, then CEQA requires that a lead agency balance the benefits of a project against its unavoidable adverse environmental risk(s) in determining whether to approve the project.

In particular, Public Resources Code Section 21081(a) and CEQA Guidelines Section 15093(a) provide that no public agency may approve or carry out a project for which an environmental impact report has been certified that identifies one or more significant effects on the environment that would occur if the project is approved or carried out, unless the public agency makes one or more of three findings with respect to each significant effect. Public Resources Code Section 21081(b) requires that where a public agency finds that specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report, then the public agency must find that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

Where the lead agency finds that the economic, legal, social, technological, or other benefits, including region-wide or Statewide environmental benefits, of a project outweigh the unavoidable adverse effects, those effects may be considered "acceptable" pursuant to Public Resources Code Section 21081(b) and CEQA Guidelines Section 15093(a). CEQA requires that a lead agency support, in writing, the specific reasons for considering a project acceptable when significant impacts are infeasible to mitigate. Those reasons must be based on substantial evidence in the EIR or elsewhere in the administrative record pursuant to CEQA Guidelines Section 15093(b). The lead agency's written reasons are referred to as a Statement of Overriding Considerations. If the lead agency makes a Statement of Overriding Considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to CEQA Guidelines Section 15091.

As explained in the above Findings of Fact, most of the proposed project's impacts on the environment would either be insignificant or, through the incorporation of mitigation measures as enforceable conditions of approval of the proposed project, can be reduced to less than significant. However, as set forth in Section 1.7 above, the following impacts would remain significant and unavoidable even with implementation of all feasible mitigation measures, or where no mitigation measures are feasible. Specifically, the EIR (see, e.g., Section 6.2) identified the following unavoidable adverse impacts of the proposed project:

- Project-Level Conversion of Prime Farmland;
- Cumulative Conversion of Prime Farmland;
- Project-Level Impact Related to Implementation of the Applicable Air Quality Plan;
- Project-Level Impact Related to Cumulatively Considerable Net Increase of ROG and carbon monoxide (CO) During Construction, and ROG and oxides of nitrogen (NO_X) During Operation;
- Project-Level Impact Related to Exposing Sensitive Receptors to Substantial Pollutant Concentrations;
- Cumulative Air Quality Impact;
- Project-Level VMT Impact; and

- Cumulative VMT Impact.

Further, as summarized in Section 1.8 above and discussed more fully in the EIR, three alternatives to the proposed project were analyzed to determine whether these alternative(s) could avoid or substantially lessen the unavoidable environment impacts of the proposed project. While the No Project Alternative would avoid all of the significant and unavoidable impacts, it would not meet any of the project objectives. With respect to the Outside Storage Allowable Use Alternative, impacts for a number of environmental topic areas would be lessened to a certain degree (including the unavoidable impacts), although this Alternative would not avoid any of the significant and unavoidable impacts and would not meet most of the project objectives at all or to the same degree as the proposed project. Similarly, the Agricultural Protection Alternative would reduce to a certain extent those impacts related to ground disturbance by reducing the overall footprint of developed areas. However, while it would result in some degree of reduction of impacts, it would not eliminate any of the significant and unavoidable impacts with respect to agricultural resources, air quality or transportation, and would not meet most of the project objectives at all or to the same degree as the proposed project. Accordingly, for the reasons set forth in these Findings and Section 5 of the Draft EIR and as otherwise documented in the administrative record, there are no feasible alternatives to the proposed project.

As required under Public Resources Code Section 21081 and CEQA Guidelines Section 15093, this City Council, having reviewed and considered the EIR, all other written materials within the administrative record, and all oral testimony presented at public hearings and other public meetings on the EIR and the merits of the proposed project, has balanced the benefits of the proposed project against the identified unavoidable adverse impacts associated with the proposed project, and hereby adopts all feasible mitigation measures with respect to such impacts, certifies the EIR, and approves the proposed project. This City Council has also examined the alternatives to the proposed project, none of which is feasible, meets most of the project objectives, or is environmentally preferable to the proposed project for the reasons discussed in Section 1.8 above and the EIR.

Accordingly, as set forth below, the City Council hereby declares that pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15093, the following benefits of the proposed project outweigh the identified significant adverse environmental impacts of the proposed project that cannot be mitigated. The City Council finds that having reduced the adverse significant environmental effects of the proposed project to the extent feasible by adopting the mitigation measures contained in the EIR, the MMRP, and these Findings, having considered the entire administrative record on the proposed project, and having weighed the benefits of the proposed project against its unavoidable adverse impacts after mitigation, each of the following social, economic, and environmental benefits of the proposed project separately and individually outweigh the potential unavoidable adverse impacts and render those adverse environmental impacts acceptable based upon the following overriding considerations:

- Completion and operation of the proposed project would employ approximately 1,871 people creating local and regional employment opportunities that improve the jobs-to-housing ratio and expand economic opportunities in the City.

- The proposed project would create a substantial number of temporary and permanent jobs during both construction and operation consistent with the skills and availability of the local workforce and assist in fulfilling the City's priorities for future growth anticipated by the General Plan.
- At buildout, the proposed project would generate significant tax revenue for the City's benefit.
- The location of the proposed project would provide a high level of accessibility and reduce the commute for regional residents, promoting the planned, orderly, efficient development of the area.
- The proposed project would provide an efficient circulation system and facilitate a future planned interchange at Paradise Road and I-205 through the dedication of land.
- The proposed project would improve mobility and provide bicycle and pedestrian connections by constructing a Class I bicycle path to accommodate both pedestrians and bicycles per the TMP for both Grant Line Road and Paradise Road. These connections would ultimately provide access to the nearest transit facility; thereby improving access to alternative transportation.
- The project site would be included as part of the NEI Specific Plan, which is in the northeastern sector of the City that has been identified for industrial growth. With direct access to I-205 and rail transportation, the project site (and the remaining portions of the NEI Specific Plan area) are ideally situated to attract and support business without the need for major infrastructure expenditures, and result in the siting of industrial uses in proximity to other similar uses and appropriately distanced and buffered from sensitive receptors. This enables the City to facilitate goals of economic development and employment generation, while also helping to ensure the availability of lands in other locations in the City (and its sphere of influence) for non-industrial uses; this encourages an appropriately diverse and balanced approach to land use consistent with the City's General Plan.
- The proposed project would maximize the utility of its location and infrastructure to develop industrial uses in a manner that would promote land use patterns that reduce the number and length of motor vehicle trips and reduce VMT impacts consistent with the City's planned industrial vision.
- The proposed project would promote numerous sustainability and energy conservation policies, including those contained in the Tracy Sustainability Action Plan, as well as through the voluntary incorporation of various "good neighbor policies" and other measures/features as enforceable conditions of approval, such as, among others, using good faith and diligent efforts to facilitate the installation of a community solar array, sensitive design and buffering with respect to loading docks, prohibition of cold storage uses and TRUs, installation of conduit to facilitate future EV charging stations for HHD trucks, incorporation of Leadership in Energy and Environmental Design (LEED®) building standards, and the incorporation of design elements to help ensure efficient traffic circulation patterns.

For the foregoing reasons and as otherwise supported by substantial evidence in the administrative record, this City Council hereby adopts this Statement of Overriding Considerations, which has balanced the benefits of the proposed project against its significant and unavoidable adverse impacts in reaching a decision to approve the proposed project.

Custodian of Record; Scope and Content of Record

The documents and materials that constitute the record of proceedings on which this Resolution has been based are located at the following:

City of Tracy
Development Services
333 Civic Center Plaza
Tracy, CA 95376
Phone: 209.831.6428
Attention: Victoria Lombardo, Senior Planner
Email: victoria.lombardo@cityoftracy.org

This information is provided in compliance with Public Resources Code Section 21081.6.

Various documents, information, testimony, reports, studies, analyses, and other materials (both oral and written) constitute the record upon which the City Council bases these Findings and the basis for the City Council's approval and/or adoption contained herein. These Findings cite specific pieces of evidence, but none of the City Council's findings is based solely on those cited pieces of evidence. Rather, these Findings are based upon the entire record for the proposed project, and the City Council intends to rely upon all supporting evidence in the record for each of its conclusions contained herein.

For purposes of CEQA and these Findings, the documents and materials in the administrative record for the proposed project include, but shall not be limited to, all items referenced in Public Resources Code Section 21167.6(e):

(i) All project application materials;

(ii) The proposed project's EIR (consisting of the Draft EIR, the Final EIR, and all appendices attached thereto);

(iii) All staff reports (including all attachments thereto) and related documents prepared by the lead agency and/or consultants with respect to the lead agency's compliance with the substantive and procedural requirements of this division and with respect to the action on the proposed project;

(iv) All staff reports (including all attachments thereto) and related documents prepared by the lead agency and written testimony or documents submitted by any person relevant to any Findings or Statement of Overriding Considerations adopted by the lead agency pursuant to this division;

(v) All documentary and oral evidence received and reviewed at public hearings, public meetings, study sessions, and workshops on the EIR, and any transcript(s) or minutes of the proceedings at which any advisory body or decision-making body heard testimony on, or considered the EIR;

(vi) All notices issued by the lead agency to comply with this division or with any other law governing the processing and approval of the proposed project;

(vii) All written comments received in response to, or in connection with, the EIR, including responses to the NOP and comments on the Draft EIR;

(viii) All written evidence or correspondence submitted to, or transferred from, the lead agency with respect to compliance with this division or with respect to the proposed project;

(ix) Any proposed decisions or findings submitted to the decision-makers by lead agency staff, or the project proponents, project opponents, or other interested agencies, organizations and/or individuals;

(x) The documentation of the final decision, including certification of the EIR and all documents and materials, in addition to those referenced in paragraph (c), cited or relied on in the Findings or in a Statement of Overriding Considerations adopted pursuant to this division;

(xi) For documentary and informational purposes, all locally-adopted land use plans and ordinances, including, without limitation, general plans, specific plans and ordinances, master plans together with environmental review documents, findings, mitigation monitoring programs, and other documentation relevant to planned growth in the area;

(xii) Any other written materials relevant to the lead agency's compliance with this division or to its decision on the merits of the proposed project, including any drafts of any environmental document or portions thereof, which have been released for public review, and copies of studies or other documents relied upon in any environmental document prepared for the proposed project and either made available to the public during the public review period or included in the lead agency's files on the proposed project, and all internal agency communications, including staff notes and memoranda related to the project or to compliance with this division;

(xiii) The full written record before any inferior administrative decision-making body whose decision was appealed to a superior administrative decision-making body prior to the filing of litigation; and

(xiv) Any additional items not included above if otherwise required by law.

The EIR is incorporated into these Findings in its entirety. Without limitation, this incorporation is intended to elaborate on the scope and nature of mitigation measures, the basis for determining the significance of impacts, the comparative analysis of alternatives, and the reasons for approving the project despite the potential for associated significant and unavoidable adverse impacts.

Recirculation Not Required

After the Draft EIR was published, the City of Tracy received certain additional information that is not included in the Draft EIR. City of Tracy staff and consultants involved in preparing the various studies, reports and analyses included in the EIR have also presented additional information since the publication of the Draft EIR. Some of this information was contained in comments submitted on the Draft EIR, and in responses to those comments contained in the Final EIR. Other information was presented at or before public meetings/hearings on the EIR. The EIR, as well as other aspects of the administrative record, incorporates additions, clarifications, modifications, and other changes, in response to comments and as determined appropriate by lead agency staff and required under CEQA.

This City Council has considered all relevant information including, without limitation, the opinions and comments of interested agencies, organizations and individuals. This includes opinions that disagree with some of the analysis, assumptions, methodologies, thresholds, and conclusions in the EIR. As noted above, the entirety of the EIR is incorporated into these Findings by reference. This City Council hereby ratifies, adopts, and incorporates into these Findings the determinations and conclusions of the EIR relating to the proposed project's environmental impacts and mitigation measures and the analysis related thereto.

Having reviewed all of the information in the administrative record, this City Council finds that this additional information does not constitute significant new information requiring recirculation. The additional information merely clarifies or amplifies an adequate EIR. Specifically, this additional information, including the changes described herein and in the Final EIR, does not show any of the following situations requiring recirculation identified in CEQA Guideline Section 15088.5 have occurred:

1. A new significant environmental impact that would result from the project (or any alternative) or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project (or an alternative), but the project's proponents decline to adopt it.
4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.
5. Based on the foregoing and as explained in more detail in the Final EIR, and having reviewed all the information in the record of proceedings, the City Council hereby finds that this additional information does not constitute significant new information nor does it require recirculation of the Draft EIR. The additional information merely clarifies or amplifies an adequate EIR.

Appendix A: Mitigation Monitoring and Reporting Program

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FIRSTCARBONSOLUTIONS™

Mitigation Monitoring and Reporting Program for the Tracy Alliance Project Environmental Impact Report City of Tracy, San Joaquin County, California

Prepared for:
City of Tracy
333 Civic Center Plaza
City of Tracy, CA 95376
209.831.6428

Contact: Victoria Lombardo, Senior Planner

Prepared by:
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Contact: Mary Bean, Project Director
Tsui Li, Project Manager

Report Date: March 1, 2023
Updated: July 13, 2023

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PREFACE

Pursuant to the Public Resources Code Section 21081.6 of the California Environmental Quality Act and CEQA Guidelines Section 15097 (collectively, "CEQA"), the City of Tracy (Lead Agency) hereby finds that the mitigation measures set forth in this Mitigation Monitoring and Reporting Program (MMRP) for the Tracy Alliance Project (proposed project) will reduce or avoid the identified potentially significant impacts of the proposed project to the extent feasible for the reasons described in the Tracy Alliance Project Draft and Final Environmental Impact Report (collectively, Final EIR) and as otherwise documented in the materials that make up the proposed project's administrative record. The Lead Agency intends for each of the mitigation measures to be adopted as recommended in the Final EIR, and incorporated into conditions of approval for the purpose of ensuring compliance during project implementation.

In the event of any inconsistencies between the mitigation measures set forth in the Final EIR and MMRP, the MMRP shall control. In the event of any inconsistencies between the Standard Conditions of Approval imposed on the proposed project set forth by the City of Tracy and the MMRP, the MMRP shall control.

The Final EIR prepared for the proposed project concluded that project implementation could result in significant effects on the environment and feasible mitigation measures have been identified as set forth in this MMRP and which will be incorporated as enforceable conditions of project approval that would reduce these potential impacts to a less than significant level to the extent feasible. This MMRP documents how and when the mitigation measures adopted by the Lead Agency will be implemented and confirms that identified, potentially significant environmental impacts would be reduced to less than significant levels to the extent feasible as identified in the Final EIR. In addition to the foregoing CEQA mitigation measures but distinct therefrom, this MMRP also sets forth certain additional measures/design features for which the project applicants have voluntarily agreed to incorporate and/or otherwise implement as enforceable conditions of approval.

This document does not discuss those environmental topic areas that the environmental analysis set forth in the Tracy Alliance Project Final EIR (along with other materials in the administrative record) has determined there would result in less than significant impacts and thus for which no mitigation is necessary.

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Table 1: Tracy Alliance Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
3.2 Agriculture and Forestry Resources					
MM AG-1: Payment of Agricultural Mitigation Fees At the time of issuance of building permits for each individual development proposal, the relevant applicant(s) for the subject development proposal shall pay the applicable Agriculture Mitigation Fee in accordance with Chapter 13.28 of the Municipal Code.	Verify payment of Agricultural Mitigation Fee.	At the time of issuance of building permits for each individual development proposal.	City of Tracy.		
3.3 Air Quality					
MM AIR-1a: NO_X Reduction Measures Prior to the issuance of grading permits for each individual development proposal within the project site, the relevant applicant for each development proposal shall provide documentation to the City of Tracy demonstrating the following NO_X reduction measures would be adhered to during construction activities for the relevant development proposal: • For all construction equipment and vehicles used during project construction that are equal to or greater than 250 horsepower, the contractor shall use construction equipment and vehicles that meet the United States Environmental Protection Agency (EPA) Tier 4 Final engine standards; • For all construction equipment and vehicles used during project construction that are less than 250 horsepower, the contractor shall use electric construction equipment and vehicles to the extent feasible, with the exception of handheld generator sets; and • All generator sets utilized during project construction shall be limited to 5 horsepower and shall only be used to power handheld power tools.	Review project construction plans and equipment lists.	Prior to issuance of grading permits for each individual development proposal within the project site.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
The construction contractor shall maintain reasonable records concerning its efforts to comply with this requirement, including equipment lists. Documentation that each relevant applicant provides to the City shall include, but is not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.					
MM AIR-1b: "Super-Compliant" Architectural Coatings Prior to the issuance of grading permits for each individual development proposal within the project site, the relevant applicant for each development shall provide the City with documentation demonstrating the use of "Super-Compliant" architectural coatings, as defined by the South Coast Air Quality Management District (South Coast AQMD), during construction of the proposed project. "Super-Compliant" architectural coatings, as defined by the South Coast AQMD, are paints which do not exceed 10 grams of reactive organic gas (ROG) per liter of paint.	Review project design plans.	Prior to the issuance of grading permits for each individual development proposal within the project site.	City of Tracy.		
MM AIR-1c: "Zero-VOC" Consumer Products Prior to issuance of building permits for each individual development proposal within the project site, the relevant applicant for each development shall provide the City with documentation requiring the consumer products purchased by the building occupant(s) or by the cleaning business contracted by the building occupant(s) for each on-site use shall consist of water-based or "zero volatile organic compound [VOC]" consumer products, to the maximum extent feasible. "Consumer products," as referred to in this mitigation measure, shall include detergents, cleaning compounds, polishes, and floor finishes. "Consumer products," as referred to in this mitigation measure, shall not include parking lot degreasers, architectural coatings, pesticides, or fertilizers.	Verify inclusion in project specifications; conduct site inspection.	Prior to issuance of building permits	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM AIR-1d: Clean Truck Fleet Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating the use of a clean truck fleet that meets the California Air Resources Board's adopted 2013 Optional Low-NOX Standard of 0.02 gram of nitrogen oxide (NO_X) per brake horsepower-hour for all heavy-duty trucks during operation of the proposed project, to the maximum extent feasible. If the relevant applicant does not own the truck fleet that will be used during operation of the subject individual development, the relevant applicant shall provide the City with reasonable documentation from the truck fleet owner demonstrating that trucks utilized for operation of the subject individual development will meet the California 2013 Optional Low-NO_X Standard, to the maximum extent feasible. If any change occurs where a new truck fleet is utilized during operation of the subject individual development, the relevant applicant shall provide the City with reasonable documentation demonstrating that the new truck fleet meets the California 2013 Optional Low-NO_X Standard of 0.02 gram per brake horsepower-hour, to the maximum extent feasible.	Verify inclusion in project specifications.	Prior to issuance of the certificate of occupancy for each individual development proposal within the project site.	City of Tracy.		
MM AIR-1e: Operational Truck Fleet Routing Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that trucks used during project operation for the subject individual development proposal shall be prohibited from accessing Grant Line Road east of the project site, such as plans illustrating intended truck routes. Additionally:	Review truck fleet routing plans, roadway improvement plans, and signage design plans.	Prior to issuance of the certificate of occupancy for each individual development proposal within the project site.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
A. Prior to the issuance of grading permit, the project applicant shall submit to the City of Tracy Engineering Department plans or designs that show where the project's private drive intersects with Grant Line Road, the applicant shall use a combination of raised concrete medians (or islands) and/or bollards to prevent trucks from entering the left turn pocket. Truck drivers shall be directed into a dedicated right turn lane onto Grant Line Road. Signage and roadway striping within the project shall also direct drivers to the appropriate lanes as they approach the intersection. The design shall be reviewed and approved by the City of Tracy Engineering Department. B. Prior to the issuance of occupancy permit for the first building, the Phase I Developer shall demonstrate to the City of Tracy Public Works Department that the development shall include new signage along Grant Line Road, warning truck drivers that truck travel through the Community of Banta is not permitted and is a finable offense shall be placed along Grant Line Road. Specifically, two signs shall be placed on the north and south sides of Grant Line Road near its intersection with the proposed project's private drive and visible to east bound traffic. The exact locations, design and text of the signs shall be approved by the City of Tracy Public Works Department.					
MM AIR-1f: Idling Limitation Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that on-site truck idling during project operation for the subject individual development proposal shall be limited to no greater than 3 minutes. The documentation provided to the City shall include photos or a map of signage posted in strategic locations on-site identifying	Review documentation and on-site signage demonstrating that on-site truck idling shall be limited to no greater than 3 minutes.	Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
that truck idling does not exceed 3 minutes. The signage shall include a phone number to contact at the facility regarding idling violation complaints, and corrective action shall occur within 48 hours of receipt of the complaint.					
MM AIR-1g: Electric On-Site Off-Road and On-Road Equipment Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that all on-site off-road and on-road equipment to be used during project operation of the subject individual development proposal shall be electric-powered. On-site off-road and on-road equipment shall include, but are not limited to, forklifts and pallet jacks.	Review construction plans.	Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site.	City of Tracy.		
MM AIR-1h: Vegetated Project Site Buffer Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall demonstrate on their site plans the inclusion of a vegetative buffer along the eastern property line of the project site adjacent to sensitive receptors. Examples of vegetative buffers may include, but are not limited to, trees, bushes, shrubs, or a mix thereof.	Review project design plans.	Prior to the issuance of building permit(s) for each individual development proposal within the project site.	City of Tracy.		
MM AIR-1i: Tier 2 CALGreen Electric Vehicle Charging Infrastructure Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation (e.g., shown on-site plans) showing that the proposed parking areas for passenger automobiles and trucks for project operation of the subject individual development proposal are designed and	Review documentation (e.g., shown on-site plans) showing that the proposed parking areas for passenger automobiles and trucks are designed and will be built to include EV charging stations.	Prior to the issuance of building permits(s) for each individual development proposed within the project site.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
shall be built to include electric vehicle (EV) charging stations. At a minimum, the parking shall be designed to include a number of EV charging stations equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2.					
3.4 Biological Resources					
MM BIO-1a: Song Sparrow and Tricolored Blackbird Mitigation Implementation of the following avoidance and minimization measures would avoid or minimize potential effects to song sparrow and tricolored blackbird as a result of project implementation within the Zuriakat parcel in and adjacent to the project site. These measures shall be implemented for construction work that occurs during the nesting season (February 1 through August 31): • If construction or habitat removal is proposed during the breeding/nesting season (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for song sparrow and tricolored blackbird within potential nesting habitat of the construction area, (special attention should be paid to the cattail marsh within the Zuriakat parcel) including a 500-foot survey buffer for tricolored blackbird and a 75-foot survey buffer for song sparrow, no more than 7 days prior to the start of ground-disturbing activities in the construction area. If no active nests are detected within the construction area on the project site or within the relevant buffer survey area, then no additional measures are required. • If an active nest is located during pre-construction surveys, the California Department of Fish and Wildlife (CDFW) (as appropriate) shall be notified (as appropriate) regarding the status of the nest. A setback of 500 feet (for tricolored blackbird) and 75 feet (for song sparrow) shall be established	If construction occurs within the Zuriakat parcel during the nesting season (February 1–August 31), conduct pre-construction site inspection.	No more than 7 days prior to the start of ground-disturbing activities within the Zuriakat parcel during the nesting season (February 1–August 31).	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
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and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Furthermore, construction activities shall be restricted in the construction area as necessary to avoid disturbance of the nest until it is abandoned, or a qualified Biologist deems disturbance potential to be minimal. Restrictions shall include consultation with a qualified Biologist to determine appropriate buffer zones or alteration of the construction schedule in the relevant area. • A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.					
MM BIO-1b: Swainson's Hawk **Foraging:** Prior to any activities that would result in ground disturbance to the project site, the relevant applicant(s) for the subject development on any portion of the project site shall each ensure coverage of the relevant portion(s) of the project site under the SJMSCP and pay the applicable fee purchase adequate mitigation through the SJMSCP for 140.59 acres of potential foraging habitat (recommended) or alternatively provide applicant-responsible compensatory mitigation at a 1:1 ratio (such as procurement of credits through a mitigation bank or dedicated of a conservation easement). **Nesting:** The following measures shall be implemented for construction work during the nesting season (February 1 through August 31): • Implementation of the following avoidance and minimization measures would avoid or minimize potential effects to Swainson's hawk as a result of project	Verify payment of applicable mitigation fees; conduct site inspection; verify retention of qualified Biologist.	No more than 7 days prior to the start of ground-disturbing activities during the nesting season (February 1–August 31).	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
implementation and adjacent to the project site. These measures shall be implemented for construction work that occurs during the nesting season (February 1 through August 31): - If construction or habitat removal is proposed during the breeding/nesting season (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for Swainson's hawk within the construction area, (special attention should be paid to trees with past recorded occurrences) including a 0.5-mile survey buffer, no more than 7 days prior to the start of ground-disturbing activities in the construction area. If no active nests are detected within the construction area site or within the buffer survey area, then no additional measures are required. - If active Swainson's hawk nests are found within the construction area or the 0.5-mile survey buffer of the project site, a qualified Biologist shall determine what nest avoidance buffers may be necessary so that construction-related activities do not cause nest abandonment. The avoidance buffer shall be submitted to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) for approval. The qualified Biologist shall monitor construction activities to ensure construction activities do not result in adverse effects to the nest, fledglings, or adults. The Biologist shall submit a memorandum documenting construction compliance to the appropriate agencies.					
MM BIO-1c: **Burrowing Owl** • A qualified Biologist shall conduct a pre-construction survey no later than 30 days prior to commencement of any ground-disturbing construction activities on the construction area. The survey shall be conducted in accordance with the	Conduct site inspection; if an active nest is found during the breeding season (February 1–August 31), submit	No later than 30 days prior to the commencement of any ground-disturbing	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Staff report on Burrowing Owl Mitigation. All suitable habitats within the construction area site and adjacent buffer (within 500 feet) shall be surveyed. If no burrowing owl are detected during the surveys, then no additional measures are required. • If pre-construction surveys during the breeding season (February 1- August 31) detect active burrows within the construction area or near the adjacent buffer survey area site, a qualified Biologist shall establish and delineate an appropriate buffer zone around the nest until the breeding season is over as determined by the Biologist. Buffer areas shall be established using the guidelines within the *Staff report on Burrowing Owl Mitigation*. • If pre-construction surveys detect active burrows during the nonbreeding season (September 1- January 31) the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) allows for eviction or passive relocation of owls. A passive relocation plan shall be prepared and submitted to SJMSCP for approval.	passive relocation plan to SJMSCP.	construction activities.			
MM BIO-1d: San Joaquin Kit Fox Measures to protect San Joaquin kit fox shall consist of the following: • A qualified Biologist shall conduct a pre-construction survey of the construction area and a 200-foot buffer, between 14 and 30 days prior to the commencement of ground disturbance. If the surveys do not identify any San Joaquin kit fox activity or locate any potential dens, then no further measures are necessary. • If the survey identifies potential dens (potential dens are defined as burrows at least 4 inches in diameter that open up within 2 feet), den entrances shall be dusted for 3 calendar days to register track of any San Joaquin kit fox present. If no San Joaquin kit fox activity is identified, potential dens may be destroyed. If San Joaquin kit fox	Conduct site inspection; if a den is occupied, educated construction workers regarding the San Joaquin kit fox.	Between 14 and 30 prior to the commencement of any ground-disturbing construction activities.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
activity is identified, then dens shall be monitored by a qualified Biologist to determine whether occupation is by an adult fox only or is a natal den (natal dens usually have multiple openings). • If the den is occupied by an adult only, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den until the Biologist determines that the den has been vacated. Where San Joaquin kit fox are identified, the provisions of the United States Fish and Wildlife Service (USFWS) published *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* shall apply (except that pre-construction survey protocols shall remain as established in this paragraph). These standards include provisions for educating construction workers regarding the San Joaquin kit fox and keeping heavy equipment operating at safe speeds.					
MM BIO-1e: Migratory Birds • To prevent significant impacts to Migratory Bird Treaty Act (MBTA)-protected birds, nesting raptors, and their nests, removal of trees shall be limited to only those necessary to feasibly construct the proposed project as shown on the individual development plans approved by the City pursuant to the mapping and/or development review process. • If any tree removal is necessary, then it should occur outside the nesting season between September 1 through January 31 to the extent feasible. If trees cannot feasibly be removed outside the nesting season, pre-construction surveys shall be conducted no more than 7 days prior to tree removal to verify the absence of active nests. • If an active nest is located during pre-construction surveys, the United States Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW) (as	If tree removal occurs during the nesting season (September 1 – January 31), conduct site survey; verify reporting to the USFWS and CDFW.	No more than 7 days prior to tree removal.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
appropriate) shall be notified regarding the status of the nest. Construction activities shall be restricted in the construction area as necessary to avoid disturbance of the nest until it is abandoned, or the agencies deem disturbance potential to be minimal. Restrictions shall consist of the include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around an active raptor nest and an appropriate radius around an active migratory bird nest depending on the species) or alteration of the construction schedule. • A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.					
MM BIO-1f: Roosting Bats • A qualified wildlife Biologist shall conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the construction area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.). • Visual surveys shall include trees within 0.25 mile of project construction activities. Not more than two weeks prior to building demolition, the Tracy Alliance parcel applicants for development on any project parcel, shall ensure that a qualified Biologist (i.e., one familiar with the identification of bats and signs of bats) survey buildings proposed for demolition for the presence of roosting bats or evidence of bats. If no roosting bats or evidence of bats are found in the structure, demolition may proceed. If the Biologist	Submit evidence of site inspections with verified biological monitor; verify installation of exclusion devices (if construction occurs between May 1 and October 1).	Bat survey to be completed up to 14 days prior to the beginning of the construction period; visual surveys of trees and structures no more than 2 weeks prior to demolition or tree removal.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
determines or presumes bats are present (if there are site access issues or structural safety concerns), the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Building demolition of the subject structure shall only commence after the Biologist verifies seven to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid significant impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts shall also be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).					
MM BIO-3: Conduct Delineation of Potentially Jurisdictional Aquatic Resources (Channels and Wetlands) The applicant(s) for development on any project parcel shall complete a formal jurisdictional delineation to document and quantify the full extent of potentially jurisdictional waters for the relevant project parcel(s) in coordination with the applicable regulatory agencies. The applicant(s) for development on any project parcel shall also coordinate, to the extent required under applicable laws and regulations, with the applicable regulatory agencies (United States Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB], and/or California Department of Fish and Wildlife [CDFW]) to determine whether the irrigation/drainage channels and/or cattail marsh on the project site is protected under Section 404 and 401 of the Clean Water Act (CWA) and/or Section 1602 of the California Fish and Game Code. **Obtain CWA Sections 401 and 404 Permits Prior to Construction**	Review and approval of jurisdictional delineation and any CWA Sections 401 and 404 Permits, and/or Notification of Streambed Alteration prior to Construction of the subject individual development proposal.	Prior to the fill of any potentially jurisdictional waters or any construction activities within irrigation/drainage channels that qualify as streams under CDFW jurisdiction.	USACE, RWQCB, CDFW		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
• Prior to the fill of any potentially jurisdictional waters within the project site, the relevant project applicant(s) for the subject project parcel(s) shall consult with the USACE and Regional Water Quality Control Board, to the extent required under applicable laws and regulations, to determine the extent, if at all, that waters of the United States and State may be impacted by the proposed project. • If required, the relevant applicant(s) for development of the subject project parcel(s) shall obtain a Section 404 CWA permit for impacts to waters of the United States. That same applicant, for development of the subject project parcel(s), will also obtain a Section 401 Water Quality Certification from the RWQCB, if required. Any such required permit and certification shall be obtained prior to issuance of grading permits for the implementation of the individual development proposal on the subject project parcel(s). • The applicant(s) for development on any project parcel shall design the project to result in no net loss of functions and values of waters of the United States and State by incorporating impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as set forth in the subject Section 404 permit and 401 water quality certification. • Compensatory mitigation may consist of (1) obtaining credits from a mitigation bank; (2) making a payment to an in-lieu fee program that would conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities; and/or (3) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This final type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). This					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
project/permit applicant shall retain responsibility for the implementation and success of the mitigation approach. **Obtain Approval of and File Notification of Streambed Alteration Agreement Prior to Construction** The applicant(s) for development on any project parcel shall ensure that the cattail marsh is not obstructed and human intrusion into the area is minimized. In compliance with Section 1600 of the California Fish and Game Code, the relevant applicant(s) of an individual development proposal within the project site shall obtain approval and file a notification of a Streambed Alteration Agreement prior to conducting any construction activities within irrigation/drainage channels that qualify as streams under CDFW jurisdiction (i.e., those having bed and bank and at least periodical flow) if and to the extent required under applicable laws and regulations. Those same applicant(s) shall implement all mitigation measures imposed by the CDFW related to the subject Streambed Alteration Agreement, which may include but not be limited to the implementation of erosion and bank stabilization measures, riparian habitat enhancement, and/or restoration and revegetation of the stream corridor habitat at no less than a 1:1 ratio, as determined by the CDFW.					
3.5 Cultural Resources					
MM CUL-1: Archaeological Spot-Monitoring and Halt of Construction Upon Encountering Historical or Archaeological Materials An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology shall inspect the site once grubbing and clearing are complete for the purpose of determining whether there are any previously undiscovered resources on-site, and prior to any grading or trenching into previously undisturbed soils. This shall be	Review documentation demonstrating retention of a qualified archaeological monitor or professional Archaeologist; conduct site inspections.	Prior to any grading or trenching into previously undisturbed soils and throughout the construction process.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
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followed by regular periodic or "spot-check" archaeological monitoring as determined by the Archaeologist. If the Archaeologist believes that a reduction in monitoring activities is prudent, then a letter report detailing the rationale for making such a reduction and summarizing the monitoring results shall be provided to the City of Tracy for concurrence. In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers shall avoid altering the materials until an Archaeologist has evaluated the situation. The applicants for the development of the Tracy Alliance, Suvik Farms, and Zuriakat parcels shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. The Archaeologist shall evaluate any finding(s) and determine whether they are significant, and if so, shall make recommendations concerning appropriate measures that will be implemented to protect the significant resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered significant resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and shall be submitted to the City of Tracy, the Northwest Information Center (NWIC), and the California Office of Historic Preservation (OHP), as required.					
MM CUL-3: Stop Construction Upon Encountering Human Remains In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code	Review project plans to verify mitigation measure is incorporated into plans.	During construction and any ground-disturbing activities.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Sections 5097.94 and Section 5097.98 shall be followed. If during the course of project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken: 1. There shall be no further excavation or disturbance within 100 feet of the remains until the county coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98. 2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance: • The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. • The descendant identified fails to make a recommendation. • The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American remains: • When an initial study identifies the existence of, or the probable likelihood of, Native American remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicants for the development of the Tracy Alliance, Suvik Farms, and Zuriakat parcels may each develop a plan with respect to their individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC.					
3.7 Geology and Soils					
MM GEO-1: Prepare Grading and Construction Plans that Incorporate Geotechnical Engineering Report Recommendations Prior to issuance of the grading permits for the proposed project, development of the final grading, foundation, and construction plans shall incorporate the site-specific earthwork, foundation, floor slab, lateral earth pressure, and pavement design recommendations, as detailed in the Geotechnical Engineering Report prepared by Terracon dated January 30, 2019. The applicant(s) for development of individual development proposal(s) within the project site shall each coordinate with a City-approved Geotechnical Engineer and Engineering Geologist to tailor the grading and foundation plans for the relevant development proposal, as needed, to reduce risk related to known soil and geologic hazards. The final grading and construction plans for the relevant development proposal shall be reviewed by the City-approved Geotechnical Engineer to confirm compliance with this MM GEO-1.	Review project plans to verify mitigation measure is incorporated into plans.	Prior to issuance of grading permits for the proposed project.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Grading operations shall meet the applicable requirements of the recommendations included in the Geotechnical Engineering Report prepared by Terracon on January 30, 2019. During construction, the City-approved Geotechnical Engineer shall monitor construction of the relevant development proposal to ensure the earthwork operations are properly performed in accordance with the foregoing recommendations.					
MM GEO-6: Inadvertent Discovery of Paleontological Resources During Project Construction In the event a fossil is discovered during construction for the proposed project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist in accordance with Society of Vertebrate Paleontology standards. The applicants for development of individual proposals within the project site shall each include a standard inadvertent discovery clause in every proposed project-related construction contract to inform their respective contractors of this requirement. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and implement a data recovery plan that is consistent with the applicable Society of Vertebrate Paleontology standards. Any recovered fossil should be deposited in an appropriate repository, such as the UCMP, where it will be properly curated and made accessible for future studies.	Review project plans to verify mitigation measure is incorporated into plans.	During construction activities.	City of Tracy.		
3.9 Hazards and Hazardous Materials					
MM HAZ-1a: Conduct Soil Sampling (Tracy Alliance, Zuriakat, and Suvik Farms parcels) Prior to the issuance of grading permits, the relevant applicant for an individual development proposal within the project site shall provide evidence of soil testing within the project boundary to confirm presence or absence of hazardous	Review documents that demonstrate soil testing was completed within the project boundary and any subsequent remediation that was needed.	Prior to the issuance of grading permits for each individual development proposal within the project site.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
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compounds such as lead and arsenic. The testing shall be conducted pursuant to a San Joaquin Environmental Health Department-approved sampling plan. If hazardous levels of hazardous compounds are found, excavated soils shall be sent off-site for disposal and any affected soils encountered should be properly characterized, treated and/or disposed of in accordance with applicable local, State, and federal laws and regulations. The relevant applicant shall complete any residual soil remediation in connection with the relevant individual development proposal to the satisfaction of San Joaquin Environmental Health Department, as evidenced by the submittal of a no further action letter. In addition, if hazardous contaminants related to the former agricultural use of the site (such as lead or arsenic) are found, a construction worker health and safety plan shall be prepared and shall be implemented during construction of the relevant individual development proposal.					
MM HAZ-1b: Proper Disposal and Decommission of Underground Storage Tanks, Aboveground Storage Tanks, and Unlabeled Drums (Tracy Alliance parcels only) If any of the reported underground storage tanks (USTs) or aboveground storage tanks (ASTs) are discovered during excavation activities, the applicant for the development of the Tracy Alliance parcels shall dispose of and decommission the USTs and ASTs in accordance with applicable laws and regulations of the Local Oversight Program (LOP) and the American Petroleum Institute Standards, respectively. The unlabeled drums and containers observed during the site reconnaissance for the Phase I Environmental Site Assessment (Phase I ESA) for the Tracy Alliance parcels shall be characterized and disposed of in accordance with applicable local, State, and federal laws and regulations.	Review documentations that demonstrate proper disposal of all USTs and ASTs.	During excavation of the development of the Tracy Alliance parcels.	City of Tracy; LOP.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM HAZ-1c: Conduct Asbestos and Lead Surveys Prior to Demolition (Tracy Alliance parcels only) Prior to the issuance of demolition permits for the existing buildings, the applicant for the development of the Tracy Alliance parcels shall retain a licensed professional to conduct asbestos and lead paint surveys. These surveys shall be conducted prior to the disturbance or removal of any suspect asbestos-containing materials (ACM) and lead-based paint (LBP), and these materials shall be characterized for asbestos and lead by a reliable method. All activities involving ACM and LBP shall be conducted in accordance with applicable laws and regulations, and all removal shall be conducted by properly licensed abatement contractors.	Review documentation demonstrating a licensed professional was retained and asbestos and lead paint surveys were conducted; Review project plans to verify applicable laws and regulations related to activities involving ACM and LBP are detailed in the project plans.	Prior to the issuance of demolition permits for the existing buildings on the Tracy Alliance parcels.	City of Tracy.		
MM HAZ-1d: Dust Mitigation and Soil Evaluation (Tracy Alliance, Zuriakat, and Suvik Farms parcels) During any grading or excavation activities in connection with an individual development proposal within the project site, relevant development personnel shall be made aware to look for unusual conditions suggesting buried debris or other potential adverse environmental conditions. If any abnormal soils are discovered during development activities, such as stained soils, hydrocarbon odors, or any other unusual odors, all construction activities near the discovery shall be stopped immediately and the applicant for the relevant individual development proposal shall contact a qualified hazardous material consulting firm for further assessment and implementation of any appropriate actions as may be required under applicable laws and regulations before construction of the relevant individual proposal can begin again.	Review project plans to ensure mitigation measure and instructions were detailed in project plans.	During any grading or excavation activities.	City of Tracy.		
MM HAZ-1e: Consultation with Chevron and DigAlert (Tracy Alliance and Suvik Farms parcel only) Prior to any ground disturbance and construction along the northern side of West Grant Line Road, adjacent to the southern boundary of the Tracy Alliance and Suvik Farms	Verify consultation with Chevron and DigAlert 811.	Prior to any ground disturbance and construction in connection with the	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
parcels, the relevant applicant(s) for the development of the Tracy Alliance and/or Suvik Farms parcels shall consult with Chevron (www.chevron-pipeline.com; 800.762.3404) and DigAlert 811 to determine the location of the existing underground petroleum pipeline to facilitate avoidance during ground disturbance and construction activities.		Tracy Alliance and/or Suvik Farms parcels.			
3.10 Hydrology and Water Quality					
MM HYD-1a: Prepare Stormwater Pollution Prevention Plan Prior to the issuance of a grading permit, the relevant applicant for each individual development proposal within the project site shall submit a draft of the Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) in connection with its individual development proposal pursuant to the then-applicable Multi-Agency Post-Construction Stormwater Standards Manual at the time the relevant grading permit is submitted. After City approval of the relevant grading permit, the relevant NOI and SWPPP shall be sent to the California State Water Resources Control Board (State Water Board) for approval. Approval by the State Water Board is a prerequisite for issuance of the relevant grading permit by the City. The SWPPP shall address stormwater management during each phase of construction of the relevant individual development proposal. Best Management Practices (BMPs) shall be integrated into the relevant SWPPP as identified by the City of Tracy, which will result in the reduction or elimination of pollutants in stormwater discharges and the stabilization of BMPs to reduce or eliminate pollutants after construction of the relevant individual development proposal is completed. The relevant SWPPP shall be consistent with the applicable Regional Water Quality Control Board (RWQCB) standards and National Pollutant Discharge Elimination System (NPDES) permit requirements to protect water quality over the period	Verify submission of SWPPP; Approval of NOI and SWPPP by the State Water Board.	Prior to the issuance of a grading permit for each individual development proposal within the project site; throughout construction activities.	City of Tracy; State Water Board.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
of construction of the relevant individual development proposal.					
MM HYD-1b: Prepare Stormwater Management Plan Prior to the issuance of a grading permit, the relevant applicant for each individual development proposal within the project site shall prepare a Stormwater Management Plan in connection with its individual development proposal for review and approval by the City of Tracy. The relevant Storm Water Management Plan (SWMP) shall include two fundamental components: (1) treatment for pollutants collected in stormwater using Low Impact Development (LID) measures, and (2) no net increase in the erosion potential of the receiving stream over the pre-project (existing) condition. All LID treatment measures would be required to be designed in accordance with applicable engineering criteria in the then-applicable Multi-Agency Post-Construction Stormwater Standards Manual. Implementation of the relevant SWMP would require the preparation of a clearly defined Operations and Maintenance (O&M) Plan by the relevant applicant in connection with its development proposal to ensure that installed stormwater treatment measure(s) and hydromodification management control(s) are inspected and properly operated and maintained for the life of the relevant individual development proposal.	Review and approval of SWMP.	Prior to issuance of a grading permit for each individual development proposal within the project site.	City of Tracy.		
MM HYD-3: Prepare Final Drainage Plan Prior to Grading Each applicant for an individual development proposal within the project site shall, in connection with the relevant individual development proposal: • Comply with all applicable rules, regulations, and procedures of the National Pollutant Discharge Elimination System (NPDES) for municipal, construction and industrial activities as promulgated by the California State Water Resources	Review site plans; verify submission of O&M Plan and Final Drainage Plan.	Prior to issuance of grading permits for each individual development proposal within the project site.	City of Tracy, State Water Board, RWQCBs.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Control Board (State Water Board), or any of its Regional Water Quality Control Boards (RWQCBs). • Submit a Final Stormwater Control Plan and a Stormwater Control Operation and Maintenance Plan (O&M Plan) to the City of Tracy Public Works and Community Development Department, which shall be reviewed for compliance with the County's National Pollutant Discharge Elimination System (NPDES) Permit and shall be determined consistent with the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.34 of the Municipal Code, Ordinance 1072) prior to issuance of a grading permit for the relevant individual development proposal. Improvement Plans shall be reviewed to verify consistency with the relevant Final Stormwater Control Plan and compliance with Provision C.3 of the City's NPDES Permit and the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.34 of the Municipal Code, Ordinance 1072). • Prior to issuance of grading permits for each relevant individual development proposal, the relevant applicant shall submit a Final Drainage Plan in connection with the relevant individual development proposal that incorporates the measures included in the Flood Protection Technical Memorandum. The City of Tracy Public Works and Community Development Department shall review the relevant Final Drainage Plan to ensure it is in compliance with all applicable requirements and standards, including the recommendations provided in the Flood Protection Technical Memorandum and in the Citywide Storm Drainage Master Plan in effect at the time building permits are issued, to reduce risk related to flooding within a designated floodplain. The relevant Final Drainage Plan shall be reviewed by City of Tracy Public Works and Community Development Department staff to ensure that all building minimum floor elevations for the relevant development					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
proposal are at 26 feet or 1 foot above the maximum flood elevation and shall accommodate the 200-year storm event as detailed in the Flood Protection Technical Memorandum. In addition, the on-site stormwater detention basin shall be designed in accordance with the recommendations provided in the Flood Protection Technical Memorandum and in accordance with the Citywide Storm Drainage Master Plan in effect at the time building permits are issued. Additionally, the relevant Final Drainage Plan shall determine if discharge of pre-project runoff rates and/or volumes into the Tom Paine Slough drainage area can continue after project construction pursuant to applicable standards and requirements. Should the relevant Final Drainage Plan determine it is feasible to discharge some runoff (possibly up to the pre-project runoff volume) into the existing downstream system, this design shall be submitted to the City of Tracy as part of the relevant Final Drainage Plan for review and approval.					
3.12 Noise: Identified Improvement Measures					
IMM NOI-2: To reduce potential construction noise impacts, the following multi-part Improvement Mitigation Measure (IMM) shall be implemented for the project: • Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Locate stationary operational noise-generating equipment as far as feasible from sensitive receptors when sensitive receptors adjoin or are near a construction area. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site to the extent feasible.	Review construction plans; verify all equipment is equipped with mufflers; verify staging areas.	During all phases of construction.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
• Utilize "quiet" air compressors and other stationary operational noise sources where such technology exists and is commercially practicable. • The construction contractor shall prohibit unnecessary idling (i.e., idling in excess of 5 minutes) of internal combustion engines. • The construction contractor shall, to the maximum extent practicable, locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. • The construction contractor shall ensure that all construction activities that would occur within 550 feet of a residential land use property line shall be limited to daylight hours or to the hours of 7:00 a.m. and 7:00 p.m.					
3.14 Transportation					
MM TRANS-1(a): Transportation Demand Management Measures Prior to issuance of the first building permit for the relevant individual development proposal, the relevant applicant for the individual development proposal at issue shall submit to the City of Tracy Planning Department a Transportation Demand Management (TDM) program that incorporates all of the following six measures (as explained further in Table 3.14-6 of the Draft EIR): 1. Utilize communication and information strategies–4 percent reduction; 2. Offer telecommuting for administrative staff (5 percent of staff population)–1 percent reduction; 3. Designate parking spaces for carpool vehicles–1 percent reduction; 4. Provide a transit stop along the project frontage on Grant Line Road, if agreed to by the City–2 percent reduction;	Review and approval of TDM.	Prior to issuance of the first building permit for the relevant individual development proposal.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
5. Provide bike lanes and sidewalks along the project frontage–1 percent reduction; and 6. Provide on-site bike racks and showers–1 percent reduction. Provided, however, that if the relevant applicant determines that one of more of the foregoing six TDM measures is not feasible in connection with the individual development proposal at issue, then the relevant applicant may obtain approval from the City of Tracy Planning Department of acceptable substitute TDM measure(s) pursuant to Table 3.14-6 of the Draft EIR. The relevant applicant's TDM program, as described above, shall reflect a 10 percent reduction in VMT for the relevant individual development proposal.					
MM TRANS-1(b): Payment of Applicable Banking Fee In addition to the Transportation Demand Management (TDM) program required in MM TRANS-1(a), each applicant for an individual development proposal shall pay its fair share of the applicable fee as set forth in the adopted Vehicle Miles Traveled (VMT) Mitigation Banking Fee in place and effective at the time the relevant applicant seeks to obtain building permits for its individual development proposal. Provided, however, that if the City Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, then the relevant applicant shall implement additional VMT reduction measures in order to meet the minimum VMT reduction requirement of 15 percent.	Verify payment of the applicable VMT Mitigation Banking Fee or that the project TDM meet the minimum VMT reduction requirement of 15 percent for purposes of the subject individual development proposal.	Prior to issuance of the first building permit for the relevant individual development proposal.	City of Tracy.		
MM TRANS-2: Prepare and Implement Construction Traffic Control Plan Prior to the start of construction for an individual development proposal, the relevant applicant shall prepare and submit a	Review and approval of traffic control plan.	Prior to the start of construction for an individual	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Construction Traffic Control Plan for the individual development proposal at issue. Each plan shall include the following items. Each approved plan shall be implemented during construction of the individual development proposal at issue. • Project staging plan to maximize on-site storage of materials and equipment. • Permitted construction hours. • Location of construction staging. • Provisions for street sweeping to remove construction-related debris on public streets. • A set of comprehensive traffic control measures including preparation of traffic control plans, as needed; scheduling of major truck trips and deliveries to avoid peak-hours; lane closure proceedings; signs, cones, and other warning devices for drivers; and designation of construction haul routes. • Survey of the pavement condition on roadways within the relevant individual development to be used as part of the haul route prior to the commencement of any work on-site. The survey shall include a video tape of the roadways. Each relevant applicant shall complete any remedial work prior to initiation of use and provide a bond assuring completion of the remediation work triggered by the individual development proposal, the amount which shall be deemed sufficient by the Public Works Department. • The relevant applicant shall provide a pavement analysis for those roads along the proposed haul routes or any alternate route(s) that are proposed to be utilized by hauling operation for the individual development proposal at issue. This study shall analyze the existing pavement conditions and determine what impact the hauling operation will have over the construction period of the relevant individual development. The study shall provide recommendations to mitigate identified impacts, which shall be implemented by		development proposal.			

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
the relevant applicant for the individual development proposal at issue.					
Transportation: Identified Improvement Measures					
IM-1: I-205 EB Ramps and North MacArthur Drive (Intersection 11) Improvements Prior to issuance of the building permits for each individual development proposal, the City of Tracy Planning Department shall verify that the relevant applicant has paid the applicable TIF fee for the relevant individual development proposal. In so doing, this payment will constitute a pro rata fair share contribution toward the City's ability to implement its TMP, which includes the following improvements: • Lane additions at both ramp terminals and the addition of a second I-205 Westbound on-ramp. The two ramp terminals cannot be improved independently. The westbound ramp terminal would improve with the addition of these lanes.	Verify payment of the applicable TIF fee for the subject individual development proposal.	Prior to issuance of the first building permit for each individual development proposal.	City of Tracy.		
IM-2: Grant Line Road and North MacArthur Drive (Intersection 13) Improvements • Prior to issuance of the building permits for each individual development proposal, the City of Tracy Planning Department shall verify that the relevant applicant has paid its pro rata fair share of the proposed project's fair share of 5.93 percent of the following improvement: the construction of a westbound right turn lane for Intersection 13 (which will include a right-turn overlap signal phase).	Verify payment of pro rata fair share for the subject individual development proposal for westbound right turn lane for Intersection 13.	Prior to issuance of building permits for each individual development proposal.	City of Tracy.		
IM-3: Optimize Signal Cycle Length at Grant Line Road and Chrisman Road (Intersection 9) and Grant Line Road and North MacArthur Drive (Intersection 13) Prior to issuance of the building permits for the first individual development proposal, the City of Tracy Planning Department shall verify that the signal cycle length has been optimized at the intersections of:	Verify optimization of signal lengths at Grant Line and Chrisman Road, and Grant Line Road, and Grant Line Road and North MacArthur Drive.	Prior to issuance of building permits for each individual development proposal.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
• Grant Line and Chrisman Road • Grant Line Road and North MacArthur Drive					
IM-4: Chrisman Road and 11th Street (Intersection 15) Improvements • Prior to issuance of the building permits for each individual development proposal, the City of Tracy Planning Department shall verify that the relevant applicant has paid its pro rata fair share of the proposed project's fair share of 5.35 percent for the following improvement: an additional second westbound left-turn lane for Intersection 15 (which will involve the signal at this Intersection being modified to allow lagging phase for the eastbound left turn and northbound left turn).	Verify payment of pro rata fair share for subject individual development proposal for westbound right turn lane for Intersection 15.	Prior to issuance of building permits for each individual development proposal.	City of Tracy.		
3.16 Utilities and Service Systems					
MM UTIL-1a: Adherence to Applicable Performance Standards and Payment of Infrastructure Fees Prior to the issuance of building permits for an individual development proposal, the relevant applicant shall demonstrate compliance of the individual development proposal at issue with applicable performance standards pursuant to the then-current Urban Water Management Plan, Citywide Water System Master Plan, Wastewater Master Plan, and Citywide Storm Drainage Master Plan. In addition, each applicant for an individual development proposal shall pay its respective proportionate share of required funding, subject to applicable laws governing nexus requirements, to the City for completion of relevant planned City Capital Improvement Plan (CIP) improvements.	Review project design plans to demonstrate compliance of the individual development proposal at issue with applicable performance standards pursuant to City utility master plans; verify payment of applicable funding for CIP improvements.	Prior to issuance of building permits for an individual development proposal.	City of Tracy.		
MM UTIL-1b: Submittal of Final Engineering Plans for Tracy Alliance Parcels Prior to the issuance of the building permit for the first building on the Tracy Alliance parcels, the applicants for the	Review engineering plans.	Prior to issuance of building permits for the first building on	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
development of the Tracy Alliance parcels shall submit engineering plans to the City of Tracy for review and approval to confirm compliance with this MM UTIL-1b. These plans shall include additional 12-inch diameter pipelines on-site as shown on Exhibit 3.16-5 of this Draft EIR and the fire service laterals shall be upsized to 14-inch diameter.		the Tracy Alliance parcels.			
MM UTIL-1c: Submittal of Final Engineering Plans for Suvik Farms and Zuriakat Parcels Prior to the issuance of the building permit for the first building on the subject parcel, each relevant applicant for the individual development proposal of the Suvik Farms or Zuriakat Parcels, respectively, shall each submit final engineering plans to the City of Tracy for review and approval to confirm compliance with the relevant performance standards including, but not limited to, those pursuant to the current Urban Water Management Plan, Citywide Water System Master Plan, Wastewater Master Plan, and Citywide Storm Drainage Master Plan in effect at the time building permits are requested.	Review engineering plans.	Prior to issuance of building permits for the first building on the subject Suvik and/or Zuriakat parcel(s).	City of Tracy.		
MM UTIL-3: Payment of Wastewater Infrastructure Fees/Construction of Wastewater Facilities Prior to the issuance of the first building permit for the subject individual development proposal, the relevant applicant shall participate in the implementation of the Wastewater Master Plan (WWMP) in effect at the time the relevant building permit is requested through the payment of the applicable impact fees as included in the City's Capital Improvement Plan (CIP).	Verify implementation of WWMP through payment of applicable fees for subject individual development proposal.	Prior to issuance of building permits for the subject individual development parcel.	City of Tracy.		
Additional Voluntary Measures/Design Features That Shall Be Incorporated As Enforceable Conditions of Approval					
COA No. 1: Time Limitation for Off-Road Diesel-Powered Equipment During Construction Each piece of off-road diesel- powered equipment used during project construction shall be prohibited from being in the "on" position for more than 10 hours per day.	Verify implementation of off-road diesel-powered equipment running status and equipment's "on" position.	Throughout all construction activities.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
COA No. 2: Transit/Ridesharing Information for Construction Employees Each applicant, in connection with the construction of the relevant specific individual development proposal, shall provide information on available transit and ridesharing programs and services to construction employees.	Review information on available transit and ridesharing programs and services to construction employees.	Prior to issuance of construction permits for each individual development proposal.	City of Tracy.		
COA No. 3: No Diesel-Powered Generators Each applicant, prior to issuance of a building permit for vertical construction in connection with a specific individual development proposal, shall submit language to the City for inclusion in future lease provisions that reflects a prohibition of diesel powered generators during normal project operation unless and until any additional required CEQA review is conducted.	Review language provided to the City that reflects a prohibition of diesel powered generators during normal project operation unless and until any additional required CEQA review is conducted, for inclusion in future lease provisions.	Prior to issuance of building permit for vertical construction in connection with each specific individual development proposal.	City of Tracy.		
COA No. 4: No TRUs or Cold Storage Uses Each applicant, prior to issuance of a building permit for vertical construction in connection with a specific individual development proposal, shall submit language to the City for inclusion in future lease provisions that reflects a prohibition of cold storage uses as well as the use of Transport Refrigerated Units (TRUs) during project operation unless and until any additional required CEQA review is conducted.	Review language provided to the City that reflects a prohibition of cold storage uses as well as the use of Transport Refrigerated Units (TRUs) during project operation unless and until any additional required CEQA review is conducted, for inclusion in future lease provisions.	Prior to issuance of a building permit for vertical construction in connection with a specific individual development proposal	City of Tracy.		
COA No. 5: LEED Green Building Standards Each applicant, in connection with the relevant specific individual development proposal, shall incorporate LEED green building standards.	Review relevant specific individual development proposals for incorporation of LEED green building standards.	Prior to issuance of construction permit.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
COA No. 6: On-Site Employee Food Options During project operations, each building manager shall use diligent and good faith efforts to encourage at least two food truck vendors to serve project employees by inviting available vendors on-site on a regular basis.	Inspect the presence of at least two food truck vendors serving the project.	Throughout all project operations.	City of Tracy.		
COA No. 7: Buffers A. If a project building is less than 50,000 square feet, then a 10-foot wide landscaping buffer shall be provided, measured from the subject building to the property line of all adjacent sensitive receptors. Buffer areas shall include, at a minimum, a solid decorative wall(s) of 10 feet or more in height, natural ground landscaping, and solid screen buffering trees, unless there is an existing solid block wall. Trees used for this purpose shall be evergreen, drought tolerant, minimum 36-inch box, and shall be spaced at 40 feet on center. B. If a project building is 50,000 square feet or more, then a 20-foot wide landscaping buffer shall be provided, measured from the subject building to the property line of all adjacent sensitive receptors. Buffer areas shall include, at a minimum, a solid decorative wall(s) of 10 feet or more in height, natural ground landscaping, and solid screen buffering trees, unless there is an existing solid block wall. Trees used for this purpose shall be evergreen, drought tolerant, minimum 36-inch box, and shall be spaced at 40 feet on center. C. Trees shall be installed in automobile parking areas to provide at least thirty five percent (35%) shade cover of parking areas within 15 years. D. All landscaping shall be drought tolerant, and to the extent feasible, species with low biogenic emissions. Palm trees shall not be utilized. E. All landscaping areas shall be properly irrigated for the life of the facility to allow for plants and trees to maintain growth. F. Loading docks and truck entries shall be oriented away from abutting sensitive receptors, to the extent feasible. If a	Review landscaping plans and other architectural site plans of each individual development proposal for compliance to COA No.7 conditions A through F.	Prior to issuance of construction permits for each individual development proposal.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
project building is more than 400,000 square feet, the subject building's loading docks shall be located a minimum of 300 feet away, measured from the property line of the sensitive receptor to the nearest dock door which does not exclusively serve electric, natural gas or hydrogen gas trucks using a direct straight-line method.					
COA No. 8: Signage and Traffic Patterns A. Entry gates into the loading dock/truck court area shall be positioned after seventy (70) feet or more of total available stacking depth inside the property line. B. The proposed project shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles pursuant to applicable City parking requirements, and on-site queuing for trucks that is away from sensitive receptors to the extent feasible. C. Unless not physically feasible, truck entries shall be located on Collector Streets, and vehicle entries shall be designed to prevent truck access on streets that are not Collector Streets. (Collector Streets = Thru, Local, STAA Truck Routes). D. Anti-idling signs indicating a 3-minute diesel truck engine idling restriction shall be posted at the project facilities along entrances to the project site and in the dock areas. E. Prior to issuance of the certificate of occupancy for each building, the relevant facility operator shall establish and submit for approval to the Planning Director a Truck Routing Plan to and from the State Highway System based on the City's latest Truck Route Map. F. Facility operators shall post signs in prominent locations inside and outside of each building indicating that off-site parking for any employee, truck, or other operation related vehicle is strictly prohibited. G. Signs shall be installed at all truck exit driveways directing truck drivers to the truck route as indicated in the Truck Routing Plan and State Highway System.	Review Truck Routing Plans, parking plans, and other architectural site plans for compliance with COA No. 8, conditions A through H.	For conditions A through D, G, and H: Prior to issuance of building permits for each individual development proposal. For conditions E and F: Prior to issuance of certificate of occupancy for each building.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
H. If a project building is greater than 400,000 square feet, the subject building shall include a truck operator lounge equipped with clean and accessible amenities such as restrooms, vending machines, television, and air conditioning.					
COA No. 9: Alternative Energy A. Each developer of an individual specific development proposal shall prepare the subject building structures to accommodate future solar panels pursuant to applicable Building Code requirements. B. The office portion of a building's rooftop that is not covered with solar panels or other utilities shall be constructed with light colored roofing material with a solar reflective index of not less than 78. C. Each developer of an individual specific development proposal shall apply to participate in the State of California's Community Solar Program (AB 2316). Said application shall be submitted within 30 days of the subject proposal's opportunity and readiness to apply. Readiness shall be defined to mean all approvals for the subject proposal have been obtained, the subject structure(s) have been built and occupancy permit have been issued. Provided, however, If (a) any such application for a governmental approval or utility approval is rejected; (b) any governmental agency revokes a permit, license, or approval that is required to construct or operate the Solar Facilities on the subject premises; (c) any governmental approval or utility approval issued contains an unreasonable term or condition or is canceled, expires, lapses, or is otherwise withdrawn or terminated; (d) PG&E has not provided authority to interconnect from the utility; (e) the subject Solar Developer determines, in its reasonable and good faith discretion, that the compensation awarded by the California Public Utilities Commission (CPUC) is insufficient to support the	Review architectural site plans for each individual specific development for compliance with COA No. 9, conditions A, B, and D through E. For condition C, review each individual specific development proposal's application to AB 2316.	For conditions A, B, and D through E: Prior to issuance of building permits for each individual development proposal. For condition C: Within 30 days of individual specific development proposal's opportunity and readiness to apply. Readiness shall be defined to mean all approvals for the subject proposal have been obtained, the subject structure(s) have been built and occupancy permit have been issued.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
construction and operation of the subject Solar Facility; or (f) the subject Solar Developer determines, in its reasonable and good faith discretion, that the cost for construction of the Solar Facility is not economically feasible despite any compensation awarded by the CPUC, the subject Developer shall notify City in writing of Developer's plans to reapply once to the State of California Community Solar Program. D. At least five percent (5%) of all passenger vehicle parking spaces shall be equipped with working Level 2 Quick charge EV charging stations installed and operational, prior to issuance of the certificate of occupancy for the subject building. E. Bicycle racks shall be provided in connection with each specific individual development proposal pursuant to applicable City requirements for warehouse uses by Table 30-714 of the Zoning and Development Code. The racks shall include locks as well as electric plugs, and shall be located as close as feasible to employee entrances.					
COA No. 10. Operation and Construction A. Cool surface treatments shall be added to all truck courts or such areas shall be constructed with a solar-reflective cool pavement such as concrete. B. Either a secondary electrical room shall be provided in each building, or the primary electrical room shall be sized twenty five percent (25%) larger than is required to satisfy the service requirements of the subject building or the electrical gear shall be installed with the initial construction with twenty five percent (25%) excess demand capacity for the subject building. C. Each building operator shall incorporate a recycling program pursuant to applicable City requirements. D. The following environmentally responsible practices shall be required during construction of each specific individual development proposal:	Review each individual specific development's recycling program, architectural site plans, environmentally responsible business practices, a Property Maintenance Program, and enrollment into the United States Environmental Protection Agency's SmartWay Program, for compliance with COA No. 10, conditions A through G.	Prior to issuance of the building permit for vertical construction of each project building.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
1. The relevant applicant shall use reasonable and good faith efforts to deploy the highest rated CARB Tier technology that is available at the time of construction of the subject proposal. Prior to building permit issuance for the subject proposal, the construction contractor shall submit an equipment list confirming the relevant equipment used is compliant with the highest CARB Tier reasonably available at the time of construction. 2. Only electric-powered hand tools, forklifts, and pressure washers shall be used during construction. 3. There shall be an area designed in the relevant construction site where electric-powered construction vehicles and equipment can charge. E. To facilitate the installation of future electric vehicle charging stations for heavy-heavy duty (HHD) trucks, in connection with each individual development proposal, the subject building improvement plans shall identify an area for future HHD truck charging stations and the subject developer shall install conduit from the power source to the identified area F. A Property Maintenance Program to address routine site maintenance during project operations (e.g., sweeping of truck/bay areas, litter removal, etc.) shall be submitted for review and approval by the Planning Director or his/her designee prior to the issuance of the building permit for vertical construction of each project building. G. Prior to issuance of the certificate of occupancy for each project building, the relevant property owner shall provide the relevant facility operator with reasonably available information on any incentive programs relating to energy efficiency, and shall require the relevant facility operator to enroll in the United States Environmental Protection Agency's SmartWay Program.					

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Attachment G

Mitigation Monitoring and Reporting Program for the Tracy Alliance Project Environmental Impact Report City of Tracy, San Joaquin County, California

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Report Date: March 1, 2023
Updated: July 13, 2023

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PREFACE

Pursuant to the Public Resources Code Section 21081.6 of the California Environmental Quality Act and CEQA Guidelines Section 15097 (collectively, "CEQA"), the City of Tracy (Lead Agency) hereby finds that the mitigation measures set forth in this Mitigation Monitoring and Reporting Program (MMRP) for the Tracy Alliance Project (proposed project) will reduce or avoid the identified potentially significant impacts of the proposed project to the extent feasible for the reasons described in the Tracy Alliance Project Draft and Final Environmental Impact Report (collectively, Final EIR) and as otherwise documented in the materials that make up the proposed project's administrative record. The Lead Agency intends for each of the mitigation measures to be adopted as recommended in the Final EIR, and incorporated into conditions of approval for the purpose of ensuring compliance during project implementation.

In the event of any inconsistencies between the mitigation measures set forth in the Final EIR and MMRP, the MMRP shall control. In the event of any inconsistencies between the Standard Conditions of Approval imposed on the proposed project set forth by the City of Tracy and the MMRP, the MMRP shall control.

The Final EIR prepared for the proposed project concluded that project implementation could result in significant effects on the environment and feasible mitigation measures have been identified as set forth in this MMRP and which will be incorporated as enforceable conditions of project approval that would reduce these potential impacts to a less than significant level to the extent feasible. This MMRP documents how and when the mitigation measures adopted by the Lead Agency will be implemented and confirms that identified, potentially significant environmental impacts would be reduced to less than significant levels to the extent feasible as identified in the Final EIR. In addition to the foregoing CEQA mitigation measures but distinct therefrom, this MMRP also sets forth certain additional measures/design features for which the project applicants have voluntarily agreed to incorporate and/or otherwise implement as enforceable conditions of approval.

This document does not discuss those environmental topic areas that the environmental analysis set forth in the Tracy Alliance Project Final EIR (along with other materials in the administrative record) has determined there would result in less than significant impacts and thus for which no mitigation is necessary.

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Table 1: Tracy Alliance Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
3.2 Agriculture and Forestry Resources					
MM AG-1: Payment of Agricultural Mitigation Fees At the time of issuance of building permits for each individual development proposal, the relevant applicant(s) for the subject development proposal shall pay the applicable Agriculture Mitigation Fee in accordance with Chapter 13.28 of the Municipal Code.	Verify payment of Agricultural Mitigation Fee.	At the time of issuance of building permits for each individual development proposal.	City of Tracy.		
3.3 Air Quality					
MM AIR-1a: NO_X Reduction Measures Prior to the issuance of grading permits for each individual development proposal within the project site, the relevant applicant for each development proposal shall provide documentation to the City of Tracy demonstrating the following NO_X reduction measures would be adhered to during construction activities for the relevant development proposal: • For all construction equipment and vehicles used during project construction that are equal to or greater than 250 horsepower, the contractor shall use construction equipment and vehicles that meet the United States Environmental Protection Agency (EPA) Tier 4 Final engine standards; • For all construction equipment and vehicles used during project construction that are less than 250 horsepower, the contractor shall use electric construction equipment and vehicles to the extent feasible, with the exception of handheld generator sets; and • All generator sets utilized during project construction shall be limited to 5 horsepower and shall only be used to power handheld power tools.	Review project construction plans and equipment lists.	Prior to issuance of grading permits for each individual development proposal within the project site.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
The construction contractor shall maintain reasonable records concerning its efforts to comply with this requirement, including equipment lists. Documentation that each relevant applicant provides to the City shall include, but is not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.					
MM AIR-1b: "Super-Compliant" Architectural Coatings Prior to the issuance of grading permits for each individual development proposal within the project site, the relevant applicant for each development shall provide the City with documentation demonstrating the use of "Super-Compliant" architectural coatings, as defined by the South Coast Air Quality Management District (South Coast AQMD), during construction of the proposed project. "Super-Compliant" architectural coatings, as defined by the South Coast AQMD, are paints which do not exceed 10 grams of reactive organic gas (ROG) per liter of paint.	Review project design plans.	Prior to the issuance of grading permits for each individual development proposal within the project site.	City of Tracy.		
MM AIR-1c: "Zero-VOC" Consumer Products Prior to issuance of building permits for each individual development proposal within the project site, the relevant applicant for each development shall provide the City with documentation requiring the consumer products purchased by the building occupant(s) or by the cleaning business contracted by the building occupant(s) for each on-site use shall consist of water-based or "zero volatile organic compound [VOC]" consumer products, to the maximum extent feasible. "Consumer products," as referred to in this mitigation measure, shall include detergents, cleaning compounds, polishes, and floor finishes. "Consumer products," as referred to in this mitigation measure, shall not include parking lot degreasers, architectural coatings, pesticides, or fertilizers.	Verify inclusion in project specifications; conduct site inspection.	Prior to issuance of building permits	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM AIR-1d: Clean Truck Fleet Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating the use of a clean truck fleet that meets the California Air Resources Board's adopted 2013 Optional Low-NOX Standard of 0.02 gram of nitrogen oxide (NO_X) per brake horsepower-hour for all heavy-duty trucks during operation of the proposed project, to the maximum extent feasible. If the relevant applicant does not own the truck fleet that will be used during operation of the subject individual development, the relevant applicant shall provide the City with reasonable documentation from the truck fleet owner demonstrating that trucks utilized for operation of the subject individual development will meet the California 2013 Optional Low-NO_X Standard, to the maximum extent feasible. If any change occurs where a new truck fleet is utilized during operation of the subject individual development, the relevant applicant shall provide the City with reasonable documentation demonstrating that the new truck fleet meets the California 2013 Optional Low-NO_X Standard of 0.02 gram per brake horsepower-hour, to the maximum extent feasible.	Verify inclusion in project specifications.	Prior to issuance of the certificate of occupancy for each individual development proposal within the project site.	City of Tracy.		
MM AIR-1e: Operational Truck Fleet Routing Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that trucks used during project operation for the subject individual development proposal shall be prohibited from accessing Grant Line Road east of the project site, such as plans illustrating intended truck routes. Additionally:	Review truck fleet routing plans, roadway improvement plans, and signage design plans.	Prior to issuance of the certificate of occupancy for each individual development proposal within the project site.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
A. Prior to the issuance of grading permit, the project applicant shall submit to the City of Tracy Engineering Department plans or designs that show where the project's private drive intersects with Grant Line Road, the applicant shall use a combination of raised concrete medians (or islands) and/or bollards to prevent trucks from entering the left turn pocket. Truck drivers shall be directed into a dedicated right turn lane onto Grant Line Road. Signage and roadway striping within the project shall also direct drivers to the appropriate lanes as they approach the intersection. The design shall be reviewed and approved by the City of Tracy Engineering Department. B. Prior to the issuance of occupancy permit for the first building, the Phase I Developer shall demonstrate to the City of Tracy Public Works Department that the development shall include new signage along Grant Line Road, warning truck drivers that truck travel through the Community of Banta is not permitted and is a finable offense shall be placed along Grant Line Road. Specifically, two signs shall be placed on the north and south sides of Grant Line Road near its intersection with the proposed project's private drive and visible to east bound traffic. The exact locations, design and text of the signs shall be approved by the City of Tracy Public Works Department.					
MM AIR-1f: Idling Limitation Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that on-site truck idling during project operation for the subject individual development proposal shall be limited to no greater than 3 minutes. The documentation provided to the City shall include photos or a map of signage posted in strategic locations on-site identifying	Review documentation and on-site signage demonstrating that on-site truck idling shall be limited to no greater than 3 minutes.	Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
that truck idling does not exceed 3 minutes. The signage shall include a phone number to contact at the facility regarding idling violation complaints, and corrective action shall occur within 48 hours of receipt of the complaint.					
MM AIR-1g: Electric On-Site Off-Road and On-Road Equipment Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation demonstrating that all on-site off-road and on-road equipment to be used during project operation of the subject individual development proposal shall be electric-powered. On-site off-road and on-road equipment shall include, but are not limited to, forklifts and pallet jacks.	Review construction plans.	Prior to the issuance of the certificate of occupancy for each individual development proposal within the project site.	City of Tracy.		
MM AIR-1h: Vegetated Project Site Buffer Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall demonstrate on their site plans the inclusion of a vegetative buffer along the eastern property line of the project site adjacent to sensitive receptors. Examples of vegetative buffers may include, but are not limited to, trees, bushes, shrubs, or a mix thereof.	Review project design plans.	Prior to the issuance of building permit(s) for each individual development proposal within the project site.	City of Tracy.		
MM AIR-1i: Tier 2 CALGreen Electric Vehicle Charging Infrastructure Prior to the issuance of building permit(s) for each individual development proposal within the project site, the relevant applicant for the subject individual development proposal shall provide the City with reasonable documentation (e.g., shown on-site plans) showing that the proposed parking areas for passenger automobiles and trucks for project operation of the subject individual development proposal are designed and	Review documentation (e.g., shown on-site plans) showing that the proposed parking areas for passenger automobiles and trucks are designed and will be built to include EV charging stations.	Prior to the issuance of building permits(s) for each individual development proposed within the project site.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
shall be built to include electric vehicle (EV) charging stations. At a minimum, the parking shall be designed to include a number of EV charging stations equal to the Tier 2 Nonresidential Voluntary Measures of the California Green Building Standards Code, Section A5.106.5.3.2.					
3.4 Biological Resources					
MM BIO-1a: Song Sparrow and Tricolored Blackbird Mitigation Implementation of the following avoidance and minimization measures would avoid or minimize potential effects to song sparrow and tricolored blackbird as a result of project implementation within the Zuriakat parcel in and adjacent to the project site. These measures shall be implemented for construction work that occurs during the nesting season (February 1 through August 31): • If construction or habitat removal is proposed during the breeding/nesting season (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for song sparrow and tricolored blackbird within potential nesting habitat of the construction area, (special attention should be paid to the cattail marsh within the Zuriakat parcel) including a 500-foot survey buffer for tricolored blackbird and a 75-foot survey buffer for song sparrow, no more than 7 days prior to the start of ground-disturbing activities in the construction area. If no active nests are detected within the construction area on the project site or within the relevant buffer survey area, then no additional measures are required. • If an active nest is located during pre-construction surveys, the California Department of Fish and Wildlife (CDFW) (as appropriate) shall be notified (as appropriate) regarding the status of the nest. A setback of 500 feet (for tricolored blackbird) and 75 feet (for song sparrow) shall be established	If construction occurs within the Zuriakat parcel during the nesting season (February 1–August 31), conduct pre-construction site inspection.	No more than 7 days prior to the start of ground-disturbing activities within the Zuriakat parcel during the nesting season (February 1–August 31).	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
and maintained during the nesting season for the period encompassing nest building and continuing until fledglings leave nests. This setback applies whenever construction or other ground-disturbing activities must begin during the nesting season in the presence of nests which are known to be occupied. Furthermore, construction activities shall be restricted in the construction area as necessary to avoid disturbance of the nest until it is abandoned, or a qualified Biologist deems disturbance potential to be minimal. Restrictions shall include consultation with a qualified Biologist to determine appropriate buffer zones or alteration of the construction schedule in the relevant area. • A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.					
MM BIO-1b: Swainson's Hawk **Foraging:** Prior to any activities that would result in ground disturbance to the project site, the relevant applicant(s) for the subject development on any portion of the project site shall each ensure coverage of the relevant portion(s) of the project site under the SJMSCP and pay the applicable fee purchase adequate mitigation through the SJMSCP for 140.59 acres of potential foraging habitat (recommended) or alternatively provide applicant-responsible compensatory mitigation at a 1:1 ratio (such as procurement of credits through a mitigation bank or dedicated of a conservation easement). **Nesting:** The following measures shall be implemented for construction work during the nesting season (February 1 through August 31): • Implementation of the following avoidance and minimization measures would avoid or minimize potential effects to Swainson's hawk as a result of project	Verify payment of applicable mitigation fees; conduct site inspection; verify retention of qualified Biologist.	No more than 7 days prior to the start of ground-disturbing activities during the nesting season (February 1–August 31).	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
implementation and adjacent to the project site. These measures shall be implemented for construction work that occurs during the nesting season (February 1 through August 31): - If construction or habitat removal is proposed during the breeding/nesting season (typically February 1 through August 31), a qualified Biologist shall conduct pre-construction surveys for Swainson's hawk within the construction area, (special attention should be paid to trees with past recorded occurrences) including a 0.5-mile survey buffer, no more than 7 days prior to the start of ground-disturbing activities in the construction area. If no active nests are detected within the construction area site or within the buffer survey area, then no additional measures are required. - If active Swainson's hawk nests are found within the construction area or the 0.5-mile survey buffer of the project site, a qualified Biologist shall determine what nest avoidance buffers may be necessary so that construction-related activities do not cause nest abandonment. The avoidance buffer shall be submitted to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) for approval. The qualified Biologist shall monitor construction activities to ensure construction activities do not result in adverse effects to the nest, fledglings, or adults. The Biologist shall submit a memorandum documenting construction compliance to the appropriate agencies.					
MM BIO-1c: **Burrowing Owl** • A qualified Biologist shall conduct a pre-construction survey no later than 30 days prior to commencement of any ground-disturbing construction activities on the construction area. The survey shall be conducted in accordance with the	Conduct site inspection; if an active nest is found during the breeding season (February 1–August 31), submit	No later than 30 days prior to the commencement of any ground-disturbing	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Staff report on Burrowing Owl Mitigation. All suitable habitats within the construction area site and adjacent buffer (within 500 feet) shall be surveyed. If no burrowing owl are detected during the surveys, then no additional measures are required. • If pre-construction surveys during the breeding season (February 1- August 31) detect active burrows within the construction area or near the adjacent buffer survey area site, a qualified Biologist shall establish and delineate an appropriate buffer zone around the nest until the breeding season is over as determined by the Biologist. Buffer areas shall be established using the guidelines within the *Staff report on Burrowing Owl Mitigation*. • If pre-construction surveys detect active burrows during the nonbreeding season (September 1- January 31) the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) allows for eviction or passive relocation of owls. A passive relocation plan shall be prepared and submitted to SJMSCP for approval.	passive relocation plan to SJMSCP.	construction activities.			
MM BIO-1d: San Joaquin Kit Fox Measures to protect San Joaquin kit fox shall consist of the following: • A qualified Biologist shall conduct a pre-construction survey of the construction area and a 200-foot buffer, between 14 and 30 days prior to the commencement of ground disturbance. If the surveys do not identify any San Joaquin kit fox activity or locate any potential dens, then no further measures are necessary. • If the survey identifies potential dens (potential dens are defined as burrows at least 4 inches in diameter that open up within 2 feet), den entrances shall be dusted for 3 calendar days to register track of any San Joaquin kit fox present. If no San Joaquin kit fox activity is identified, potential dens may be destroyed. If San Joaquin kit fox	Conduct site inspection; if a den is occupied, educated construction workers regarding the San Joaquin kit fox.	Between 14 and 30 prior to the commencement of any ground-disturbing construction activities.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
activity is identified, then dens shall be monitored by a qualified Biologist to determine whether occupation is by an adult fox only or is a natal den (natal dens usually have multiple openings). • If the den is occupied by an adult only, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den until the Biologist determines that the den has been vacated. Where San Joaquin kit fox are identified, the provisions of the United States Fish and Wildlife Service (USFWS) published *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* shall apply (except that pre-construction survey protocols shall remain as established in this paragraph). These standards include provisions for educating construction workers regarding the San Joaquin kit fox and keeping heavy equipment operating at safe speeds.					
MM BIO-1e: Migratory Birds • To prevent significant impacts to Migratory Bird Treaty Act (MBTA)-protected birds, nesting raptors, and their nests, removal of trees shall be limited to only those necessary to feasibly construct the proposed project as shown on the individual development plans approved by the City pursuant to the mapping and/or development review process. • If any tree removal is necessary, then it should occur outside the nesting season between September 1 through January 31 to the extent feasible. If trees cannot feasibly be removed outside the nesting season, pre-construction surveys shall be conducted no more than 7 days prior to tree removal to verify the absence of active nests. • If an active nest is located during pre-construction surveys, the United States Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW) (as	If tree removal occurs during the nesting season (September 1 – January 31), conduct site survey; verify reporting to the USFWS and CDFW.	No more than 7 days prior to tree removal.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
appropriate) shall be notified regarding the status of the nest. Construction activities shall be restricted in the construction area as necessary to avoid disturbance of the nest until it is abandoned, or the agencies deem disturbance potential to be minimal. Restrictions shall consist of the include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around an active raptor nest and an appropriate radius around an active migratory bird nest depending on the species) or alteration of the construction schedule. • A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and/or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.					
MM BIO-1f: Roosting Bats • A qualified wildlife Biologist shall conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the construction area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.). • Visual surveys shall include trees within 0.25 mile of project construction activities. Not more than two weeks prior to building demolition, the Tracy Alliance parcel applicants for development on any project parcel, shall ensure that a qualified Biologist (i.e., one familiar with the identification of bats and signs of bats) survey buildings proposed for demolition for the presence of roosting bats or evidence of bats. If no roosting bats or evidence of bats are found in the structure, demolition may proceed. If the Biologist	Submit evidence of site inspections with verified biological monitor; verify installation of exclusion devices (if construction occurs between May 1 and October 1).	Bat survey to be completed up to 14 days prior to the beginning of the construction period; visual surveys of trees and structures no more than 2 weeks prior to demolition or tree removal.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
determines or presumes bats are present (if there are site access issues or structural safety concerns), the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Building demolition of the subject structure shall only commence after the Biologist verifies seven to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid significant impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts shall also be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).					
MM BIO-3: Conduct Delineation of Potentially Jurisdictional Aquatic Resources (Channels and Wetlands) The applicant(s) for development on any project parcel shall complete a formal jurisdictional delineation to document and quantify the full extent of potentially jurisdictional waters for the relevant project parcel(s) in coordination with the applicable regulatory agencies. The applicant(s) for development on any project parcel shall also coordinate, to the extent required under applicable laws and regulations, with the applicable regulatory agencies (United States Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB], and/or California Department of Fish and Wildlife [CDFW]) to determine whether the irrigation/drainage channels and/or cattail marsh on the project site is protected under Section 404 and 401 of the Clean Water Act (CWA) and/or Section 1602 of the California Fish and Game Code. **Obtain CWA Sections 401 and 404 Permits Prior to Construction**	Review and approval of jurisdictional delineation and any CWA Sections 401 and 404 Permits, and/or Notification of Streambed Alteration prior to Construction of the subject individual development proposal.	Prior to the fill of any potentially jurisdictional waters or any construction activities within irrigation/drainage channels that qualify as streams under CDFW jurisdiction.	USACE, RWQCB, CDFW		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
• Prior to the fill of any potentially jurisdictional waters within the project site, the relevant project applicant(s) for the subject project parcel(s) shall consult with the USACE and Regional Water Quality Control Board, to the extent required under applicable laws and regulations, to determine the extent, if at all, that waters of the United States and State may be impacted by the proposed project. • If required, the relevant applicant(s) for development of the subject project parcel(s) shall obtain a Section 404 CWA permit for impacts to waters of the United States. That same applicant, for development of the subject project parcel(s), will also obtain a Section 401 Water Quality Certification from the RWQCB, if required. Any such required permit and certification shall be obtained prior to issuance of grading permits for the implementation of the individual development proposal on the subject project parcel(s). • The applicant(s) for development on any project parcel shall design the project to result in no net loss of functions and values of waters of the United States and State by incorporating impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as set forth in the subject Section 404 permit and 401 water quality certification. • Compensatory mitigation may consist of (1) obtaining credits from a mitigation bank; (2) making a payment to an in-lieu fee program that would conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities; and/or (3) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This final type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). This					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
project/permit applicant shall retain responsibility for the implementation and success of the mitigation approach. **Obtain Approval of and File Notification of Streambed Alteration Agreement Prior to Construction** The applicant(s) for development on any project parcel shall ensure that the cattail marsh is not obstructed and human intrusion into the area is minimized. In compliance with Section 1600 of the California Fish and Game Code, the relevant applicant(s) of an individual development proposal within the project site shall obtain approval and file a notification of a Streambed Alteration Agreement prior to conducting any construction activities within irrigation/drainage channels that qualify as streams under CDFW jurisdiction (i.e., those having bed and bank and at least periodical flow) if and to the extent required under applicable laws and regulations. Those same applicant(s) shall implement all mitigation measures imposed by the CDFW related to the subject Streambed Alteration Agreement, which may include but not be limited to the implementation of erosion and bank stabilization measures, riparian habitat enhancement, and/or restoration and revegetation of the stream corridor habitat at no less than a 1:1 ratio, as determined by the CDFW.					
3.5 Cultural Resources					
MM CUL-1: Archaeological Spot-Monitoring and Halt of Construction Upon Encountering Historical or Archaeological Materials An Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology shall inspect the site once grubbing and clearing are complete for the purpose of determining whether there are any previously undiscovered resources on-site, and prior to any grading or trenching into previously undisturbed soils. This shall be	Review documentation demonstrating retention of a qualified archaeological monitor or professional Archaeologist; conduct site inspections.	Prior to any grading or trenching into previously undisturbed soils and throughout the construction process.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
followed by regular periodic or "spot-check" archaeological monitoring as determined by the Archaeologist. If the Archaeologist believes that a reduction in monitoring activities is prudent, then a letter report detailing the rationale for making such a reduction and summarizing the monitoring results shall be provided to the City of Tracy for concurrence. In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers shall avoid altering the materials until an Archaeologist has evaluated the situation. The applicants for the development of the Tracy Alliance, Suvik Farms, and Zuriakat parcels shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. The Archaeologist shall evaluate any finding(s) and determine whether they are significant, and if so, shall make recommendations concerning appropriate measures that will be implemented to protect the significant resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered significant resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and shall be submitted to the City of Tracy, the Northwest Information Center (NWIC), and the California Office of Historic Preservation (OHP), as required.					
MM CUL-3: Stop Construction Upon Encountering Human Remains In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code	Review project plans to verify mitigation measure is incorporated into plans.	During construction and any ground-disturbing activities.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Sections 5097.94 and Section 5097.98 shall be followed. If during the course of project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken: 1. There shall be no further excavation or disturbance within 100 feet of the remains until the county coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98. 2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance: • The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. • The descendant identified fails to make a recommendation. • The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American remains: • When an initial study identifies the existence of, or the probable likelihood of, Native American remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicants for the development of the Tracy Alliance, Suvik Farms, and Zuriakat parcels may each develop a plan with respect to their individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC.					
3.7 Geology and Soils					
MM GEO-1: Prepare Grading and Construction Plans that Incorporate Geotechnical Engineering Report Recommendations Prior to issuance of the grading permits for the proposed project, development of the final grading, foundation, and construction plans shall incorporate the site-specific earthwork, foundation, floor slab, lateral earth pressure, and pavement design recommendations, as detailed in the Geotechnical Engineering Report prepared by Terracon dated January 30, 2019. The applicant(s) for development of individual development proposal(s) within the project site shall each coordinate with a City-approved Geotechnical Engineer and Engineering Geologist to tailor the grading and foundation plans for the relevant development proposal, as needed, to reduce risk related to known soil and geologic hazards. The final grading and construction plans for the relevant development proposal shall be reviewed by the City-approved Geotechnical Engineer to confirm compliance with this MM GEO-1.	Review project plans to verify mitigation measure is incorporated into plans.	Prior to issuance of grading permits for the proposed project.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Grading operations shall meet the applicable requirements of the recommendations included in the Geotechnical Engineering Report prepared by Terracon on January 30, 2019. During construction, the City-approved Geotechnical Engineer shall monitor construction of the relevant development proposal to ensure the earthwork operations are properly performed in accordance with the foregoing recommendations.					
MM GEO-6: Inadvertent Discovery of Paleontological Resources During Project Construction In the event a fossil is discovered during construction for the proposed project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist in accordance with Society of Vertebrate Paleontology standards. The applicants for development of individual proposals within the project site shall each include a standard inadvertent discovery clause in every proposed project-related construction contract to inform their respective contractors of this requirement. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and implement a data recovery plan that is consistent with the applicable Society of Vertebrate Paleontology standards. Any recovered fossil should be deposited in an appropriate repository, such as the UCMP, where it will be properly curated and made accessible for future studies.	Review project plans to verify mitigation measure is incorporated into plans.	During construction activities.	City of Tracy.		
3.9 Hazards and Hazardous Materials					
MM HAZ-1a: Conduct Soil Sampling (Tracy Alliance, Zuriakat, and Suvik Farms parcels) Prior to the issuance of grading permits, the relevant applicant for an individual development proposal within the project site shall provide evidence of soil testing within the project boundary to confirm presence or absence of hazardous	Review documents that demonstrate soil testing was completed within the project boundary and any subsequent remediation that was needed.	Prior to the issuance of grading permits for each individual development proposal within the project site.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
compounds such as lead and arsenic. The testing shall be conducted pursuant to a San Joaquin Environmental Health Department-approved sampling plan. If hazardous levels of hazardous compounds are found, excavated soils shall be sent off-site for disposal and any affected soils encountered should be properly characterized, treated and/or disposed of in accordance with applicable local, State, and federal laws and regulations. The relevant applicant shall complete any residual soil remediation in connection with the relevant individual development proposal to the satisfaction of San Joaquin Environmental Health Department, as evidenced by the submittal of a no further action letter. In addition, if hazardous contaminants related to the former agricultural use of the site (such as lead or arsenic) are found, a construction worker health and safety plan shall be prepared and shall be implemented during construction of the relevant individual development proposal.					
MM HAZ-1b: Proper Disposal and Decommission of Underground Storage Tanks, Aboveground Storage Tanks, and Unlabeled Drums (Tracy Alliance parcels only) If any of the reported underground storage tanks (USTs) or aboveground storage tanks (ASTs) are discovered during excavation activities, the applicant for the development of the Tracy Alliance parcels shall dispose of and decommission the USTs and ASTs in accordance with applicable laws and regulations of the Local Oversight Program (LOP) and the American Petroleum Institute Standards, respectively. The unlabeled drums and containers observed during the site reconnaissance for the Phase I Environmental Site Assessment (Phase I ESA) for the Tracy Alliance parcels shall be characterized and disposed of in accordance with applicable local, State, and federal laws and regulations.	Review documentations that demonstrate proper disposal of all USTs and ASTs.	During excavation of the development of the Tracy Alliance parcels.	City of Tracy; LOP.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM HAZ-1c: Conduct Asbestos and Lead Surveys Prior to Demolition (Tracy Alliance parcels only) Prior to the issuance of demolition permits for the existing buildings, the applicant for the development of the Tracy Alliance parcels shall retain a licensed professional to conduct asbestos and lead paint surveys. These surveys shall be conducted prior to the disturbance or removal of any suspect asbestos-containing materials (ACM) and lead-based paint (LBP), and these materials shall be characterized for asbestos and lead by a reliable method. All activities involving ACM and LBP shall be conducted in accordance with applicable laws and regulations, and all removal shall be conducted by properly licensed abatement contractors.	Review documentation demonstrating a licensed professional was retained and asbestos and lead paint surveys were conducted; Review project plans to verify applicable laws and regulations related to activities involving ACM and LBP are detailed in the project plans.	Prior to the issuance of demolition permits for the existing buildings on the Tracy Alliance parcels.	City of Tracy.		
MM HAZ-1d: Dust Mitigation and Soil Evaluation (Tracy Alliance, Zuriakat, and Suvik Farms parcels) During any grading or excavation activities in connection with an individual development proposal within the project site, relevant development personnel shall be made aware to look for unusual conditions suggesting buried debris or other potential adverse environmental conditions. If any abnormal soils are discovered during development activities, such as stained soils, hydrocarbon odors, or any other unusual odors, all construction activities near the discovery shall be stopped immediately and the applicant for the relevant individual development proposal shall contact a qualified hazardous material consulting firm for further assessment and implementation of any appropriate actions as may be required under applicable laws and regulations before construction of the relevant individual proposal can begin again.	Review project plans to ensure mitigation measure and instructions were detailed in project plans.	During any grading or excavation activities.	City of Tracy.		
MM HAZ-1e: Consultation with Chevron and DigAlert (Tracy Alliance and Suvik Farms parcel only) Prior to any ground disturbance and construction along the northern side of West Grant Line Road, adjacent to the southern boundary of the Tracy Alliance and Suvik Farms	Verify consultation with Chevron and DigAlert 811.	Prior to any ground disturbance and construction in connection with the	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
parcels, the relevant applicant(s) for the development of the Tracy Alliance and/or Suvik Farms parcels shall consult with Chevron (www.chevron-pipeline.com; 800.762.3404) and DigAlert 811 to determine the location of the existing underground petroleum pipeline to facilitate avoidance during ground disturbance and construction activities.		Tracy Alliance and/or Suvik Farms parcels.			
3.10 Hydrology and Water Quality					
MM HYD-1a: Prepare Stormwater Pollution Prevention Plan Prior to the issuance of a grading permit, the relevant applicant for each individual development proposal within the project site shall submit a draft of the Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) in connection with its individual development proposal pursuant to the then-applicable Multi-Agency Post-Construction Stormwater Standards Manual at the time the relevant grading permit is submitted. After City approval of the relevant grading permit, the relevant NOI and SWPPP shall be sent to the California State Water Resources Control Board (State Water Board) for approval. Approval by the State Water Board is a prerequisite for issuance of the relevant grading permit by the City. The SWPPP shall address stormwater management during each phase of construction of the relevant individual development proposal. Best Management Practices (BMPs) shall be integrated into the relevant SWPPP as identified by the City of Tracy, which will result in the reduction or elimination of pollutants in stormwater discharges and the stabilization of BMPs to reduce or eliminate pollutants after construction of the relevant individual development proposal is completed. The relevant SWPPP shall be consistent with the applicable Regional Water Quality Control Board (RWQCB) standards and National Pollutant Discharge Elimination System (NPDES) permit requirements to protect water quality over the period	Verify submission of SWPPP; Approval of NOI and SWPPP by the State Water Board.	Prior to the issuance of a grading permit for each individual development proposal within the project site; throughout construction activities.	City of Tracy; State Water Board.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
of construction of the relevant individual development proposal.					
MM HYD-1b: Prepare Stormwater Management Plan Prior to the issuance of a grading permit, the relevant applicant for each individual development proposal within the project site shall prepare a Stormwater Management Plan in connection with its individual development proposal for review and approval by the City of Tracy. The relevant Storm Water Management Plan (SWMP) shall include two fundamental components: (1) treatment for pollutants collected in stormwater using Low Impact Development (LID) measures, and (2) no net increase in the erosion potential of the receiving stream over the pre-project (existing) condition. All LID treatment measures would be required to be designed in accordance with applicable engineering criteria in the then-applicable Multi-Agency Post-Construction Stormwater Standards Manual. Implementation of the relevant SWMP would require the preparation of a clearly defined Operations and Maintenance (O&M) Plan by the relevant applicant in connection with its development proposal to ensure that installed stormwater treatment measure(s) and hydromodification management control(s) are inspected and properly operated and maintained for the life of the relevant individual development proposal.	Review and approval of SWMP.	Prior to issuance of a grading permit for each individual development proposal within the project site.	City of Tracy.		
MM HYD-3: Prepare Final Drainage Plan Prior to Grading Each applicant for an individual development proposal within the project site shall, in connection with the relevant individual development proposal: • Comply with all applicable rules, regulations, and procedures of the National Pollutant Discharge Elimination System (NPDES) for municipal, construction and industrial activities as promulgated by the California State Water Resources	Review site plans; verify submission of O&M Plan and Final Drainage Plan.	Prior to issuance of grading permits for each individual development proposal within the project site.	City of Tracy, State Water Board, RWQCBs.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Control Board (State Water Board), or any of its Regional Water Quality Control Boards (RWQCBs). • Submit a Final Stormwater Control Plan and a Stormwater Control Operation and Maintenance Plan (O&M Plan) to the City of Tracy Public Works and Community Development Department, which shall be reviewed for compliance with the County's National Pollutant Discharge Elimination System (NPDES) Permit and shall be determined consistent with the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.34 of the Municipal Code, Ordinance 1072) prior to issuance of a grading permit for the relevant individual development proposal. Improvement Plans shall be reviewed to verify consistency with the relevant Final Stormwater Control Plan and compliance with Provision C.3 of the City's NPDES Permit and the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.34 of the Municipal Code, Ordinance 1072). • Prior to issuance of grading permits for each relevant individual development proposal, the relevant applicant shall submit a Final Drainage Plan in connection with the relevant individual development proposal that incorporates the measures included in the Flood Protection Technical Memorandum. The City of Tracy Public Works and Community Development Department shall review the relevant Final Drainage Plan to ensure it is in compliance with all applicable requirements and standards, including the recommendations provided in the Flood Protection Technical Memorandum and in the Citywide Storm Drainage Master Plan in effect at the time building permits are issued, to reduce risk related to flooding within a designated floodplain. The relevant Final Drainage Plan shall be reviewed by City of Tracy Public Works and Community Development Department staff to ensure that all building minimum floor elevations for the relevant development					

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
proposal are at 26 feet or 1 foot above the maximum flood elevation and shall accommodate the 200-year storm event as detailed in the Flood Protection Technical Memorandum. In addition, the on-site stormwater detention basin shall be designed in accordance with the recommendations provided in the Flood Protection Technical Memorandum and in accordance with the Citywide Storm Drainage Master Plan in effect at the time building permits are issued. Additionally, the relevant Final Drainage Plan shall determine if discharge of pre-project runoff rates and/or volumes into the Tom Paine Slough drainage area can continue after project construction pursuant to applicable standards and requirements. Should the relevant Final Drainage Plan determine it is feasible to discharge some runoff (possibly up to the pre-project runoff volume) into the existing downstream system, this design shall be submitted to the City of Tracy as part of the relevant Final Drainage Plan for review and approval.					
3.12 Noise: Identified Improvement Measures					
IMM NOI-2: To reduce potential construction noise impacts, the following multi-part Improvement Mitigation Measure (IMM) shall be implemented for the project: • Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Locate stationary operational noise-generating equipment as far as feasible from sensitive receptors when sensitive receptors adjoin or are near a construction area. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site to the extent feasible.	Review construction plans; verify all equipment is equipped with mufflers; verify staging areas.	During all phases of construction.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
• Utilize "quiet" air compressors and other stationary operational noise sources where such technology exists and is commercially practicable. • The construction contractor shall prohibit unnecessary idling (i.e., idling in excess of 5 minutes) of internal combustion engines. • The construction contractor shall, to the maximum extent practicable, locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. • The construction contractor shall ensure that all construction activities that would occur within 550 feet of a residential land use property line shall be limited to daylight hours or to the hours of 7:00 a.m. and 7:00 p.m.					
3.14 Transportation					
MM TRANS-1(a): Transportation Demand Management Measures Prior to issuance of the first building permit for the relevant individual development proposal, the relevant applicant for the individual development proposal at issue shall submit to the City of Tracy Planning Department a Transportation Demand Management (TDM) program that incorporates all of the following six measures (as explained further in Table 3.14-6 of the Draft EIR): 1. Utilize communication and information strategies–4 percent reduction; 2. Offer telecommuting for administrative staff (5 percent of staff population)–1 percent reduction; 3. Designate parking spaces for carpool vehicles–1 percent reduction; 4. Provide a transit stop along the project frontage on Grant Line Road, if agreed to by the City–2 percent reduction;	Review and approval of TDM.	Prior to issuance of the first building permit for the relevant individual development proposal.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
5. Provide bike lanes and sidewalks along the project frontage–1 percent reduction; and 6. Provide on-site bike racks and showers–1 percent reduction. Provided, however, that if the relevant applicant determines that one of more of the foregoing six TDM measures is not feasible in connection with the individual development proposal at issue, then the relevant applicant may obtain approval from the City of Tracy Planning Department of acceptable substitute TDM measure(s) pursuant to Table 3.14-6 of the Draft EIR. The relevant applicant's TDM program, as described above, shall reflect a 10 percent reduction in VMT for the relevant individual development proposal.					
MM TRANS-1(b): Payment of Applicable Banking Fee In addition to the Transportation Demand Management (TDM) program required in MM TRANS-1(a), each applicant for an individual development proposal shall pay its fair share of the applicable fee as set forth in the adopted Vehicle Miles Traveled (VMT) Mitigation Banking Fee in place and effective at the time the relevant applicant seeks to obtain building permits for its individual development proposal. Provided, however, that if the City Council has not adopted the Mitigation Banking Fee Program such that it is effective and in place at the time an applicant for an individual development proposal seeks to obtain a building permit, then the relevant applicant shall implement additional VMT reduction measures in order to meet the minimum VMT reduction requirement of 15 percent.	Verify payment of the applicable VMT Mitigation Banking Fee or that the project TDM meet the minimum VMT reduction requirement of 15 percent for purposes of the subject individual development proposal.	Prior to issuance of the first building permit for the relevant individual development proposal.	City of Tracy.		
MM TRANS-2: Prepare and Implement Construction Traffic Control Plan Prior to the start of construction for an individual development proposal, the relevant applicant shall prepare and submit a	Review and approval of traffic control plan.	Prior to the start of construction for an individual	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
Construction Traffic Control Plan for the individual development proposal at issue. Each plan shall include the following items. Each approved plan shall be implemented during construction of the individual development proposal at issue. • Project staging plan to maximize on-site storage of materials and equipment. • Permitted construction hours. • Location of construction staging. • Provisions for street sweeping to remove construction-related debris on public streets. • A set of comprehensive traffic control measures including preparation of traffic control plans, as needed; scheduling of major truck trips and deliveries to avoid peak-hours; lane closure proceedings; signs, cones, and other warning devices for drivers; and designation of construction haul routes. • Survey of the pavement condition on roadways within the relevant individual development to be used as part of the haul route prior to the commencement of any work on-site. The survey shall include a video tape of the roadways. Each relevant applicant shall complete any remedial work prior to initiation of use and provide a bond assuring completion of the remediation work triggered by the individual development proposal, the amount which shall be deemed sufficient by the Public Works Department. • The relevant applicant shall provide a pavement analysis for those roads along the proposed haul routes or any alternate route(s) that are proposed to be utilized by hauling operation for the individual development proposal at issue. This study shall analyze the existing pavement conditions and determine what impact the hauling operation will have over the construction period of the relevant individual development. The study shall provide recommendations to mitigate identified impacts, which shall be implemented by		development proposal.			

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
the relevant applicant for the individual development proposal at issue.					
Transportation: Identified Improvement Measures					
IM-1: I-205 EB Ramps and North MacArthur Drive (Intersection 11) Improvements Prior to issuance of the building permits for each individual development proposal, the City of Tracy Planning Department shall verify that the relevant applicant has paid the applicable TIF fee for the relevant individual development proposal. In so doing, this payment will constitute a pro rata fair share contribution toward the City's ability to implement its TMP, which includes the following improvements: • Lane additions at both ramp terminals and the addition of a second I-205 Westbound on-ramp. The two ramp terminals cannot be improved independently. The westbound ramp terminal would improve with the addition of these lanes.	Verify payment of the applicable TIF fee for the subject individual development proposal.	Prior to issuance of the first building permit for each individual development proposal.	City of Tracy.		
IM-2: Grant Line Road and North MacArthur Drive (Intersection 13) Improvements • Prior to issuance of the building permits for each individual development proposal, the City of Tracy Planning Department shall verify that the relevant applicant has paid its pro rata fair share of the proposed project's fair share of 5.93 percent of the following improvement: the construction of a westbound right turn lane for Intersection 13 (which will include a right-turn overlap signal phase).	Verify payment of pro rata fair share for the subject individual development proposal for westbound right turn lane for Intersection 13.	Prior to issuance of building permits for each individual development proposal.	City of Tracy.		
IM-3: Optimize Signal Cycle Length at Grant Line Road and Chrisman Road (Intersection 9) and Grant Line Road and North MacArthur Drive (Intersection 13) Prior to issuance of the building permits for the first individual development proposal, the City of Tracy Planning Department shall verify that the signal cycle length has been optimized at the intersections of:	Verify optimization of signal lengths at Grant Line and Chrisman Road, and Grant Line Road, and Grant Line Road and North MacArthur Drive.	Prior to issuance of building permits for each individual development proposal.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
• Grant Line and Chrisman Road • Grant Line Road and North MacArthur Drive					
IM-4: Chrisman Road and 11th Street (Intersection 15) Improvements • Prior to issuance of the building permits for each individual development proposal, the City of Tracy Planning Department shall verify that the relevant applicant has paid its pro rata fair share of the proposed project's fair share of 5.35 percent for the following improvement: an additional second westbound left-turn lane for Intersection 15 (which will involve the signal at this Intersection being modified to allow lagging phase for the eastbound left turn and northbound left turn).	Verify payment of pro rata fair share for subject individual development proposal for westbound right turn lane for Intersection 15.	Prior to issuance of building permits for each individual development proposal.	City of Tracy.		
3.16 Utilities and Service Systems					
MM UTIL-1a: Adherence to Applicable Performance Standards and Payment of Infrastructure Fees Prior to the issuance of building permits for an individual development proposal, the relevant applicant shall demonstrate compliance of the individual development proposal at issue with applicable performance standards pursuant to the then-current Urban Water Management Plan, Citywide Water System Master Plan, Wastewater Master Plan, and Citywide Storm Drainage Master Plan. In addition, each applicant for an individual development proposal shall pay its respective proportionate share of required funding, subject to applicable laws governing nexus requirements, to the City for completion of relevant planned City Capital Improvement Plan (CIP) improvements.	Review project design plans to demonstrate compliance of the individual development proposal at issue with applicable performance standards pursuant to City utility master plans; verify payment of applicable funding for CIP improvements.	Prior to issuance of building permits for an individual development proposal.	City of Tracy.		
MM UTIL-1b: Submittal of Final Engineering Plans for Tracy Alliance Parcels Prior to the issuance of the building permit for the first building on the Tracy Alliance parcels, the applicants for the	Review engineering plans.	Prior to issuance of building permits for the first building on	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
development of the Tracy Alliance parcels shall submit engineering plans to the City of Tracy for review and approval to confirm compliance with this MM UTIL-1b. These plans shall include additional 12-inch diameter pipelines on-site as shown on Exhibit 3.16-5 of this Draft EIR and the fire service laterals shall be upsized to 14-inch diameter.		the Tracy Alliance parcels.			
MM UTIL-1c: Submittal of Final Engineering Plans for Suvik Farms and Zuriakat Parcels Prior to the issuance of the building permit for the first building on the subject parcel, each relevant applicant for the individual development proposal of the Suvik Farms or Zuriakat Parcels, respectively, shall each submit final engineering plans to the City of Tracy for review and approval to confirm compliance with the relevant performance standards including, but not limited to, those pursuant to the current Urban Water Management Plan, Citywide Water System Master Plan, Wastewater Master Plan, and Citywide Storm Drainage Master Plan in effect at the time building permits are requested.	Review engineering plans.	Prior to issuance of building permits for the first building on the subject Suvik and/or Zuriakat parcel(s).	City of Tracy.		
MM UTIL-3: Payment of Wastewater Infrastructure Fees/Construction of Wastewater Facilities Prior to the issuance of the first building permit for the subject individual development proposal, the relevant applicant shall participate in the implementation of the Wastewater Master Plan (WWMP) in effect at the time the relevant building permit is requested through the payment of the applicable impact fees as included in the City's Capital Improvement Plan (CIP).	Verify implementation of WWMP through payment of applicable fees for subject individual development proposal.	Prior to issuance of building permits for the subject individual development parcel.	City of Tracy.		
Additional Voluntary Measures/Design Features That Shall Be Incorporated As Enforceable Conditions of Approval					
COA No. 1: Time Limitation for Off-Road Diesel-Powered Equipment During Construction Each piece of off-road diesel- powered equipment used during project construction shall be prohibited from being in the "on" position for more than 10 hours per day.	Verify implementation of off-road diesel-powered equipment running status and equipment's "on" position.	Throughout all construction activities.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
COA No. 2: Transit/Ridesharing Information for Construction Employees Each applicant, in connection with the construction of the relevant specific individual development proposal, shall provide information on available transit and ridesharing programs and services to construction employees.	Review information on available transit and ridesharing programs and services to construction employees.	Prior to issuance of construction permits for each individual development proposal.	City of Tracy.		
COA No. 3: No Diesel-Powered Generators Each applicant, prior to issuance of a building permit for vertical construction in connection with a specific individual development proposal, shall submit language to the City for inclusion in future lease provisions that reflects a prohibition of diesel powered generators during normal project operation unless and until any additional required CEQA review is conducted.	Review language provided to the City that reflects a prohibition of diesel powered generators during normal project operation unless and until any additional required CEQA review is conducted, for inclusion in future lease provisions.	Prior to issuance of building permit for vertical construction in connection with each specific individual development proposal.	City of Tracy.		
COA No. 4: No TRUs or Cold Storage Uses Each applicant, prior to issuance of a building permit for vertical construction in connection with a specific individual development proposal, shall submit language to the City for inclusion in future lease provisions that reflects a prohibition of cold storage uses as well as the use of Transport Refrigerated Units (TRUs) during project operation unless and until any additional required CEQA review is conducted.	Review language provided to the City that reflects a prohibition of cold storage uses as well as the use of Transport Refrigerated Units (TRUs) during project operation unless and until any additional required CEQA review is conducted, for inclusion in future lease provisions.	Prior to issuance of a building permit for vertical construction in connection with a specific individual development proposal	City of Tracy.		
COA No. 5: LEED Green Building Standards Each applicant, in connection with the relevant specific individual development proposal, shall incorporate LEED green building standards.	Review relevant specific individual development proposals for incorporation of LEED green building standards.	Prior to issuance of construction permit.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
COA No. 6: On-Site Employee Food Options During project operations, each building manager shall use diligent and good faith efforts to encourage at least two food truck vendors to serve project employees by inviting available vendors on-site on a regular basis.	Inspect the presence of at least two food truck vendors serving the project.	Throughout all project operations.	City of Tracy.		
COA No. 7: Buffers A. If a project building is less than 50,000 square feet, then a 10-foot wide landscaping buffer shall be provided, measured from the subject building to the property line of all adjacent sensitive receptors. Buffer areas shall include, at a minimum, a solid decorative wall(s) of 10 feet or more in height, natural ground landscaping, and solid screen buffering trees, unless there is an existing solid block wall. Trees used for this purpose shall be evergreen, drought tolerant, minimum 36-inch box, and shall be spaced at 40 feet on center. B. If a project building is 50,000 square feet or more, then a 20-foot wide landscaping buffer shall be provided, measured from the subject building to the property line of all adjacent sensitive receptors. Buffer areas shall include, at a minimum, a solid decorative wall(s) of 10 feet or more in height, natural ground landscaping, and solid screen buffering trees, unless there is an existing solid block wall. Trees used for this purpose shall be evergreen, drought tolerant, minimum 36-inch box, and shall be spaced at 40 feet on center. C. Trees shall be installed in automobile parking areas to provide at least thirty five percent (35%) shade cover of parking areas within 15 years. D. All landscaping shall be drought tolerant, and to the extent feasible, species with low biogenic emissions. Palm trees shall not be utilized. E. All landscaping areas shall be properly irrigated for the life of the facility to allow for plants and trees to maintain growth. F. Loading docks and truck entries shall be oriented away from abutting sensitive receptors, to the extent feasible. If a	Review landscaping plans and other architectural site plans of each individual development proposal for compliance to COA No.7 conditions A through F.	Prior to issuance of construction permits for each individual development proposal.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
project building is more than 400,000 square feet, the subject building's loading docks shall be located a minimum of 300 feet away, measured from the property line of the sensitive receptor to the nearest dock door which does not exclusively serve electric, natural gas or hydrogen gas trucks using a direct straight-line method.					
COA No. 8: Signage and Traffic Patterns A. Entry gates into the loading dock/truck court area shall be positioned after seventy (70) feet or more of total available stacking depth inside the property line. B. The proposed project shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles pursuant to applicable City parking requirements, and on-site queuing for trucks that is away from sensitive receptors to the extent feasible. C. Unless not physically feasible, truck entries shall be located on Collector Streets, and vehicle entries shall be designed to prevent truck access on streets that are not Collector Streets. (Collector Streets = Thru, Local, STAA Truck Routes). D. Anti-idling signs indicating a 3-minute diesel truck engine idling restriction shall be posted at the project facilities along entrances to the project site and in the dock areas. E. Prior to issuance of the certificate of occupancy for each building, the relevant facility operator shall establish and submit for approval to the Planning Director a Truck Routing Plan to and from the State Highway System based on the City's latest Truck Route Map. F. Facility operators shall post signs in prominent locations inside and outside of each building indicating that off-site parking for any employee, truck, or other operation related vehicle is strictly prohibited. G. Signs shall be installed at all truck exit driveways directing truck drivers to the truck route as indicated in the Truck Routing Plan and State Highway System.	Review Truck Routing Plans, parking plans, and other architectural site plans for compliance with COA No. 8, conditions A through H.	For conditions A through D, G, and H: Prior to issuance of building permits for each individual development proposal. For conditions E and F: Prior to issuance of certificate of occupancy for each building.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
H. If a project building is greater than 400,000 square feet, the subject building shall include a truck operator lounge equipped with clean and accessible amenities such as restrooms, vending machines, television, and air conditioning.					
COA No. 9: Alternative Energy A. Each developer of an individual specific development proposal shall prepare the subject building structures to accommodate future solar panels pursuant to applicable Building Code requirements. B. The office portion of a building's rooftop that is not covered with solar panels or other utilities shall be constructed with light colored roofing material with a solar reflective index of not less than 78. C. Each developer of an individual specific development proposal shall apply to participate in the State of California's Community Solar Program (AB 2316). Said application shall be submitted within 30 days of the subject proposal's opportunity and readiness to apply. Readiness shall be defined to mean all approvals for the subject proposal have been obtained, the subject structure(s) have been built and occupancy permit have been issued. Provided, however, If (a) any such application for a governmental approval or utility approval is rejected; (b) any governmental agency revokes a permit, license, or approval that is required to construct or operate the Solar Facilities on the subject premises; (c) any governmental approval or utility approval issued contains an unreasonable term or condition or is canceled, expires, lapses, or is otherwise withdrawn or terminated; (d) PG&E has not provided authority to interconnect from the utility; (e) the subject Solar Developer determines, in its reasonable and good faith discretion, that the compensation awarded by the California Public Utilities Commission (CPUC) is insufficient to support the	Review architectural site plans for each individual specific development for compliance with COA No. 9, conditions A, B, and D through E. For condition C, review each individual specific development proposal's application to AB 2316.	For conditions A, B, and D through E: Prior to issuance of building permits for each individual development proposal. For condition C: Within 30 days of individual specific development proposal's opportunity and readiness to apply. Readiness shall be defined to mean all approvals for the subject proposal have been obtained, the subject structure(s) have been built and occupancy permit have been issued.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
construction and operation of the subject Solar Facility; or (f) the subject Solar Developer determines, in its reasonable and good faith discretion, that the cost for construction of the Solar Facility is not economically feasible despite any compensation awarded by the CPUC, the subject Developer shall notify City in writing of Developer's plans to reapply once to the State of California Community Solar Program. D. At least five percent (5%) of all passenger vehicle parking spaces shall be equipped with working Level 2 Quick charge EV charging stations installed and operational, prior to issuance of the certificate of occupancy for the subject building. E. Bicycle racks shall be provided in connection with each specific individual development proposal pursuant to applicable City requirements for warehouse uses by Table 30-714 of the Zoning and Development Code. The racks shall include locks as well as electric plugs, and shall be located as close as feasible to employee entrances.					
COA No. 10. Operation and Construction A. Cool surface treatments shall be added to all truck courts or such areas shall be constructed with a solar-reflective cool pavement such as concrete. B. Either a secondary electrical room shall be provided in each building, or the primary electrical room shall be sized twenty five percent (25%) larger than is required to satisfy the service requirements of the subject building or the electrical gear shall be installed with the initial construction with twenty five percent (25%) excess demand capacity for the subject building. C. Each building operator shall incorporate a recycling program pursuant to applicable City requirements. D. The following environmentally responsible practices shall be required during construction of each specific individual development proposal:	Review each individual specific development's recycling program, architectural site plans, environmentally responsible business practices, a Property Maintenance Program, and enrollment into the United States Environmental Protection Agency's SmartWay Program, for compliance with COA No. 10, conditions A through G.	Prior to issuance of the building permit for vertical construction of each project building.	City of Tracy.		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
1. The relevant applicant shall use reasonable and good faith efforts to deploy the highest rated CARB Tier technology that is available at the time of construction of the subject proposal. Prior to building permit issuance for the subject proposal, the construction contractor shall submit an equipment list confirming the relevant equipment used is compliant with the highest CARB Tier reasonably available at the time of construction. 2. Only electric-powered hand tools, forklifts, and pressure washers shall be used during construction. 3. There shall be an area designed in the relevant construction site where electric-powered construction vehicles and equipment can charge. E. To facilitate the installation of future electric vehicle charging stations for heavy-heavy duty (HHD) trucks, in connection with each individual development proposal, the subject building improvement plans shall identify an area for future HHD truck charging stations and the subject developer shall install conduit from the power source to the identified area F. A Property Maintenance Program to address routine site maintenance during project operations (e.g., sweeping of truck/bay areas, litter removal, etc.) shall be submitted for review and approval by the Planning Director or his/her designee prior to the issuance of the building permit for vertical construction of each project building. G. Prior to issuance of the certificate of occupancy for each project building, the relevant property owner shall provide the relevant facility operator with reasonably available information on any incentive programs relating to energy efficiency, and shall require the relevant facility operator to enroll in the United States Environmental Protection Agency's SmartWay Program.					

Attachment H

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

ORDINANCE NO. _____

---

1) CERTIFYING AN ENVIRONMENTAL IMPACT REPORT ("EIR"), ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM ("MMRP"), AND MAKING FINDINGS OF FACT AND A STATEMENT OF OVERRIDING CONSIDERATIONS (TOGETHER, "CEQA FINDINGS"), FOR THE ANNEXATION AND FUTURE DEVELOPMENT OF INDUSTRIAL BUILDINGS ON THE 191.18 ACRE PROPERTY LOCATED AT THE NORTHEAST CORNER OF GRANT LINE AND PARADISE ROADS (ASSESSOR'S PARCEL NUMBERS 213-170-14, -24, -25, -26, -27, AND -48, COLLECTIVELY THE "PROPERTY") IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT ("CEQA");

2) AMENDING THE NORTHEAST INDUSTRIAL ("NEI") SPECIFIC PLAN TO ADD THE PROPERTY TO THE NEI SPECIFIC PLAN AREA WITH A LAND USE DESIGNATION OF LIGHT INDUSTRIAL (SPA22-0003);

3) APPROVING THE PREZONING OF THE PROPERTY TO NORTHEAST INDUSTRIAL SPECIFIC PLAN ZONE (AP20-0003); AND

4) APPROVING THE SUBMITTAL OF A PETITION TO THE SAN JOAQUIN COUNTY LOCAL AGENCY FORMATION COMMISSION FOR ANNEXATION OF THE PROPERTY TO THE CITY OF TRACY

WHEREAS, On May 29, 2020, the City received applications from the owners of the Property asking the City to amend the NEI Specific Plan to incorporate the Property into the Specific Plan area, prezone the Property as Northeast Industrial Specific Plan Zone, and submit a petition to the San Joaquin County Local Agency Formation Commission (LAFCo) to annex the Property to the City of Tracy (collectively, the applications are referred to herein as the "Project"); and

WHEREAS, The Property has been located within the City's Sphere of Influence ("SOI") since the July 1993 General Plan Update; and

WHEREAS, The Property is designated by the City's General Plan as Industrial, and the proposed prezoning designation of Northeast Industrial Specific Plan Zone is consistent with the General Plan designation; and

WHEREAS, To support its processing of the applications, and pursuant to the

requirements of CEQA, the City conducted an environmental analysis of the proposed Project, resulting in the completion of a Draft EIR bearing State Clearinghouse Number 2020080524 (**Exhibit 1**); and

WHEREAS, The Draft EIR was published on April 20, 2022 for public review and comment, with the comment period closing on June 3, 2022; and

WHEREAS, The City received comments throughout the comment period, including during a Planning Commission public hearing on May 25, 2022; and

WHEREAS, A Final EIR was published on January 19, 2023 for public review; and

WHEREAS, The Planning Commission conducted a duly noticed public hearing on January 25, 2023, and considered the Draft and Final EIRs (together comprising the EIR), the MMRP, and the CEQA Findings, (attached as **Exhibits 2, 3 and 4**), and the applications for the NEI Specific Plan amendment, prezoning, and submittal to LAFCo of the petition to annex the Property to the City of Tracy, and voted to recommend that the City Council certify the EIR, approve the NEI Specific Plan amendment and prezoning, and approve the submittal of a petition to LAFCo to annex the Property to the City of Tracy; and

WHEREAS, In February and April, 2023, the City received three late comment letters on the EIR and prepared written responses to said letters, which letters and responses were incorporated into the EIR, and the City supplemented the mitigation measures in the EIR at the request of the late comments, and the minor changes to the EIR arising from the late comment letters did not change the analyses or conclusions of the EIR and did not require recirculation of the Draft EIR under applicable CEQA requirements; and

WHEREAS, On August 15, 2023, the City Council held a duly noticed public hearing to review and consider the proposed Project, and the EIR with the minor changes arising from the late comment letters, Findings of Fact, MMRP, and Statement of Overriding Considerations.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TRACY AS FOLLOWS:

SECTION 1. Incorporation of Recitals/Findings. The City Council of the City of Tracy hereby finds and determines the foregoing recitals are true and correct and are hereby incorporated herein as findings and determinations of the City.

SECTION 2. CEQA EIR. The City Council, based on its independent judgment and analysis, has reviewed and considered the proposed Project and has determined, based on the whole record before it, including the EIR, MMRP, and CEQA Findings set forth in **Exhibits 1 through 4**, that the proposed Project will have a significant effect on the environment and hereby certifies the EIR, adopts the MMRP, and makes the CEQA Findings set forth in Exhibit 3 as full satisfaction of the requirements under CEQA for the Project.

SECTION 3. Specific Plan Amendment. The City Council hereby approves and adopts the NEI Specific Plan amendment to add the above-described Property to the NEI Specific Plan as indicated in **Exhibit 5**

SECTION 4. Prezoning. The City Council hereby approves the application to prezone the Property as Northeast Industrial Specific Plan Zone, Tracy Municipal Code section 10.08.3022.

SECTION 5. Petition for Annexation. The City Council hereby grants the applicants' request to submit a petition to LAFCo to annex the Property to the City of Tracy and directs the City Manager to prepare and submit said application in substantially the form of **Exhibit 6**.

SECTION 6. Severability. If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the Ordinance. The City Council hereby declares that it would have passed this Ordinance and each section, subsection, clause or phrase thereof irrespective of the fact that one or more other sections, subsections, clauses or phrases may be declared invalid or unconstitutional.

SECTION 7. Effective Date. This Ordinance shall become effective upon the thirtieth (30th) day after final adoption.

SECTION 8. Publication. The City Clerk is directed to publish this Ordinance in a manner required by law.

SECTION 9. Codification. This Ordinance shall not be codified in the Tracy Municipal Code.

* * * * * * * * * * * * * *

The foregoing Ordinance 2023-_____ was introduced at a regular meeting of the Tracy City Council on the 15th day of August 2023, and finally adopted on the ___ day of _____ 2023, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy

ATTEST: _____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the City of Tracy

Date of Attestation: _____

Exhibit 1 – Project Draft EIR *(Attachment D to staff report)*
Exhibit 2 – Project Final EIR *(Attachment E to staff report)*
Exhibit 3 – EIR Findings of Fact and Statement of Overriding Considerations *(Attachment F to staff report)*
Exhibit 4 – Mitigation Monitoring and Reporting Program *(Attachment G to staff report)*
Exhibit 5 – NEI Specific Plan amendment *(Attachment B to staff report)*
Exhibit 6 – Petition for Annexation

To be submitted to LAFCo Offices by cities or special districts of San Joaquin County only

Exhibit 6

San Joaquin
Local Agency Formation Commission

44 N. San Joaquin Street Suite #374 Stockton, CA 95202

JUSTIFICATION OF PROPOSAL

Please complete the following information to process an application under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000: (Indicate N/A if Not Applicable)

SHORT TITLE OF THE PROPOSAL: _____

TYPE OF PROPOSAL

- ☐ City Incorporation
- ☐ Sphere of Influence Amendment
- ☐ District Formation
- ☐ Consolidation
- ☐ Sphere of Influence Update
- ☐ Annexation
- ☐ Detachment
- ☐ Addition of Services
- ☐ District Dissolution
- ☐ Reorganization (involving an Annexation and Detachment(s))

AGENCY CHANGES RESULTING FROM THIS PROPOSAL

Agency or Agencies gaining territory: _____

_____

Agency or Agencies losing territory: _____

_____

_____

NOTIFICATION

Please indicate the names, addresses and telephone numbers of all Applicants, Applicant's Agents, and all affected Agencies who are to receive the hearing notice and the Executive Officer's Report:

Name	Mailing Address	Telephone

(Attach a separate sheet if necessary.)

PROJECT INFORMATION

Please provide project-related information for the following questions:

1. Do the proposed boundaries create an island of non-agency territory? [ ] Yes [ ] No

2. Do the proposed boundaries split lines of assessment or ownership? [ ] Yes [ ] No

3. Does the proposal involve public rights-of-way or easements? [ ] Yes [ ] No

4. Does the proposal involve public land or land assessed by the State? [ ] Yes [ ] No

5. Does any part of the proposal involve land under a Williamson Act Contract or Farmland Security Zone? [ ] Yes [ ] No

6. Does any part of the proposal involve land with a Wildlife/Habitat Easement or Agricultural Land Conservation Easement? [ ] Yes [ ] No

7. List the affected Assessor Parcel Numbers, Owners of record and Parcel Sizes:

APN	Owner	Acreage

(Attach a separate sheet if necessary)

8. Physical Location of Proposal: _____
(Street or Road, distance from and name of Cross Street, quadrant of City)

9. Has an application been filed for an underlying project (such as Development Plan, Conditional Use Permit, or Tentative Subdivision Map)? [ ] Yes [ ] No
If Yes, please attach a Project Site Plan or Tentative Subdivision Map.
If No, please provide an estimate of when development will occur: _____

10. List those public services or facilities which will be provided to the affected territory as a result of the proposed action:

11. Indicate which of these services or facilities will require main line extensions or facility up-grades in order to serve the affected territory:

12. Provide any other justification that will assist the Commission in reviewing the merits of this request. (Attach a separate sheet if necessary)

INDEMNIFICATION AGREEMENT

As part of this application, applicant and real property in interest, if different, agreed to defend, indemnify, hold harmless, and release the San Joaquin Local Agency Formation Commission, its agents, officers, attorneys, and employees from any claim, action, or proceeding brought against any of the above, the purpose of which is to attack, set aside, void, or annul the approval of this application or adoption of the environmental document which accompanies it. This indemnification obligation shall include, but not be limited to, damages, costs, expenses, attorney's fees, or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the approval of this application, whether or not there is concurrent passive or active negligence on the part of the San Joaquin Local Agency Formation Commission, its agents, officers, attorneys, or employees.

Executed at _____ _____, California, on _____, 20__.

APPLICANT

Signature: _____

Title: _____

REAL PARTY IN INTEREST
(If different from Applicant)

Signature: _____

Title: _____

SUBMITTALS

In order for this application to be processed, the following information needs to be provided:

1. Two copies of this Justification of Proposal, completed and signed with original signatures;
2. Five prints of a full-scale proposal map showing the affected territory and its relationship to the affected jurisdiction (Refer to Guide for Preparation):
3. Five copies of an 8.5" x 11" reduction of the proposal map;
4. Three copies of a metes and bounds description of the affected territory;
5. One certified copy of the City Council and/or Special District Board Resolution of Application, or a petition making application to LAFCo (as appropriate);
6. Written permission from each affected property owner (or signature form);
7. One copy of the project environmental document (One Compact Disc if more than 25 pages);
8. One copy of the project Notice of Determination;
9. Three 8.5" x 11" copies of the Vicinity Map (if not included on the proposal map);
10. One copy of the plan for providing services along with a schematic diagram of water, sewer and storm drainage systems (refer to Government Code Section 56653);
11. One copy of the Pre-Zoning map or description (as required by Section 56375);
12. One copy of the Statement of Open Space (Ag) Land Conversion (refer to Section 56377);
13. One Copy of the Statement of Timely Availability of Water Supplies (refer to Section 56668(k);
14. One copy of the Statement of Fair Share Housing Needs (if residential land uses are included in the proposal) (refer to Section 56668(l));
15. One copy of the project design (site plan, development plan, or subdivision map);
16. One copy of the Residential Entitlement matrix form (if residential land uses are included in the proposal); and
17. Filing and processing fees in accordance with the LAFCo Fee Schedule and the State Board of Equalization Fee Schedule.

Additional information may be required during staff review of the proposal.

CERTIFICATION

The undersigned hereby certifies that all LAFCo filing requirements will be met and that the statements made in this application are complete and accurate to the best of my knowledge.

_____ Date: _____
(Signature)

Print or Type Name: _____ Daytime Telephone: _____

August 15, 2023

Agenda Item 3.B

RECOMMENDATION

Staff recommends that City Council review and discuss the Wastewater Master Plan Update.

EXECUTIVE SUMMARY

This is an informational item in which City staff and consultants will provide a summary of the proposed Wastewater Master Plan Update (Update). This Update will update the City's wastewater infrastructure needed to serve new development identified in the City's General Plan and the growing population of the City.

BACKGROUND AND LEGISLATIVE HISTORY

The City's existing Wastewater Master Plan (Master Plan) was approved in January 2013. The Master Plan was based on the City's 2011 General Plan. The City has incorporated many general plan amendments since the 2011 adoption and has seen a significant increase in residential and commercial development. The changes to the general plan and increased development has resulted in the need for an update to all seven of the City's Master Plans. The General Plan, as amended, identifies existing and new areas of development within and around the existing City limits. It includes areas east of the City, up to Chrisman Road, and west of the City, up to the Altamont Pass south of I-205, as well as the Larch Clover area both north and south of I-205.

ANALYSIS

The Update provides an evaluation of the required backbone wastewater collection system facilities required to serve the City's existing and future needs. The State endured five years of drought starting in 2012, including the driest four consecutive years in California history. These unprecedented conditions led to State mandated water conservation, significant surface water supply reductions and curtailments and legislation establishing new water efficiency standards. This water conservation also resulted in a reduction in per capita wastewater flow generation for existing and future planned development. This has resulted in a general reduction in the required wastewater facilities, despite the City's continued growth.

The Update was recently revised based on flows seen at the wastewater treatment plant during the significant and unprecedented rainfall at the end of 2022. Revisions to the existing and peak wet weather flow (PWWF) were included to account for this new information. The presentation (Attachment A) will include a summary of what is included in the Update and will include the following:

- An overview of our current wastewater system.
- Provide an explanation of the work that was completed for the Update.
- Review of the hydraulic model used.
- An explanation of the existing capacity.
- Information on planned future development and how that will affect wastewater flows.
- A comparison of existing flows, projected flows in 2040 and projected flows at Build-out of the City of Tracy.

- Wastewater Treatment Plant expansion needs for the future.
- Recommended infrastructure to serve future growth.
- The costs associated with the recommended improvements.
- Include new gravity sewers, new pumping stations and force mains and future needs for wastewater treatment.

FISCAL IMPACT

There is no fiscal impact associated with the approval of the Update. The cost of completion of the Update was funded from program management fees collected through our development impact fee program. The cost of construction of the physical infrastructure listed in the Master Plan and the Update will be funded through development impact fees paid by new developments or wastewater rates collected from existing users, as outlined in the Master Plan.

PUBLIC OUTREACH / INTEREST

A Public Outreach Meeting for the Wastewater Master Plan Update is planned for August 2023.

COORDINATION

The City's Engineering Division coordinated with our Operations and Utilities Department and Carollo Engineers, Inc. to complete this update.

CEQA DETERMINATION

This is an informational report only and no environmental review is necessary at this time.

STRATEGIC PLAN

This agenda item supports the City of Tracy's Quality of Life Strategic Priority, which is to provide an outstanding quality of life by enhancing the City's amenities, business mix and services and cultivating connections to promote positive change and progress in our community.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that City Council review and discuss the Wastewater Master Plan Update.

Prepared by: Veronica Child, Management Analyst II

Reviewed by: Koosun Kim, PE, City Engineer / Assistant Director of Development Services
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

ATTACHMENTS

Attachment A – PowerPoint Presentation
Attachment B – Wastewater Master Plan Update

Attachment A

Wastewater Master Plan Update - City of Tracy

August 15th, 2023

WATER
OUR FOCUS
OUR BUSINESS
OUR PASSION

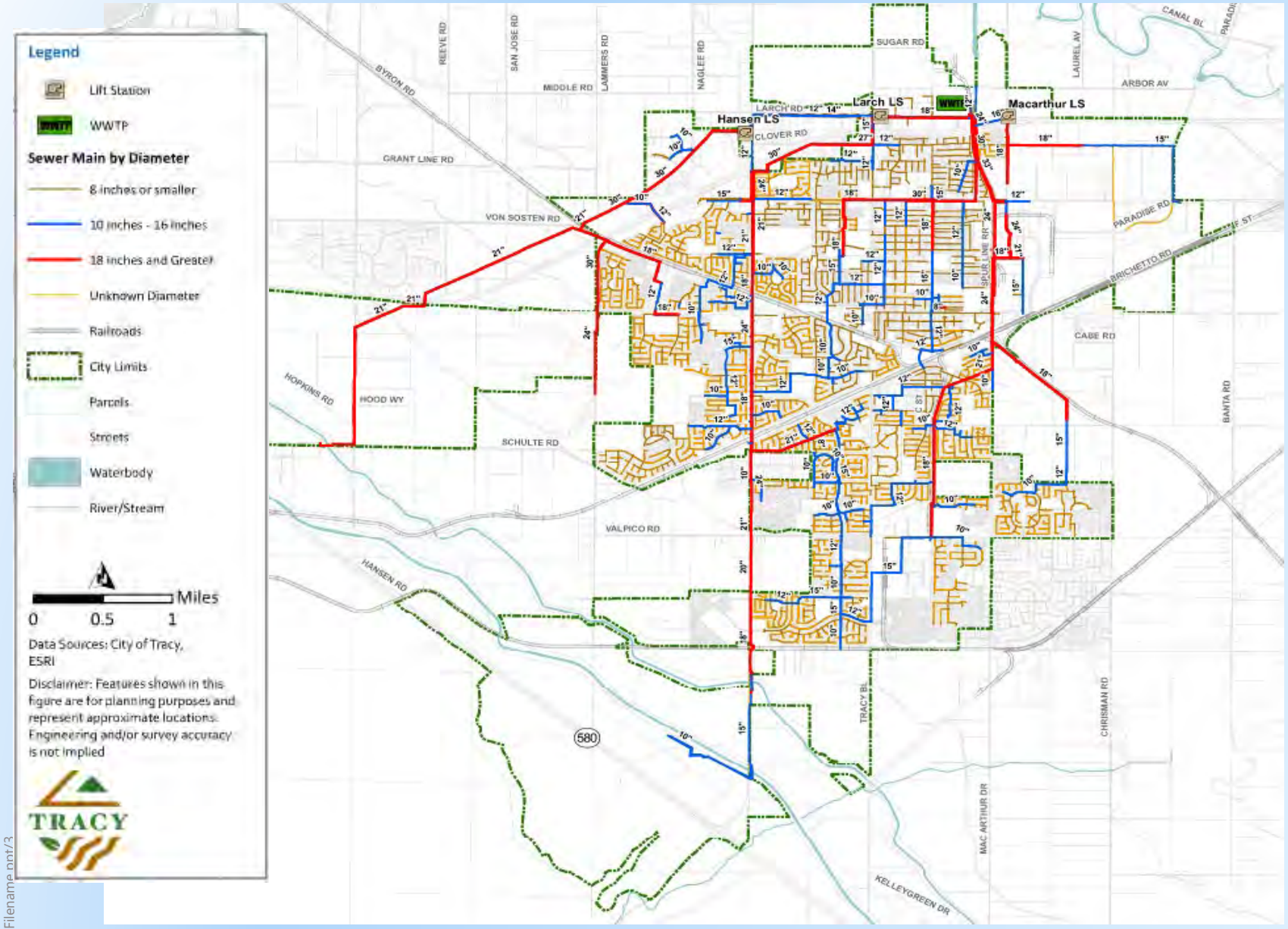
TRACY

carollo
Engineers...Working Wonders With Water®

Agenda

- Existing Wastewater System
- Master Plan Work Plan
- Hydraulic Model
- Existing Capacity Evaluation
- Planned Development and Projected Flows
- Future System Evaluation
- Wastewater Treatment Plant
- Capital Improvement Plan

Existing Wastewater Collection System

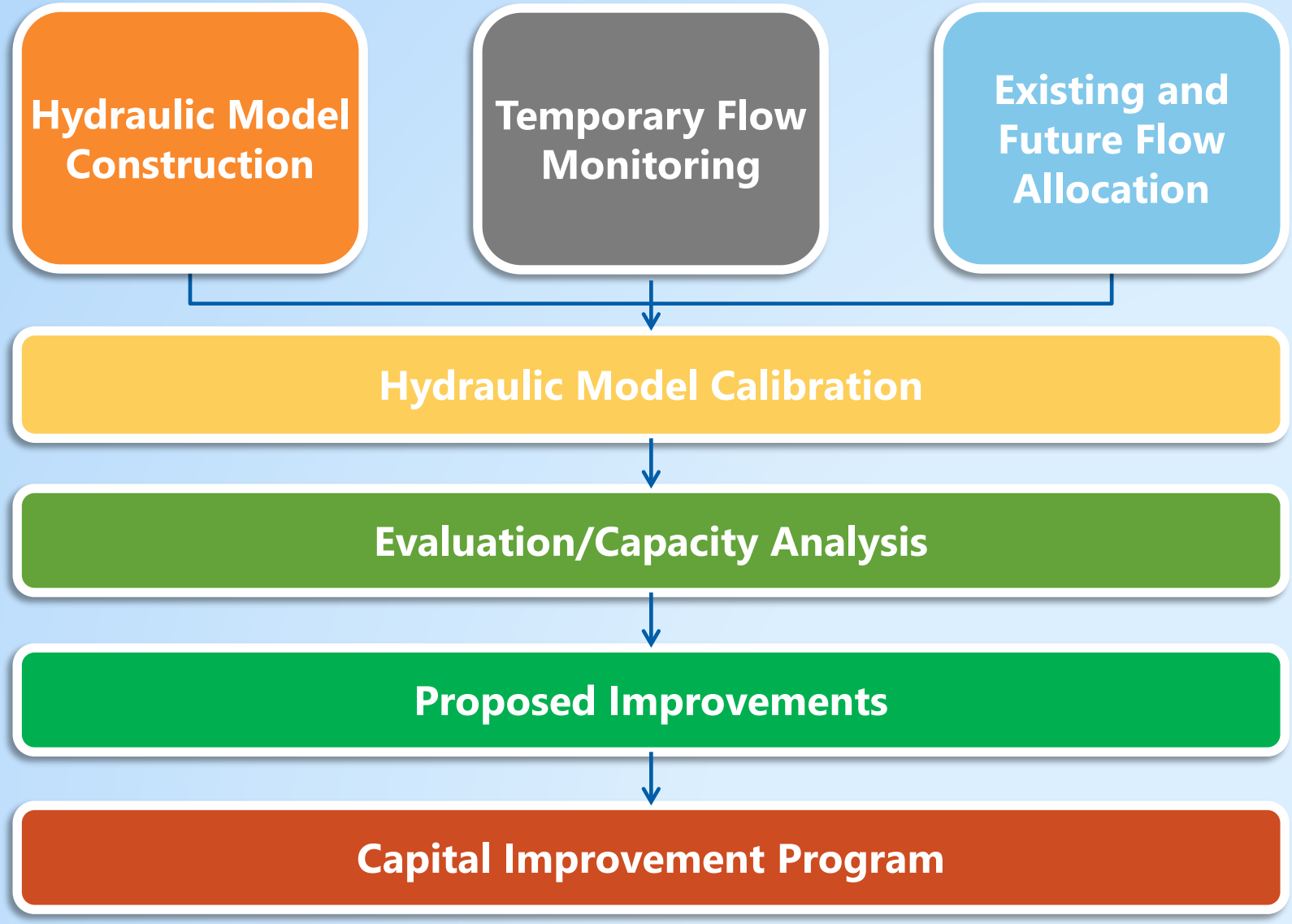


- 210 miles of gravity sewer
- 4 to 48 inches in diameter
- 3 Wastewater Lift Stations
- Serves Existing City Limits

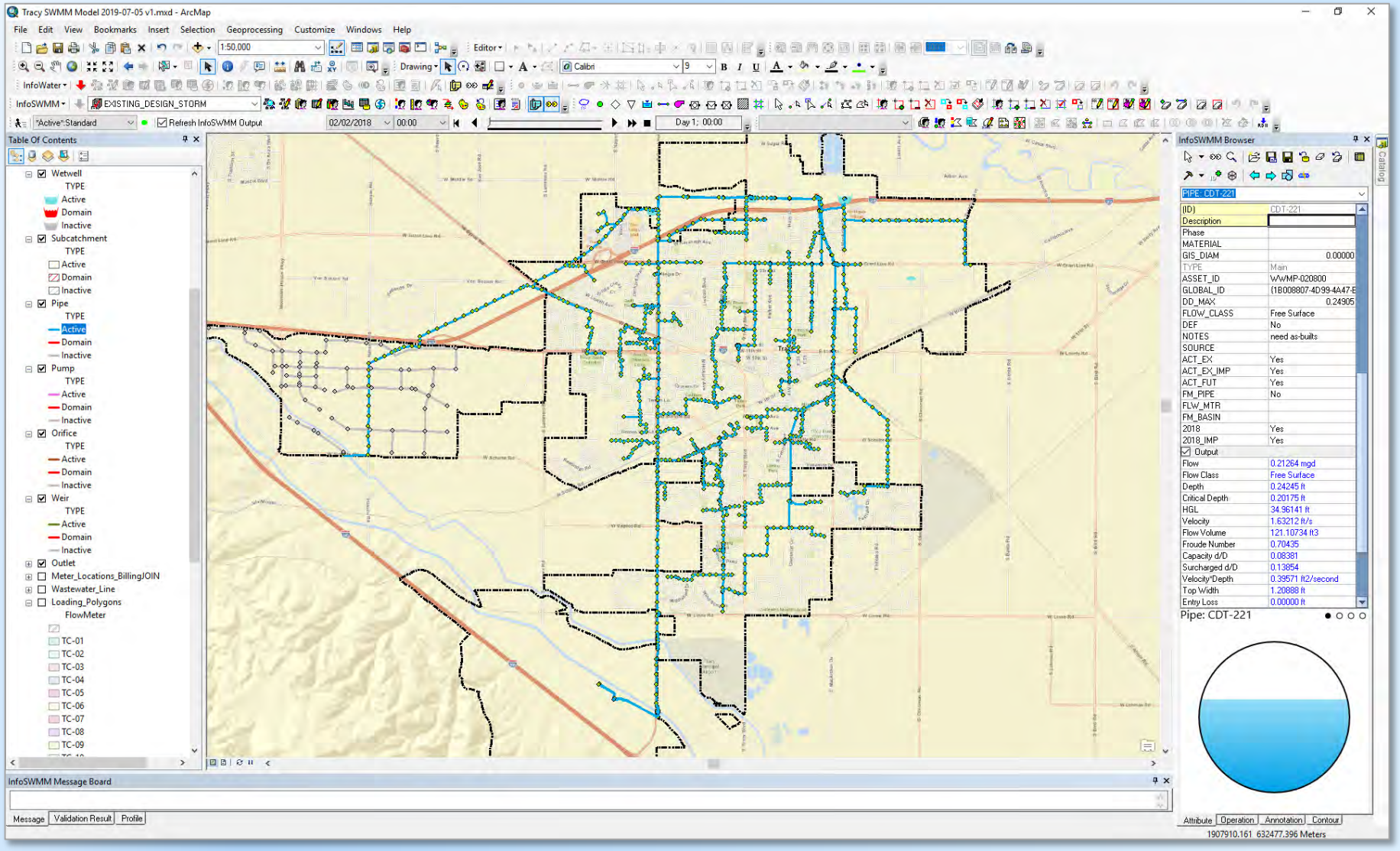
Filename.ppt/3

Master Plan Evaluation Work Plan

- Establish Existing Conditions
- Evaluate Planned Growth
- Determine service plan
- Develop Costs

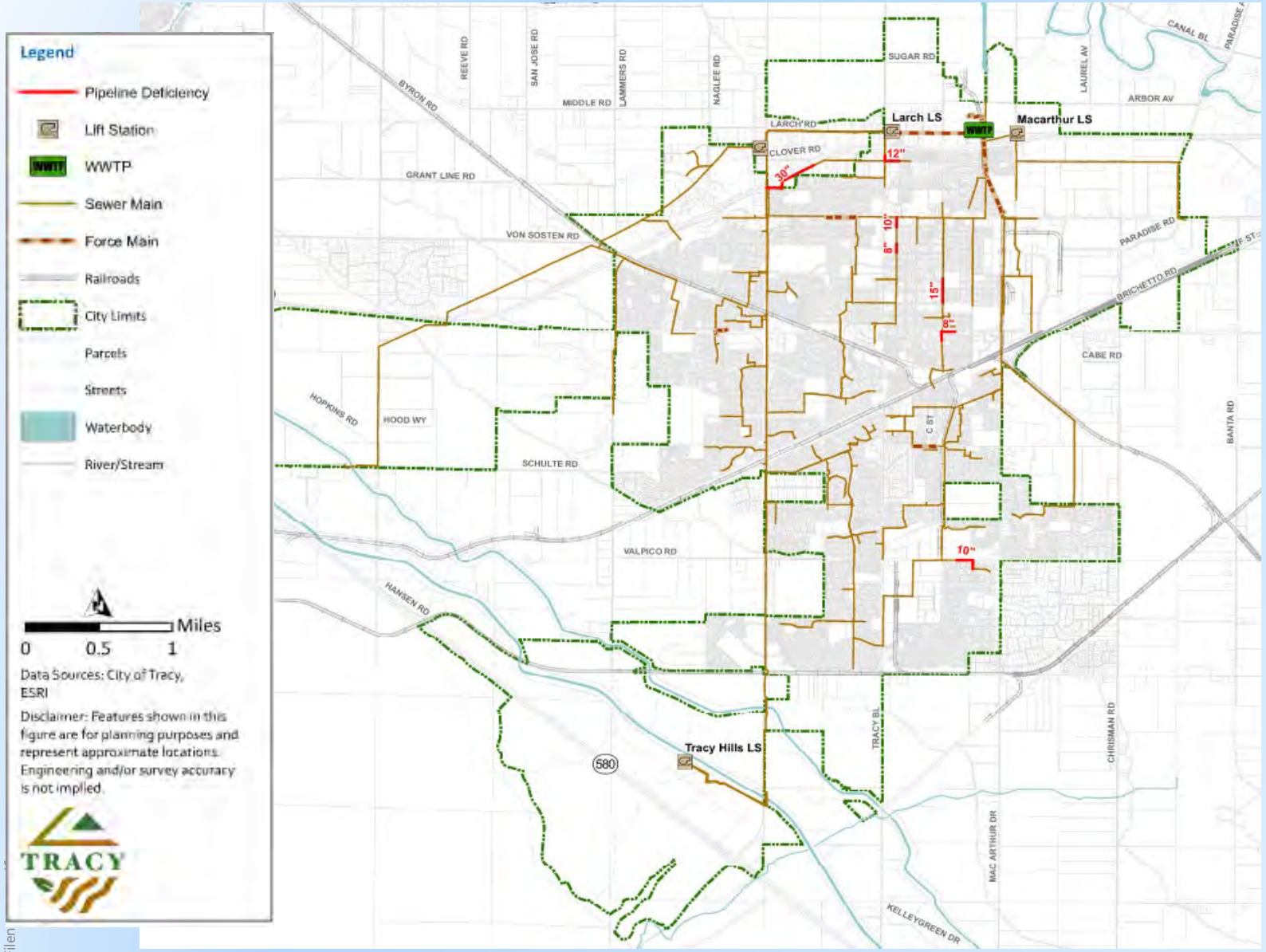


A hydraulic computer model was developed to evaluate capacity and ability to serve growth



- Calibrated to Industry Standards
- Temporary Flow Monitoring Program

Evaluation of existing capacity showed good performance



- Evaluation criteria was developed in coordination with City staff
- Existing system is performing well in terms of hydraulic capacity
- Deficiencies and improvements developed were evaluated based on risk

Evaluation of future developments established future conditions

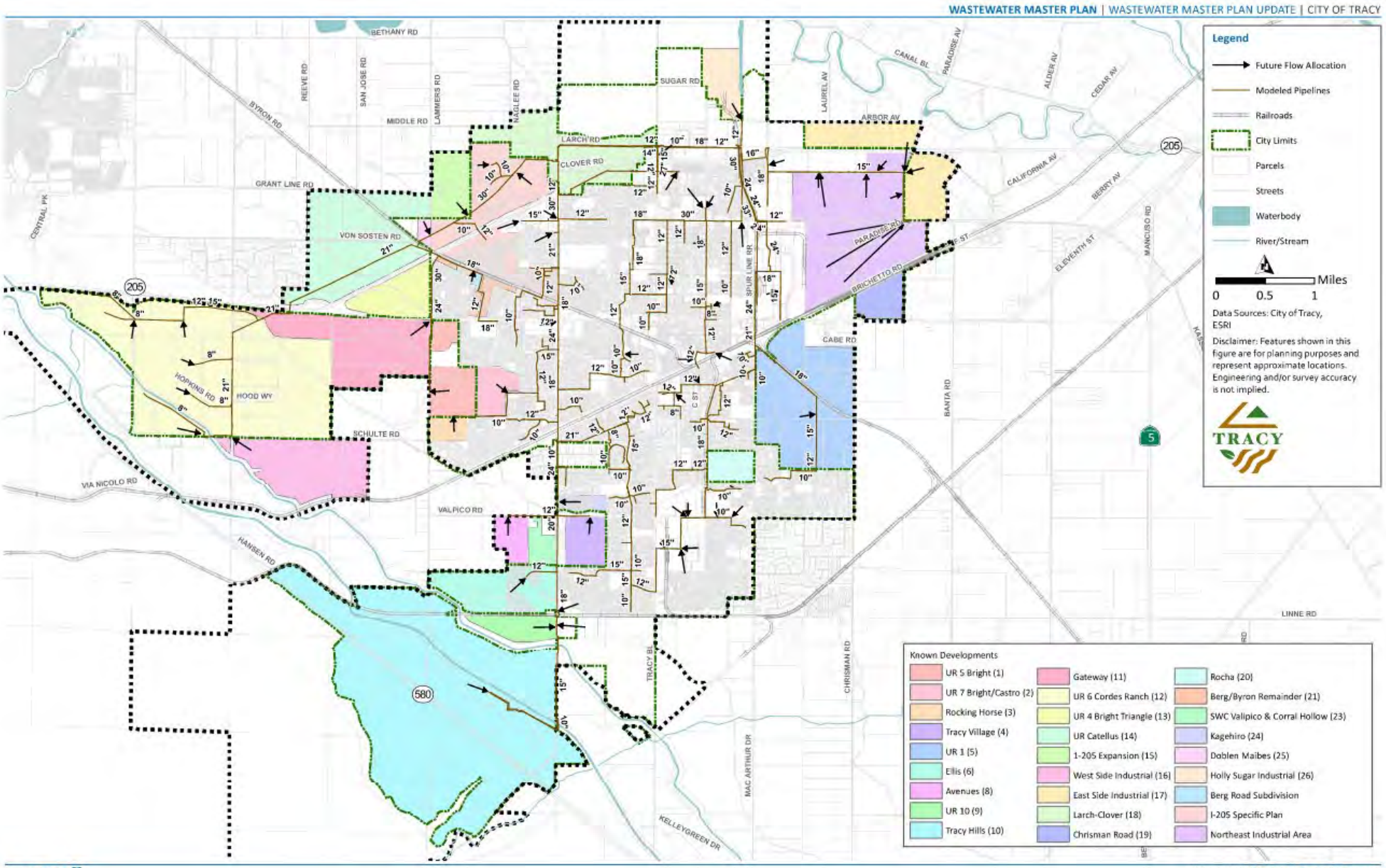
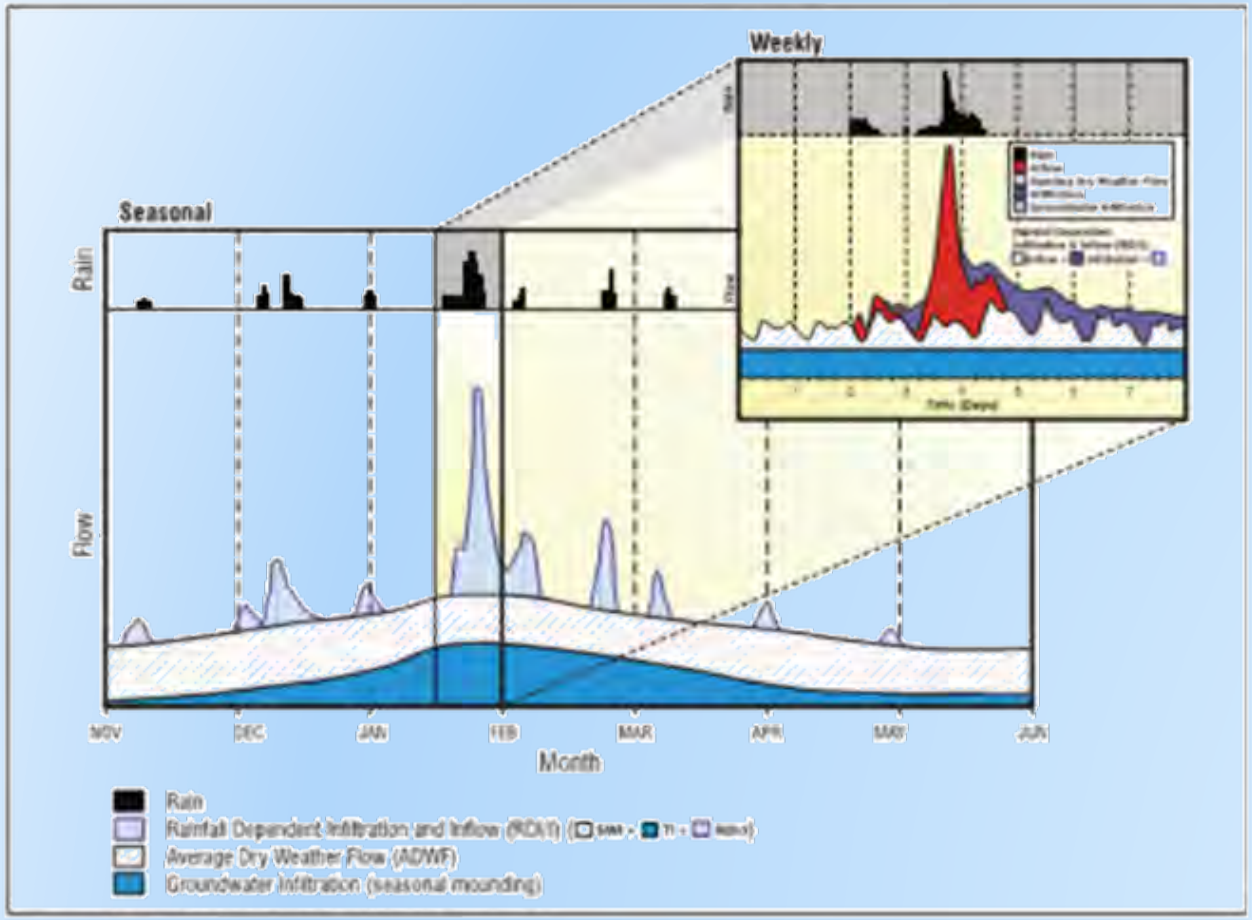
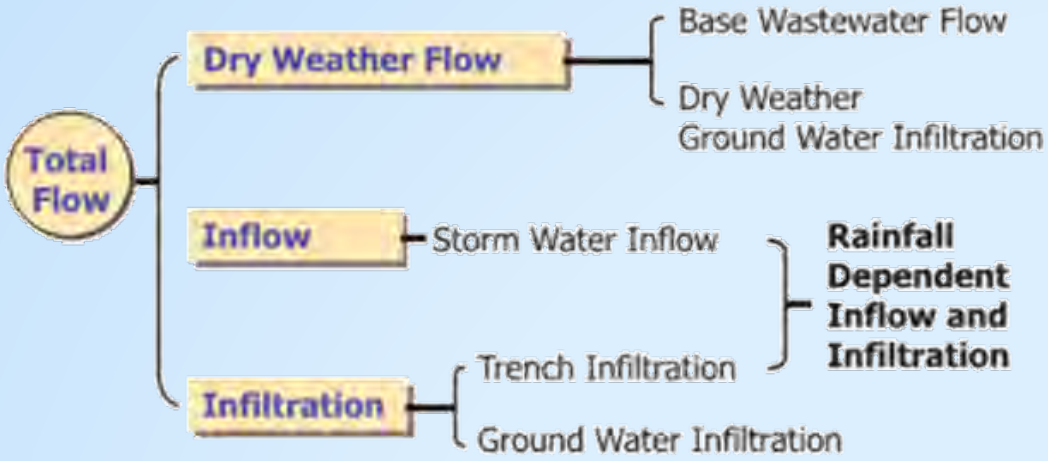


Figure 2.2 Known Development

Wastewater flows include multiple components





Typical sources of infiltration and inflows

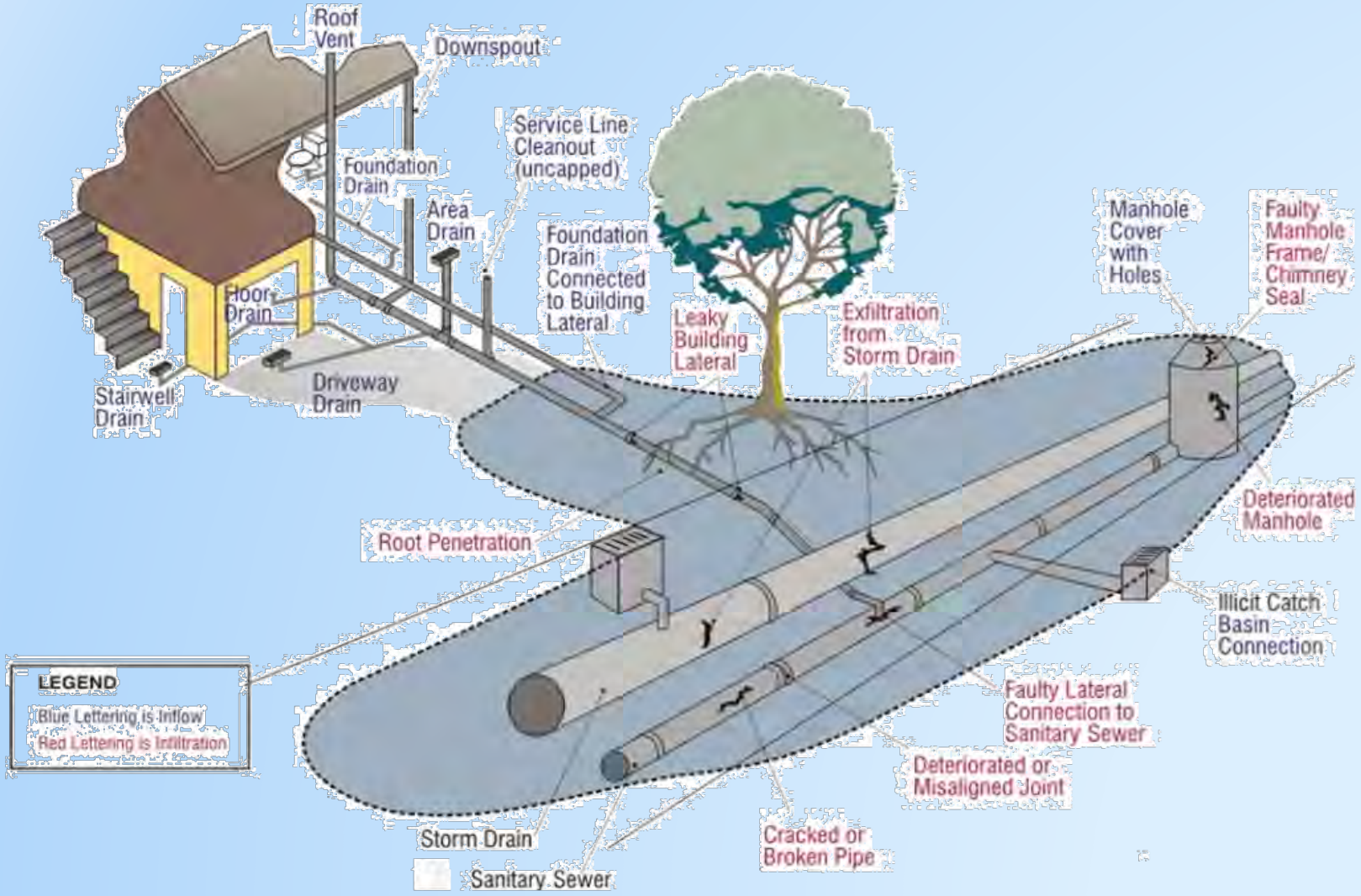


Figure 4.2 Typical Sources of Infiltration and Inflow

Existing and future flows in million gallons per day (mgd)

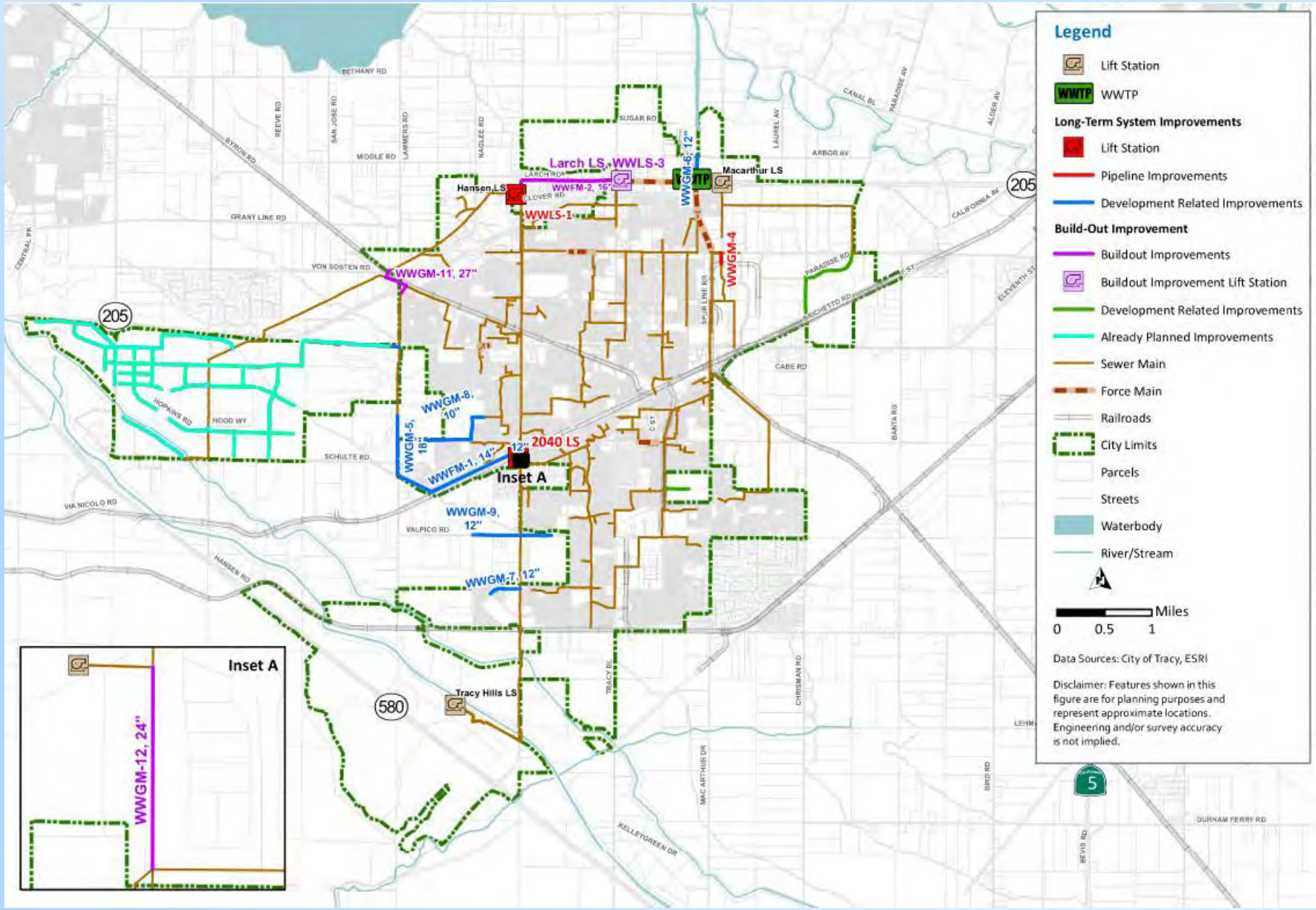
Planning Horizon	Average Dry Weather Flow (ADWF, mgd)	Peak Wet Weather Flow (PWWF, mgd)	PWWF/ADWF Factor
Existing	7.35	16.95	2.31
2040	12.22	25.35	2.07
Buildout	15.65	30.14	1.93

PWWF = peak wet weather flow

ADWF = average dry weather flow

mgd = million gallons per day

Future system evaluation



Wastewater Treatment Plant – Master Plan Phases

Phase 2	Revised Phase 3	Revised Phase 4	Phase 5
Phase 2A, 2B Completed Phase 2C Designed -Outfall and Aeration Tanks Under Construction	Required for 2040 Flows	Required for Buildout Flows	Not required based on current projected flows

Wastewater Treatment Plant Expansion Phase 3

Revised Phase 3 Upgrades
Grit Removal Basin #3
Circular Clarifier #3
Primary Sludge Pump Station #2
Primary Effluent Equalization Tank #2
Aeration Basin #5
Secondary Clarifier #2
New WAS and Mixed Liquor Pump Station
Anaerobic Digester #4
Remove 1975 Trickling Filters
New Centrate Equalization Tank and Pump Station
New Sludge Drying Bed #4

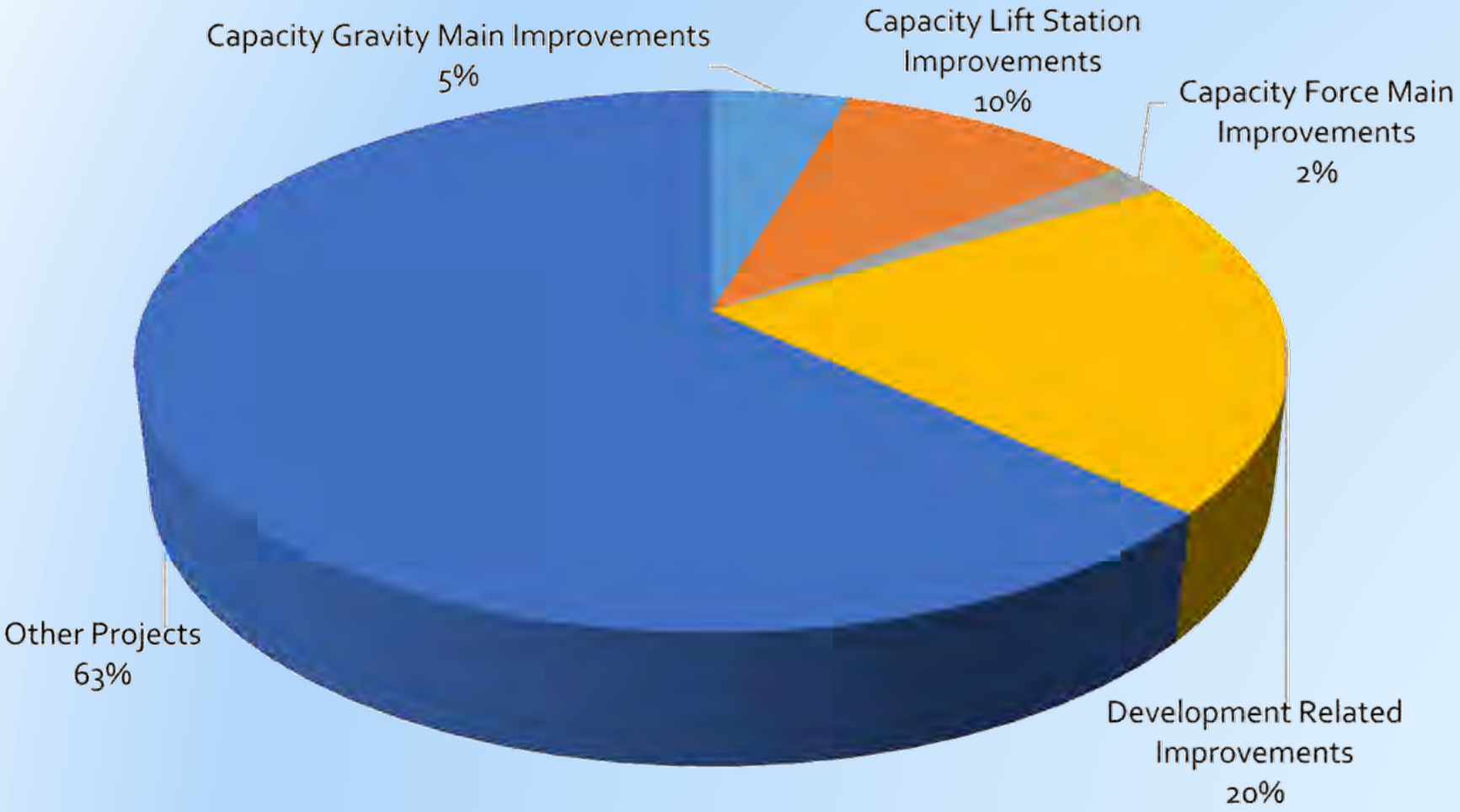
Wastewater Treatment Plant Expansion Phase 4

Revised Phase 4 Upgrades
Additional Influent Screen and Channel
New Primary Effluent Equalization Pump Station
New Outfall Pipeline

The capital improvement program included pipelines, pump stations, treatment, rehabilitation and replacement costs

Project Type	Horizon 1 (2022-2026) ($)	Horizon 2 (2027-2030) ($)	Horizon 3 (2031-2040) ($)	Horizon 4 (2041 & Beyond) ($)	Total ($)
Capacity/Storage Improvements					
Gravity Mains	$550,000	-	$4,105,000	$4,698,000	$9,353,000
Lift Station	-	-	$7,034,000	$13,331,000	$20,365,000
Force Main	-	-	-	$3,857,000	$3,857,000
Subtotal	**$550,000**	**-**	**$11,139,000**	**$21,886,000**	**$33,575,000**
Development Related Improvements					
Gravity Mains	-	$1,474,000	$4,753,000	$26,961,000	$33,188,000
Lift Station	-	$3,068,000	-	-	$3,068,000
Force Main	-	$4,680,000	-	-	$4,680,000
Subtotal	**-**	**$9,222,000**	**$4,753,000**	**$26,961,000**	**$40,936,000**
Other Projects					
Master Plan	-	$150,000	$300,000	-	$450,000
Annual Sewer Line Replacement	$600,000	$600,000	$1,500,000		$2,700,000
WWTP Expansion	$35,000,000	-	$55,587,000	$34,058,000	$124,645,000
Subtotal	**$35,600,000**	**$750,000**	**$57,387,000**	**$34,058,000**	**$127,795,000**
Total	**$36,150,000**	**$9,972,000**	**$73,279,000**	**$82,905,000**	**$202,306,000**

Capital costs by project type



- "Other Projects" Include
  - Treatment Plant Expansion
  - Pipe replacement
  - Future studies

The capital improvement plan costs were allocated to existing and future users

Reimbursement Category	Horizon 1 (2022-2026) (Million $)	Horizon 2 (2027-2030) (Million $)	Horizon 3 (2031-2040) (Million $)	Horizon 4 (2041- and beyond) (Millon $)	Total (Million $)
Existing Users	$1.2	0.75	$1.6	$1.5	$4.9
Future Users	$35	$9.2	$72.0	$81.4	$197.3
Total	$36.2	$10.0	$73.3	$82.9	$202.3

Thank You

Attachment B

City of Tracy
Wastewater Master Plan Update

WASTEWATER MASTER PLAN

FINAL | July 2023

City of Tracy
Wastewater Master Plan Update

WASTEWATER MASTER PLAN

FINAL | July 2023

Digitally signed by Timothy J. Loper
Contact Info: Carollo Engineers, Inc.
Date: 2023.07.14 14:01:18-07'00'

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY J. LOPER
No. 70847
CIVIL
STATE OF CALIFORNIA

Contents

Chapter 1 – Introduction

1.1 Background 1-1

1.2 Wastewater Collection System Overview 1-1

1.3 Study Purpose, Scope, and Authorization 1-1

1.4 Report Organization 1-2

1.5 Acknowledgements 1-2

1.6 Reference Material 1-3

Chapter 2 – Study Area Description

2.1 Study Area 2-1

2.2 Planning Period 2-1

2.3 Climate and Topography 2-1

2.4 Land Use and Future Developments 2-1

2.4.1 Existing Land Use 2-2

2.4.2 Known Development 2-5

2.4.3 Future Development 2-6

Chapter 3 – Planning and Evaluation Criteria

3.1 Collection System Evaluation Criteria 3-1

3.1.1 Manning's Coefficient (n) 3-1

3.1.2 Peak Flow Depth Criteria 3-1

3.1.3 Design Velocities and Minimum Slopes 3-3

3.1.4 Changes in Pipe Diameter 3-3

3.1.5 Lift Station and Force Mains 3-3

3.2 Peak Wet Weather Flow Design Storm 3-3

Chapter 4 – Wastewater Flows

4.1 Wastewater Flow Components 4-1

4.2 Temporary Flow Monitoring Program 4-2

4.2.1 Flow Monitoring Sites and Tributary Areas 4-2

4.2.2 Flowmeter Installation and Flow Calculation 4-9

4.3 Flow Monitoring Program Results 4-9

4.3.1 Dry Weather Flow Data 4-10

4.3.2 Rainfall Data 4-12

4.3.3 Wet Weather Flow Data 4-12
4.3.4 Inflow and Infiltration Analysis 4-13
4.4 Design Flows 4-14
4.4.1 Wastewater Flow Factors 4-14
4.4.2 Average Dry Weather Flow 4-16
4.4.3 Peak Wet Weather Flow 4-17
Chapter 5 – Collection System Facilities and Hydraulic Model
5.1 Existing Wastewater Collection System 5-1
5.1.1 Pipeline Distribution by Diameter 5-1
5.1.2 Lift Stations 5-1
5.2 Hydraulic Model Development 5-6
5.2.1 Hydraulic Modeling Software 5-6
5.2.2 Data Collection and Validation 5-6
5.2.3 Skeletonizing 5-6
5.2.4 Elements of the Hydraulic Model 5-7
5.2.5 Hydraulic Model Construction 5-8
5.3 Load Allocation 5-11
5.4 Hydraulic Model Calibration 5-11
5.4.1 Wastewater Calibration Standards 5-12
5.4.2 Dry Weather Flow Calibration 5-12
5.4.3 Wet Weather Flow Calibration 5-14
Chapter 6 – System Evaluation and Proposed Improvements
6.1 Wastewater Collection System Analysis 6-1
6.1.1 Gravity System Evaluation 6-1
6.1.2 Lift Station and Force Main Evaluation 6-6
6.2 Recommended Improvements 6-6
6.2.1 Existing Gravity Main Improvements 6-15
6.2.2 Future Gravity Main Improvements 6-15
6.2.3 Existing Lift Station and Force Main Improvements 6-16
6.2.4 Future Lift Station and Force Main Improvements 6-16
6.2.5 Collection System Expansion to Serve Future Growth 6-16
Chapter 7 – Wastewater Treatment Plant Evaluation and Proposed Grades
7.1 Existing Wastewater Treatment Plant Process Overview 7-1
7.1.1 Liquid Treatment Stream 7-1

7.1.2 Solids Treatment 7-2
7.2 Historical Flows and Loads 7-2
7.2.1 Historical Flows 7-2
7.2.2 Historical Loads 7-3
7.3 Projected Flows and Loads 7-4
7.3.1 Projected Flows 7-4
7.3.2 Projected Loads 7-4
7.4 Wastewater Treatment Plant Capacity Analysis 7-5
7.4.1 Outfall Capacity 7-5
7.4.2 Secondary Treatment Capacity 7-5
7.4.3 Overall Facility Capacity 7-6
7.5 Current Treatment Plant Upgrades 7-7
7.6 Planned Treatment Plant Upgrades 7-13
7.7 Summary and Findings 7-15
7.7.1 Current Capacity 7-15
7.7.2 Future Capacity 7-16
7.7.3 Wastewater Treatment Plant Expansion Areas 7-16

Chapter 8 – Capital Improvement Plan

8.1 Project Prioritization 8-1
8.2 Capital Improvement Project Costs 8-1
8.3 Cost Estimating Accuracy 8-1
8.4 Construction Unit Costs 8-2
8.4.1 Pipeline Unit Costs 8-2
8.4.2 Lift Station Unit Costs 8-2
8.5 Project Costs and Contingencies 8-2
8.5.1 Baseline Construction Costs 8-3
8.5.2 Capital Improvement Cost 8-3
8.6 Capital Improvement Program Implementation 8-3
8.7 Existing Versus Future User Cost Share 8-8

Appendices

Appendix A	Land Use with TAZ Estimates
Appendix B	V&A Sewer Flow Monitoring Study
Appendix C	Dry Weather Flow Calibration Sheets
Appendix D	Wet Weather Flow Calibration Sheets
Appendix E	Wastewater Improvement Detail Sheets
Appendix F	Wastewater Treatment Plant Expansion Areas

Tables

Table 2.1	Study Area Climate	2-1
Table 2.2	Existing Land Use	2-2
Table 2.3	Known Development	2-5
Table 3.1	Wastewater System Evaluation Criteria	3-2
Table 4.1	Flow Monitoring Locations	4-6
Table 4.2	Dry Weather Flow Summary	4-11
Table 4.3	Peak Measured Flows During the Flow Monitoring Program	4-11
Table 4.4	Flow Monitoring Basin Peak I/I Rates	4-14
Table 4.5	Wastewater Flow Factors	4-15
Table 4.6	Known Development Flows	4-16
Table 4.7	Existing and Projected ADWF Summary	4-17
Table 4.8	Historical Data of Flow and Rainfall Characteristics	4-18
Table 4.9	Projected PWWF Summary	4-18
Table 5.1	Total System Pipeline Diameter Overview	5-5
Table 5.2	Lift Station Information	5-6
Table 6.1	Lift Station Capacity Evaluation	6-6
Table 6.2	Force Main Capacity Evaluation	6-6
Table 7.1	Projected Flows for the City WWTP	7-4
Table 7.2	Projected Populations for the City	7-4
Table 7.3	Unit Loading Rates from 2019 Facility Plan	7-4
Table 7.4	Contaminant Loading Projections for the City	7-4
Table 7.5	Phase 1 and 2 Treatment Plant Upgrades	7-9
Table 7.6	Proposed Phase 3 Upgrades	7-13

Table 7.7	Proposed Phase 4 Upgrades	7-14
Table 7.8	Proposed Phase 5 Upgrades	7-14
Table 7.9	Revised Phase 3 Proposed Upgrades	7-15
Table 7.10	Revised Phase 4 Proposed Upgrades	7-15
Table 8.1	Gravity Pipeline Unit Construction Costs	8-2
Table 8.2	Collection System Capital Improvement Plan	8-5
Table 8.3	CIP Cost by Project Type and Phase	8-7
Table 8.4	CIP Cost by Reimbursement Category	8-8
Table 8.5	CIP Cost by Project Type and Reimbursement Category	8-8

Figures

Figure 1.1	Regional Location Map	1-5
Figure 2.1	General Plan Land Use	2-3
Figure 2.2	Known Development	2-7
Figure 3.1	10-Year, 24-Hour Design Storm	3-4
Figure 4.1	Typical Wastewater Flow Components	4-3
Figure 4.2	Typical Sources of Infiltration and Inflow	4-4
Figure 4.3	Typical Effects of Infiltration and Inflow	4-5
Figure 4.4	Temporary Flow Monitoring Locations	4-7
Figure 4.5	Temporary Flow Monitoring Schematic	4-9
Figure 4.6	Typical Dry Weather Flow Variation (Site TC-05)	4-10
Figure 4.7	Example Wet Weather Response (TC-08)	4-13
Figure 5.1	Wastewater Collection System	5-3
Figure 5.2	Existing System Schematic	5-5
Figure 5.3	Modeled Collection System	5-9
Figure 5.4	Example Weekday and Weekend ADWF Diurnal Patterns (TC-09)	5-13
Figure 5.5	Example of Dry Weather Calibration (TC-09)	5-14
Figure 5.6	Example RDII Unit Hydrograph	5-16
Figure 5.7	Example WWF Calibration Sheet (Site TC-08)	5-17
Figure 6.1	Sample Illustration of Backwater Effects in a Sewer	6-2
Figure 6.2	Existing Capacity Deficiencies	6-3
Figure 6.3	Future Capacity Deficiencies	6-7
Figure 6.4	Existing System Improvements	6-9

Figure 6.5	2040 System Improvements	6-11
Figure 6.6	Build Out System Improvements	6-13
Figure 7.1	Historical Influent Flow to the City WWTP	7-3
Figure 7.2	Historical BOD, TSS, and NH_3 Loading to the City WWTP	7-3
Figure 7.3	Outfall Capacity Compared to Projected Flows	7-5
Figure 7.4	Secondary Treatment Flow Capacity Compared to Projected Flows	7-6
Figure 7.5	Secondary Treatment Load Capacity Compared to Projected BOD, TSS, and NH_3 Loads	7-6
Figure 7.6	Hydraulic Capacity of Each Treatment Process Compared to Projected Flows	7-7
Figure 8.1	Project Cost Summary by Type	8-7

Abbreviations

AACE	Association for the Advancement of Cost Engineering
AAF	average annual flow
AC	acre
ADWF	average dry weather flow
BOD	biochemical oxygen demand
BWF	base wastewater flow
Carollo	Carollo Engineers
CEQA	California Environmental Quality Act
CIMIS	California Irrigation Management Information System
CIP	capital improvement program
City	City of Tracy
CST	Combined Solar Technologies
d	depth of flow
D	diameter
d/D	depth/diameter ratios
DAFT	dissolved air floatation thickening
DO	dissolved oxygen
du	dwelling unit
DWF	dry weather flow
EDU	equivalent dwelling unit
EIR	environmental impact report
ENR CCI	Engineering News Record Construction Cost Index
EPA	Environmental Protection Agency
ETo	evapotranspiration
F	Fahrenheit
ft/s	feet per second
GIS	geographic information system
gpd/ac	gallons per day per acre
gpd/du	gallons per day per dwelling unit
GWI	groundwater infiltration
I/I	infiltration/inflow
Master Plan	wastewater master plan update
mgd	million gallons per day
MLSS	mixed liquor suspended solids
n	Manning's coefficient
NH_3	ammonia
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service

PHF	peak hour dry weather flow
ppd	pounds per day
PWWF	peak wet weather flow
RAS	return activated sludge
RDI	rain-dependent infiltration
RDII	rain derived infiltration and inflow
ROW	right-of-way
SOI	sphere of influence
SSO	sanitary sewer overflows
SWMM	storm water management model
TSS	total suspended solids
V&A	V&A Consulting Engineers
WaPUG	wastewater planning users guide
WAS	waste activated sludge
WWF	wet weather flow
WWTP	wastewater treatment plant

Chapter 1

INTRODUCTION

This chapter presents a brief summary of the City of Tracy's (City's) need for the Wastewater Master Plan Update (Master Plan), the objectives of the Master Plan, and a description and organization of the seven chapters that cover the wastewater collection system in Tracy.

1.1 Background

The City is located in the southwestern portion of San Joaquin County in California in a geographic triangle formed by Interstate 205 to the north, Interstate 5 to the east, and Interstate 580 to the southwest. Figure 1.1 presents a location map of the City.

The City initially grew rapidly and prospered as an agricultural area. In the 1980's more rapid growth occurred as a result of people migrating out of the Bay Area in search of more affordable living. Today, the City continues to prosper as an agricultural area.

The City, incorporated in 1910, provides water, sewer and storm drainage services to its residents. The City owns and operates its own water and wastewater treatment plants.

1.2 Wastewater Collection System Overview

The City provides wastewater service to approximately 83,000 residents, industrial and commercial customers. The wastewater collection system includes approximately 210 miles of active gravity sewer lines, ranging from 4 to 48 inches in diameter, 3 lift stations and associated force mains. Wastewater generated in the sewer service area is conveyed to the wastewater treatment plant (WWTP).

1.3 Study Purpose, Scope, and Authorization

The purpose of this Master Plan is to update the 2012 Master Plan and to identify existing and future capacity deficiencies in the wastewater system, and to develop and prioritize a capital improvement program (CIP) to correct these deficiencies.

In February 2018, the City approved a professional services agreement with Carollo Engineers (Carollo) to prepare this Wastewater System Master Plan Update. The professional services agreement includes the following main tasks:

- Task 1 – Project Management and Meetings.
- Task 2 – Master Planning.
- Task 3 – Funding Assistance.
- Task 4 – Technical Support to the City's Environmental Impact Report (EIR) Consultant.
- Task 5 – Tracy Gateway Sewer Generation and Conveyance Planning.
- Task 6 – South Schulte Sewer Generation and Conveyance Planning.
- Task 7 – City Standards Review.

1.4 Report Organization

The Master Plan contains eight chapters, followed by appendices that provide supporting documentation for the information presented in the report. The chapters are briefly described below:

- **Chapter 1 – Introduction.** This chapter presents the need for this Master Plan and the objectives of the study.
- **Chapter 2 – Study Area Description.** This chapter presents a description of the study area, defines the planning horizon for this study, and summarizes the zoning classifications and future development of the study area.
- **Chapter 3 – Planning and Evaluation Criteria.** This chapter presents the planning criteria and methodologies for the analysis used to evaluate the City's existing wastewater collection system and associated facilities, which are utilized to identify existing system deficiencies and to size future improvements. The planning criteria address the collection system capacity, acceptable gravity sewer pipe slopes, and maximum allowable depth of flow, design velocities, and changes in pipe size. This chapter also summarizes existing (2019), interim (2040), and future buildout design flows.
- **Chapter 4 – Wastewater Flows.** This chapter summarizes the existing and projected wastewater flows for the City's wastewater collection system. Flow data obtained as part of the temporary flow monitoring program are also presented.
- **Chapter 5 – Wastewater Collection System Facilities and Hydraulic Model.** This chapter discusses the wastewater collection system hydraulic model, including modeling software, model elements and the model creation process.
- **Chapter 6 – System Evaluation and Proposed Improvements.** This chapter discusses the hydraulic evaluation of the wastewater collection system and the proposed projects that correct capacity deficiencies and serve future users.
- **Chapter 7 – Wastewater Treatment Plant Evaluation and Proposed Upgrades.** This chapter discusses the treatment plant overview and its projected flows and loads. This chapter also discusses the treatment plant evaluation and proposed upgrades.
- **Chapter 8 – Capital Improvement Program.** This chapter presents the capital improvement projects, a summary of the capital costs, and a basic assessment of the possible financial impacts.

1.5 Acknowledgements

We would like to thank the following City staff for their assistance and oversight of this project:

- Paul Verma – Project Manager.
- Robert Armijo – City Engineer.

The following Carollo staff members were principally involved in this project:

- Tim Loper – Project Manager.
- Ryan Orgill – Project Engineer.
- Grace Mitzel – Engineer.
- Kevin Christensen – Graphics.

1.6 Reference Material

The following documents were referenced in the preparation of this Master Plan:

- City of Tracy Wastewater Master Plan, December 2012.
- City of Tracy General Plan, 2011.
- City of Tracy Housing Element.
- City of Tracy Sewer Design Standards.

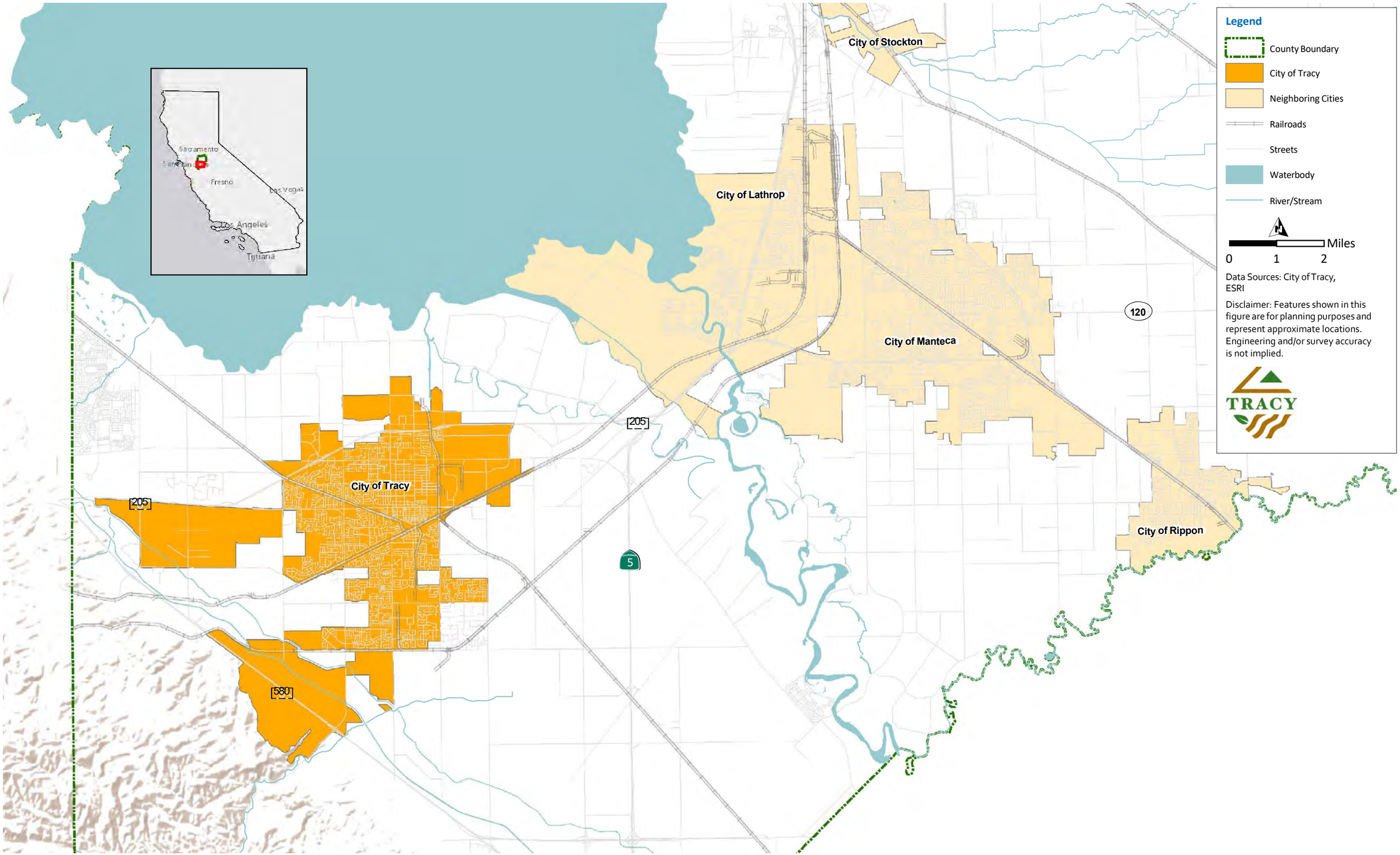


Figure 1.1 Regional Location Map

Chapter 2

STUDY AREA DESCRIPTION

This chapter outlines the planning area for the wastewater collection system, defines land use classifications and described planned development within the City's service area. The planning assumptions described in this chapter form the basis for the wastewater flow projections included in Chapter 4.

2.1 Study Area

The City's study area consists of two boundaries which are identified in the General Plan. These boundaries are the City limits and sphere of influence (SOI). The City provides wastewater collection service to residents, businesses, industrial, and other institutions within City limits. Figure 2.1 shows the City's existing and future boundaries.

2.2 Planning Period

This Master Plan is intended to serve as a guiding document for the planning and implementation of system improvements to accommodate future growth for the planning years of 2040 and buildout.

2.3 Climate and Topography

Table 2.1 summarizes the study areas climate. As shown, the City's climate is characterized by hot dry summers and mild winters with an average annual rainfall of approximately 12.03 inches. Approximately 80 percent of the average annual precipitation occurs between November and March. The City's elevation ranges from approximately 9 feet above sea level in the northwestern portion of the City to approximately 259 feet above sea level in the southern portion of the City.

2.4 Land Use and Future Developments

Land use information is an integral component in determining the wastewater generation within a given service area. The type of land use in an area will affect the volume and character of the wastewater generation. Adequately estimating wastewater flow from various land use types is important in sizing and maintaining effective system facilities.

Table 2.1 Study Area Climate

Month	Average Temperature[1] (degrees F)		Monthly Average ETo[2]	Average Total Precipitation[1]
	Minimum	Maximum	(inches)	(inches)
January	38.3	54.8	1.84	2.54
February	41.9	61.2	1.83	2.13
March	44.7	66.4	3.34	1.57
April	47.8	72.2	5.55	0.83

Month	Average Temperature[1] (degrees F)		Monthly Average ETo[2]	Average Total Precipitation[1]
	Minimum	Maximum	(inches)	(inches)
May	53.4	79.7	6.35	0.40
June	57.8	87.2	8.91	0.13
July	60.5	92.6	9.01	0.03
August	60.4	91.9	7.44	0.06
September	58.3	87.7	5.80	0.23
October	52.3	78.3	4.10	0.65
November	44.2	64.7	2.08	1.56
December	38.6	55.2	2.02	1.91
Average or Total	**49.9**	**74.3**	**58.27**	**12.03**

Abbreviations: ETo - evapotranspiration; F - Fahrenheit.
Notes:
(1) Source: Western Regional Climate Center Tracy Pumping Plant (049001). Represents monthly average from February 1955 to June 2016.
(2) Source: California Irrigation Management Information System (CIMIS) Station 249 Ripon. Represents monthly average ETo from June 2018 to May 219.

2.4.1 Existing Land Use

Figure 2.1 shows the City's existing land use within the City's service area. Table 2.2 provides a summary, by land use, of the amount of developed and developable land within the study area.

Table 2.2 Existing Land Use

Land Use Type	Developed Area (acres [ac])	Developable Area (ac)[1]
Residential Very Low	76	0
Residential Low	2,817	33
Residential Medium	792	31
Residential High	158	66
Commercial	501	80
Industrial	1,828	250
Downtown	111	3
Public Facilities	665	0
Park	227	26
Aggregate	2	0
Total	**7,176**	**488**

Notes:
(1) Acreages do not include Known Development.

As shown in Table 2.2, there are approximately 7,176 acres of developed land within the City limits (excluding right-of-way such as streets, highways, and railroads). Of the 7,176 developed acres, 3,842 ac (54 percent) are classified as residential, 2,329 ac (32 percent) are classified as commercial/industrial, and the remaining 1,005 (14 percent) are associated with downtown, public facilities, park, or aggregate.

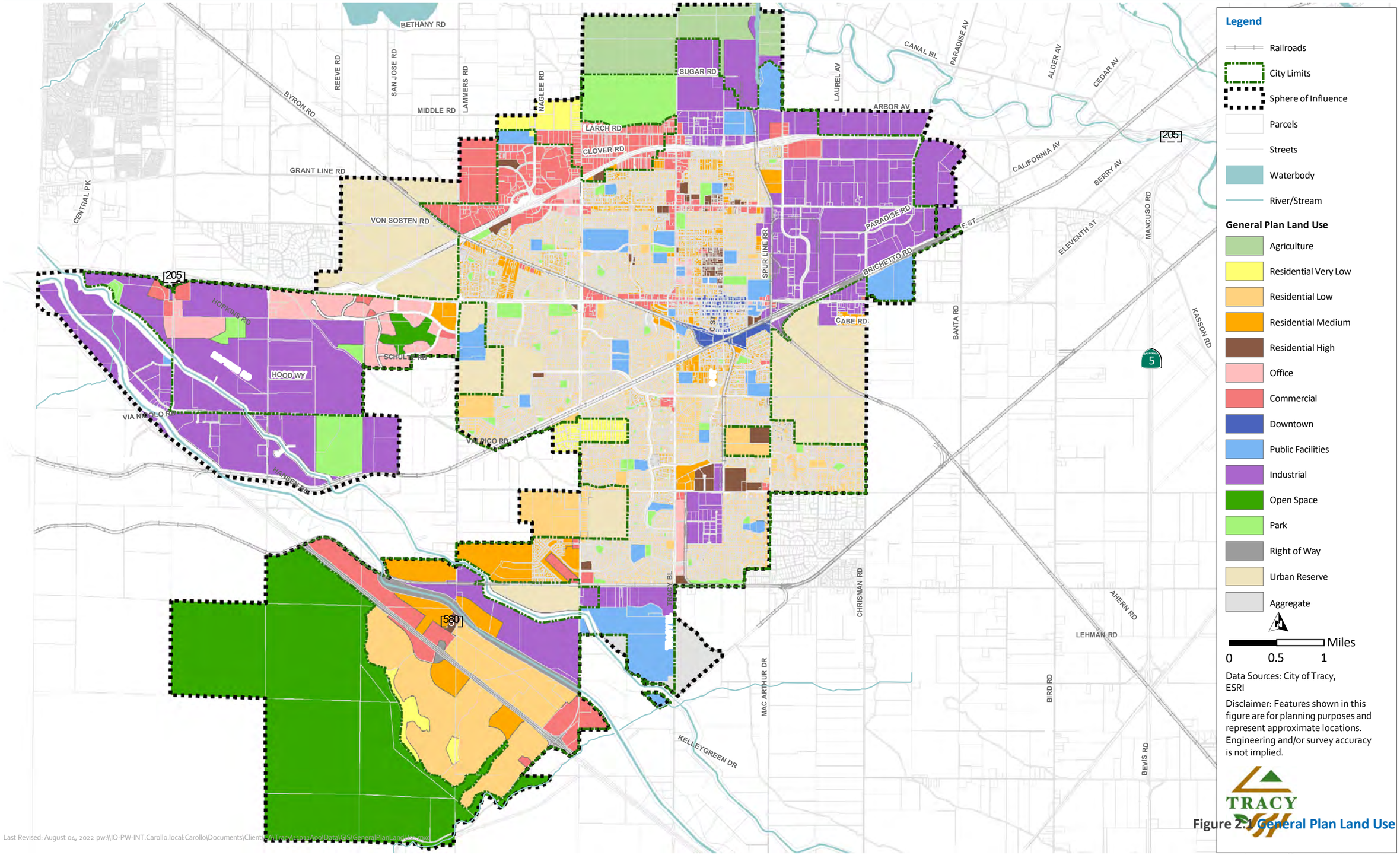


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Figure 2.1 General Plan Land Use

2.4.2 Known Development

The City has plans for development of new residential, industrial, commercial, and institutional areas through 2040 and buildout. As shown in Table 2.3 and on Figure 2.2, the City currently has twenty six planned developments. Projected acreages were provided by the City for each of these development areas. The City also provided a timeline of when these developments would come online (either by 2040 or sometime between 2040 and buildout). The City also provided infill data on which developments would be built by 2040 and buildout. Appendix A shows the known development and infill data provided by the City.

Table 2.3 Known Development

Planning Area Name	Total Area (ac)
UR 5 (Bright) (1)	170
UR 7 (Bright/Castro) (2)	112
Rocking Horse (3)	58
Tracy Village (4)	135
UR1 (5)	780
Ellis (6)	321
Ellis DA additional RGAs (7)	--
Avenues (8)	96
UR10 (9)	116
Tracy Hills (10)	2,732
Gateway (11)	535
UR6 (Cordes Ranch) (12)	1,730
UR4 (Bright Triangle) (13)	190
UR3 (Catellus) (14)	700
I-205 Expansion (15)	172
West Side Industrial (16)	487
East Side Industrial (17)	370
Larch Clover (18)	442
Chrisman Road (19)	116
Rocha (20)	91
Berg/Byron remainder (21)	56
Berg Road Subdivision (22)	10
SWC Valpico and Coral Hollow (23)	65
Kagehiro (24)	47
Dobler/Maibes (25)	23
Holly Sugar Industrial (26)	160
Northeast Industrial Area	906
I-205 Specific Plan	620

2.4.3 Future Development

Future land use includes the development of vacant or underdeveloped areas not defined as known development. This includes growth outside of the current City limits and encompassed by the planning area. It is assumed that development and redevelopment will occur according to the land use designations as depicted on Figure 2.1.

Build-out is defined as development of all land including the planning area of the City. At build-out, the service area will encompass approximately 41.9 square miles.

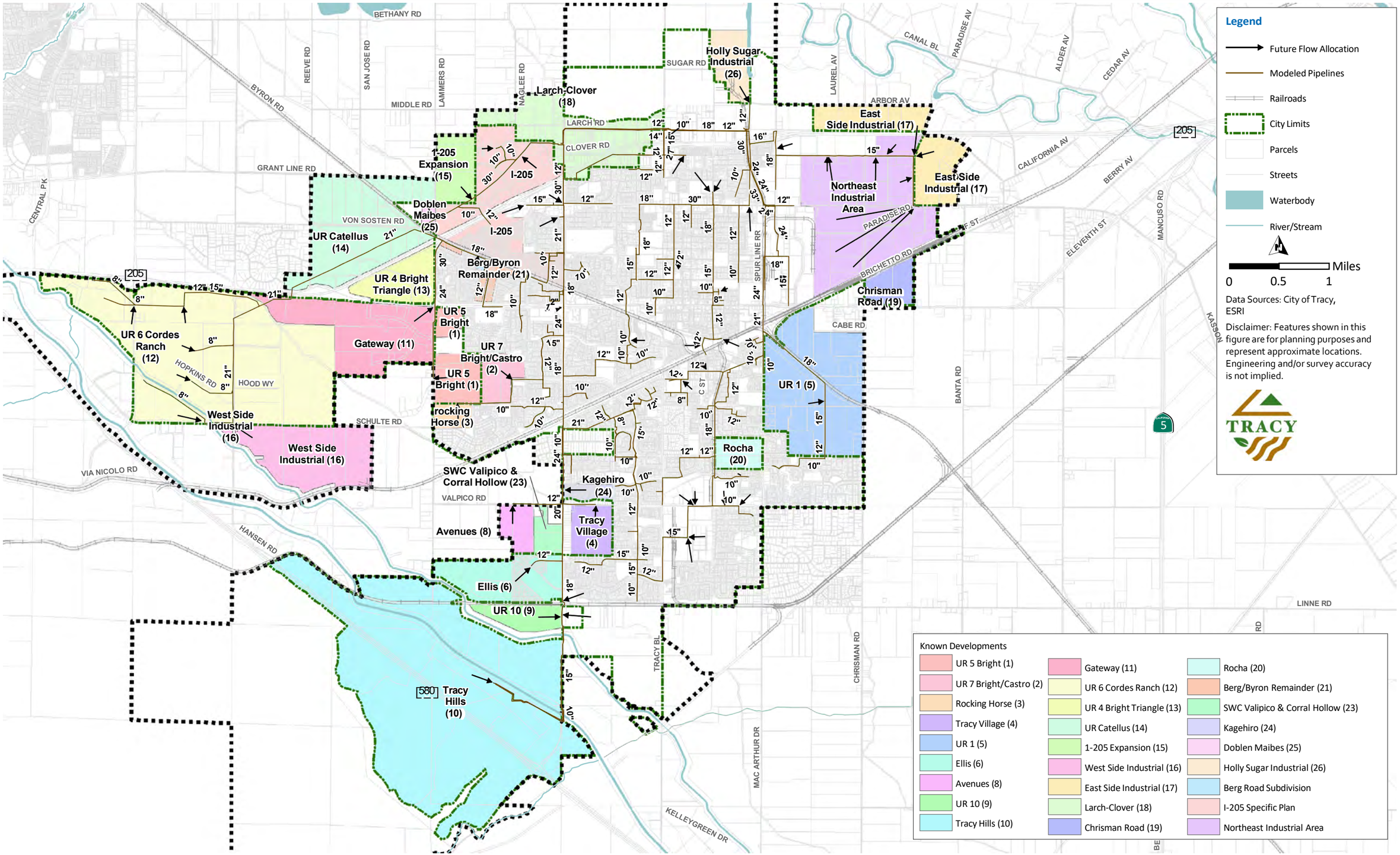


Figure 2.2 Known Development

Chapter 3

PLANNING AND EVALUATION CRITERIA

This chapter presents the planning criteria and methodologies for the analysis used to evaluate the City's existing wastewater collection system and associated facilities. The planning criteria is utilized to identify existing system deficiencies, and to size future improvements. The planning criteria address the collection system capacity, acceptable gravity sewer pipeline slopes, maximum allowable depth of flow, design velocities, and changes in pipe size.

3.1 Collection System Evaluation Criteria

The capacity of the City's sanitary sewer collection system was evaluated based on the planning criteria defined in this section. The planning criteria address the collection system capacity, gravity sewer pipes slopes, and maximum allowable depth of flow within a sewer. The evaluation criteria used for the evaluation of the City's sewer system are summarized in Table 3.1.

3.1.1 Manning's Coefficient (n)

The Manning's coefficient "n" is a friction coefficient that varies with respect to pipe material, size of pipe, depth of flow, smoothness of joints, root intrusion, and other factors. For sewer pipes, the Manning's coefficient typically ranges between 0.011 and 0.017, with 0.013 being a representative value used for system planning purposes. Due to unknown conditions of existing pipelines, a conservative Manning's "n" factor of 0.013 was initially used for the evaluation of all existing collection system pipelines. Pipe roughness values were adjusted during calibration. The evaluation of all proposed pipelines used a Manning's "n" factor of 0.013.

3.1.2 Peak Flow Depth Criteria

The primary criterion used to identify pipeline capacity deficiencies or to size new sewer improvements is the maximum flow depth-to-pipe diameter ratio (d/D). The d/D value is defined as the depth of flow (d) in a pipe during peak (design) flow conditions divided by the pipe's diameter (D). Based on Carollo's experience and industry standards, the following criteria were recommended.

- **Flow depth criteria for existing sewers:** maximum flow-depth criteria for existing sanitary sewers are established based on a number of factors, including the acceptable risk tolerance of the utility, local standards and codes, and other factors. Using a conservative d/D ratio when evaluating existing sewers may lead to unnecessary replacement of existing pipelines. Conversely, lenient flow-depth criteria could increase the risk of sanitary sewer overflows (SSOs). Ultimately, the maximum allowable flow-depth criteria should be established to be as cost-effective as possible, while at the same time reducing the risk of SSOs to the greatest extent possible. For the City, existing pipelines were flagged based on the maximum flow depth criteria listed in

Table 3.1. As shown in Table 3.1, the maximum allowable flow depth varied depending on flow condition:

- **Peak hour dry weather flow (PHF):** under dry weather flow conditions, the maximum allowable flow d/D ratio is 0.75 for all pipelines.
- **Peak wet weather flow (PWWF):** under PWWF conditions, flow depths are allowed to exceed the maximum d/D ratio established for dry weather conditions. The maximum d/D ratio is 0.90 for all pipelines.

- **Flow depth criteria for new sewers:** when sizing new sewer pipelines, it is common practice to adopt variable flow depth criteria for various pipe sizes. Design d/D ratios typically range from 0.5 to 0.92, with the lower values typically used for smaller pipes, which may experience flow peaks greater than design flow or blockages from debris, paper, or rags. For pipelines 12 inches in diameter and smaller, the maximum d/D value is 0.67. For pipelines 15 inches and larger, the maximum d/D is 0.75.

Table 3.1 Wastewater System Evaluation Criteria

Minimum Slopes for New Circular Pipes		
Pipe Size (inches)		Minimum Slope (foot/foot)[1]
6		0.0049
8		0.0033
10		0.0025
12		0.002
15		0.0015
18		0.0012
21		0.0009
24		0.0008
27		0.0007
30		0.0006
36		0.0005
Flow Depth, d/D		
Maximum Flow Depth for Existing Sewer		
Pipe Diameter		Maximum d/D Ratio
All Pipe Sizes		0.75 (PHF), 0.90 (PWWF)
Maximum Flow Depth for Future Sewers		
Pipe Diameter		Maximum d/D Ratio
12 inches and Smaller		0.67
Larger than 12 inches		0.75
Head Loss in Pipelines		
Gravity Pipeline	Manning's n =	0.013
Pressure Pipelines	Hazen William's C =	120

Lift Stations and Force Mains	
Minimum Velocity	3 feet per second (ft/s)
Maximum Velocity	8 ft/s
Lift Station Capacity	Firm Capacity under PWWF(3)(4)

Note:
(1) Minimum Slope values are based on pipeline flowing half full at 2 ft/s.
(2) Firm capacity represents the lift stations capacity with the largest pump out of service.

3.1.3 Design Velocities and Minimum Slopes

In order to minimize the settlement of sewage solids, it is standard practice in the design of gravity sewers to specify a minimum velocity of 2 ft/s be maintained when the pipeline is half-full. At this velocity, the sewer flow will provide self-cleaning of the pipe. Table 3.1 lists the recommended minimum slopes, which were calculated to maintain a minimum velocity of 2 ft/s when flowing half full or at the maximum d/D ratio, whichever is more conservative.

3.1.4 Changes in Pipe Diameter

When a smaller sewer joins a larger pipe, the invert of the larger sewer should be lowered sufficiently to maintain the same energy gradient. An approximate method for securing these results is to place the 80 percent depth point of both sewers at the same elevation. For planning purposes and designing new pipes, and in the absence of field data, sewer crowns are typically matched at the manholes.

3.1.5 Lift Station and Force Mains

Industry standard practice is to require that sewage lift stations have sufficient capacity to pump the peak flow with the largest pump out of service (firm capacity).

Force main piping should be sized to provide a minimum velocity of 3 ft/s at the design flow rate of the lift station and no more than 7 ft/s. For the determination of head loss, the Hazen Williams Equation is used with a C-factor of 120. These factors are typical for sewer system master planning purposes.

3.2 Peak Wet Weather Flow Design Storm

Design storms are rainfall events used to analyze the performance of a collection system under extreme wet weather events. The City's design storm was routed through the collection system model to determine PWWFs. The first step in the development of the design storm is to define its recurrence interval and rainfall duration. The recurrence interval is based on the probability that a given rainfall event will occur or be exceeded in any given year. For example, a "100-year storm" means there is a 1 in 100 chance that a storm as large as or larger than this event will occur at a specific location in any year.

Duration is the length of time in which the rainfall occurs. It is industry standard to use the 10-year, 24-hour design storm for analyzing wastewater collection system performance during PWWF conditions. The 10-year, 24-hour design storm volume for the City is 1.79 inches, as document by National Oceanic and Atmospheric Administration Atlas 14.

Once the design storm recurrence interval, duration, and associated rainfall volume have been determined, the next step in defining the design storm is to distribute the total rainfall over the duration of the storm. The Natural Resources Conservation Service (NRCS) Type 1 rainfall distribution was used. Figure 3.1 shows the 10-year, 24-hour design storm.

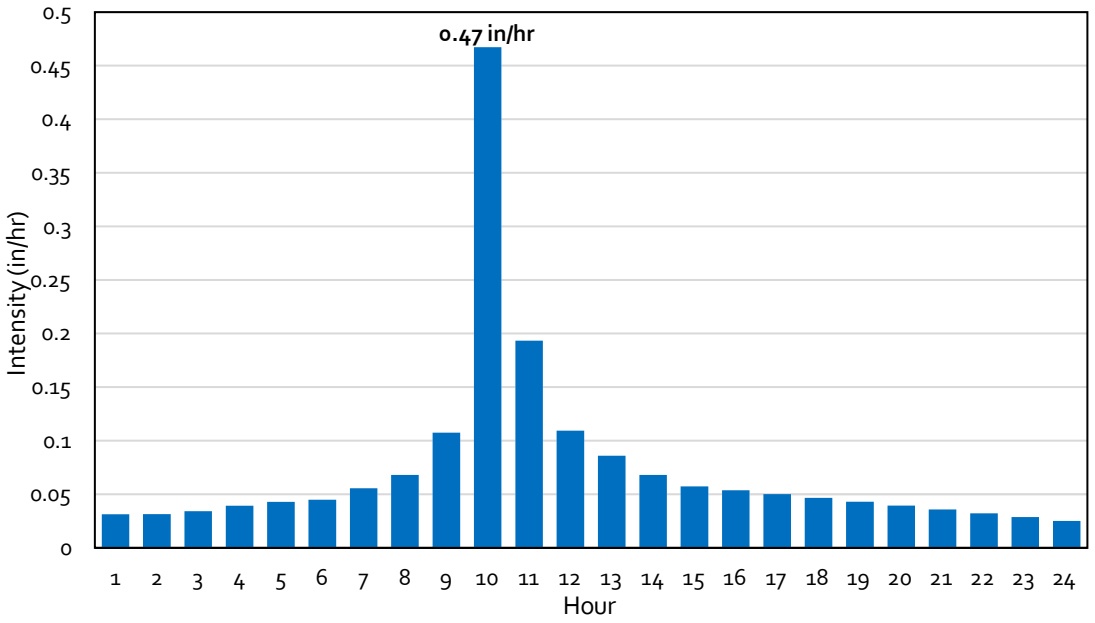


Figure 3.1 10-Year, 24-Hour Design Storm

Chapter 4

WASTEWATER FLOWS

This chapter summarizes the existing and projected wastewater flows for the City's collection system. Flow data obtained as part of the temporary flow monitoring program is also presented.

4.1 Wastewater Flow Components

This section describes and provides definitions of commonly used terminology in the sewer collection system analysis and evaluations conducted as part of this project. Wastewater flows vary according to the season. Dry weather flow (DWF) or base flow is flow generated by routine water usage in the residential, commercial, and industrial sectors of the collection system.

Another component of DWF is the contribution of dry weather groundwater infiltration (GWI) into the collection system. Dry weather GWI will enter the sewer system when the relative depth of the groundwater table is higher than the depth of the pipeline and when the susceptibility of the sanitary sewer pipe allows infiltration through defects such as cracks, misaligned joints, and broken pipelines. Figure 4.1 illustrates the various flow components of wastewater in general, which are described in detail in the following sections.

Wet weather flow (WWF) includes storm water inflow, trench infiltration, and GWI. The storm water inflow and trench infiltration comprise the WWF component termed infiltration/inflow (I/I). The response in the sewer system to rainfall is seen immediately (as with inflow) or within hours after the storm (as with infiltration):

- **Base wastewater flow (BWF).** The BWF is the flow generated by the City's customers independent of wet weather influences. BWF is estimated by measuring flows during dry weather conditions. The flow has a diurnal pattern that varies depending on the type of use. Commercial and industrial patterns, though they vary depending on the type of use, typically have more consistent higher flows during business hours and lower flows at night. Furthermore, the diurnal flow pattern experienced during a weekend may vary from the diurnal flow experienced during a weekday.
- **Average annual flow (AAF).** The AAF is the average flow that occurs on a daily basis throughout the year, including both periods of dry and wet weather conditions.
- **Average dry weather flow (ADWF).** The ADWF is the average flow that occurs on a daily basis during the dry weather season. The ADWF includes the BWF generated by the City's residential, commercial, and industrial users, plus the dry weather GWI component.
- **PWWF.** PWWF is the highest observed flow that occurs following a design storm event. Wet weather I/I causes flows in the collection system to increase. PWWF is typically used for designing sewers, lift stations, and some unit processes in a treatment plant. Therefore, the PWWF and the "Design Flow" are synonymous and will be used interchangeably throughout this report.
- **GWI.** GWI is the result of extraneous water entering the sewer system through defects in pipes and manholes. GWI is related to the condition of the sewer pipes, manholes, and

groundwater levels. GWI may occur throughout the year, although rates are typically higher in the late winter and early spring. Dry weather GWI (or base infiltration) cannot easily be separated from BWF by flow measurement techniques. Therefore, dry weather GWI is typically grouped with BWF.

- **Rain derived infiltration and inflow (RDII).** Infiltration is defined as storm water flows that enter the sewer system by percolating through the soil and then through defects in pipelines, manholes, and joints. Examples of infiltration entry points are cracks in pipelines, misaligned joints, and root penetration. Inflow is defined as storm water that enters the sewer system via storm drain cross connections, leaky manhole covers, or cleanouts. Examples of inflow entry points are roof drain and downspout connections, leaky manhole covers, and illegal storm drain connections. Some of the most common sources of I/I are shown on Figure 4.2 The adverse effects of I/I entering the sewer system is that it increases both the flow volume and peak flows, as illustrated on Figure 4.3.

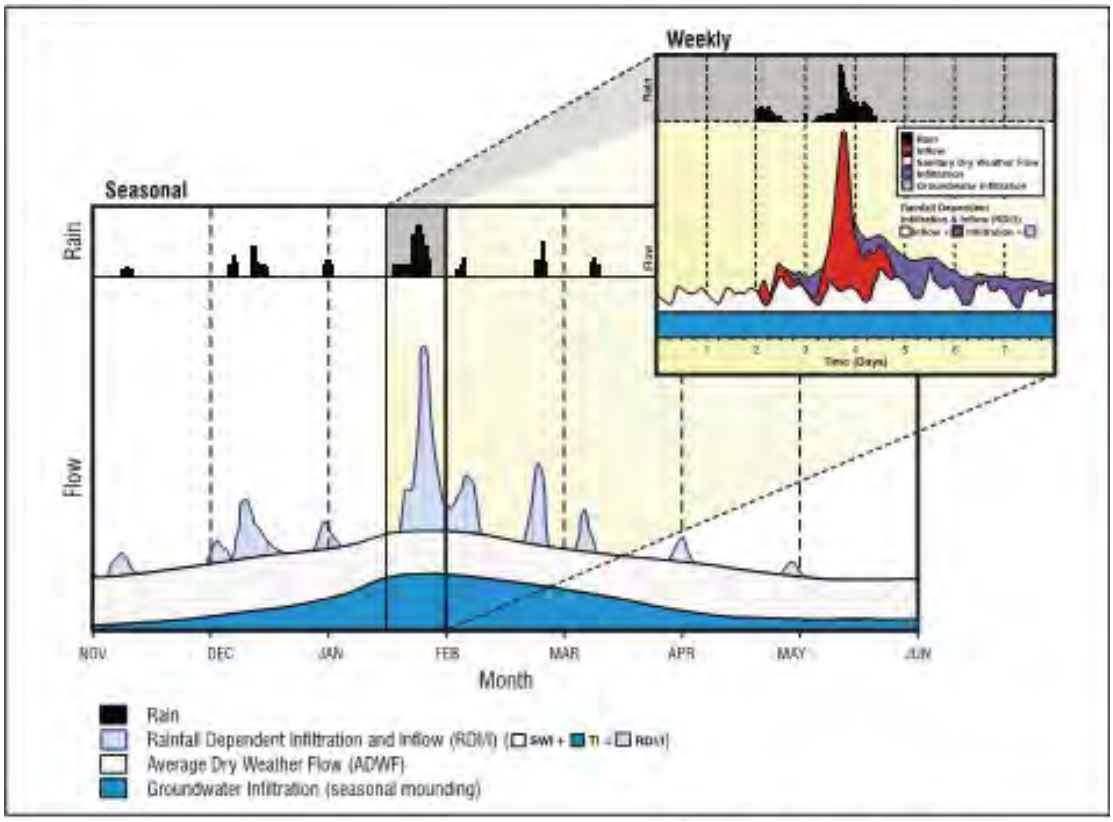
4.2 Temporary Flow Monitoring Program

Carollo contracted with V&A Consulting Engineers (V&A) to conduct a temporary flow monitoring program within the City's sanitary sewer collection system. V&A provided site reports for all of the flow monitoring locations, which is included in Appendix B. Flow monitoring was performed over a 1-month period from February 27, 2018 to March 29, 2018 at 16 flow monitoring sites.

The temporary flow monitoring program helped develop design flow criteria and correlate actual collection system flows to the hydraulic model predicted flows. Flow monitoring data was used to calibrate the collection system hydraulic model for dry weather and wet weather flow and to help to identify areas of the system with the highest rates of I/I.

4.2.1 Flow Monitoring Sites and Tributary Areas

A total of 15 flowmeters were used at 16 open channel sites during the temporary flow monitoring program. One meter was moved from Site 16 to Site 7 approximately halfway through the 1-month period. Additionally, flow monitoring data for Site 3 was only collected from March 13 to March 29, 2018.The flowmeter sites were selected to best isolate and model the critical areas and subareas within the City's wastewater collection system. The flow monitoring sites are listed in Table 4.1 and shown on Figure 4.4. Figure 4.5 provides a schematic illustration of the flow monitoring locations.



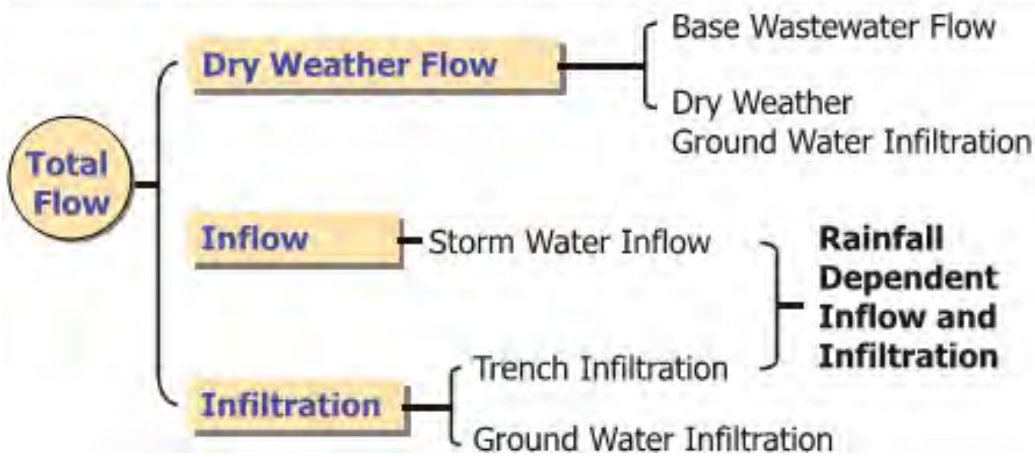


Figure 4.1 Typical Wastewater Flow Components

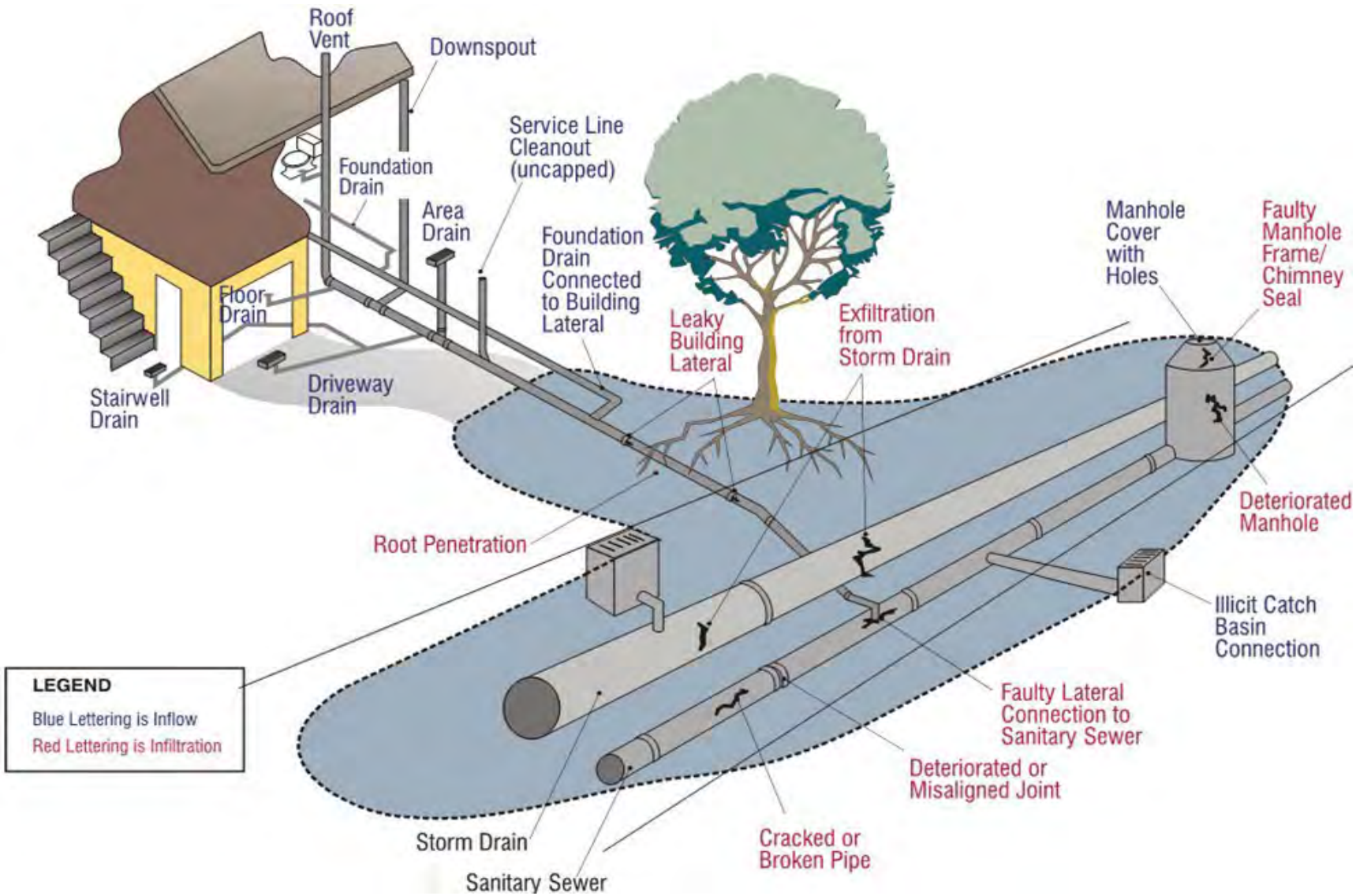


Figure 4.2 Typical Sources of Infiltration and Inflow

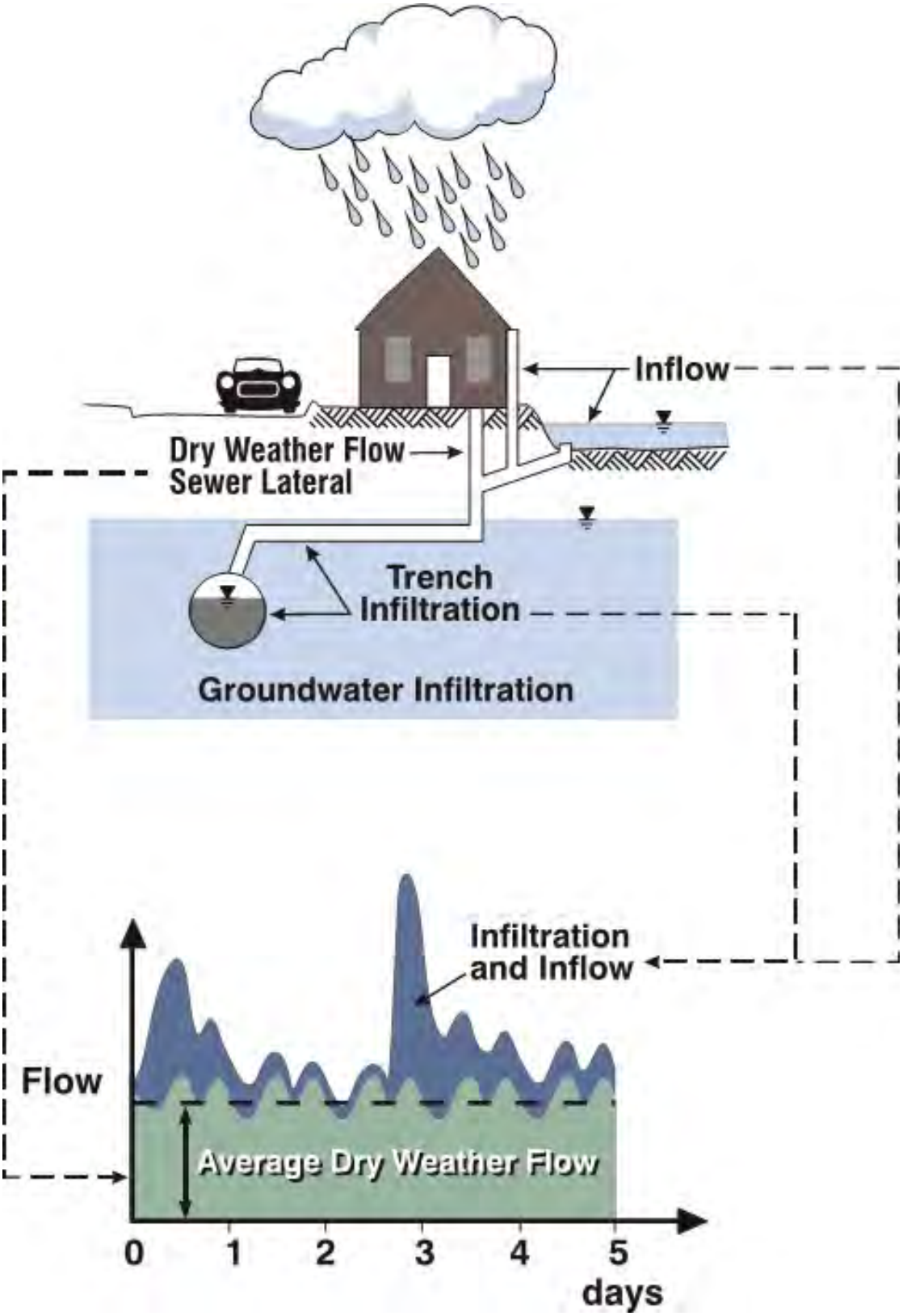


Figure 4.3 Typical Effects of Infiltration and Inflow

Table 4.1 Flow Monitoring Locations

Meter Name	Measured Diameter	Location
TC-01	24.5	Intersection of Larch Road and Spurline Railroad
TC-02	29.75	E Grant Line Road, between Colony Drive and Entrada Way
TC-03	24	MacArthur Drive, north of I205 Freeway
TC-04	15	Tracy Boulevard, north of I205 Freeway (east pipeline)
TC-05	24	Tracy Boulevard, north of I205 Freeway (west pipeline)
TC-06	29.25	North of West Valley Mall
TC-07(2)	20.25	South of intersection of Byron Road and Von Sosten Road
TC-08	18	Holly Drive., south of E Grant Line Road
TC-09	18	Summer Gate Drive and Westbury Court
TC-10	24	Corral Hollow Road between 11th Street and Krohn Road
TC-11	15	Sycamore Park Drive and Sienna Park Drive
TC-12	20.75	Leamon Street and Avila Street
TC-13	18	Along UPRR, east of MacArthur Drive
TC-14	18	East of Cairo Court and De bord Drive
TC-15	21.5	Corral Hollow Road and Alegre Drive
TC-16(2)	12	Bessie Avenue and 23rd Street

Notes:
(1) Source: V&A 2018 Sewer Flow Monitoring and Inflow/Infiltration Study.
(2) Meter moved from Site 16 to Site 7 on 3/13/2018.

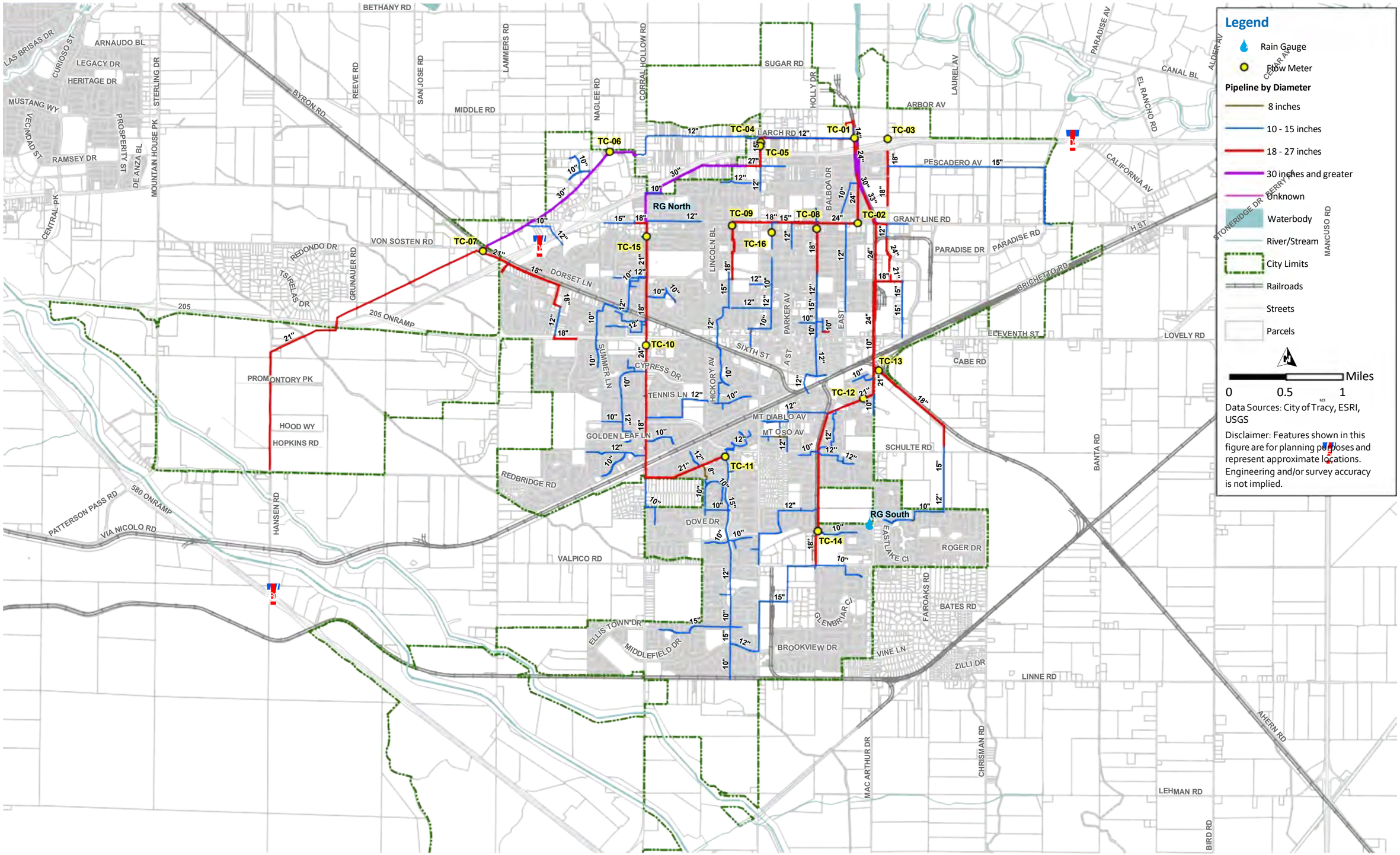


Figure 4.4 Temporary Flow Monitoring Locations

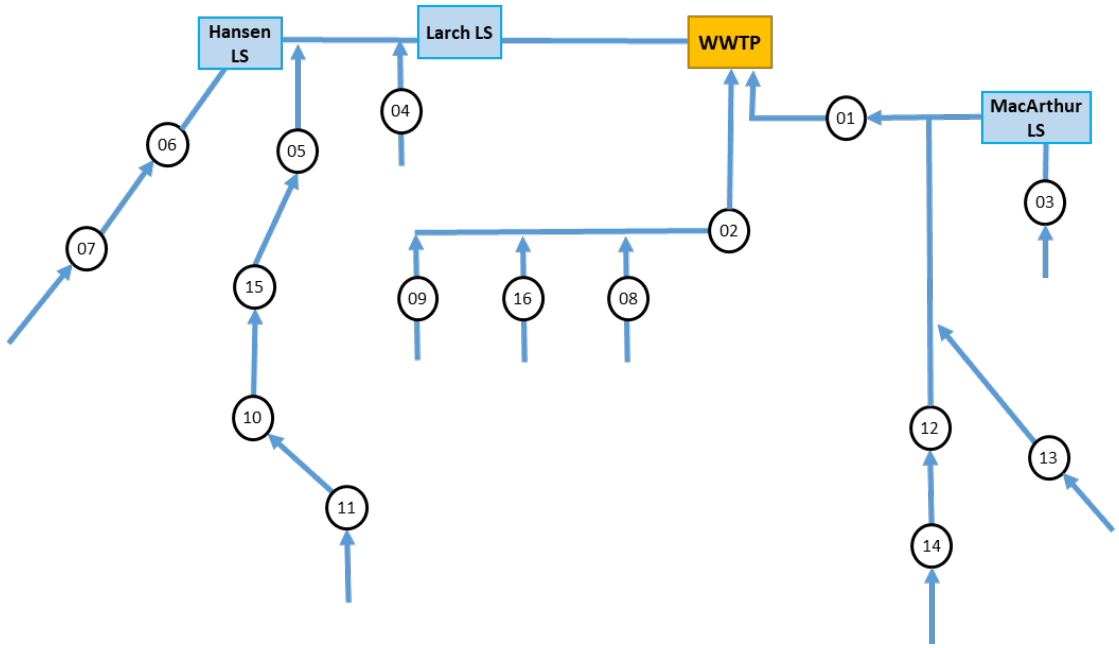


Figure 4.5 Temporary Flow Monitoring Schematic

4.2.2 Flowmeter Installation and Flow Calculation

V&A reviewed the hydraulics of the selected flow monitoring locations to select the optimal flow monitoring technology.

In order to ensure that each meter was accurate and calibrated, manual level and velocity measurements were taken by V&A when each meter was installed and again when they were removed. These manual measurements were compared to simultaneous level and velocity readings from the flowmeters. The pipe diameter was also verified, because the pipe diameter is needed to calculate flow rate in a pipe based on the velocity and level measurements. In addition, the depth of sediment, if any, was measured as this affects the cross sectional area of flow within a pipe. V&A conducted an analysis of the data retrieved from each flowmeter, and made adjustments as needed for calibration based on the field measurements, and to account for any sediment build up. Flow data was collected in 15-minute intervals throughout the flow monitoring period. The flow at each meter was then calculated at 15-minute intervals based on the continuity equation:

$Q = V \times A$, where:

Q = Pipeline flow rate, cfs.

V = Average velocity, ft/sec.

A = Cross sectional flow area, ft^2.

4.3 Flow Monitoring Program Results

This section summarizes the results of the flow monitoring program, including DWF data, rainfall data, and WWF data.

4.3.1 Dry Weather Flow Data

During the flow monitoring period, flow, depth, and velocity data were collected at each meter at 15-minute intervals. Carollo aggregated the 15-minute data to hourly data for use in the hydraulic model. Characteristic dry weather 24-hour diurnal flow patterns for each site were developed based on the hourly data. This hourly flow data was then used to calibrate the hydraulic model for the observed dry weather flows during the flow monitoring period. For this flow monitoring program, V&A developed four ADWF curved for each site location (Monday through Thursday, Friday, Saturday, and Sunday). Hourly patterns were separated this way to better understand how the dry weather flows vary day to day as flows often differ on Friday evenings compared to Monday through Thursday. Similarly, Saturday and Sunday flow patterns were unique during the evening. V&A used the data from days least affected by rainfall to estimate the weekday and weekend ADWF. For sites TC-06 and TC-07, the Monday flow pattern was significantly different from the Tuesday through Friday flow pattern. Therefore, a special Monday average flow condition curve was created for these two sites.

Figure 4.6 illustrates a typical variation of Monday through Thursday, Friday, Saturday, and Sunday flows in the City's collection system, which is based on the data collection from flowmeter Site TC-05. Similar graphics associated with the remaining sites are included in Appendix B. In addition, V&A provided estimates for the average weekday and weekend levels and velocities at each site, which are used for dry weather calibration. Table 4.2 summarizes the dry weather flows at each meter.

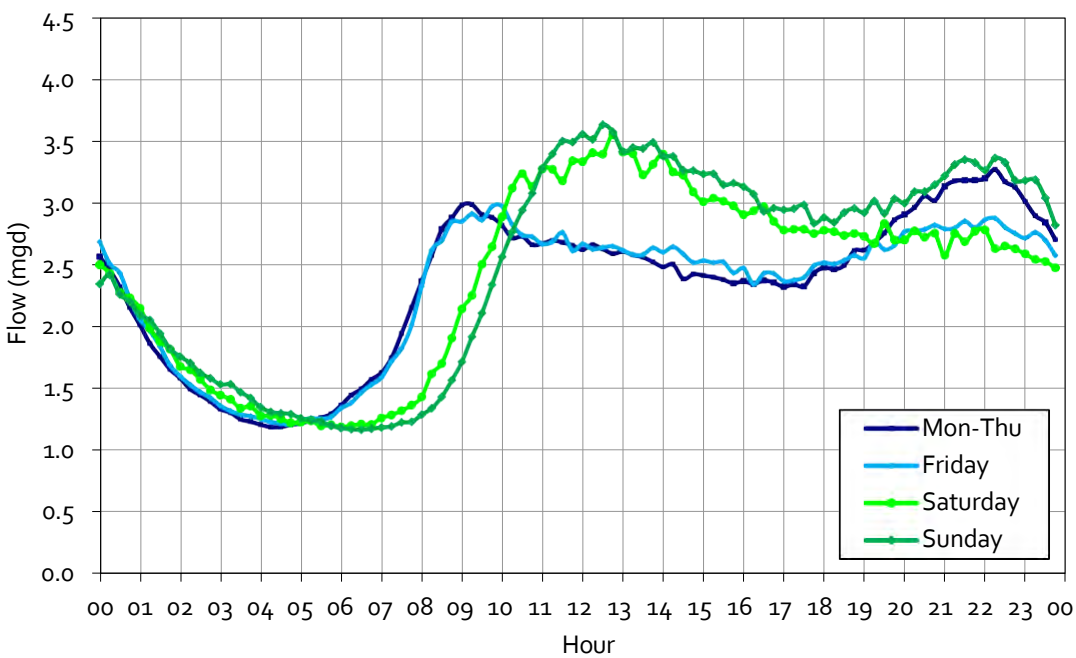


Figure 4.6 Typical Dry Weather Flow Variation (Site TC-05)

Table 4.2 Dry Weather Flow Summary

Meter Site[1]	Monday-Thursday ADWF (mgd)	Friday ADWF (mgd)	Saturday ADWF (mgd)	Sunday ADWF (mgd)	Overall ADWF (mgd)
TC-01	1.63	1.53	1.64	1.65	1.62
TC-02	1.11	1.08	1.11	1.15	1.11
TC-03	0.27	0.28	0.26	0.26	0.27
TC-04	0.60	0.59	0.61	0.61	0.60
TC-05	2.33	2.30	2.40	2.50	2.36
TC-06	1.35 [2]	1.33	1.35	1.24	1.32
TC-07	0.34 [3]	0.32	0.24	0.17	0.28
TC-08	0.44	0.44	0.45	0.47	0.45
TC-09	0.33	0.33	0.35	0.35	0.34
TC-10	1.10	1.12	1.18	1.27	1.14
TC-11	0.33	0.33	0.35	0.39	0.34
TC-12	1.06	1.04	1.14	1.17	1.09
TC-13	0.19	0.18	0.20	0.22	0.19
TC-14	0.62	0.59	0.66	0.69	0.63
TC-15	1.51	1.50	1.59	1.72	1.55
TC-16	0.22	0.21	0.21	0.21	0.21

Notes:
(1) Source: V&A 2018 Sewer Flow Monitoring and Inflow/Infiltration Study.
(2) Meter Site TC-06 has a significantly different Monday ADWF compared to the rest of the week. This number is the Tuesday-Thursday ADWF. The Monday ADWF for TC-06 is 1.26.
(3) Meter Site TC-07 has a significantly different Monday ADWF compared to the rest of the week. This number is the Tuesday-Thursday ADWF. The Monday ADWF for TC-07 is 0.19.

Table 4.3 summarizes the peak measured flows, and peak pipe flow d/D ratios for each meter site during the flow monitoring period.

Table 4.3 Peak Measured Flows During the Flow Monitoring Program

Meter Site	Measured Diameter (inches)	ADWF (mgd)	Peak Measured Flow (mgd)	Peak d/D Ratio
TC-01	24.5	1.62	3.58	0.71
TC-02	29.75	1.11	1.84	0.43
TC-03	24	0.27	0.42	0.32
TC-04	15	0.60	1.03	0.34
TC-05	24	2.36	3.82	0.55
TC-06	29.25	1.32	1.78	0.31
TC-07	20.25	0.30	1.17	1.00
TC-08	18	0.45	0.91	0.39
TC-09	18	0.34	0.59	0.38
TC-10	24	1.14	2.03	0.50
TC-11	15	0.34	0.59	0.26

Meter Site	Measured Diameter (inches)	ADWF (mgd)	Peak Measured Flow (mgd)	Peak d/D Ratio
TC-12	20.75	1.09	1.91	0.29
TC-13	18	0.19	0.46	0.26
TC-14	18	0.63	1.16	0.47
TC-15	21.5	1.55	2.70	0.47
TC-16	12	0.21	0.33	0.58

4.3.2 Rainfall Data

The rainfall data collected by V&A was used to correlate the I/I response observed in the collection system to specific storm recurrence intervals. Several minor rainfall events occurred during the flow monitoring period. The March 3-4, 2018 rainfall event was the largest event captured and elicited the greatest I/I response throughout the collection system. The rain gauges recorded 0.26 inch during the March 3-4, 2018 storm event and a total of 1.89 inches during the entire flow monitoring program.

It is important to classify the size of any major storm events captured during the flow monitoring period. National Oceanic and Atmospheric Administration Atlas 14 provides precipitation frequency estimates for the United States based on historical rainfall data and serves as the industry standard for determining total rainfall depth at specified frequencies and durations. The Atlas provides precipitation frequency estimates for 5-minute through 60-day durations at average recurrence intervals of 1-year through 1,000-year. For example, the Atlas classifies a 10-year, 24-hour storm event in the City as 1.79 inches. This means that in any given year, there is a 10 percent chance that 1.79 inches of rain will fall within a 24-hour period.

4.3.3 Wet Weather Flow Data

The flow monitoring data was also evaluated to determine how the collection system responds to wet weather events. As mentioned above, the flow monitoring program captured one significant rainfall event. The rainfall event that occurred on March 3-4, 2018 was associated with the largest I/I response during the flow monitoring period, and was used for the I/I analysis and model calibration

Figure 4.7 shows an example of the wet weather response at flowmeter TC-08 during the March 3-4, 2018 storm event. The dashed line is the calculated ADWF (baseline flow) while the black line is the measured flow from the flow monitoring period (realtime flow). As shown on Figure 4.7 significant amounts of I/I do enter portions of the collection system during wet weather events. Additional wet weather monitoring results for all meters can be found in Appendix B. The following section summarizes the results from V&A's Inflow/Infiltration Analysis as part of the Temporary Flow Monitoring Program.

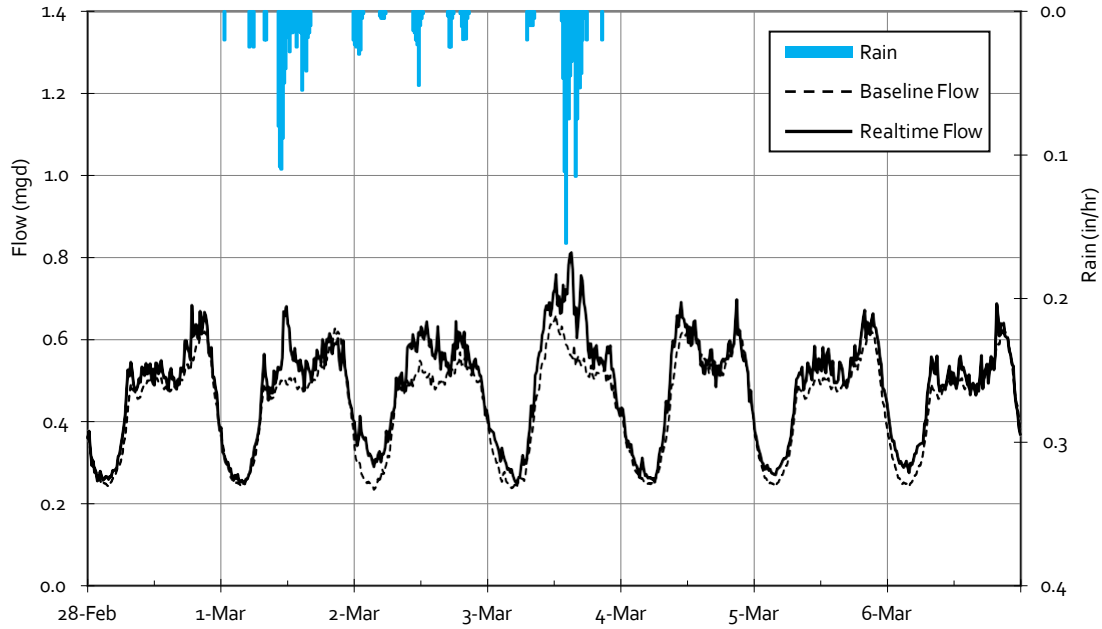


Figure 4.7 Example Wet Weather Response (TC-08)

4.3.4 Inflow and Infiltration Analysis

This section summarizes the I/I findings from the flow monitoring program.

4.3.4.1 Inflow

As discussed earlier in this chapter, inflow is storm water discharged into the sewer system through direct connections. The corresponding flow rates from these direct connections are closely related to the intensity of the storm. Inflow causes peak flow problems that often dictate downstream pipeline and lift station capacity.

4.3.4.2 Rain-Dependent Infiltration

Rain-dependent infiltration (RDI) is water that enters the sanitary sewer system through defects in pipes, joints and manholes. RDI enters the system indirectly and is characterized by flows that increase gradually, are typically sustained for a period after the rainfall has stopped, and then gradually drop off as soils become less saturated and as groundwater levels recede to normal. The major impact of RDI is the cost of pumping and treating the additional volume of water.

4.3.4.3 Peak I/I Rate

The combined I/I analysis considers the total volume of inflow and RDI over the source of a storm event. Table 4.4 summarizes the peak I/I rate for each flow monitoring basin. I/I rate is defined as the rate of flow entering the system during a storm event. The I/I rate is calculated by subtracting out the base flow from the real time inflow.

Table 4.4 Flow Monitoring Basin Peak I/I Rates

Meter Site[1]	ADWF (mgd)	Peak I/I Rate (mgd)
TC-01	1.62	1.57
TC-02	1.11	0.62
TC-03	0.27	0.13
TC-04	0.6	0.31
TC-05	2.36	0.42
TC-06	1.32	0.26
TC-07	0.28	0.66
TC-08	0.45	0.43
TC-09	0.34	0.10
TC-10	1.14	0.25
TC-11	0.34	0.05
TC-12	1.09	0.23
TC-13	0.19	0.07
TC-14	0.63	0.22
TC-15	1.55	0.28
TC-16	0.21	0.09

Notes:
(1) Source: V&A 2018 Sewer Flow Monitoring and Inflow/Infiltration Study.

4.4 Design Flows

This section summarizes the existing and projected flows for the City's wastewater collection system. Flow parameters used to evaluate capacities of treatment processes are also discussed.

4.4.1 Wastewater Flow Factors

In order to develop wastewater flow projections and allocate future flows to the collection system, relationships between land use and wastewater generation were developed. These relationships, called wastewater flow factors are established based on the average wastewater flow generated (based on flow data collected from the temporary flow monitoring program) for each existing land use type. These wastewater flow factors were compared to the per capita wastewater generation flow rates used to project future wastewater flows in the City's previous capacity analysis studies.

Unit flow factors provide a means to estimate flow per acre for each land use category. Wastewater unit flow factors, expressed in gallons per day per acre (gpd/ac), are applied to land use acreage for calculating average day flow generated from a particular land use type. A unit flow factor was developed for each of the City's existing land use classifications.

The wastewater flow factors were developed based on flow monitoring data collected during the 2018 Temporary Flow Monitoring Program only and includes all flowmeter basins within the study area.

The wastewater flow factors were developed using the following procedure:

1. Average flow for the entire system was derived from the flow monitoring data (described in detail in Section 4.3).
2. Using geographic information system (GIS), the acres for each land use type were calculated.
3. Preliminary wastewater flow factors for each land use type are estimated based on values that are typical for the approximate number of dwelling units per acre and the typical number of people per dwelling unit for each land use type.
4. The coefficients are then adjusted up or down (balanced) so that the calculated average flows match the measured data from the flow monitoring data.

The final wastewater flow factors developed for this Master Plan are summarized in Table 4.5. In general, flow factors for residential areas can range between 250 to 4,000 gpd/ac, and commercial and industrial areas may range from 500 to 3,000 gpd/ac or higher. Open space land use types were assumed to generate negligible amounts of wastewater flow. For the City's collection system, the developed flow factors ranged from 350 gpd/ac for very low density residential land uses to 3,600 gpd/ac for high density residential land uses, as shown in Table 4.5.

Table 4.5 Wastewater Flow Factors

Land Use Type	Existing Developed Acreage	Wastewater Flow Factor (gpd/ac)	Wastewater Flow (mgd)
Residential Very Low	76	350	0.03
Residential Low	2,817	1,000	2.82
Residential Medium	792	2,100	1.66
Residential High	158	3,600	0.57
Commercial	501	900	0.45
Industrial	1,828	750	1.37
Downtown	111	800	0.09
Public Facilities	665	550	0.37
Park	227	0	0.00
Aggregate	2	0	0.00
Total	**7,176**	**-**	**7.35**

For future developments, Carollo recommended using a flow per dwelling unit (du) factor for single family residential and multi-family residential. These flow factors were determined based on the wastewater flow factors presented in Table 4.5, and the number of existing single family and multi-family residential units in the system now. A flow factor of 230 gallons per day per dwelling unit (gpd/du) is recommended for single family residential, and a flow factor of 150 gpd/du is recommended for multi-family residential. These flow factors were determined based on a total of 22,945 single family residential units, 4,506 multi-family residential units, and an average of 3.64 persons per households. These flow factors were utilized for known developments where the number of units was known. If the number of units was not known for future development areas, the flow factors from Table 4.5 were used.

4.4.2 Average Dry Weather Flow

Developing an accurate estimate of the future quantity of wastewater generated at build out of the collection system is an important step in maintaining and sizing sewer system facilities, for both existing conditions and future developments. The calibrated ADWF based on the flow monitoring data was not changed for the existing parcels currently connected to the City's wastewater collection system. In General, the following assumptions were used for determining the future ADWF for the interim and buildout scenarios:

Future development wastewater flow projections were based on planned development areas, land use, per capita rates and wastewater flow factors. These flows were then added to the appropriate planning year.

Known residential development flows were calculated based on per capita flow rates and residential units. Known development, other than residential, used wastewater flow factors to project ADWF. As shown in Table 4.6, known development within the City is projected to be 4.09 million gallons per day (mgd) for planning year 2040 and an additional 2.84 mgd by ultimate buildout.

Table 4.6 Known Development Flows

Planning Area Name	Planning Year ADWF (mgd)		
	2025	2040	Buildout
UR 5 (Bright) (1)	0.00	0.18	0.00
UR 7 (Bright/Castro) (2)	0.03	0.10	0.00
Rocking Horse (3)	0.06	0.00	0.00
Tracy Village (4)	0.09	0.05	0.00
UR1 (5)	0.04	0.17	0.46
Ellis (6)	0.03	0.14	0.00
Ellis DA additional RGAs (7) **2250 RGAs	0.00	0.52	0.00
Avenues (8)	0.00	0.10	0.00
UR10 (9)	0.00	0.00	0.09
Tracy Hills (10)	0.27	1.03	0.54
Gateway (11)	0.10	0.25	0.09
UR6 (Cordes Ranch) (12)	0.10	0.60	0.05
UR4 (Bright Triangle) (13)	0.00	0.00	0.23
UR3 (Catellus) (14)	0.00	0.00	0.49
I-205 Expansion (15)	0.00	0.22	0.17
West Side Industrial (16)	0.12	0.24	0.00
East Side Industrial (17)	0.00	0.28	0.00
Larch Clover (18)	0.01	0.00	0.34
Chrisman Road (19)	0.00	0.00	0.09
Rocha (20)	0.00	0.00	0.13
Berg/Byron remainder (21)	0.01	0.00	0.09
Berg Road Subdivision (22)	0.02	0.00	0.00

Planning Area Name	Planning Year ADWF (mgd)		
	2025	2040	Buildout
SWC Valpico and Corral Hollow (23)	0.00	0.00	0.06
Kagehiro (24)	0.01	0.00	0.00
Dobler/ Maibes (25)	0.00	0.02	0.00
Holly Sugar Industrial	0.00	0.09	0.00
Northeast Industrial Area	0.19	0.07	0.00
I-205 Specific Plan	0.00	0.03	0.00

Along with known development, the city provided some infill information. The same methodology that was used to calculate flows for known developments was used to calculate infill flows. Table 4.7 summarizes the existing and future ADWF.

Table 4.7 Existing and Projected ADWF Summary

Planning Horizon	ADWF (mgd)
Existing	7.35
2040	12.84
Buildout	15.65

4.4.3 Peak Wet Weather Flow

The PWWF is the highest observed hourly flow that occurs following the design storm event (discussed in Chapter 3). Wet weather (I/I), which occurs during and after rainfall events, increases flows in the collection system. PWWF is typically used for designing sewers and lift stations. Therefore, the PWWF is the design flow for the purpose of this study. The City's sewers and lift stations were evaluated based on their capacity to convey the PWWF.

The existing PWWF was derived based on the hydraulic modeling results. This was accomplished by routing the 10-year, 24-hour design storm through the hydraulic model, which was calibrated to both dry weather and wet weather conditions. Detailed information regarding the calibration of the City's hydraulic model is provided in Chapter 5.

Similar to the existing PWWF, the future PWWF was derived by routing a 10-year, 24-hour design storm through the hydraulic model. A future R-value was developed to generate average peak I/I rate of 500 gpd/ac and was assigned to large vacant areas within the study area. The future I/I for large vacant areas was calculated by multiplying the peak I/I rate of 500 gpd/ac and the total area in acres. The peak I/I rate for future growth typically ranges from 500 to 1,000 gpd/ac. Small, infill areas that fell within an existing loading polygon were assigned the calibrated R-values of the associated flow monitoring basin.

Table 4.8 presents a concise summary of flow and rainfall characteristics observed over several years. Ten years of hourly historical flow data influent to the treatment plant was reviewed and correlated to rainfall data for the same period to determine the existing PWWF. The data analysis suggests that the system exhibits a PWWF of 17.0 mgd during a period characterized by saturation and rainfall conditions similar in duration and intensity to a 10-year 24-hour event. As shown in Table 4.8 summarizes the events in January of 2023 most closely correlated to the design storm event. The data highlights variations in flow rates and rainfall amounts, providing

insights into the water system's behavior. The average annual daily flow ranges from 7.3 mgd to 8.2 mgd, with peak hourly flows ranging from 12.5 mgd to 20.0 mgd. Rainfall amounts vary from 3.6 inches to 13.0 inches annually, with peak daily rainfall ranging from 0.6 inches to 3.39 inches. The peaking factor indicates the magnitude of flow during peak periods, while the storm classification categorizes the intensity based on the duration.

Table 4.8 Historical Data of Flow and Rainfall Characteristics

Year	Average Annual Daily Flow (mgd)	Peak Hourly Flow (mgd)	Total Annual Rainfall (inch)	Peak Daily Rainfall (inch)	Peaking Factor	Storm Classification (24-hour)
2013	7.7	13.3	3.6	0.8	1.72	<1 year
2014	7.6	13.2	11.3	0.8	1.73	<1 year
2015	7.3	13.1	4.6	1.2	1.79	2 years
2016	8.2	15.0	10.7	1.2	1.83	2 years
2017	7.8	15.8	6.9	0.8	2.02	<1 year
2018	7.5	12.8	11.0	1.2	1.71	2 years
2019	7.9	12.8	13.0	0.6	1.62	<1 year
2020	7.7	12.5	5.0	0.7	1.62	<1 year
2021	7.6	14.0	12.0	1.9	1.84	10 – 25 years
2022	8.2	20.0	9.3	3.39	2.44	200 - 500 year
2023	NA	17.0	NA	1.54	NA	5 – 10 years
MP	7.6	13.1	NA	1.8	1.78	10 years
Average	7.75	14.25	8.74	1.13	1.832	NA

Table 4.9 presents a summary of the existing and future ADWF and PWWFs as well as the PWWF peaking factors. In the existing scenario, the ADWF is 7.35 mgd, and the PWWF is 16.95 mgd. The factor indicates the ratio of PWWF to ADWF is 2.31. In the 2040 scenario, the ADWF increases to 12.22 mgd, and the PWWF is approximately 22.53 mgd. The PWWF/ADWF factor decreases to 1.84. In the buildout scenario, the PWWF rises to 30.14 mgd. The PWWF/ADWF factor also increases slightly to 1.93.

Table 4.9 Projected PWWF Summary

Planning Horizon	ADWF (mgd)	PWWF (mgd)	PWWF/ADWF Factor
Existing	7.35	16.95	2.31
2040	12.22	25.35	2.07
Buildout	15.65	30.14	1.93

Overall, Table 4.9 provides a comparison of flow values and factors for different planning horizons, highlighting potential changes in water flow patterns.

Chapter 5

COLLECTION SYSTEM FACILITIES AND HYDRAULIC MODEL

This chapter describes the development and calibration of the City's wastewater collection system hydraulic model. It provides a description of the existing collection system, the hydraulic model, and an outline of the steps used to develop the model, as well as a detailed summary of the hydraulic model calibration steps and results.

5.1 Existing Wastewater Collection System

The existing wastewater collection system consists of approximately 210 miles of sanitary sewer pipelines ranging from 4 inches to 48 inches, as well as 3 wastewater lift stations. Figure 5.1 presents the City's existing wastewater collection system. Generally, the flow within the system flows from south to north. The Hansen lift station collects flow from the Hansen Road sewer and the flows into the Larch lift station which is then conveyed to the WWTP. Larch lift station collects flows from Corral Hollow Road. MacArthur lift station collects flows on the east side of the system and conveys flows to the WWTP. A gravity main along the spur line railroad conveys a portion of the system to the WWTP by gravity. Figure 5.2 shows a schematic of the City's existing collection system.

5.1.1 Pipeline Distribution by Diameter

Table 5.1 summarizes the total length of pipeline for each diameter in the domestic collection system. The table is based on GIS data and available drawings provided by City staff. The table excludes private sewer pipelines within the study area and does not account for pipelines within the WWTP.

As shown in Table 5.1, nearly all of the City's sewer pipelines are gravity. The majority of the City's gravity sewers are 8 inches in diameter, with the largest being 48 inches in diameter.

5.1.2 Lift Stations

The City owns and operates 3 active wastewater lift stations throughout the City. Figure 5.1 shows the location of each lift station. Table 5.2 summarizes the available data for each of the City's active lift stations.

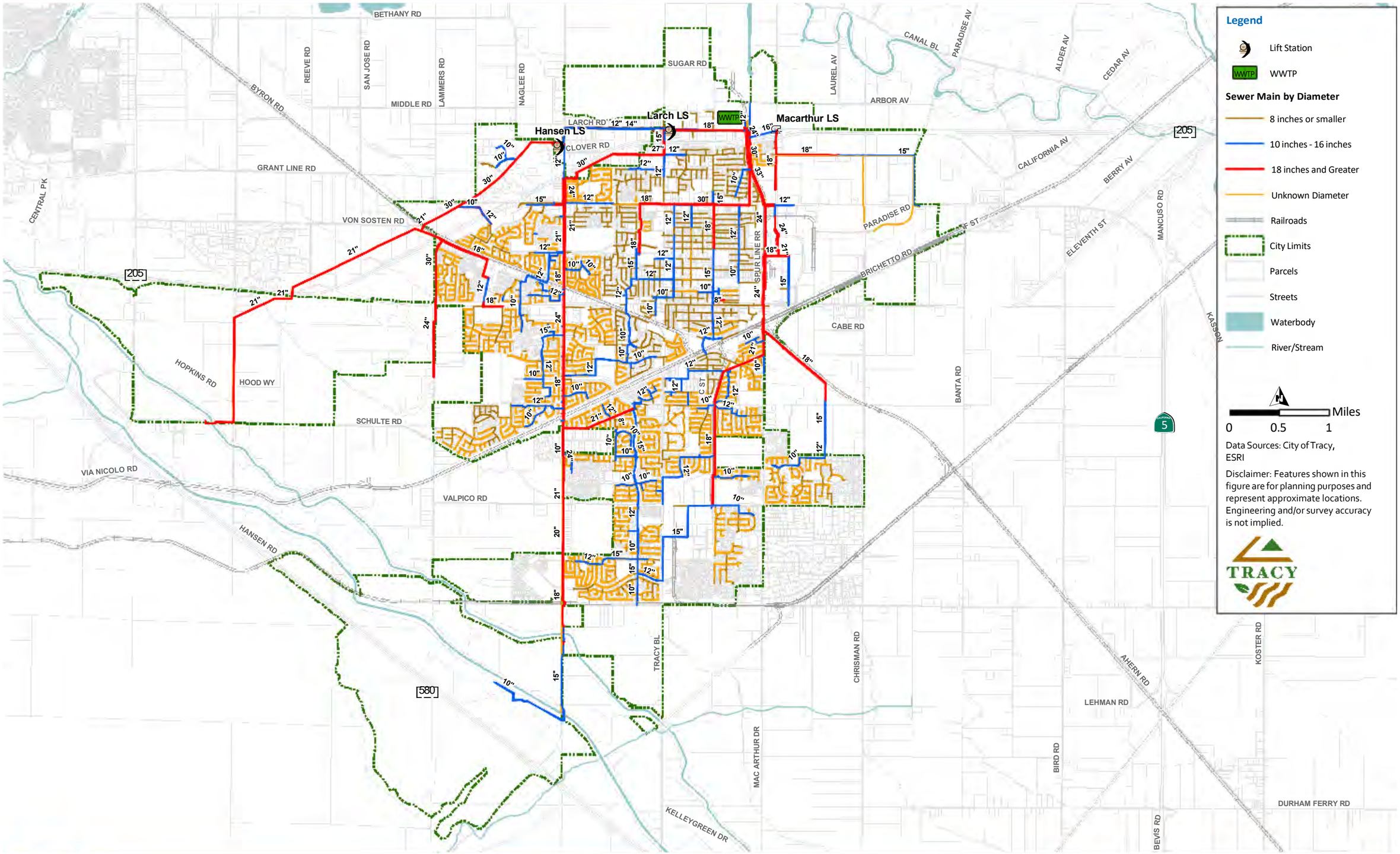


Figure 5.1 Wastewater Collection System

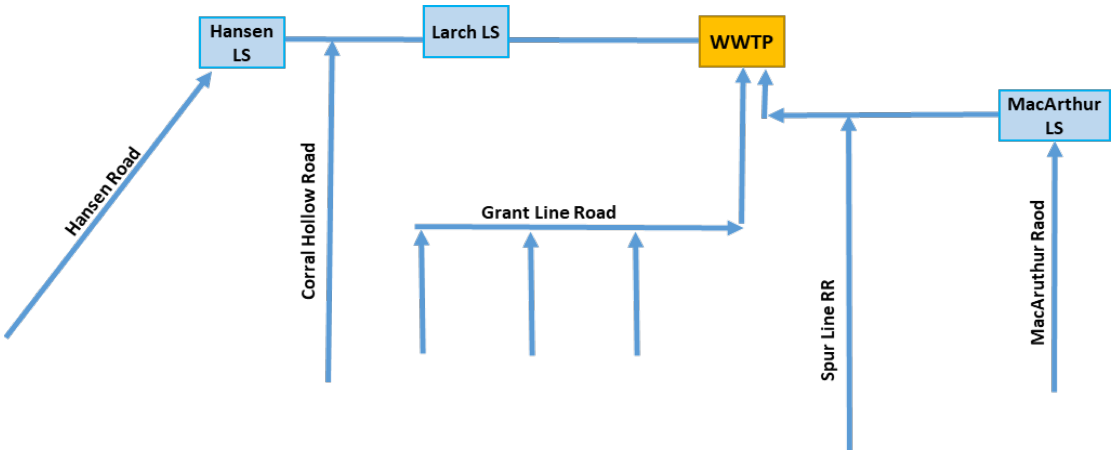


Figure 5.2 Existing System Schematic

Table 5.1 Total System Pipeline Diameter Overview

Diameter	Length (feet)	Length (miles)	Percent
	Gravity		
4	11,527	2.2	1.0 percent
6	70,900	13.4	6.3 percent
8	691,500	131	61.8 percent
10	69,600	13.2	6.2 percent
12	72,900	13.8	6.5 percent
15	41,900	7.9	3.7 percent
16	700	0.1	0.1 percent
18	38,800	7.3	3.5 percent
20	3,000	0.6	0.3 percent
21	40,200	7.6	3.6 percent
24	27,000	5.1	2.4 percent
27	1,300	0.2	0.1 percent
30	22,700	4.3	2.0 percent
33	4,000	0.8	0.4 percent
48	200	0	0.0 percent
Subtotal	**1,096,227**	**207.6**	**98.0 percent**
	Force Main		
12	6,415	1.2	0.6 percent
14	6,415	1.2	0.6 percent
16	1,907	0.4	0.2 percent
18	4,069	0.8	0.4 percent
24	4,069	0.8	0.4 percent
Subtotal	**22,875**	**4.4**	**2.0 percent**
Total	**1,119,102**	**212.0**	**100.0 percent**

Table 5.2 Lift Station Information

Lift Station Name	Location	No. of Pumps	Firm Capacity(1) (mgd)
Hansen(2)	Corral Hollow Road, n/o Clover Road	4	9.01
Larch(2)	Larch Road and Tracy Boulevard	4	12.96
MacArthur	205 Freeway and MacArthur Drive	3	5.33

Notes:
(1) Firm capacity represents the lift station capacity with the largest pump out of service.
(2) Capacity determined from flow tests performed by the City.

5.2 Hydraulic Model Development

A sewer collection system model is a simplified representation of the real sewer system. Sewer system models can assess the conveyance capacity for a collection system. In addition, sewer system models can perform "what if" scenarios to assess the impacts of future developments and land use changes. The City's collection system hydraulic model was constructed using a multi-step process utilizing data from a variety of sources. This chapter summarizes the hydraulic model development process, including a summary of the modeling software selection, a description of the modeled collection system, the hydraulic model elements, the model creation process, and the model calibration process.

5.2.1 Hydraulic Modeling Software

There are several software applications for network analysis with a variety of capabilities and features. The selection of a particular model is generally dependent upon user preference, the requirements of a particular collection system, and the cost associated with the software.

InfoSWMM®, developed by Innovyze (formerly MWH Soft), was selected as the software platform for the development of the City's hydraulic model. The hydraulic modeling engine for InfoSWMM® uses the Environmental Protection Agency's (EPA's) Storm Water Management Model (SWMM), which is widely used throughout the world for planning, analysis, and design related to stormwater runoff, combines sewers, sanitary sewers, and other drainage systems. InfoSWMM® routes flow through the model using the Dynamic Wave method, which solves the complete Saint Venant, one dimensional equations of fluid flow.

InfoSWMM® consists of multiple products that work together to bring a graphical approach to the analysis and design of wastewater and stormwater collection systems, the program includes seamless integration with GIS data.

5.2.2 Data Collection and Validation

The primary sources for the development of the hydraulic model were available design drawings, as-builts construction drawings, and GIS data. The existing collection system was mainly constructed with drawings and as-builts, while GIS was used for the collection system alignment and manhole placement.

5.2.3 Skeletonizing

Skeletonizing is the process of removing pipelines not considered to be essential for the purpose of analysis. While skeletonizing the system minimizes the number of pipelines analyzed, an accurate representation of the collection system is maintained. For the City's hydraulic model, pipelines 10 inches in diameter and larger were included as well as some smaller diameter

pipelines for connectivity. The skeletonized model included approximately 66 miles of pipelines. Figure 5.3 shows the skeletonized modeled wastewater collection system.

5.2.4 Elements of the Hydraulic Model

The following provides a brief overview of the major elements of the City's hydraulic model and the required input parameters associated with each:

- **Manholes:** Sewer manholes, cleanouts, as well as other locations where pipe sizes change, where pipelines intersect, or where force mains connect to gravity mains, are represented by manholes in the hydraulic model. Required inputs for manholes include diameter, sanitary loads, and ground, rim, and invert elevations. Manholes can also be used to represent locations where flows are split or diverted between two or more downstream links.
- **Conduits:** Gravity sewers are represented as conduits in the hydraulic model. Input parameters for conduits include length, diameter, material, friction factor (Manning's n), and invert elevations.
- **Pressure Pipes:** Force mains are represented as pressure pipes in the hydraulic model. Required input parameters are length, diameter, invert elevations, and friction factor (i.e., Hazen Williams C).
- **Pressure Junctions:** Pressure junctions are used to connect multiple force main segments. They are needed when an individual pipe changes in diameter or material and can be used to represent a pressure gauge. Required input includes ground and node elevations. Node elevations correspond to inverts of the contiguous pressure pipes.
- **Wet Wells:** Required input parameters for wet wells include cross section type (circular or variable area), wet well diameter or cross sectional area, and wet well base (bottom), ground (top), maximum (high water level), and minimum elevations (low water level).
- **Pumps:** Pumps are included in the hydraulic model as links. Input parameters for pumps include type (single point, multiple point, variable speed, etc.), pump capacity/head information, operational controls (on/off set points), ground elevation, and pump invert elevation.
- **Outfalls:** Outfalls represent areas where flow leaves the system. For sewer system modeling, an outfall typically represents a wastewater treatment plant. Required input parameters include boundary conditions (free outfall, normal, user-defined tailwater, etc.), ground elevation, and invert elevation.
- **Patterns:** Diurnal patterns are used to simulate the variation in flow throughout the day. Patterns can be established for any time period, including multi-day patterns (48-hour, 72-hour, etc.).
- **Catchments:** Often referred to as loading polygons, sewer sheds, or tributary areas, catchments are used in the wet weather scenarios. Required input parameters include user defined area, outflow element (typically a manhole), storm event pattern, runoff method (unit hydrograph, modified-rational, time-area, etc.), unit hydrograph method (generic, RTK, and SCS), and RTK set. The area of a catchment affects the amount of I/I to a particular manhole. A smaller catchment will have less I/I than a larger catchment.
- **Flows:** The following are the two types of wastewater flow sources that can be injected into individual model elements:
  - Loads: Loads simulate base sanitary wastewater flows and represent the average flow. The base flows are multiplied by a pattern that varies the flow temporally. The

base flow diurnal patterns are adjusted during the dry weather calibration process. Sanitary loads can be applied to manholes, wet wells, and pressure junctions.

- **Stormwater Flows:** RDII flows are applied in the model by assigning a unit hydrograph and a corresponding catchment to a given loading manhole. The unit hydrographs consists of several parameters that are used to adjust the volume of RDII that enters the system at a given location. These parameters are adjusted during the wet weather calibration process.

5.2.5 Hydraulic Model Construction

The City's hydraulic model combines information on physical and operational characteristics of the wastewater collection system and performs calculations to solve a series of mathematical equations to simulate flows in pipelines.

The model construction process consisted of six steps, as described below:

- **Step 1:** The City's drawings and GIS shapefiles for the sewer collection system were obtained.
- **Step 2:** The GIS data was reviewed and formatted to allow easy import into the InfoSWMM® modeling platform. The City's collection system alignment and manhole placement were imported into the modeling software.
- **Step 3:** Some physical and operational data for the City's wastewater collection facilities were not available from the GIS data. Data, such as pipeline inverts, wet well dimensions, pump stations, and other special features, were input manually into the model based on available information. In addition, discrepancies with pipeline alignment and junction placement were reviewed and manually input or modified based on City records, field reconnaissance, and engineering judgment.
- **Step 4:** Once all the relevant data was input into the hydraulic model, the model was reviewed to verify that the model data was input correctly and that the flow direction and size of the modeled pipelines were logical. Additionally, the modeled lift stations were also checked to verify that they operated correctly.
- **Step 5:** Dry weather wastewater flows were then allocated to the appropriate model junctions. These flows were scaled up or down, as necessary, to match the dry weather flows recorded during the flow monitoring period.
- **Step 6:** The hydraulic model contains certain run parameters that need to be set by the user at the beginning of the project. These include run dates, time steps, reporting parameters, output units, and flow routing method. Once the run parameters were established, the model was debugged to ensure that it ran without errors or warnings.

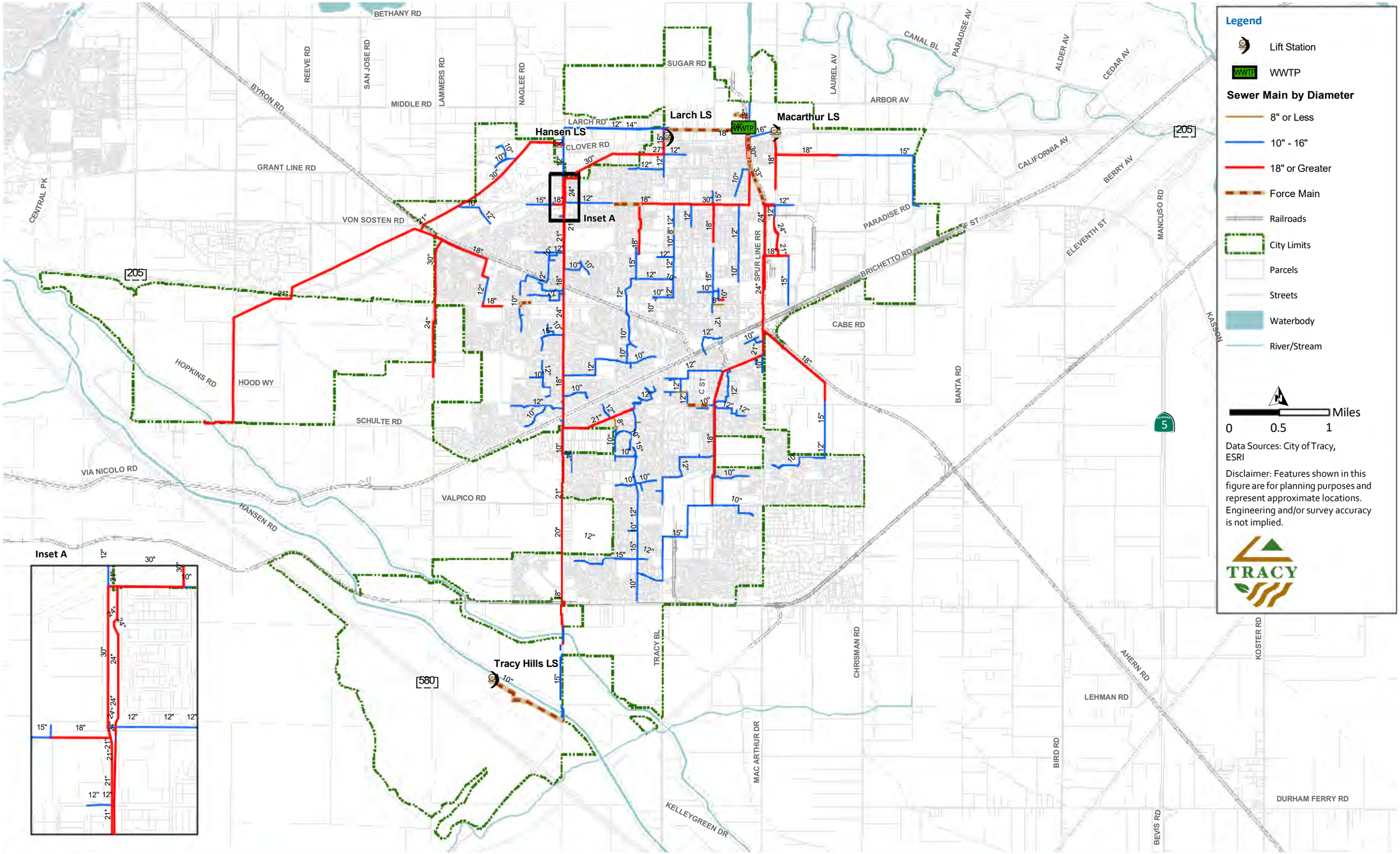


Figure 5.3 Modeled Collection System

5.3 Load Allocation

Determining the quantity of base wastewater flows generated by a municipality and how they are distributed throughout the collection system is a critical component of the hydraulic modeling process.

Various techniques can be used to assign wastewater flows to individual model junctions, depending on the type of data that is available. Adequate estimates of the volume of wastewater are important in maintaining and sizing sewer system facilities, both for present and future conditions. Baseline wastewater loads were allocated (assigned to specific nodes) in the hydraulic model based on land use data provided by the City, as well as the flow data from the temporary flow monitoring program. The following steps outline the wastewater load allocation process:

- **Step 1:** The City's service area was broken up into individual loading polygons. In a "skeletonized" (i.e., truncated model) model, a loading polygon will usually encompass a particular subdivision or grouping of lots. However, a loading polygon could be as small as a few parcels. Each loading polygon represents the geographic area that contributes flows into a single model node (i.e., manhole), and was developed using GIS based on the City's parcel and sewer pipeline shapefiles.
- **Step 2:** One approach for estimating the existing ADWF associated with each loading polygon is based on land use designations, flow coefficients, and land use area. In reality, the wastewater generation rates of each existing customer will vary from an average flow coefficient (significantly in some cases). For this reason, water billing records can be considered as an alternative to the land use based load allocation method for existing DWFs. For this project, water consumption billing records were available. Thus, billing records were used. Billing records were assigned point loads in GIS. Loading polygons were developed based on the parcels that discharge into certain manholes. Using InfoSWMM's "Load Allocator" tool, point loads and the loading polygons calculated the loads in the model.
- **Step 3:** Once the existing wastewater flows were allocated into the model, they were adjusted as needed during model calibration to closely match the DWFs recorded during the flow monitoring program.

5.4 Hydraulic Model Calibration

Hydraulic model calibration is a crucial component of the hydraulic modeling effort. Calibrating the model to match data collected during the flow monitoring program is critical to achieve the most accurate results possible. The calibration process typically consists of calibrating to both dry and wet weather conditions.

For this project, DWF monitoring was conducted at 16 metering sites for a period of approximately one month. DWF calibration provides an accurate depiction of base wastewater flow generated within the study area. The WWF calibration consists of calibrating the hydraulic model to a specific storm event or events to accurately simulate the peak and volume of I/I into the sewer system. The amount of I/I is essentially the difference between the WWF and DWF components.

5.4.1 Wastewater Calibration Standards

The hydraulic model was calibrated in accordance with international modeling standards. The Wastewater Planning Users Group (WaPUG), a section of the Chartered Institution of Water and Environmental Management, has established generally agreed upon principles for model verification. The dry weather and wet weather calibration focused on meeting the recommendations on model verification contained in the "Code of Practice for the Hydraulic Modeling of Sewer Systems," published by the WaPUG (WaPUG 2002), as summarized below:

- **Dry Weather Calibration Standards:** Dry weather calibration should be carried out for two dry weather days and the modeled flows and depths should be compared to the field measured flows and depths. Both the modeled and field measured flow hydrographs should closely follow each other in both shape and magnitude. In addition to the shape, the flow hydrographs should also meet the following criteria as a general guide:
  - The timing of flow peaks and troughs should be within 1 hour.
  - The peak flow rate should be within the range of ±10 percent.
  - The volume of flow (or the average rate of flow) should be within the range of ±10 percent. If applicable, care should be taken to exclude periods of missing or inaccurate data.
- **Wet Weather Calibration Standards:** The model simulated flows should be compared to the field measured flows. The flow hydrographs for both events should closely follow each other in both shape and magnitude, until the flow has substantially returned to dry weather flow rates. In addition to the shape, the flow hydrographs should also meet the following criteria as a general guide:
  - The timing of the peaks and troughs should be similar with regard to the duration of the events.
  - The peak flow rates at significant peaks should be in the range of +25 percent to -15 percent and should be generally similar throughout.
  - The volume of flow (or the average flow rate) should be within the range of +20 percent to -10 percent.

5.4.2 Dry Weather Flow Calibration

The DWF calibration process consists of several elements, as outlined below:

- **Divide the system into flow meter tributaries.** The first step in the calibration process was to divide the City into flowmeter tributary areas. Sixteen tributary areas were created, one for each flow meter from the temporary flow monitoring program. A map showing the locations of each flow monitoring site and their associated tributary area are provided in Chapter 4 along with a schematic of the flow meters.
- **Define flow volumes within each area.** The next step was to define the flow volumes within each area, which was accomplished in the flow allocation step.
- **Create diurnal patterns to match the temporal distribution of flow.** A diurnal curve is a pattern of hourly multipliers that are applied to the base flow to simulate the variation in flow that occurs throughout the day. Two diurnal curves were developed for each flow monitoring tributary area, one representing weekday flow and one representing weekend flow. The diurnal patterns were initially developed based on the flow monitoring data and adjusted as part of the calibration process until the model

simulated flows matched the field measured flows as closely as possible. Figure 5.4 shows the calibrated weekday and weekend diurnal patterns for the area tributary to Meter TC-09. Similar diurnal curves were developed for each of the meters and its tributary area. The DWF calibration curves are provided in Appendix C.

- **Adjust model variables to match field-measured velocity and flow depths.** After the model-simulated flows satisfactorily matched the field-measured flows, the model-simulated velocity and flow depth were compared to the field-measured velocity and flow depth. Adjustments were then made to various model parameters until the modeled and measured velocity and depth closely matched each other. For this process, the primary varied parameters were pipeline roughness (Manning's n) and sediment buildup in the pipe, although other parameters can also be adjusted as calibration results are generated.
  - Manning's roughness coefficients, or n values, have industry accepted ranges based on a number of variables. Roughness coefficients increase over time depending on the construction methods, installation quality, system maintenance, and other environmental factors. There can be certain factors within the City's collection system that can result in roughness coefficients that differ from the typical range. For example, pipeline bellies, joint misalignment, cracks, and debris (e.g., root intrusion, etc.) lead to increased turbulence in a pipe, as wells as the apparent Manning's n factor.
  - If the model is unable to reasonably match the field measured flow depth and velocity without leaving the acceptable range of manning's roughness coefficients, further investigation is conducted to help determine the cause of the discrepancy. Some issues that could cause such a discrepancy can include errors in the slope or diameter of a pipeline, downstream blockages, pipeline sags, and, in some cases, influences from downstream lift station operations.

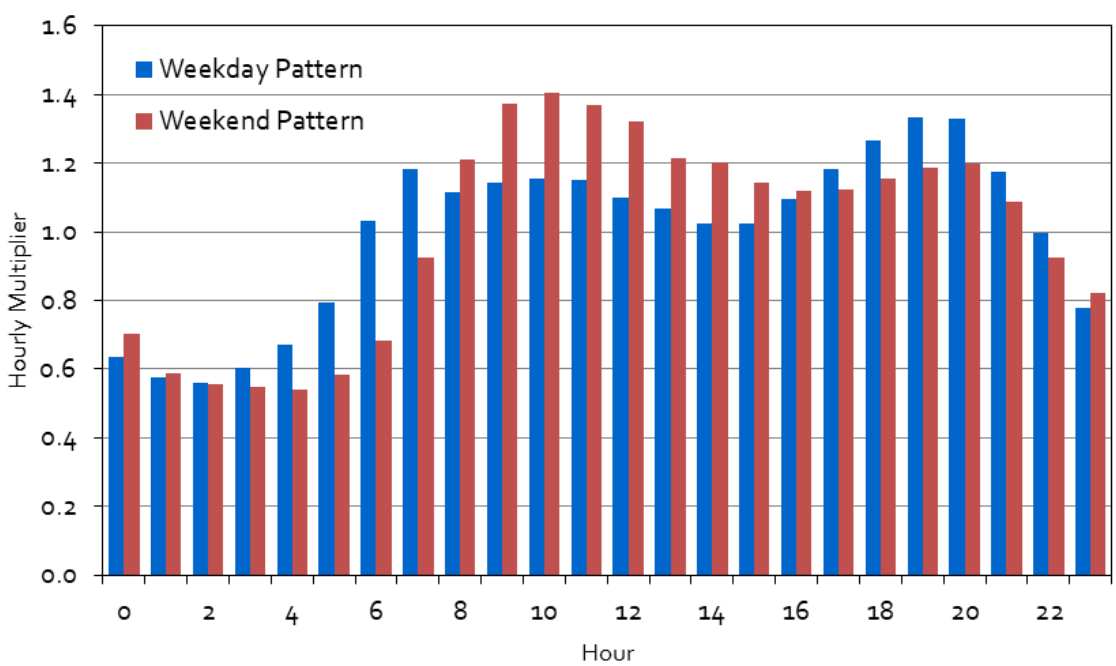


Figure 5.4 Example Weekday and Weekend ADWF Diurnal Patterns (TC-09)

Figure 5.5 is an example DWF calibration sheet for flowmeter site TC-09. Calibration sheets provide plots and tables that compare model results and the field measured flow, velocity, and level for during the calibration period. Appendix C contains detailed DWF calibration sheets for all meter locations. As shown on Figure 5.5 and Appendix C, there is good overall correlation of the field data to the model output results. The modeled flows, levels, and velocities at each site were within the generally accepted calibration tolerances, and therefore the model was considered calibrated.

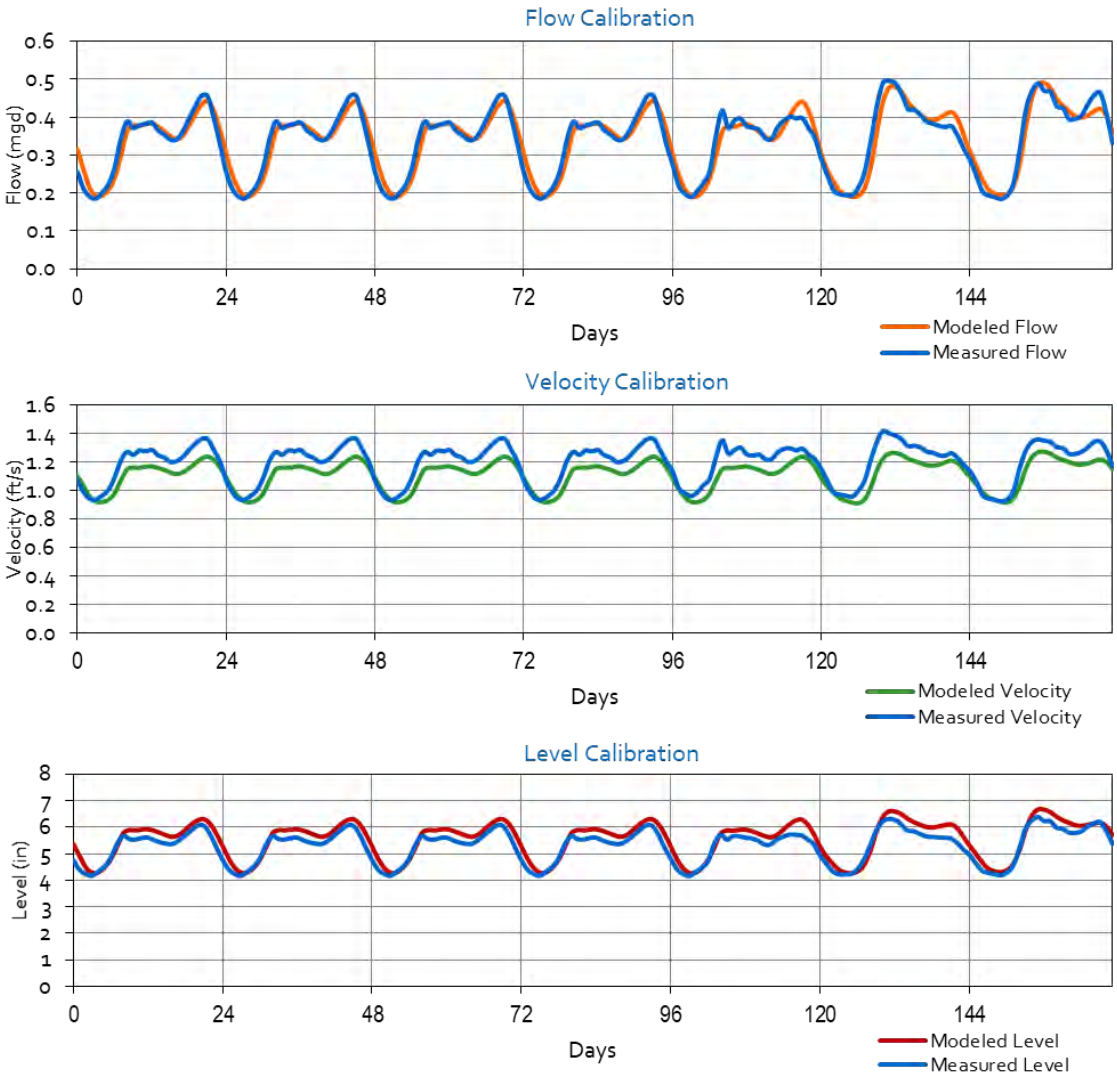


Figure 5.5 Example of Dry Weather Calibration (TC-09)

5.4.3 Wet Weather Flow Calibration

The WWF calibration enables the hydraulic model to accurately simulate I/I entering the collection system during a large storm. As outlined below, the WWF calibration consists of several elements:

- **Identify calibration rainfall events.** The WWF calibration process consists of running model simulations of historical rainfall events based on data collected as part of the

temporary flow monitoring program. The goal of any WWF monitoring program is to capture and characterize a system's response to a significant rainfall event, preferably during wet antecedent moisture conditions.

- **The selection of a particular calibration storm or group of storms is based on a review of the flow and rainfall data.** Only one significant rainfall event (total of 0.26 inch of rainfall) occurred during the flow monitoring program on March 3, 2018.
- **Define RDII tributary areas.** For the WWF calibration, RDII flows are superimposed on top of the DWF. The model calculates RDII by assigning "RDII Inflows" to each area node in the model. RDII inflows consist of both a unit hydrograph and the total area that is tributary to the model node. The RDII tributary areas were calculated in GIS using loading polygons, excluding any large vacant, open space, or other areas in the system which are not expected to contribute to I/I into the collection system. The tributary area provides a means to transform hourly rainfall depth from the rainfall hyetographs into a rainfall volume. The rainfall volume is transformed into actual RDII flows using the unit hydrograph, as described in the next step.
- **Create I/I parameter database and modify to match field measured flows.** The main step in the WWF calibration process involved creating a custom unit hydrograph for the study area using the "RTK Method", which is widely used in collection system master planning. Using the RTK Method, the RDII unit hydrograph is the summation of three separate triangular hydrographs (short term, medium term, and long term), which are each defined by three parameters: R, T, and K. R represents the fraction of rainfall over the sewer basin that enters the collection system; T represents the time to peak of the hydrograph; and K represents the ratio of time to recession to the time of peak. Therefore, there are a total of nine separate variables associated with a unit hydrograph. Figure 5.6 shows the shape of an example unit hydrograph.

  The hydrograph utilizes the R-values (percent of rainfall that enters the collection system) calculated for each basin to simulate I/I. The nine variables in each unit hydrograph were initially set based on engineering judgment and then adjusted until the model simulated flows (both peak flows and average flows) matched closely with the field measured flows.

  As with the dry weather calibration, the wet weather calibration process compared the measured flow data with the model output. Comparisons were made for average and peak flows as well as the temporal distribution of flow until flows returned to their baseline levels.
- **Refine model variables to match field measured velocity and flow depths.** After the model was considered to be satisfactorily calibrated for wet weather flows, the model simulated velocities and flow depths were checked against the field measured velocities and flow depths during the calibration storms. Refinements were made to the various model parameters so that the modeled and measured velocity and depth closely matched one another. If any adjustments were made to Manning's n-values or other parameters, the DWF calibration was rechecked as well to make sure that the flow depth and velocities still matched well under DWF conditions.

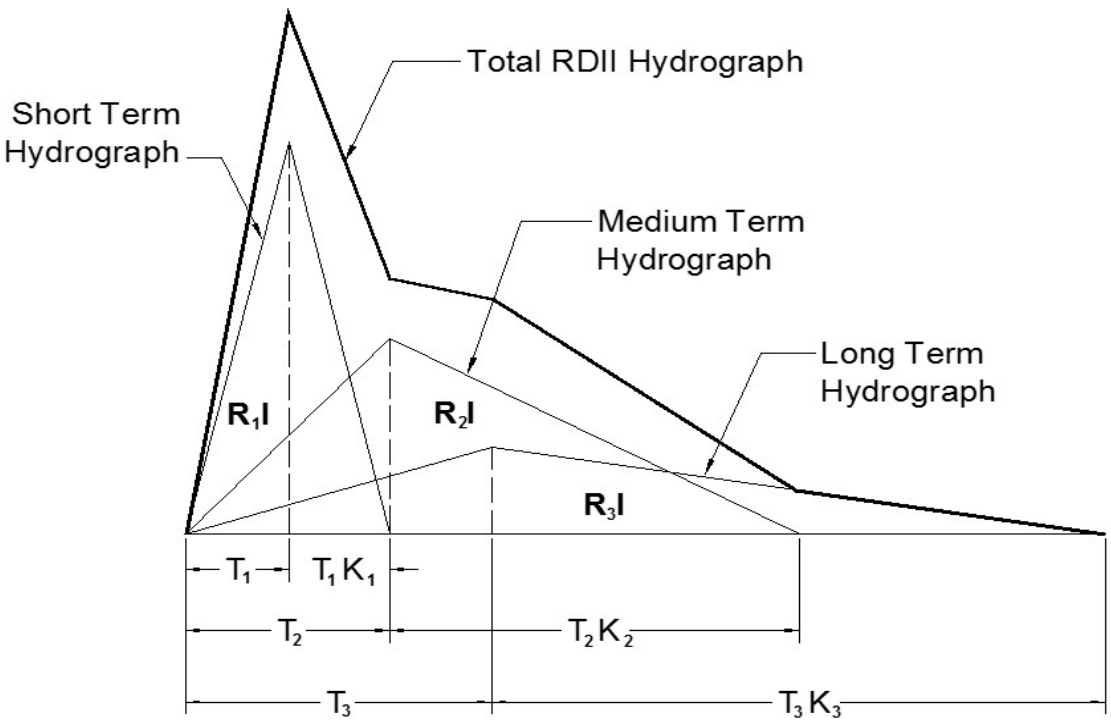


Figure 5.6 Example RDII Unit Hydrograph

Appendix D contains a detailed WWF calibration summary sheet for each of the flow monitoring sites. Each calibration sheet provides plots that compare the model simulated and field measured flow, velocity, and level data for the calibration storm. An example of the wet weather calibration for Site TC-08 is shown on Figure 5.7. As shown on Figure 5.7 and in Appendix D, there is good overall correlation of the field data to the model output results. The modeled average flows, and peak flows at each site were within the generally accepted calibration tolerances, and therefore the model was considered calibrated.

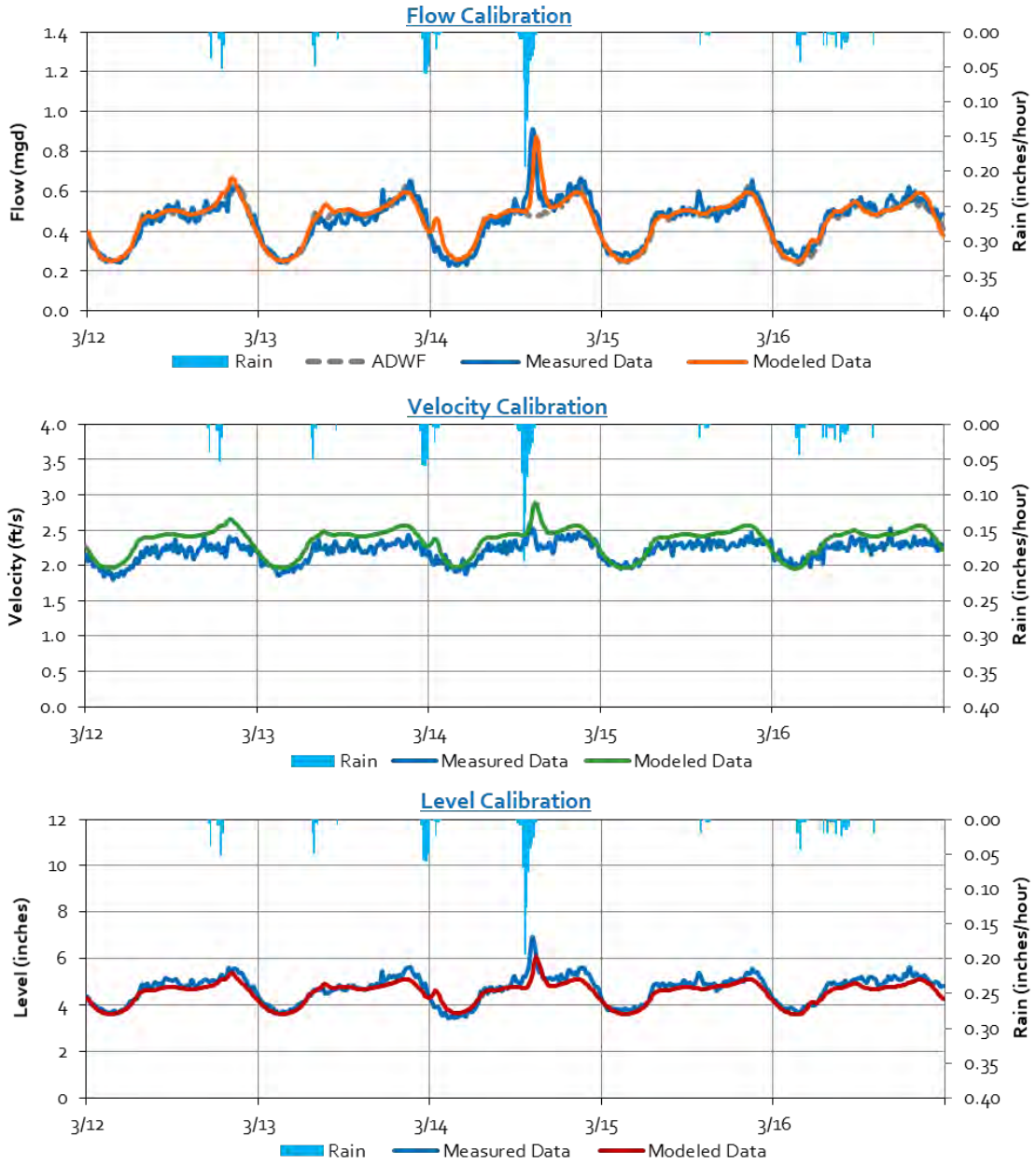


Figure 5.7 Example WWF Calibration Sheet (Site TC-08)

Chapter 6

SYSTEM EVALUATION AND PROPOSED IMPROVEMENTS

This chapter discusses the hydraulic evaluation of the City's wastewater collection system, and the proposed projects that correct capacity deficiencies and serve future users.

6.1 Wastewater Collection System Analysis

Following the DWF and WWF calibration, which is summarized in detail in Chapter 5, a capacity analysis of the existing and future collection system was performed. The capacity analysis entailed identifying area in the sewer system where flow restrictions occur or where pipe capacity is insufficient to convey either PHF or PWWFs. Sewers that lack sufficient capacity to convey PHFs and/or PWWFs create bottlenecks in the collection system that can potentially cause SSOs. The sewer system was evaluated based on planning criteria presented in Chapter 3.

This section discusses the locations of current and projected hydraulic deficiencies resulting from flows exceeding the maximum flow depth criteria.

6.1.1 Gravity System Evaluation

In accordance with the established flow depth criteria for existing sewers, pipelines with a maximum flow d/D ratio greater than 0.75 under PHF conditions and 0.90 under PWWF conditions were identified as capacity deficient. Under PHF conditions, no deficiencies were identified.

It is important to understand that not all of the existing pipelines with a d/D greater than 0.90 are necessarily capacity deficient. In some cases, a surcharged condition within a given pipeline segment is due to backwater effects created by a downstream bottleneck (i.e., upstream surcharging is caused by downstream pipeline deficiencies). An illustration of backwater effects is shown on Figure 6.1. For this reason, the hydraulic model was analyzed to identify the pipeline segments that are the cause of the surcharged conditions. These capacity deficient sewers are shown on Figure 6.2. Each pipeline that violated the evaluation criteria was looked at in closer detail to evaluate the severity of the deficiency. Improvement projects were not created for pipelines that only slightly violated the evaluation criteria. Therefore, minor criteria violations are not shown on Figure 6.2 as a deficiency.

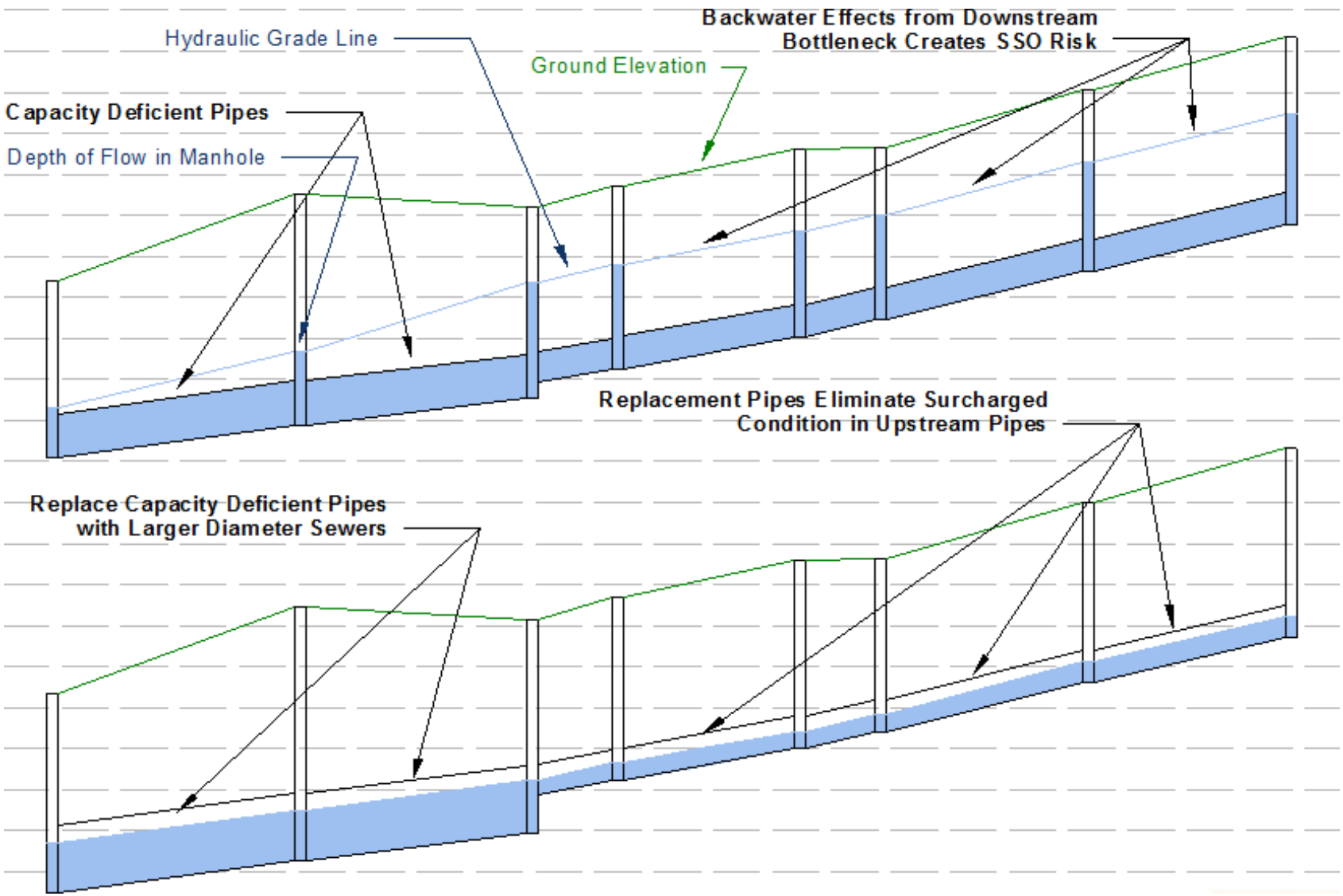


Figure 6.1 Sample Illustration of Backwater Effects in a Sewer

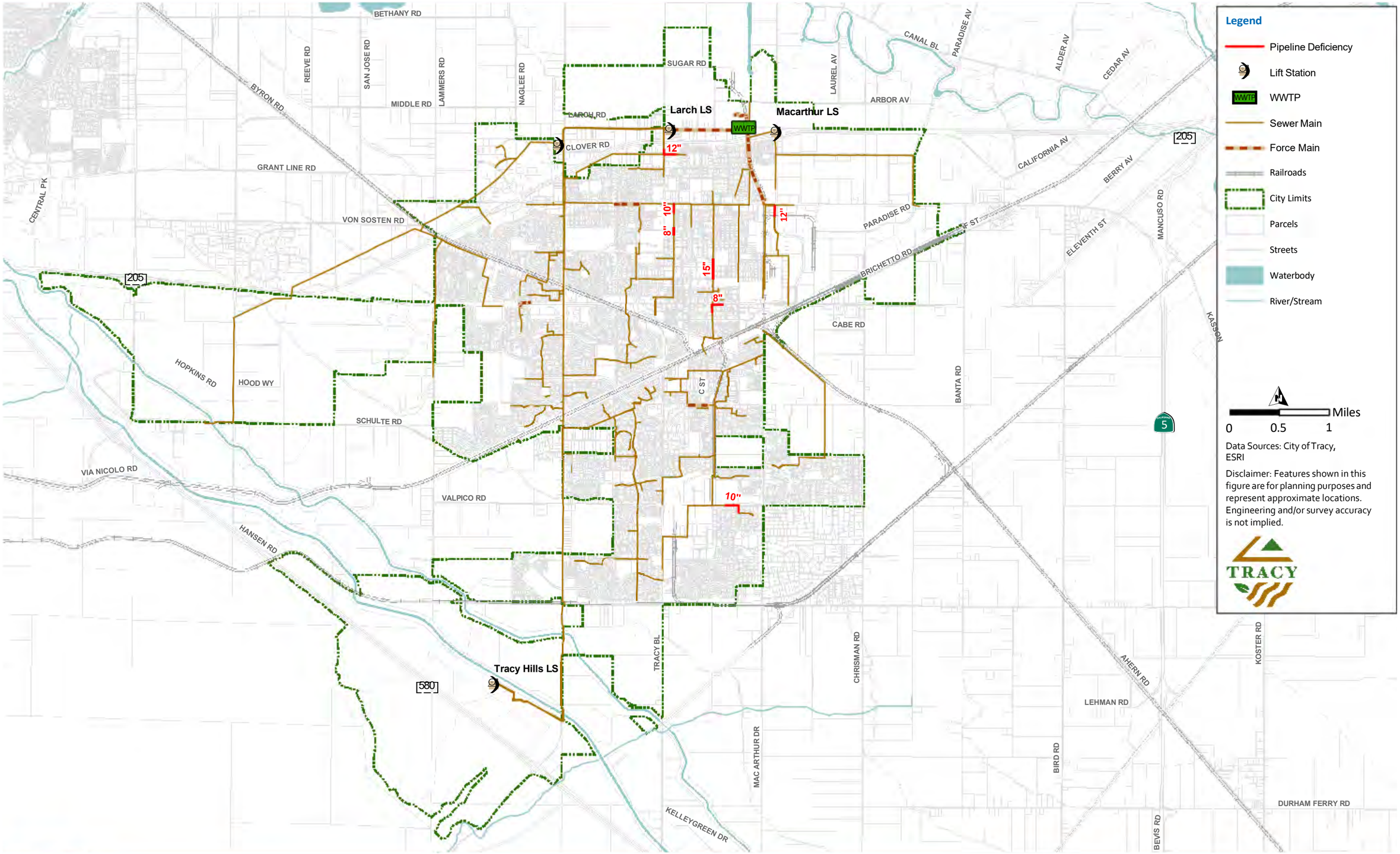


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Figure 6.2 Existing Capacity Deficiencies

Following the completion of the existing system analysis, improvement projects and alternatives were identified to mitigate pipeline capacity deficiencies while maintaining a maximum d/D for new sewers (0.67 for pipes 12-inch and smaller, 0.75 for pipes 15-inch and larger). These sewers will need to be replaced by larger-diameter sewers or constructed in parallel to bypass flow around hydraulically deficient sewers. The decision on whether to upsize or parallel a particular sewer should be confirmed during the preliminary design of each proposed project and is based on a number of factors, including the condition of the existing pipeline, pipeline velocities during dry-weather flow conditions, pipeline slopes, and other relevant factors.

The goal of the future system analysis is to evaluate the collection system under projected future peak flow and to ensure existing improvements are sized to convey Buildout flows and identify future deficiencies. As part of the future system analysis, the planning years 2040 and Buildout were evaluated. The term future is a general reference to planning years 2040 and Buildout.

The future system analysis of the gravity system was performed in a manner similar to the existing system evaluation. Figure 6.3 shows the locations of deficiencies under future flow conditions for the planning horizon of the Master Plan. Preliminary projects for expansion to serve future growth is also summarized, with conceptual locations for new trunks and lift stations.

6.1.1.1 Corral Hollow Road Capacity Evaluation

The pipeline along Corral Hollow Road conveys flow from the southern portion of the City to the Larch lift station. The sewer line along Corral Hollow Road has capacity to handle approximately 3,300 additional equivalent dwelling units (EDUs). This capacity is based on the existing system, and therefore planned developments that were not contributing flow in 2018 were not included in evaluation. To calculate the number of EDUs that the Corral Hollow Sewer System could handle before it reached capacity, Carollo used the hydraulic model to determine the maximum flow that the Corral Hollow Sewer System could handle. The maximum flow in gallons per day was divided by a peaking factor of 2.5 to calculate an average flow. That average flow was then divided by a flow factor of 230 gallons per day per dwelling unit. The final product is the number of EDUs the system can handle before a deficiency occurs.

This pipeline in Corral Hollow Road is a major transmission main within the system and conveys a large portion of flows to the Larch lift station and eventually to the WWTP. The City needs to be aware of how much more capacity this line has when approving developments that will generate flow that is tributary to the sewer. It is recommended that the City track the number of approved EDUs tributary to the Corral Hollow sewer over the course of time. Tracking the number of EDUs will allow for the timely planning and construction of improvements required to convey the total amount of development tributary to this sewer in the south portions of the City. An improvement project (Lammer's Project) was developed to provide additional capacity for growth in the southern area of the City once the 3,300 EDUs of remaining capacity have been exhausted (see section 6.2.5).

The City has started the process of collecting fees for a Phase 2 parallel sewer pipeline in Corral Hollow Road which runs from Parkside Drive to Fieldview Drive. This Phase 2 pipeline will increase the capacity in Corral Hollow Sewer System to handle an additional 1,400 EDUs. Therefore, the total available capacity in the Corral Hollow Sewer System following the implementation of Phase 2 is 4,700 EDUs. The number of EDUs for Phase 2 were calculated similarly to how the existing capacity was.

6.1.1.2 Maintenance Issues

City staff confirmed that there are constant maintenance issues with buildup of grease and trash in the Hansen Road sewer. This issue should be resolved before any new developments come online in this area.

6.1.2 Lift Station and Force Main Evaluation

The City's hydraulic model includes each of the three operational lift stations. The lift stations were evaluated to determine if they have capacity to convey peak flow. Lift stations with an influent peak flow above the existing firm capacity were flagged as deficient. Table 6.1 summarizes the results of the City's lift station evaluation. As shown in Table 6.1, Larch lift station has been identified as capacity deficient under 2040 and buildout peak flow conditions and the Hansen lift station has been identified as capacity deficient under buildout conditions. MacArthur lift station has capacity through buildout.

Table 6.1 Lift Station Capacity Evaluation

Lift Station	Existing Firm Capacity	Existing PWWF (mgd)	Existing Surplus/ (Deficit) (mgd)	2040 PWWF (mgd)	2040 Surplus/ (Deficit) (mgd)	Buildout PWWF (mgd)	Buildout Surplus/ (Deficit) (mgd)
Hansen	9.01	2.88	6.13	7.43	1.58	10.79	(1.41)
Larch	12.96	11.74	1.22	16.34	(3.38)	19.75	(6.79)
MacArthur	5.33	0.67	4.66	1.21	4.12	1.78	3.55

Additionally, the force mains associated with each lift station was evaluated to determine if they have capacity to convey peak flow. Force mains with a velocity of greater than 8 ft/s were identified as deficient. Table 6.2 summarizes the results of the City's force main evaluation. As shown in Table 6.2, both the 12-inch diameter and 14-inch diameter force mains are capacity deficient under buildout peak flow conditions.

Table 6.2 Force Main Capacity Evaluation

Force Main	Force Main Diameter (inches)	Existing PWWF Velocity (ft/s)	2040 PWWF Velocity (ft/s)	Buildout PWWF Velocity (ft/s)
Hansen	12	0.67	6.03	8.47
	14	1.00	6.70	9.40
Larch	18	2.88	4.07	5.70
	24	4.20	4.28	5.38
MacArthur	16	1.00	1.97	2.54

6.2 Recommended Improvements

This section summarizes the improvements recommended for the wastewater collection system. Figure 6.4, Figure 6.5, and Figure 6.6 illustrates the recommended improvements to mitigate capacity deficiencies and to serve future growth. Detailed improvement sheets for the recommended improvements can be found in Appendix E.

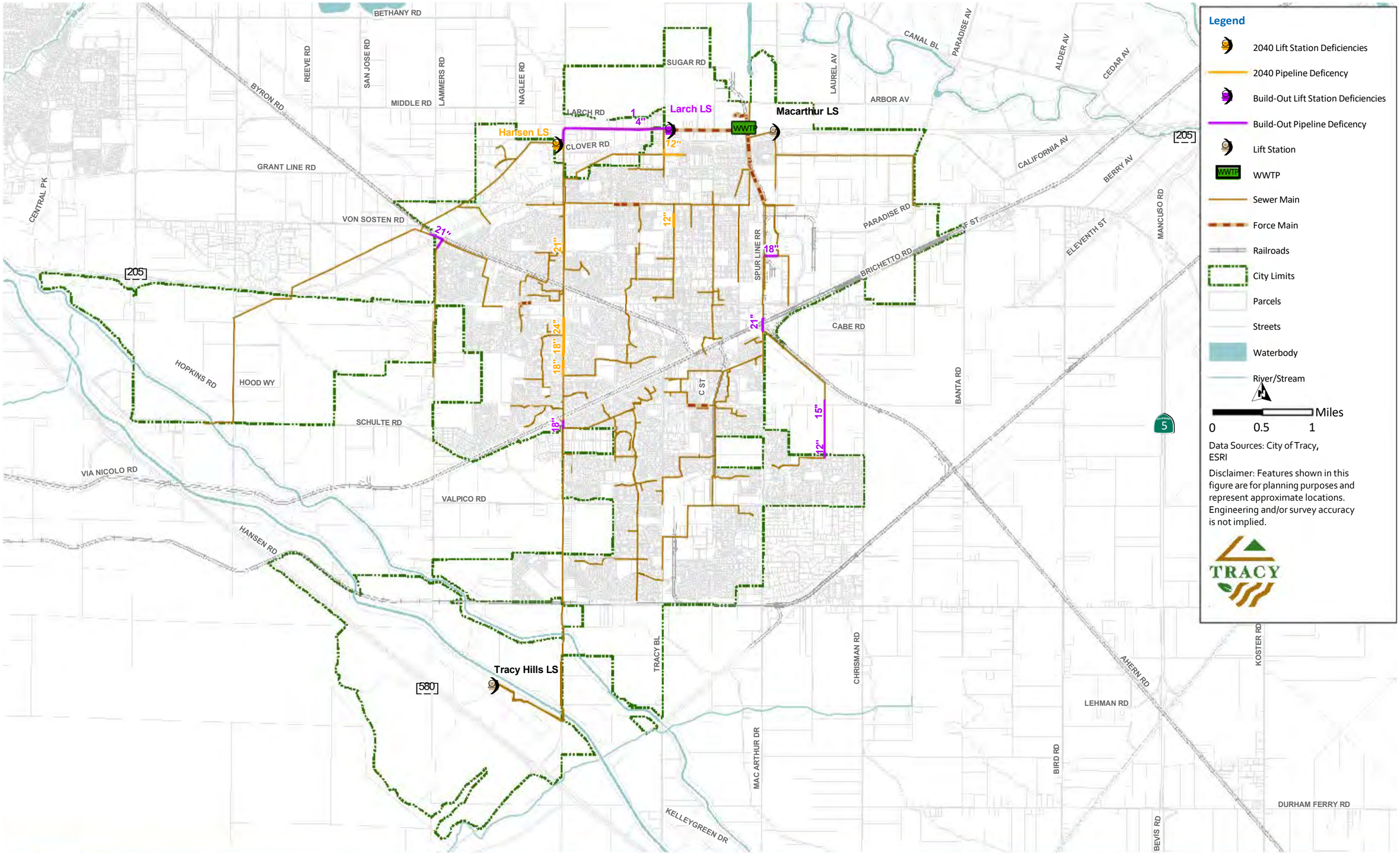

Figure 6.3 Future Capacity Deficiencies

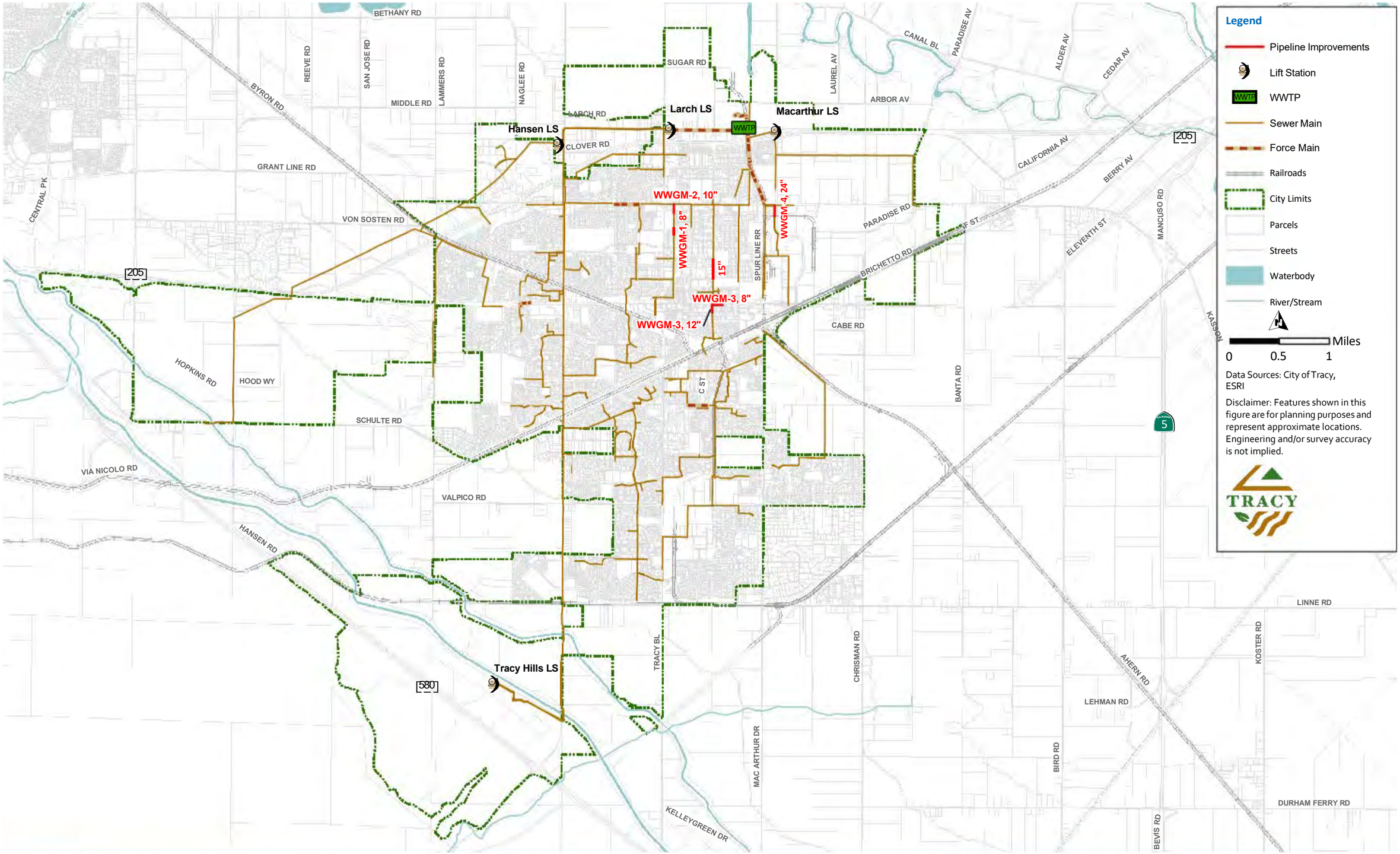

Figure 6.4 Existing System Improvements

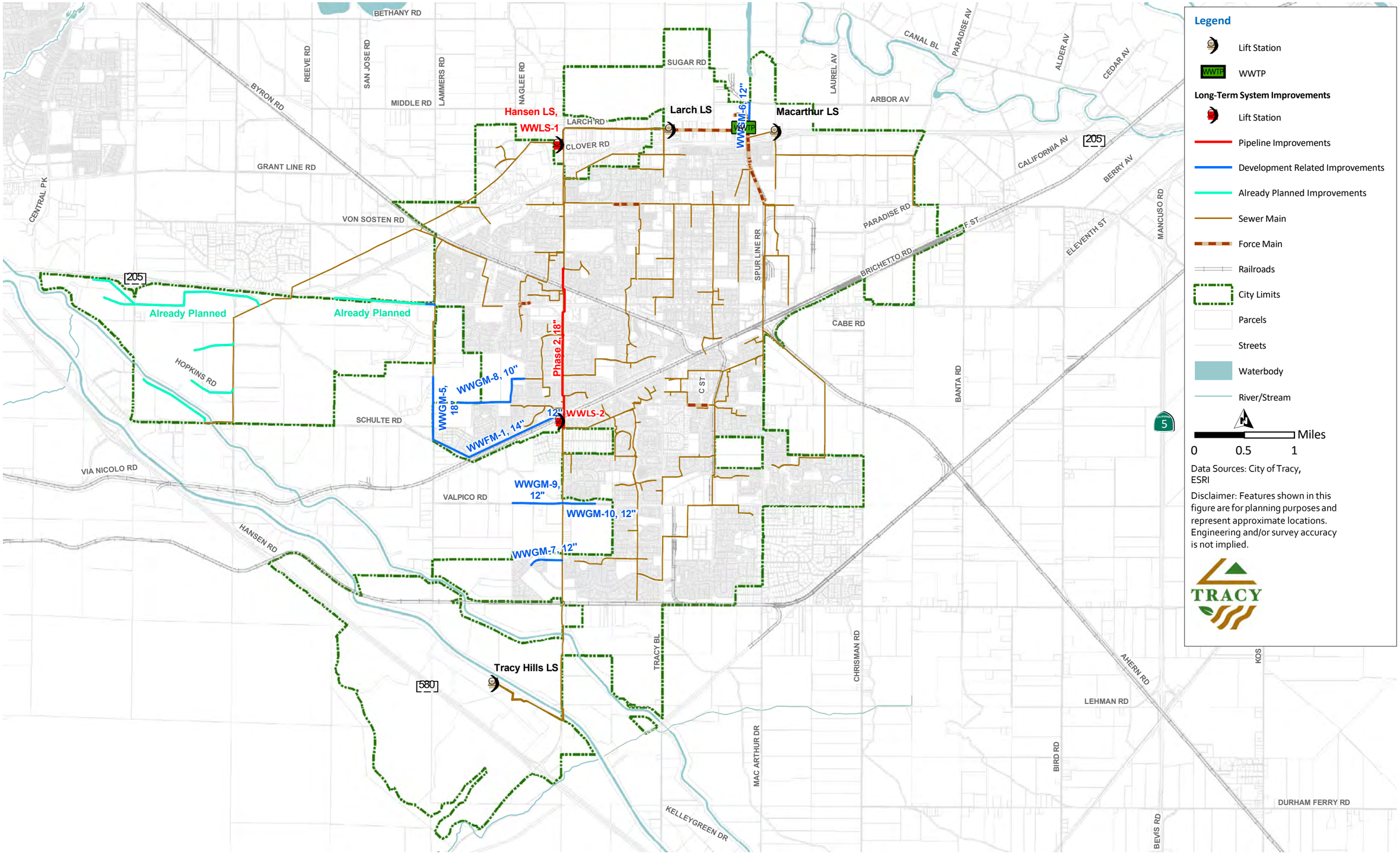

Figure 6.5 2040 System Improvements

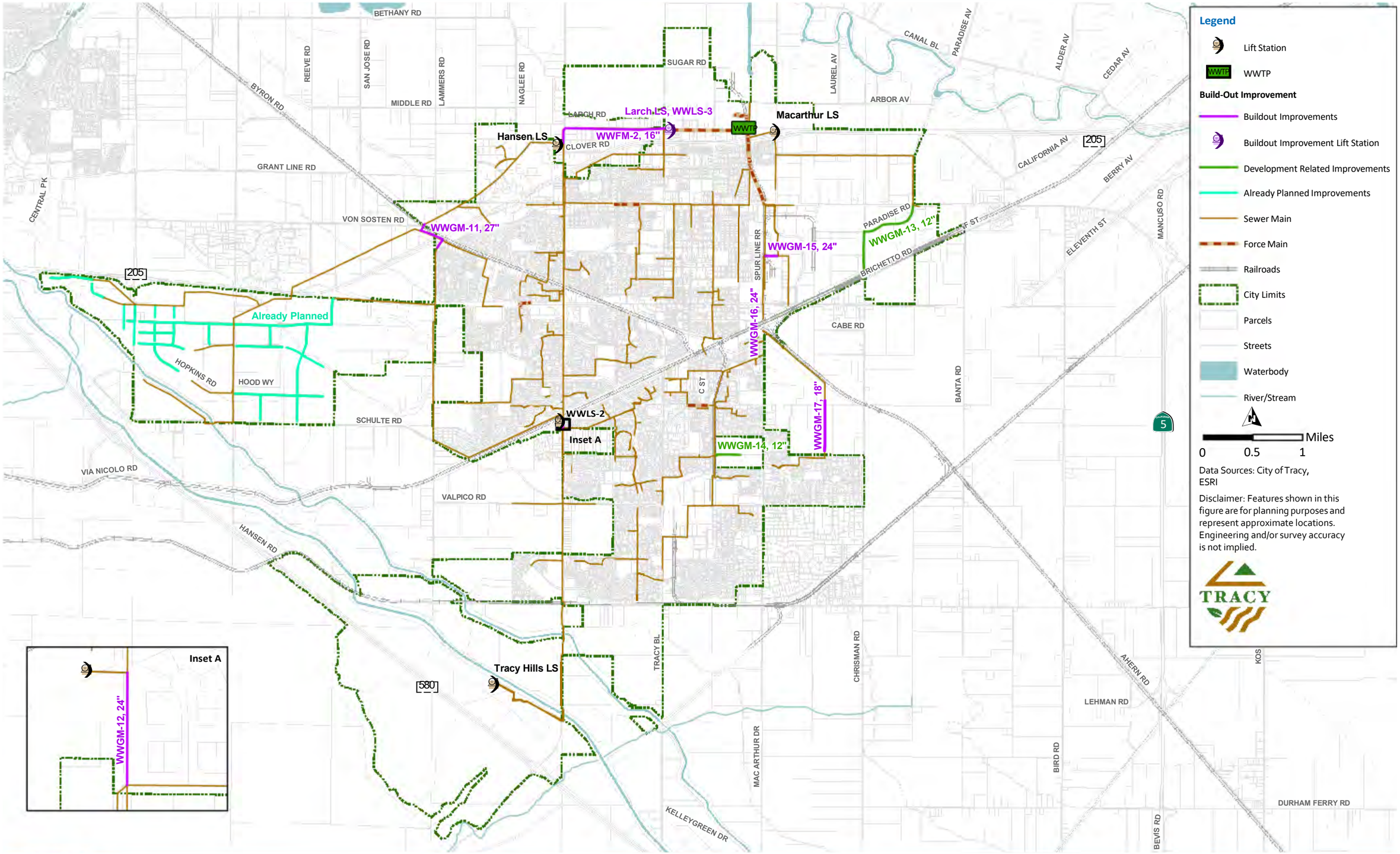

Figure 6.6 Buildout System Improvements

6.2.1 Existing Gravity Main Improvements

The following gravity main improvements are recommended to address deficiencies identified under existing conditions:

- **Gravity Main along Bessie Avenue (WWGM-1):** This project includes the replacement of approximately 440 feet of 8-inch diameter gravity main along Bessie Avenue, between Whittier Avenue and 20th Street. To mitigate capacity deficiencies under existing PWWF conditions, it is recommended that the existing 8-inch diameter gravity main be replaced with a 12-inch diameter gravity main.
- **Gravity Main along Bessie Avenue (WWGM-2):** This project includes the replacement of approximately 510 feet of 10-inch diameter gravity main along Bessie Avenue, between 23rd Street and West Grant Line Road. To mitigate capacity deficiencies under existing PWWF conditions, it is recommended that the existing 10-inch diameter gravity main be replaced with a 12-inch diameter gravity main.
- **Gravity Main along North Central Avenue (WWGM-3):** This project includes the replacement of approximately 450 feet of 8-inch and 12-inch diameter gravity main along North Central Avenue, 10th Street and 11th Street. To mitigate capacity deficiencies under existing PWWF conditions, it is recommended that the existing 8-inch and 12-inch diameter gravity mains be replaced with a 15-inch diameter gravity main.

6.2.2 Future Gravity Main Improvements

The following gravity main improvements are recommended to address deficiencies identified under future conditions:

- **Gravity Main along MacArthur Drive (WWGM-4):** This project includes the replacement of approximately 600 feet of 12-inch diameter gravity main along MacArthur Drive, south of East Grant Line Road. To mitigate capacity deficiencies under 2040 PWWF conditions, it is recommended that the existing 12-inch diameter gravity main be replaced with a 21-inch diameter gravity main.
- **Gravity Main along Lammers Road and Byron Road (WWGM-11):** This project includes the replacement of approximately 2,710 feet of 21-inch diameter gravity main along Lammers Road, south of Byron Road, and along Byron Road, west of Lammers Road. To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended that the existing 21-inch diameter gravity main be replaced with a 27-inch diameter gravity main.
- **Gravity Main along Corral Hollow Road (WWGM-12):** This project includes the replacement of approximately 380 feet of 18-inch gravity main along Corral Hollow Road, between Parkside Drive and project WWLS-2.To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended that the existing 18-inch diameter gravity main be replaced with a 24-inch diameter gravity main.
- **Corral Hollow Phase 2 Pipeline (Phase 2):** This project includes the addition of a parallel gravity main along Corral Hallow Road between Parkside Drive and Fieldview Drive. This project will compromise of approximately 8,450 feet of 18-inch diameter gravity main.
- **Gravity Main to Serve Acacia Street and Franklin Avenue (WWGM -15):** This project includes the replacement of approximately 750 feet of 18-inch gravity main east of the

intersection of Acacia Street and Franklin Avenue. To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended that the existing 18-inch diameter gravity main be replaced with a 21-inch diameter gravity main.

- **Gravity Main Along Macarthur Drive (WWGM -16):** This project includes the replacement of approximately 1500 feet of 21-inch gravity main Along Macarthur Drive between UP Railroad and Eleventh Street. To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended that the existing 21-inch diameter gravity main be replaced with a 24-inch diameter gravity main.
- **Gravity Main to Serve Chrisman Road (WWGM -17):** This project includes the replacement of approximately 2700 feet of 12 and 15-inch gravity main West of Chrisman Road between Tulloch Drive and Schulte Road. To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended that the existing 12 and 15-inch diameter gravity main be replaced with an 18-inch diameter gravity main.

6.2.3 Existing Lift Station and Force Main Improvements

There are no existing lift station or force main improvements. The existing system lift stations and force mains have capacity to convey existing PWWF.

6.2.4 Future Lift Station and Force Main Improvements

The following lift station and force main improvements are recommended to address future deficiencies.

- **Hansen Lift Station Upgrade (Project WWLS-1):** This project includes the expansion of Hansen Lift Station. The firm capacity is not adequate to convey the buildout PWWF. It is recommended that the lift station capacity be upgraded from 9.01 mgd to 10.4 mgd to accommodate future flows.
- **Larch Lift Station Upgrade (Project WWLS-3):** This project includes the expansion of Larch Lift Station. The firm capacity is not adequate to convey the 2040 and buildout PWWF. It is recommended that the lift station capacity be upgraded from 12.96 mgd to 17.5 mgd to accommodate future buildout flows.
- **Hansen Force Main Upgrade (Project WWFM-2):** This project includes the replacement of approximately 6,240 feet of 12-inch diameter force main. To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended the pipeline be replaced with a 16-inch diameter force main to accommodate future flows.

6.2.5 Collection System Expansion to Serve Future Growth

The following recommendations are preliminary sewer trunk alignments and lift stations that will serve future growth. The location of the new trunks and lift stations are conceptual and should be refined as more data becomes available.

- **Lammers Projects (WWLS-2, WWFM-1, and WWGM-5):** These projects will service future growth in the southern area of the City. Improvements will consist of a lift station, force main, and gravity pipelines. The project will connect into the existing system on Corral Hollow Road. This project will alleviate deficiencies on Corral Hollow Road by directing flows to Lammers Road. This project is separated into the following segments:
  - WWLS-2 is a lift station that would be required to route flow from Corral Hollow Road to Lammers Road to alleviate the deficiencies along Corral Hollow Road.

  - WWFM-1 consists of approximately 7,790 feet of 14-inch diameter force main located along West Schulte Road from Corral Hollow Road and Lammers Road.
  - WWGM-5 consists of approximately 3,310 feet of 18-inch diameter sewer main located along Lammers Road.
- **Gravity Main to Serve Holly Sugar Industrial (WWGM-6):** This project includes the addition of approximately 1,520 feet of 12-inch diameter gravity main west of MacArthur drive and south of Arbor Avenue. To anticipate development in this area (Holly Sugar Industrial) by 2040, it is recommended that these 12-inch diameter pipelines be added.
- **Gravity Main to Serve Ellis (WWGM-7):** This project includes the addition of approximately 1,760 feet of 12-inch diameter gravity main along Ellis Town Drive, between Corral Hollow Road and Middlefield Drive. To anticipate development in this area (Ellis) by 2040, it is recommended that these 12-inch diameter pipelines be added.
- **Gravity Main to Serve Rocking Horse and UR7 Bright/Castro (WWGM-8):** This project includes the addition of approximately 4,700 feet of 12-inch diameter gravity main along Schulte Road and Mabel Josephine Drive. To anticipate development in this area (Rocking Horse and UR7 Bright/Castro) by 2040, it is recommended that these 12-inch diameter pipelines be added.
- **Gravity Main to Serve Avenues and SWC Valpico and Corral Hollow (WWGM-9):** This project includes the addition of approximately 2,650 feet of 12-inch diameter gravity main along Valpico Road, west of Corral Hollow Road. To anticipate development in this area (Avenues and SWC Valpico and Corral Hollow) by 2040, it is recommended that these 12-inch diameter pipelines be added.
- **Gravity Main to Serve Tracy Village (WWGM-10):** This project includes the addition of approximately 1,720 feet of 12-inch diameter gravity main along Valpico Road, east of Corral Hollow Road. To anticipate development in this area (Tracy Village) by 2040, it is recommended that these 12-inch diameter pipelines be added.
- **Gravity Main to Serve Chrisman (WWGM-13):** This project includes the addition of approximately 5,750 feet of 12-inch diameter gravity main along Paradise Road, south of West Grant Line and along Chrisman Road, south of Paradise Road. To anticipate development in this area (Chrisman Road) by 2040, it is recommended that these 12-inch diameter pipelines be added.
- **Gravity Main to Serve Rocha (WWGM-14):** This project includes the addition of approximately 1,420 feet of 12-inch diameter gravity main east of Spur Line Railroad and south of Yosemite Drive. To anticipate development in this area (Rocha) by 2040, it is recommended that these 12-inch diameter pipelines be added.

Chapter 7

WASTEWATER TREATMENT PLANT EVALUATION AND PROPOSED GRADES

This chapter discusses the current treatment processes at the City WWTP, as well as applying the projected flows as summarized in Chapter 4 to assess the capacity of the WWTP by process.

7.1 Existing Wastewater Treatment Plant Process Overview

The WWTP currently treats approximately 7.35 mgd of average dry weather influent flows. The influent is comprised of both municipal and industrial waste streams, with the primary industrial contributor being Leprino Foods. The treatment facility operates municipal, industrial, and solids treatment processes.

7.1.1 Liquid Treatment Stream

The liquid treatment process begins with the industrial pretreatment ponds, which then flow into the remainder of the treatment facility along with the raw influent municipal wastewater.

7.1.1.1 Headworks

The headworks of the facility consists of several processes beginning with influent receiving and splitting. There is a specified manhole at the facility for commercial as well as recreational sewage to be unloaded, where it joins with the influent stream from the sanitary sewer system. The combined influent flow is then split into up to two channels before entering two 36-inch pipes containing magnetic flow meters for measuring the influent flow. Following flow measurement, the influent is directed into a 3-foot-wide channel equipped with a mechanically cleaned screen. The screenings are directed to a washer/compactor to prepare the screenings for removal from the facility. Finally, the influent stream is measured for temperature, and sampled using an automatic composite sampler downstream of the influent screens before moving to the primary clarifiers.

7.1.1.2 Primary Treatment

Primary treatment begins with clarification to settle out particulate matter that passed through the influent screens. The facility currently operates two rectangular primary clarifiers and one circular primary clarifier. Straight edged weirs are used to split the flow equally to the two clarifiers that run-in tandem at any given time, with the third clarifier serving as redundancy. Downstream of the primary clarifiers is a flow equalization basin that also serves as emergency storage. The equalization basin is used to provide flexibility in higher flow scenarios for secondary treatment basin loading and tertiary treatment contact time.

7.1.1.3 Secondary Treatment

Secondary treatment at the Tracy WWTP primarily consists of a biological treatment process split into two identical treatment trains. Each treatment train begins with an anoxic selector split into two compartments. The anoxic selectors are followed by two aerobic zones equipped with

dissolved oxygen (DO) control. Following the biological treatment trains the flow is split and a portion of the flow is returned to the anoxic selectors to keep the anoxic environment sustained. Flow is then equally distributed between 3 secondary clarifiers to settle out the microorganisms and return a portion of them to the aeration basins. Following the secondary clarifiers, the flow enters the secondary effluent pump station where it is pumped to the tertiary filtration system.

7.1.1.4 Tertiary Treatment

The tertiary treatment system begins with the addition of an alum/polymer solution to stimulate coagulation before filtration to meet regulatory and filter operational requirements. The tertiary filtration system consists of two deep bed filtration trains of four filter cells per train. Each filter utilizes anthracite mono-media and is scoured with air and water for backwashing. These filters ensure that the effluent is treatment to meet the National Pollutant Discharge Elimination System (NPDES) limitations as well as recycled water requirements.

Following the tertiary filters flow enters the disinfection channels following the addition of chloramines. The chlorine contact channel provides adequate time for disinfection regulations and is followed by addition of sulfur dioxide to dechlorinate to residual chlorine requirements before entering the reaeration zone. The effluent flow is reaerated using fine bubble membrane disc diffusers. The final step in the treatment process is metering the effluent flow using a Parshall flume before the effluent enters the final pumping station.

7.1.2 Solids Treatment

Solids treatment at the City WWTP will not be described in detail due the focus on liquid treatment capacities in this chapter. The treatment of solids begins with the portion of settled microorganisms (sludge) from the secondary clarifiers. A portion of the sludge is returned, return activated sludge (RAS), to the aeration basins to stimulate population growth and treatment efficiency. The portion of the sludge that is not returned to the aerations basins is called waste activated sludge (WAS) and is sent to the solids treatment system alongside the settled matter from primary clarification (primary solids).

The WAS enters a dissolved air floatation thickening (DAFT) bed to thicken the sludge for anaerobic digestion. The thickened WAS then enters the anaerobic digesters along with the primary solids where the material is further broken down in a series of biological and environmental processes. The digested sludge is then dried to form sludge cakes on drying beds before it is removed from the facility to either be land applied or placed in a landfill.

7.2 Historical Flows and Loads

The historical flows and loads discussed in this chapter primarily come from the City WWTP Facility Plan prepared by CH2M in 2019.

7.2.1 Historical Flows

Figure 7.1 shows the influent flow data for the years 2013-2017, as indicated in the 2019 Facility Plan.

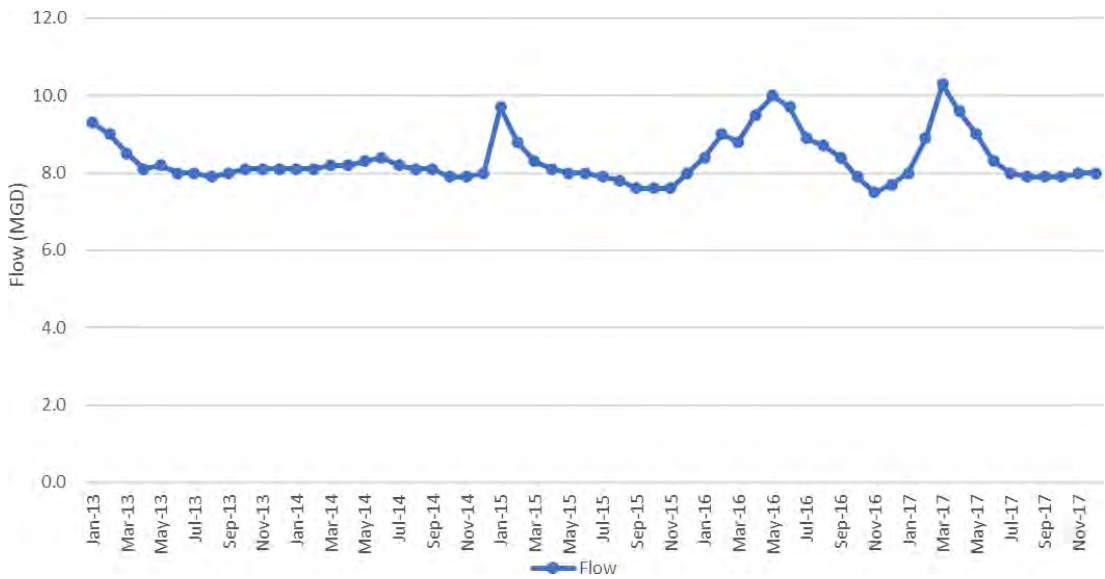

Figure 7.1 Historical Influent Flow to the City WWTP

7.2.2 Historical Loads

Figure 7.2 shows the historical influents loads for biochemical oxygen demand (BOD), total suspended solids (TSS), and ammonia (NH_3) in a pounds per day (ppd) basis for the years of 2013-2017 as indicated in the 2019 Facility Plan. It is important to note that the headworks of the facility performed periodic grease flushing over the course of 2016 and 2017 which resulted in the exclusion of some BOD and TSS data for those years.

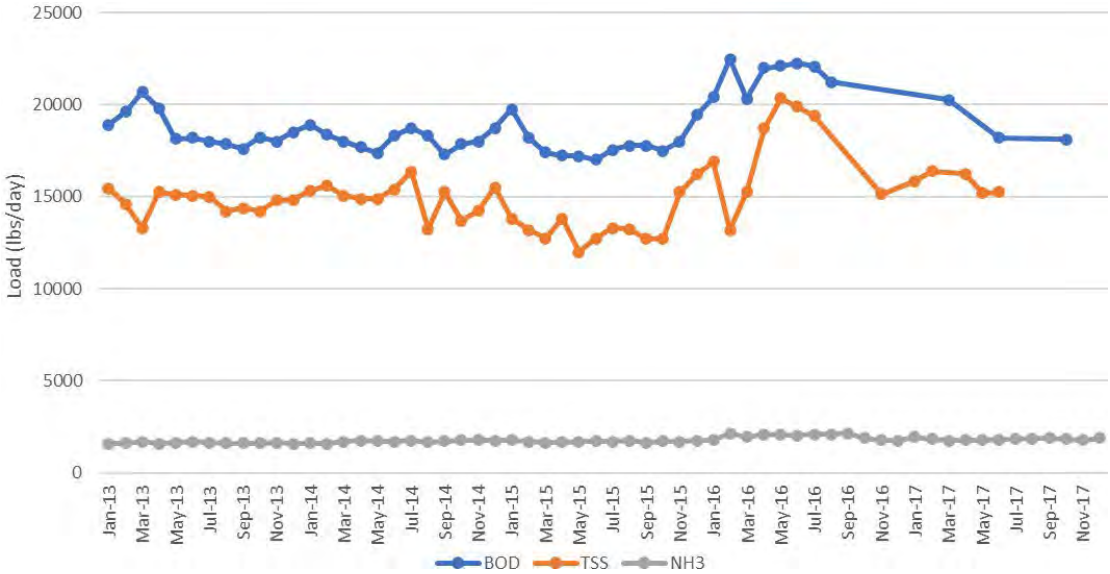

Figure 7.2 Historical BOD, TSS, and NH_3 Loading to the City WWTP

7.3 Projected Flows and Loads

7.3.1 Projected Flows

The projected flows for the City WWTP were developed by Carollo in 2020, and can be found more in-depth in Chapter 4. Table 7.1 summarizes the projected flow conditions as they relate to the WWTP capacity.

Table 7.1 Projected Flows for the City WWTP

Flow Condition	Existing (mgd)	2040 (mgd)	Buildout (mgd)
ADWF	7.35	12.84	15.65
PWWF	16.95	25.35	30.14

7.3.2 Projected Loads

Projected loads for the City WWTP were developed based on the loading cited in the 2019 Facility Plan and standardized to the population at that time to create a pounds per person per day basis and not a weight/flow basis. This ppd rate for each contaminant (BOD, TSS, and NH_3) was then used alongside projected populations (see Table 7.2) to estimate the loading currently, in the year 2040, and at buildout conditions.

Table 7.2 Projected Populations for the City

	Existing	2040	Buildout
Population	95,931	170,152	185,961

Table 7.3 Unit Loading Rates from 2019 Facility Plan

Loading Rate (pounds per person per day)	Average
BOD	0.211
TSS	0.175
NH_3	0.020
Population increase (percent)	0.0205

The 2022 and 2040 populations were estimated using a yearly growth rate of 0.02 (averaged from 2015-2020 population growth rate) and assuming exponential population growth. The buildout population was estimated by dividing the last known population (2020 census) by the percent of land used, where 100 percent usage represents buildout. This assumed that under buildout conditions the land use percentages will be similar. Table 7.4 shows the resulting projected loads based on the associated estimated populations.

Table 7.4 Contaminant Loading Projections for the City

Contaminant	Loading			
	Units	Existing	2040	Buildout
BOD	ppd	20,278	35,966	39,308
TSS	ppd	16,773	29,750	32,515
NH_3	ppd	1,921	3,407	3,724

7.4 Wastewater Treatment Plant Capacity Analysis

The projected flows and loads were then used to assess the capacity of the WWTP using process capacities that were both calculated based on as well as pulled from the 2019 Facility Plan. In particular, the treatment facility is concerned about the capacity of the outfall pipe as well as the secondary treatment process and already have plans to upgrade those processes to increase capacity.

7.4.1 Outfall Capacity

As mentioned above, the WWTP is upgrading the outfall pipeline with an expected completion date of summer 2020. This upgrade will increase the capacity of the outfall pipe from 9 mgd to 16 mgd. Figure 7.3 summarizes the predicted flows in relation to the capacity of the outfall pipeline by the time each flow prediction is reached.

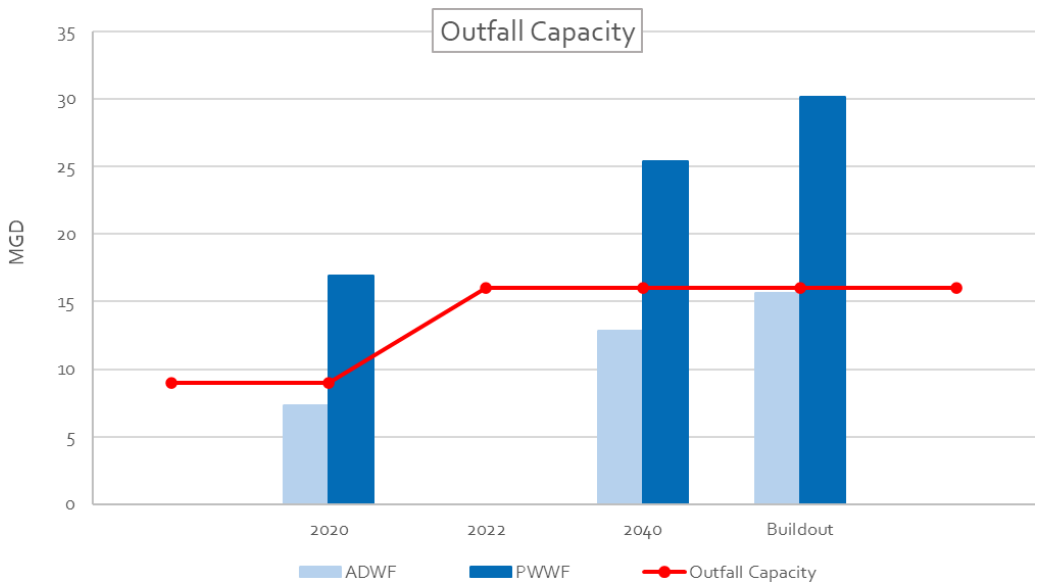

Figure 7.3 Outfall Capacity Compared to Projected Flows

7.4.2 Secondary Treatment Capacity

The secondary treatment capacity was evaluated on both a flow and load basis, with the loading capacity assessed by BOD loading. The City is upgrading the secondary treatment basins as well by adding a fourth basin of equal size, which increases the total basin volume by 30 percent. Loading capacity of the basins was assessed using mixed liquor suspended solids (MLSS) concentration and settleability assessed under the PWWF conditions. The upgrade has an anticipated completion date of 2025. Figure 7.4 and Figure 7.5 summarize the flow and load capacities as they relate to the projected flows and loads.

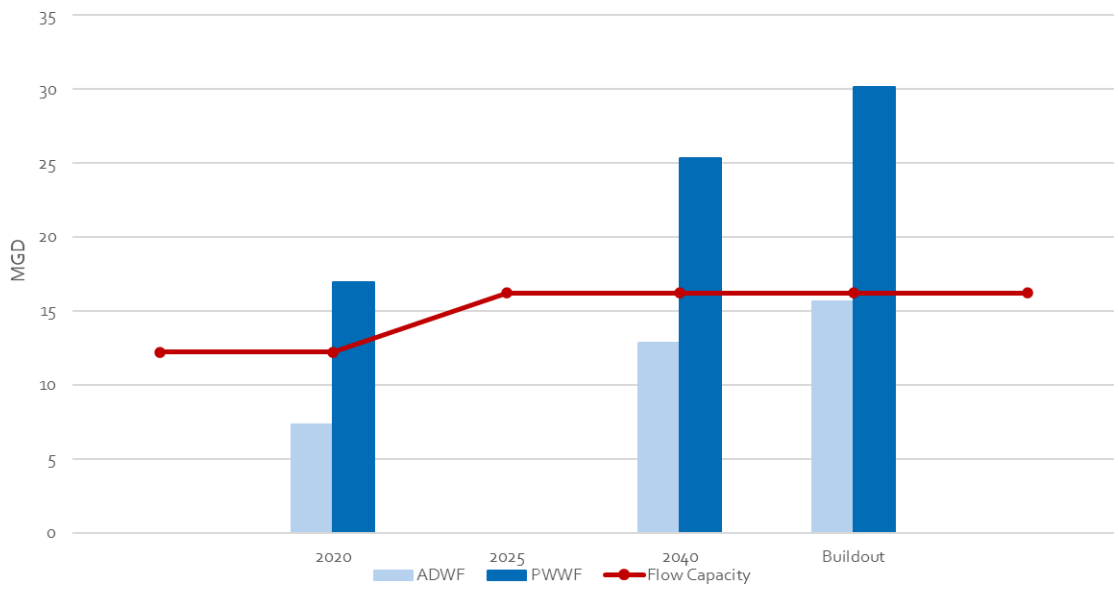

Figure 7.4 Secondary Treatment Flow Capacity Compared to Projected Flows

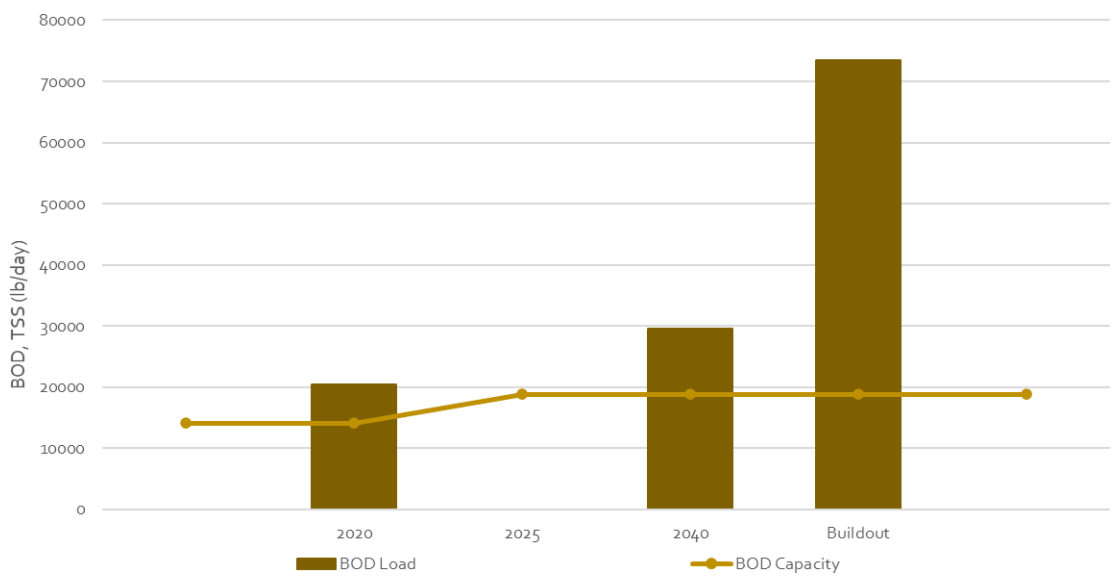

Figure 7.5 Secondary Treatment Load Capacity Compared to Projected BOD, TSS, and NH_3 Loads

7.4.3 Overall Facility Capacity

In addition to assessing the capacity of processes with upgrades in progress, the estimated flow capacity, from the 2019 Facility Plan, of all treatment processes was compared to the predicted future flows to predict when upgrades may be necessary. The hydraulic capacity was used to assess most processes unless detention time or overflow rate was a more appropriate analysis.

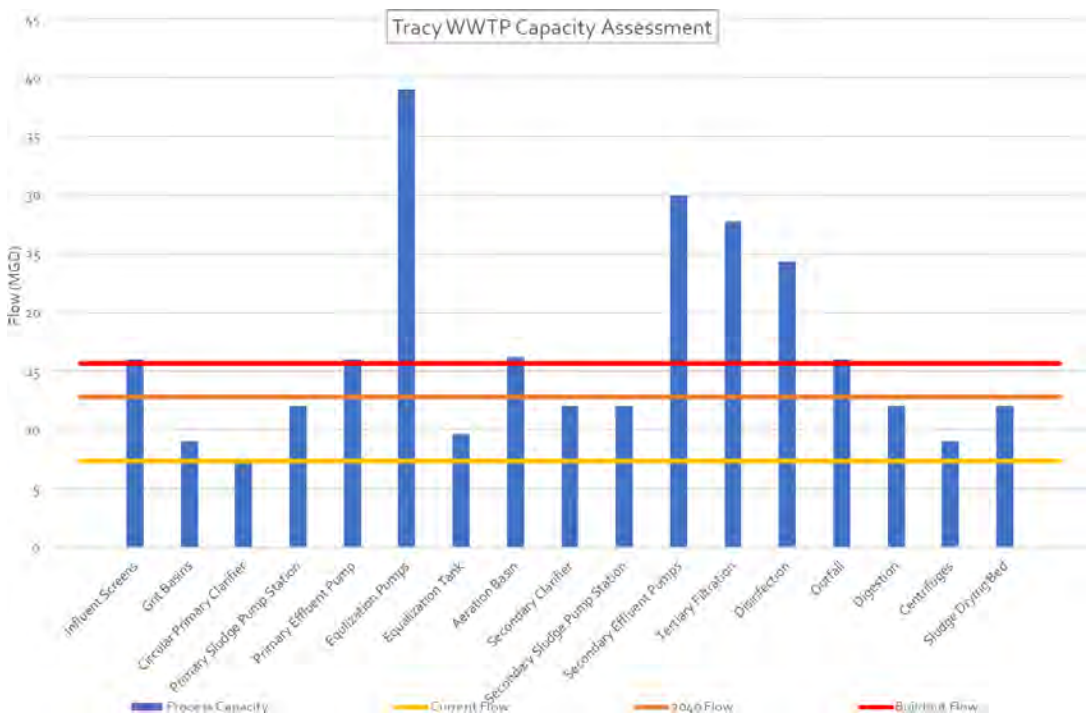

Figure 7.6 Hydraulic Capacity of Each Treatment Process Compared to Projected Flows

7.5 Current Treatment Plant Upgrades

The City is currently undergoing a series of treatment plant upgrades. Phases 1A, 1B, 2A, and 2B are fully complete, Phase 2C is designed but has yet to be completed. Phase 1A and 1B increased the treatment plant capacity from 6.5 mgd to 10.8 mgd. Table 7.5 summarizes the Phase 1 and 2 upgrades in detail.

Table 7.5 Phase 1 and 2 Treatment Plant Upgrades

Phase	Description
1A	• Completed 2002. Consists of upgrades to 3 Primary Effluent pumps, 3rd Secondary Clarifier, new RAS/WAS pump station, groundwater pump station near secondary clarifiers, upgrade of 2 Effluent pumps, and associated electrical and instrumentation and control systems. Increased capacity from 6.5 mgd to 9 mgd.
1B	• Completed in 2007. Increased treatment capacity from 9 to 10.8 mgd (no increase in discharge capacity). The following items are part of Phase 1B. • Construction-phase security upgrades. • Modifications to septage receiving and raw wastewater intake to Plant. • Internal remodel of existing Administration Building and existing Control Building. • New Headworks. • Demolition of existing headworks building (superstructure only) and old laboratory. • Demolition of existing unused digester complex (excepting digester to be converted to Biofilter). • Conversion of existing abandoned digester to Biofilter. • New Primary Influent Distribution Box and revised feed piping to primary clarifiers. • Demolition of existing Domestic Primary Clarifier Nos. 1 and 2. • New circular Primary Clarifier (No. 1). • New Primary Effluent Collection Box. • Demolition of Distribution Box No. 6. • New Primary Sludge Pump and associated piping and controls installed in existing Primary Sludge Pump Station structure. • New primary scum handling facilities including primary scum pit, heated primary scum tank, pumps, and concrete utility trench for routing of primary scum piping and hot water piping to/from existing operational digester complex. • New primary effluent pump and revisions to Primary Effluent Pump Station. • Three new Aeration Basins with connecting below-grade gallery complex including miscellaneous built-in pump stations, piping, and ancillaries. • Revisions to Distribution Box No. 1. • Revisions to Distribution Box No. 3. • Replacement mechanisms and miscellaneous components for existing Secondary Clarifier Nos. 1 and 2. • Addition of flocculation well for existing Secondary Clarifier No. 3. • New Secondary Effluent Collection Box. • New Secondary Scum Pump Station (manhole configuration). • New Secondary Effluent Pump Station. • New 2 million gallon Flow Equalization Tank. • New Tertiary Filter complex with connecting gallery. • New filter chemical storage and handling facility. • New Blower Building with control room and electrical room. • Modifications to existing aeration basins to convert them to Filter Backwash Equalization Tanks. • New Disinfection Chemical Building for chlorination and dechlorination chemicals and associated emergency scrubber. • New filter backwash pumps located adjacent to existing Chlorine Contact Basins 1 and 2. • New Distribution Box No. 7. • Modifications to Plant Effluent Channel to divert effluent to post-aeration. • New Post-Aeration Basin. • Modifications to existing rectangular clarifiers (out of service) to convert to Chlorine Contact Basins 5 and 6. • Miscellaneous modifications to existing blower room, primary effluent pump station, and aeration basin gallery. • New plant water (3W) pumps and strainers, and relocation of existing 3W pump. • Pavement of two existing sludge drying beds. • Conversion of one existing sludge drying bed to handle filter backwash solids. • New Standby Generator Facility and relocation of existing diesel storage tank. • New primary power facilities. • Electrical system improvements. • Process Instrumentation and Control System Improvements. • Site and facility security systems. • Site improvements/yard piping. • New Plant Stormwater Pump Station (manhole type). • Grading of existing emergency storage pond and miscellaneous modifications to outfall structures and intake within the pond. • New industrial pond return flow polymer addition facility. • Removal of contents and cleaning of existing Digesters No. 1 and 2.
2A	• Under construction. Proposed completion is Spring 2023. Increased discharge capacity from 9 mgd to 16 mgd (no increase in treatment capacity). • The following items are part of Phase 2A. • Installation of a 42-inch diameter effluent outfall pipeline from the City WWTP to a diffuser in the Old River and includes about 18,000 feet of 42-inch pipeline and 36-inch, 20-inch, 14-inch, 12-inch and 8-inch yard piping, a new pipeline diffuser system, new pumps and mechanical piping, a flowmeter vault, pond 3 pump station upgrade, miscellaneous appurtenances and electrical and communications conduits and integration.

Table 7.5 Phase 1 and 2 Treatment Plant Upgrades (continued)

Phase	Description
2B	• Under construction. Proposed completion is Fall 2023. Upgrades to solids treatment and primary treatment. Phase 2 was proposed to be complete in ONE phase. Due to lack of funds (or cash flow), it is being done in two phases. So, no increase in treatment capacity until Phase 2C is complete. The following items are part of Phase 2B. • Replacement of one existing perforated bar screens with multiple rake bar screen and associated electrical and instrumentation and controls. • 100 feet diameter Circular Primary Clarifier. • Groundwater Pump Station. • Demolition of old rectangular domestic primary clarifier at the location of proposed Circular Primary Clarifier. • Investigation and demolition of old large diameter concrete pipes, old electrical, and other pipes at the location of proposed Circular Primary Clarifier. • Installation of new large diameter pipes. • Valves, flow control devices, flow meters of various sizes. • Electrical Building for Digester Complex consisting of switch boards, circuit breakers, electrical and instrumentation and controls panels. • 75 feet diameter above ground digester. • Digester support facility and concrete trench for pipes. • 12 kilovolt power supply from existing junction box to the new Transformer next to Electrical Building. • Pumps, heat exchangers, control panels, and associated piping. • Above and underground piping, electrical, and instrumentation and controls systems, including underground and above ground facilities. • One centrifuge, associated piping, and control panels. • Conveyor system for loading dewatered sludge. • Excavation in an extremely congested area around existing utilities and extensive dewatering. • Concrete slab to support pumps and various structures. • Discharge header pipelines, control valves, air relief valves, flow meters, pipe supports, pressure sensors, air relief valves, and other appurtenances. • Electrical systems, including adjustable frequency drives, circuit breakers, switch boards, motor control centers, electrical conduits, conductors, and concrete encased duct banks. • Instrumental and control systems. • Telemetry and supervisory control and data acquisition.
2C	• 90% Design complete. Construction timing unknown. Will increase treatment capacity from 10.8 mgd to 12 mgd (actual treatment capacity is unknown since the BOD loading is increasing every year and actual construction timing is unknown). • The following items are part of proposed Phase 2C. • Septage receiving station. • Fiberglass box, weir gates, pumps, and piping for grease removal from headworks. • Replacement of two existing perforated bar screens with multiple rake bar screens and associated electrical and instrumentation and controls. • Packaged Power Center for headworks. • Addition of weir gate and scum pumps downstream of bar screens. • Grit removal basins, grit pumps, grit separator, and washer. • Demolition of old industrial primary clarifier at the location of proposed Grit Removal System. • Installation of new large diameter pipes. • New Aeration Basin (#1) and associated pipes in the existing secondary gallery. • Demolition of old large diameter concrete pipes, old electrical, and other pipes at the location of proposed Aeration Basin (#1). • One additional Turblex Blower and associated control panels. • Two large pumps in the existing secondary gallery and associated electrical and instrumentation and control systems. • Valves, flow control devices, flow meters of various sizes in the existing gallery. • Above and underground piping, electrical, and instrumentation and controls systems, including underground and above ground facilities. • Solids Dewatering Structure. • Overhead crane system. • Three Centrifuges, associated piping, and control panels. • Hopper and Conveyor system for loading dewatered sludge. • Excavation in an extremely congested area around existing utilities and extensive dewatering. • Concrete slab to support pumps and various structures. • Discharge header pipelines, control valves, air relief valves, flow meters, pipe supports, pressure sensors, air relief valves, and other appurtenances. • Electrical systems including adjustable frequency drives, circuit breakers, switch boards, motor control centers, electrical conduits, conductors and concrete encased duct banks. • Instrumental and control systems. • Telemetry and supervisory control and data acquisition. • Testing, startup and operator training. • Cathodic protection system. • Surveying. • Utility Potholing. • Reconstruction of existing road with new asphalt concrete paving. • Tie into existing piping and systems. • Area lighting.

Notes:
(1) Provided by City staff.

7.6 Planned Treatment Plant Upgrades

The 2019 Facility Plan also included a recommended phasing for upgrading the treatment processes that were estimated to run out of capacity based on their projected flows and loads. The phasing was intended to allow the facility to upgrade processes just before they were operating at capacity. These phases do not include the outfall upgrade or aeration basin addition as those upgrades are already in progress. Table 7.6 through Table 7.8 summarize the proposed upgrade phases from the 2019 Facility Plan.

Table 7.9 and Table 7.10 indicate a revised phasing plan for treatment upgrades using the above capacities and revised future flows/loads. This phasing plan does not consider the age or maintenance requirements of existing systems, these upgrades are recommended based on treatment capacity alone.

Phase 3 of the revised proposed upgrades represents processes that need to be upgraded before/near the 2040 predicted flows and phase 4 of the revised proposed upgrades represent processes that will need to be upgraded before/near buildout conditions.

Table 7.6 Proposed Phase 3 Upgrades

Proposed Phase 3 Upgrades
Process Upgrade
New Primary Influent Distribution Box
Circular Clarifier #3
Scum Heating and Transfer System #2
Add Pump to Match Existing in Primary Effluent Pump Station
New Primary Effluent Equalization Pump Station
Primary Effluent Equalization Tank #2
Aeration Basins #5 and #6
RAS Pump Station #2
New Mixed Liquor Distribution Box
Galleries for Aerations Basins #5 and #6
New WAS and Mixed Liquor Pump Station
New Glycerin Feed and Storage System
Retrofit North Chlorine Contact Basins
New UV System
Anaerobic Digester #4
Remove 1975 Trickling Filters
New Centrate Equalization Tank and Pump Station

Table 7.7 Proposed Phase 4 Upgrades

Proposed Phase 4 Upgrades
Process Upgrade
Additional Influent Screen and Channel
Grit Removal Basin #3
Expand Grease Removal System
Relocate Plant Control Building
Remove Rectangular Clarifiers and Primary Sludge Pump Station
Primary Sludge Pump Station #2
Aeration Basin #7
Gallery for Aeration Basin #7
Blower Building #2
Secondary Clarifier #2
Conventional Deep Bed Filters #9 and #10
New Inline Rapid Mixer
New Coagulant Feed System
Recycled Water Pump Station Expansion
Remove Existing DAFTs #1 and #2
New Gravity Belt Thickeners #1 and #2

Table 7.8 Proposed Phase 5 Upgrades

Proposed Phase 5 Upgrades
Process Upgrade
Grit Removal Basin #4
Circular Clarifier #4
Primary Effluent Equalization Tank #3
New Secondary Effluent Pump Station
Conventional Deep Bed Filters #11 and #12
New Filter Backwash Supply Pump Station
New Additional UV Banks
Gravity Belt Thickener #3
Anaerobic Digester #5
New Digested Sludge Holding Tank
New Larger Centrifuges

Table 7.9 Revised Phase 3 Proposed Upgrades

Revised Phase 3 Upgrades
Process Upgrade
Grit Removal Basin #3
Circular Clarifier #3
Primary Sludge Pump Station #2
Primary Effluent Equalization Tank #2
Aeration Basin #5
Secondary Clarifier #2
New WAS and Mixed Liquor Pump Station
Anaerobic Digester #4
Remove 1975 Trickling Filters
New Centrate Equalization Tank and Pump Station
New Sludge Drying Bed #4

Table 7.10 Revised Phase 4 Proposed Upgrades

Revised Phase 4 Upgrades
Process Upgrade
Additional Influent Screen and Channel
New Primary Effluent Equalization Pump Station
New Outfall Pipeline

7.7 Summary and Findings

7.7.1 Current Capacity

The current WTWP capacity is not sufficient for the existing flows, in particular the outfall and secondary treatment system. However, both the outfall pipeline and secondary treatment system are currently undergoing expansion, which will increase the capacity to meet current influent flows. The Outfall pipeline will increase from 9 mgd to 16 mgd which should provide enough capacity for projected buildout flows or approximately 19,200 EDUs of growth. The secondary treatment system will be increased hydraulically by 30 percent, increasing the current capacity of 12.2 mgd to 16.2 mgd in the next few years. The updated hydraulic capacity will provide enough capacity for just under projected buildout flows and provides capacity for approximately 15,350 EDUs of growth. The secondary treatment load capacity will increase by approximately 30 percent as well, increasing from 18,000 ppd of BOD to 24,000 ppd of BOD. This will provide enough capacity for current loading conditions, but by 2040 the loading will exceed the capacity of the secondary clarifiers.

7.7.2 Future Capacity

As summarized in the Revised Phase 3 Upgrades presented above, several processes beyond secondary treatment and the outfall pipeline will require capacity increases before 2040. These processes include an additional aeration basin and secondary clarifier as discussed above, but also an additional grit basin, an additional circular primary clarifier, addition to the primary sludge pumping station, an additional primary effluent equalization tank, addition to the secondary sludge pump station, an additional anaerobic digester, an additional centrifuge, and an additional sludge drying bed. These recommended updates are recommended based on flow capacity alone, without taking age of existing equipment or maintenance requirements into account.

Assuming all processes included in the Phase 3 Upgrades are upgraded and meet the capacity need of projected buildout flows, the only processes that will require capacity increases before buildout flows are realized are an additional influent screen, addition to the primary effluent equalization pump station, and additional capacity at the outfall. Once again, these recommendations are made on a flow based capacity only.

7.7.3 Wastewater Treatment Plant Expansion Areas

The future expansion of the WWTP will require use of land located adjacent to the existing WWTP. Decades ago, the City's wastewater enterprise fund purchased land located north and west of the existing site for the future expansions. A map of the acquired lands are shown in Appendix F. Portions of this land will be used for other purposes as well. A portion of the land will be reserved for potential improvements including the effluent cooling system if it is required by the future NPDES permit or other permitting requirements. The City has also leased certain portions of the land to Combined Solar Technologies (CST) for construction of a desalination plant and for storage of agricultural waste for fuel for the plant. Additionally, a portion of the land may be used for temporary or permanent storage facilities for recycled water.

Chapter 8

CAPITAL IMPROVEMENT PLAN

This chapter presents the City's sewer CIP and summary of the capital costs. This chapter is organized to assist the City in making financial decisions. The CIP is based on the evaluation of the City's sanitary sewer collection system, as described in Chapter 6.

8.1 Project Prioritization

Prioritizing the required capital improvements for the City is an important part of this study. Improvement projects were prioritized in the following order:

- Upgrade existing facilities to mitigate current capacity deficiencies.
- Upgrade existing facilities to accommodate increased wastewater flows associated with long term planning (2040) and buildout.
- Construct new infrastructure required to serve future users.

Based on these factors, each project was categorized as either a Near Term, Future (Year 2040), or Buildout project. Near term projects are targeted for implementation by year 2030. Long term projects are targeted for implementation between years 2031 and 2040. Buildout projects are targeted for implementation beyond 2040 and are outside of the planning period.

Implementation of future capacity and growth improvements ultimately depends on growth. For this reason, the phasing assumptions presented in this report are estimates, and changes in the City's planning assumptions or growth projections may shift priority of each project.

8.2 Capital Improvement Project Costs

The capacity upgrades and other system capital improvements set the foundation of the City's sanitary sewer collection system CIP. The cost estimates presented in this study are opinions developed from bid tabulations, cost curves, information obtained from previous studies, and Carollo experience on other projects. The costs are based on an Engineering News Record Construction Cost Index (ENR CCI) for San Francisco of 15,640 (July 2022).

8.3 Cost Estimating Accuracy

The cost estimates presented in the CIPs have been prepared for general master planning purposes and for guidance in project evaluation and implementation. Final costs of a project will depend on actual labor and materials costs, competitive market conditions, final project scope, implementation schedule, and other variable factors such as preliminary alignment generation, investigation of alternative routings, and detailed utility and topography surveys.

The Association for the Advancement of Cost Engineering (AACE) defines an Order of Magnitude Estimate, deemed appropriate for master plan studies as an approximate estimate made without detailed engineering data. It is normally expected that an estimate of this type would be accurate within plus 50 percent to minus 30 percent. This section presents the assumptions used in developing order of magnitude cost estimates for recommended facilities.

8.4 Construction Unit Costs

The construction costs are representative of sewer collection system facilities under normal construction conditions and schedules. Costs have been estimated for public works construction. Land acquisition costs of $250,000 per acre was used for applicable projects.

8.4.1 Pipeline Unit Costs

Sewer pipeline improvements range in size from 8 inches to 27 inches in diameter in this study. There are gravity main and force main improvements recommended in this study. Unit costs for the construction of pipelines and appurtenances (e.g., manholes) are shown in Table 8.1. The construction cost estimates are based upon these unit costs. The unit costs are for "typical" field conditions with construction in stable soil at a depth ranging between 10 feet to 15 feet.

Table 8.1 Gravity Pipeline Unit Construction Costs

Pipe Diameter (inches)	Replacement Unit Construction Cost ($/linear foot)
Gravity Mains	
8	260
10	270
12	285
14	300
15	305
18	330
20	405
21	420
24	460
27	520
Force Mains	
14	445
16	445

Notes:
(1) ENR 20 City Average Construction Cost Index for July 2022 is 15,640.

8.4.2 Lift Station Unit Costs

The estimated costs for projects to increase the pumping capacity of a lift station assume complete replacement of the lift station. Lift station cost estimates are based on a rate of $0.50 per gallon.

8.5 Project Costs and Contingencies

Project cost estimates are calculated based on elements, such as the project location, size, length, and other factors. Allowances for project contingencies consistent with an "Order of Magnitude" estimate are also included in the project costs prepared as part of this study, as outlined in this section.

8.5.1 Baseline Construction Costs

Baseline construction cost is the total estimated construction cost, in dollars, of the proposed improvements for pipelines. Baseline construction costs were calculated by multiplying the estimated length by the unit construction cost listed in Table 8.1.

8.5.2 Capital Improvement Cost

Other project costs include costs associated with engineering, construction-phase professional services, and project administration. Engineering services associated with new facilities include preliminary investigations and reports, right-of-way (ROW) acquisition, foundation explorations, preparation of drawings and specifications during construction, surveying and staking, sampling of testing material, and start-up services. Construction-phase professional services cover such items as construction management, engineering services, materials testing, and inspection during construction. Finally, there are project administration costs, which cover such items as legal fees, environmental/California Environmental Quality Act (CEQA) compliance requirements, financing expenses, administrative costs, and interest during construction.

As shown in the following sample calculation of the capital improvement cost, the total cost of all project contingencies (general contingency, design cost, and construction management) is 35 percent of the baseline construction cost. This 35 percent markup are the City's standard markup costs. These project Calculation of the 35 percent is the overall markup on the baseline construction cost to arrive at the capital improvement cost. It is not an additional contingency.

Example:

Baseline Construction Cost	**$1,000,000**
General Contingency (15 percent)	$150,000
Design Cost (10 percent)	$100,000
Construction Management (10 percent)	$100,000
Capital Improvement Cost	**$1,350,000**

8.6 Capital Improvement Program Implementation

The proposed capital improvements are prioritized based on their urgency to mitigate existing deficiencies and for serving future growth. The capital improvements were phased according to the following improvement categories:

- **Phase 1 (2022-2026):** This phase includes projects that are targeted as highest priority existing improvements.
- **Phase 2 (2027-2030):** This phase includes medium priority existing improvements.
- **Phase 3 (2031-2040):** This phase includes low priority existing improvements, as well as projects triggered by growth that is expected to occur by the year 2040.
- **Phase 4 (2041 and beyond):** This phase includes improvements related to ultimate buildout of the City.

A summary of the capital project costs is presented in Table 8.2. This table identifies the projects, provides a brief description of the project, identifies facility size (e.g., pipe diameter and length), and provides capital improvement cost. The table also shows the probably phase in which the project would be implemented. The implementation timeframe was based on the priority of each project to correct existing deficiencies or to serve future users. Detailed

improvement sheets can be found in Appendix E. Projects that are not capacity or development related were listed in the "other projects".

Figure 8.1 illustrates the CIP cost summary by project type. As shown in Figure 8.1, other projects account for 64 percent of the recommended improvements. Table 8.3 provides a summary by phase and project type. Phase 2 improvements account for the smallest cost share at 5.0 percent ($10.0 million) of the total project cost, with Phase 4 having the largest cost share at 40 percent ($81.4 million).

Table 8.2 Collection System Capital Improvement Plan

Project		Existing Size/Type	Proposed Size/Type	Proposed Amount	CIP Cost Estimate (1)(2)($)	Existing User Cost ($)	Future User Cost ($)	CIP Phasing ($)							
								Near-Term						Long-Term	Build-Out
								2022	2023	2024	2025	2026	2027-2030	2031-2040	2041 & beyond
Capacity Related Improvements					$33,575,000	$2,067,000	$31,508,000	$-	$169,000	$196,000	$185,000	$3,765,000	$-	$11,139,000	$21,886,000
Gravity Mains		Diameter (in)	Diameter (in)	Length (ft)	$9,353,000	$2,067,000	$7,286,000	$-	$169,000	$196,000	$185,000	$3,765,000	$-	$4,105,000	$4,698,000
WWGM-1	Gravity Main along Bessie Avenue	8	12	440	$169,000	$169,000	$-	$-	$169,000	$-	$-	$-	$-	$-	$-
WWGM-2	Gravity Main along Bessie Avenue	10	12	510	$196,000	$196,000	$-	$-	$-	$196,000	$-	$-	$-	$-	$-
WWGM-3	Gravity Main along North Central Avenue	8	15	450	$185,000	$185,000	$-	$-	$-	$-	$185,000	$-	$-	$-	$-
Phase 2	Corral Hollow Phase 2	-	18	8450	$3,765,000	$-	$3,765,000	$-	$-	$-	$-	$-	$-	$3,765,000	$-
WWGM-4	Gravity Main along MacArthur Drive	12	21	600	$340,000	$-	$340,000	$-	$-	$-	$-	$-	$-	$340,000	$-
WWGM-11	Gravity Main along Lammers Road and Byron Road	21	27	2710	$1,902,000	$-	$1,902,000	$-	$-	$-	$-	$-	$-	$-	$1,902,000
WWGM-12	Gravity Main along Corral Hollow Road	18	24	380	$236,000	$-	$236,000	$-	$-	$-	$-	$-	$-	$-	$236,000
WWGM-15	Gravity Main along Acacia Street and Franklin Avenue	18	21	750	$425,000	$302,000	$123,000	$-	$-	$-	$-	$-	$-	$-	$425,000
WWGM-16	Gravity Main along MacArthur Drive	21	24	1,500	$932,000	$662,000	$270,000	$-	$-	$-	$-	$-	$-	$-	$932,000
WWGM-17	Gravity Main along Chrisman Road	12	18	2,700	$1,203,000	$553,000	$650,000	$-	$-	$-	$-	$-	$-	$-	$1,203,000
Lift Stations		Capacity (mgd)	Capacity (mgd)		$19,103,000	$-	$19,103,000	$-	$-	$-	$-	$-	$-	$7,034,000	$13,331,000
WWLS-1	Hansen Lift Station	9.01	10.8	TBD	$7,290,000	$-	$7,290,000	$-	$-	$-	$-	$-	$-	$7,034,000	$-
WWLS-3	Larch Lift Station	12.96	17.5	TBD	$13,331,000	$-	$13,331,000	$-	$-	$-	$-	$-	$-	$-	$13,331,000
Force Main		Diameter (in)	Diameter (in)	Length (ft)	$3,857,000	$-	$3,857,000	$-	$-	$-	$-	$-	$-	$-	$3,857,000
WWFM-2	Hansen Force Main	12	16	6420	$3,857,000	$-	$3,857,000	$-	$-	$-	$-	$-	$-	$-	$3,857,000
Development Related Improvements					$40,936,000	$-	$40,936,000	$-	$-	$-	$-	$-	$9,222,000	$4,753,000	$26,961,000
Gravity Mains		Diameter (in)	Diameter (in)	Length (ft)	$33,188,000	$-	$33,188,000	$-	$-	$-	$-	$-	$1,474,000	$4,753,000	$26,961,000
WWGM-5	Gravity Main along Lammers Road	--	18	3,310	$1,474,000	$-	$1,474,000	$-	$-	$-	$-	$-	$1,474,000	$-	$-
WWGM-6	Gravity Main to Serve Holly Sugar Industrial	--	12	1,520	$585,000	$-	$585,000	$-	$-	$-	$-	$-	$-	$585,000	$-
WWGM-7	Gravity Main to Serve Ellis	--	12	1,760	$678,000	$-	$678,000	$-	$-	$-	$-	$-	$-	$678,000	$-
WWGM-8	Gravity Main to Serve Rocking Horse and UR7 Bright/Castro	--	12	4,700	$1,809,000	$-	$1,809,000	$-	$-	$-	$-	$-	$-	$1,809,000	$-
WWGM-9	Gravity Main to Serve Avenues and SWC Valpico & Corral Hollow	--	12	2,650	$1,019,000	$-	$1,019,000	$-	$-	$-	$-	$-	$-	$1,019,000	$-
WWGM-10	Gravity Main to Serve Tracy Village	--	12	1,720	$662,000	$-	$662,000	$-	$-	$-	$-	$-	$-	$662,000	$-
WWGM-13	Gravity Main to Serve Chrisman	--	12	5,750	$2,213,000	$-	$2,213,000	$-	$-	$-	$-	$-	$-	$-	$2,213,000
WWGM-14	Gravity Main to Serve Rocha	--	12	1,420	$547,000	$-	$547,000	$-	$-	$-	$-	$-	$-	$-	$547,000
Cordes Ranch	Gravity Mains to Serve Cordes Ranch	--	Multiple	66,160	$24,201,000	$-	$24,201,000	$-	$-	$-	$-	$-	$-	$-	$24,201,000
Lift Stations		Capacity (mgd)	Capacity (mgd)		$3,068,000	$-	$3,068,000	$-	$-	$-	$-	$-	$3,068,000	$-	$-
WWLS-2	Lammers Lift Station	-	4.36	N/A	$3,068,000	$-	$3,068,000	$-	$-	$-	$-	$-	$3,068,000	$-	$-
Force Main		Diameter (in)	Diameter (in)	Length (ft)	$4,680,000	$-	$4,680,000	$-	$-	$-	$-	$-	$4,680,000	$-	$-
WWFM-1	Schulte Road Force Main	-	14	7,790	$4,680,000	$-	$4,680,000	$-	$-	$-	$-	$-	$4,680,000	$-	$-
Other Projects					$127,795,000	$2,925,000	$124,870,000	$-	$150,000	$150,000	$150,000	$150,000	$750,000	$57,387,000	$34,058,000
WWRR-1	Annual Sewer Line Replacement Program	--	--	--	$2,700,000	$2,700,000	$-	$-	$150,000	$150,000	$150,000	$150,000	$600,000	$1,500,000	$-
WWO-1	Wastewater Master Plan Update	--	--	--	$450,000	$225,000	$225,000	$-	$-	$-	$-	$-	$150,000	$300,000	$-
WWO-2	WWTP Expansion Phase 2C	--	--	--	$35,000,000	$-	$35,000,000	$-	$-	$-	$-	$35,000,000	$-	$-	$-
WWO-3	WWTP Expansion Phase 3	--	--	--	$55,587,000	$-	$55,587,000	$-	$-	$-	$-	$-	$-	$55,587,000	$-
WWO-4	WWTP Expansion Phase 4	--	--	--	$34,058,000	$-	$34,058,000	$-	$-	$-	$-	$-	$-	$-	$34,058,000
CIP Total					**$202,306,000**	**$4,992,000**	**$197,314,000**	**$-**	**$319,000**	**$346,000**	**$335,000**	**$35,150,000**	**$9,972,000**	**$73,279,000**	**$82,905,000**
Annual Cost								**$-**	**$319,000**	**$346,000**	**$335,000**	**$35,150,000**	**$2,493,000**	**$6,107,000**	**N/A**

Notes:
(1) ENR 20 San Francisco Construction Cost Index for July 2022 is 15,640.
(2) Estimated Construction Cost includes a 15 percent general contingency, 10 percent for design costs, and 10 percent for construction management.

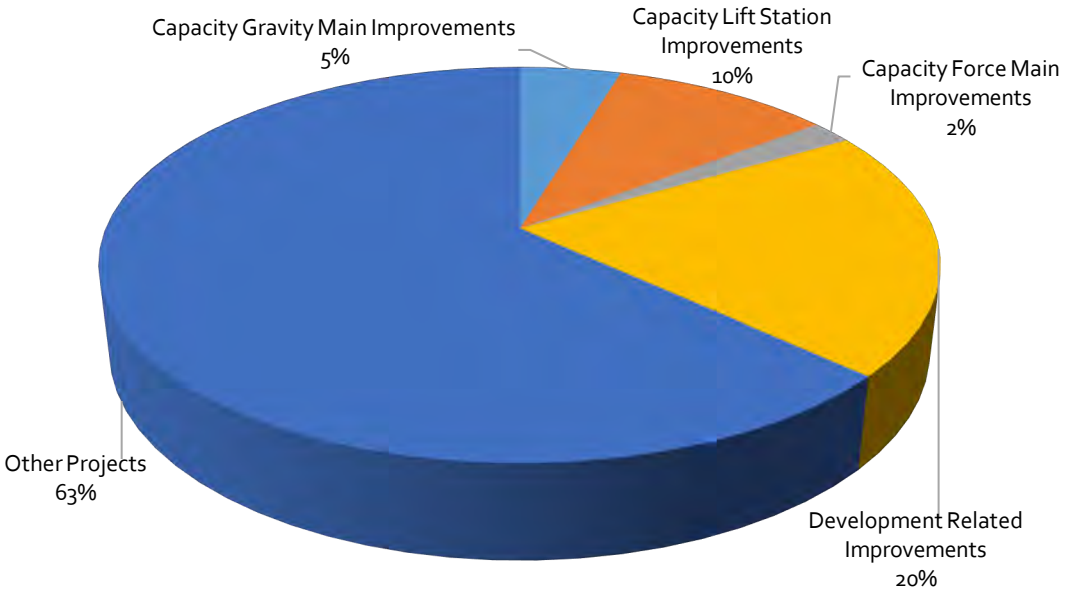

Figure 8.1 Project Cost Summary by Type

Table 8.3 CIP Cost by Project Type and Phase

Project Type	Phase 1 (2022-2026) ($)	Phase 2 (2027-2030) ($)	Phase 3 (2031-2040) ($)	Phase 4 (2041 & Beyond) ($)	Total ($)
Capacity/Storage Improvements					
Gravity Mains	$550,000	-	$4,105,000	$4,698,000	$9,353,000
Lift Station	-	-	$7,034,000	$13,331,000	$20,365,000
Force Main	-	-	-	$3,857,000	$3,857,000
Subtotal	**$550,000**	**-**	**$11,139,000**	**$21,886,000**	**$33,575,000**
Development Related Improvements					
Gravity Mains	-	$1,474,000	$4,753,000	$26,961,000	$33,188,000
Lift Station	-	$3,068,000	-	-	$3,068,000
Force Main	-	$4,680,000	-	-	$4,680,000
Subtotal	**-**	**$9,222,000**	**$4,753,000**	**$26,961,000**	**$40,936,000**
Other Projects					
Master Plan	-	$150,000	$300,000	-	$450,000
Annual Sewer Line Replacement	$600,000	$600,000	$1,500,000		$2,700,000
WWTP Expansion	$35,000,000	-	$55,587,000	$34,058,000	$124,645,000
Subtotal	**$35,600,000**	**$750,000**	**$57,387,000**	**$34,058,000**	**$127,795,000**
Total	**$36,150,000**	**$9,972,000**	**$73,279,000**	**$82,905,000**	**$202,306,000**

Notes:
(1) ENR 20 San Francisco Construction Cost Index for July 2022 is 15,640.

8.7 Existing Versus Future User Cost Share

Improvement costs within this study can be categorized as beneficial to existing users or future users, with some of the costs distributed between both categories. Costs are assigned to existing users if the improvement is related to an existing deficiency. Existing projects also benefit future users, which are assigned a portion of the cost. Projects that solely benefit future users such as new development will be assigned 100 percent of the cost. A summary of existing and future user cost share for the proposed projects by phase is summarized in Table 8.4, while Table 8.5 summarizes user cost by project type.

Table 8.4 CIP Cost by Reimbursement Category

Reimbursement Category	Phase 1 (2022-2026) ($)	Phase 2 (2027-2030) ($)	Phase 3 (2031-2040) ($)	Phase 4 (2041 & beyond) ($)	Total ($)
Existing Users	$1,150,000	$750,000	$1,575,000	$1,517,000	$4,992,000
Future Users	$35,000,000	$9,222,000	$71,704,000	$81,388,000	$197,314,000
Total	**$36,150,000**	**$9,972,000**	**$73,279,000**	**$82,905,000**	**$202,306,000**

Table 8.5 CIP Cost by Project Type and Reimbursement Category

Project Type	Existing User ($)	Future User ($)	Total ($)
Capacity Improvements			
Gravity Mains	$2,067,000	$7,286,000	$9,353,000
Lift Stations	-	$20,365,000	$20,365,000
Force Mains	-	$3,857,000	$3,857,000
Subtotal	**$2,067,000**	**$31,508,000**	**$33,575,000**
Development Related Improvements			
Gravity Mains	-	$33,188,000	$33,188,000
Lift Stations	-	$3,068,000	$3,068,000
Force Mains	-	$4,680,000	$4,680,000
Subtotal	**-**	**$40,936,000**	**$40,936,000**
Other Projects			
Wastewater Master Plan Update	$225,000	$225,000	$450,000
Annual Sewer Line Replacement	$2,700,000	$-	$2,700,000
WWTP Expansion	$-	$124,645,000	$124,645,000
Subtotal	**$2,925,000**	**$124,870,000**	**$127,795,000**
Total	**$4,992,000**	**$197,314,000**	**$202,306,000**

Appendix A

LAND USE WITH TAZ ESTIMATES

General Plan Planning Area/Common Name	TAZ	Total Acres	Adjusted Total Acres	Overall Density (Units per Gross Acre)	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	Taz 2040	TAZ 2040 to Build out	TAZ 2040 to Build out	TAZ Buildout	TAZ Build out	TAZ Build out	TAZ Build out	Very Low Density (1.5 DU per acre typical)	Low Density (4.35 DU per acre typical)	Medium Density (9 DU per acre typical)	High Density SFD (13 DU per acre typical)	High Density Multi-Family (24 DU per acre typical)	Total Resid SF DU	Total Resid MF DU	Senior /Assisted Living		Institutional (Hospital and Medical Office)		Industrial Acres (0.5 FAR)	Retail/Commercial/ Office Acres
					SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr. Assist Liv Acres	acres	acres	acres	acres	acres			units	acres	square footage	acres		
UR 5 (Bright) (1)	527	170	108	8.2							546								10					40	38	10	10	546	0		0		0	0	10
	789										100	240																100	240		0		0	0	0
UR 7 (Bright/Castro) (2)	792	112	107	5.7	150						456													40	48			606	0		0		0	0	0
Rocking Horse (3)	788	58	55	4.5	250																			55				250	0		0		0	0	0
Tracy Village (4)	535	135	130	4.6	400						200													130				600	0		0		0	0	0
UR1 (5)	515	780	780	3.8	50	50					200							169	20				380	300	65		25	250	219		0		0	0	20
	517																400											400	0		0		0	0	0
	613										200						260											460	0		0		0	0	0
	616																300											300	0		0		0	0	0
	617												10				200	200										200	200		0		0	0	10
	618				50	50					200	50					300											550	100		0		0	0	0
	659																200											200	0		0		0	0	0
Ellis (6)	529	321	185	4.1	43						132													178	7			175	0		0		0	0	0
	661											60																0	60		0		0	0	0
	662				43						132																	175	0		0		0	0	0
	663				43						132																	175	0		0		0	0	0
	664										176																	176	0		0		0	0	0
Ellis DA additional RGAs (7) **2250 RGAs	665	?	?	?							562																	2,250	0		0		0	0	0
	666										562																	562	0		0		0	0	0
	600										563																	563	0		0		0	0	0
	667										563																	563	0		0		0	0	0
Avenues (8)	670	96	96	4.7							350													96				350	0		0		0	0	0
	599										103																	103	0		0		0	0	0
UR10 (9)	660	116	116	N/A																116								0	0		0		0	116	0
Tracy Hills (10)	573	2732	1845	3.3	200						100		7										81	876	342	8		300	0		0		0	0	9
	574																			27								0	0		0		0	27	0
	601																700			85								700	0		0		0	85	0
	682										600																	600	0		0		0	0	0
	683				200						150						100											450	0		0		0	0	0
	684										300																	300	0		0		0	0	0
	685										908						200											1,108	0		0		0	0	0
	686										500						500											1,000	0		0		0	0	0
	687										320																	320	0		0		0	0	0
	688										450																	450	0		0		0	0	0
	689				200						600																	800	0		0		0	0	0
	690				200						100																	300	0		0		0	0	0
	691													196														0	0		0		0	196	0
	692																500											500	0		0		0	0	0
	693				200						185		30															385	0		0		0	0	30
	1044										50																	50	0		0		0	0	0
Gateway (11)	794	535	454			75	8.5					302	34						34						50		17	0	377	1,557	0	688,000	0	0	120
	839									17						69												0	0		86		0	0	0
	840																											0	0		0		0	0	0
	843									12.5						50												0	0		63		0	0	0
	844						8				50		33						34									50	0		0		0	0	75
	845								20						60						50							0	0		0		130	0	0
	847				160						325																	485	0		0		0	0	0
	848				18					5	75					20												93	0		25		0	0	0
UR6 (Cordes Ranch) (12)	829	1730	971	N/A			5						40	150																	0		0	150	171
	830						5						20																		0		0	0	25
	831													50																	0		0	50	0
	832							50					54	50																	0		0	100	54
	833													110																	0		0	110	0

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General Plan Planning Area/Common Name	TAZ	Total Acres	Adjusted Total Acres	Overall Density (Units per Gross Acre)	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	Taz 2040	TAZ 2040 to Build out	TAZ 2040 to Build out	TAZ Buildout	TAZ Build out	TAZ Build out	TAZ Build out	Very Low Density (1.5 DU per acre typical)	Low Density (4.35 DU per acre typical)	Medium Density (9 DU per acre typical)	High Density SFD (13 DU per acre typical)	High Density Multi-Family (24 DU per acre typical)	Total Resid SF DU	Total Resid MF DU	Senior /Assisted Living		Institutional (Hospital and Medical Office)		Industrial Acres (0.5 FAR)	Retail/Commercial/ Office Acres
					SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr. Assist Liv Acres	acres	acres	acres	acres	acres			units	acres	square footage	acres		
	834							20						20																	0		0	40	0
	835																		57												0		0	0	57
	836																														0		0	0	0
	837													50																	0		0	50	0
	838													74																	0		0	74	0
	840													143																	0		0	143	0
	841							50						143																	0		0	193	0
UR4 (Bright Triangle) (13)	795	190	162	5														816									34	0	816		0		0	0	43
	817																		22									0	0		0		0	0	22
	818																		22									0	0		0		0	0	22
	828																		80									0	0		0		0	0	80
UR3 (Catellus) (14)	819	700	700	0.1																66			40					0	0		0		0	66	40
	820																		40	66								0	0		0		0	66	40
	821																60			66								60	0		0		0	66	0
	822																			67								0	0		0		0	67	0
	823																			67								0	0		0		0	67	0
	824																		45	67								0	0		0		0	67	45
	825																			67								0	0		0		0	67	0
	1039																			69								0	0		0		0	69	0
I-205 Expansion (15)	525	172	172	10.2							257	180	50				257	180							42	50	30	514	360		0		0	0	50
	641										257	180					257	180										514	360		0		0	0	0
West Side Industrial (16)	528	487	485	N/A				120						240																	0		0	360	0
	842													200																	0		0	200	0
	851							45						45																	0		0	90	0
East Side Industrial (17)	510	370	368	N/A										220																	0		0	220	0
	511												5	69																	0		0	69	5
	627													74																	0		0	74	0
Larch Clover (18)	521	442	100	2.7																			250	40	40		12	0	0		0		0	0	0
	530																549											549	0		0		0	0	0
	554																											0	0		0		0	0	0
	638						10												80									0	0		0		0	0	90
	641																											0	0		0		0	0	0
	642																360	288	20									360	288		0		0	0	20
	656																											0	0		0		0	0	0
Chrisman Road (19)	647	116	113	N/A															13	100											0		0	100	13
Rocha (20)	810	91	91	8													296	431						68			23	296	431		0		0	0	0
Berg/Byron remainder (21)	796	56	44	9.3													26								39		5	26	0		0		0	0	0
	1040					72											275	60										275	132		0		0	0	0
	625																50											50	0		0		0	0	0
Berg Road Subdivision (22)	1040	10	10	7.1	71																				10			71	0		0		0	0	0
SWC Valpico and Corral Hollow (2	671	65	65	4.3													282							65				282	0		0		0	0	0
Kagehiro (24)	534	47	10	5	62																			10				62	0		0		0	0	0
Dobler/ Maibes (25)	644	23	23	N/A									23																		0		0	0	23
Holly Sugar Industrial	518	160	143	N/A									18	125																	0		0	125	18
Between Holly Sugar and Arbor	636	111	100											50						50											0		0	100	0
Gabriel Estates	653																																		
San Marco	622																																		
	654																																		
Sterling Park	624																																		
Alden Meadows	791																																		
Presidio	623																																		
Placencia Fields/CalTrans	793																	30	1									0	30		0		0	0	1
Belconte	797																																		
Lyon Crossroads	625																																		
Cintra Park	640																																		

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General Plan Planning Area/Common Name	TAZ	Total Acres	Adjusted Total Acres	Overall Density (Units per Gross Acre)	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	Taz 2040	TAZ 2040 to Build out	TAZ 2040 to Build out	TAZ Buildout	TAZ Build out	TAZ Build out	TAZ Build out	Very Low Density (1.5 DU per acre typical)	Low Density (4.35 DU per acre typical)	Medium Density (9 DU per acre typical)	High Density SFD (13 DU per acre typical)	High Density Multi-Family (24 DU per acre typical)	Total Resid SF DU	Total Resid MF DU	Senior /Assisted Living		Institutional (Hospital and Medical Office)		Industrial Acres (0.5 FAR)	Retail/Commercial/ Office Acres
					SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr. Assist Liv Acres	acres	acres	acres	acres	acres			units	acres	square footage	acres		
Woodfield Estates	1042																																		
SWC Grant Line and Corral Hollow	639						1.06			2.73																					3		0	0	1
Bridle Creek, Laurelbrook	526																																		
Heartland / Chesapeake Bay	798																																		
West HS / Alegre Commons	556																																		
Summergate	555																																		
Arnaudo Village, Rebeiro	657																																		
East of Tracy Blvd, between I-205 & Grant Line (La Quinta)	553						87-room hotel																								0		0	0	0
The Classics, California Espirit, Mobile Home Park	537																																		
Garden Square + Shamrock	699																			4											0		0	4	0
Garden Square+ Brookview	1041																																		
Garden Square	696																																		
Mars Ct, Gandy Dancer area	816							4.8												18											0		0	23	0
Jim Tracey (vacant)	815												29																		0		0	0	29
N. Side Valpico, inc. Tar pit	811																	442											442		0		0	0	0
NEI Amazon + Crate & Barrel North bldg.	649													15																	0		0	15	0
US Cold, other Ind.	650																																		
Crate & Barrel South, Amazon Pkng	680													5																	0		0	5	0
OSH, Seagate, United Grocers	635																																		
Various M-1 and M-2, SEC MacArthur and Grant Line	509																																		
Red Maple Village (west half)	814																																		
ISP (So. Side Valpico, b/t RR spur & Glenbriar)	589																																		
Heinz	694													11						11								0	0		0		0	22	0
Mission Court	612											200						210										0	410		0		0	0	0
Red Maple remainder	813												3					78										0	78		0		0	0	3
Sycamore Village (apts +SFDs)	652																																		
LDR	610																																		
Corral Hollow Estates (county)	603																																		
old residential	541																																		
old residential (Clover+more)	538																																		
South side GL, west of MA (GHC + res)	540																																		
LDR, Dr. Powers Park	557																																		
Old Res., Millenium	544																																		
Old Res, Lincoln Park-mostly built but includes NEC 11th & Central	545											12																0	12		0		0	0	0
S. Side old downtown, MDR, LDR, PUD	567																	20										0	20		0		0	0	0
Edgewood	597																																		
Edgewood	785																																		
Edgewood-res plus commercial site	784						2.4						8.5																		0		0	0	11
Edgewood, Brookview West	786																																		
Edgewood	787																																		
Edgewood	598																																		

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General Plan Planning Area/Common Name	TAZ	Total Acres	Adjusted Total Acres	Overall Density (Units per Gross Acre)	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	Taz 2040	TAZ 2040 to Build out	TAZ 2040 to Build out	TAZ Buildout	TAZ Build out	TAZ Build out	TAZ Build out	Very Low Density (1.5 DU per acre typical)	Low Density (4.35 DU per acre typical)	Medium Density (9 DU per acre typical)	High Density SFD (13 DU per acre typical)	High Density Multi-Family (24 DU per acre typical)	Total Resid SF DU	Total Resid MF DU	Senior /Assisted Living		Institutional (Hospital and Medical Office)		Industrial Acres (0.5 FAR)	Retail/Commercial/ Office Acres
					SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/ Office Acres	Ind Acres	Institutional Acres	Sr. Assist Liv Acres	acres	acres	acres	acres	acres			units	acres	square footage	acres		
Fairhaven, Victoria Greens, Harvest Glen, Glen Creek	596																																		
Murifield 8 & 9	607																																		
Murifield	608																																		
Parkside Estates, California Parkside, California Marquis	609																																		
Glenbriar, Pebblebrook	590																																		
County Residential	591																																		
Tiburon Village, Katerra Apts	812					264																						0			0		0	0	0
Larkspur Estates-14 units remainin	536				14																							14			0		0	0	0
Eastlake	614																																		
Elissagaray Ranch	615																																		
Country Vista (Yosemite Vista)	695																																		
Victoria Park	611																																		
Santana, Centennial	651																																		
Schulte Ranch, Quail Glen, Countrywood, Vintage Estates, Mt Oso	568																	50											50		0		0	0	0
Forest Glen, Mt. Diablo Estates	566																																		
Bowtie East, Quail Run, Pheasant Crossing 2, CA Cameo, CA Collections	565											See TOD/Valley Link Plan						See TOD/Valley Link Plan													0		0	0	0
Bowtie West, Ryland Junction	564											See TOD/Valley Link Plan						See TOD/Valley Link Plan													0		0	0	0
Tennis Vista, RR property	621																			9											0		0	9	0
Tennis Village, Harvest Ridge	620																																		
Westchester Green, Rancho Pacific, Alden Glen, Fox Hollow	560																																		
Harvest Landing, Quail Meadows, Corral Hollow Estates	619																																		
CBD	561																																		
N. side 11th, b/t Parker & Central	550																																		
City Hall, Creamery, downtown	559																																		
S. sidw GL, west of MA, Light Industrial, PUD	542												1.75																		0		0	0	2
Tracy High, GHC, Res	587																																		
West of Downtown	562																																		
GHC, MDC, MDR (N. of 11th, b/t Tracy & Parker)	551																																		
Commercial, MDR (99 cent store, affordable hsg.)	563																																		
LDR, MDR, GHC (N. of 11th, b/t Lincoln & Tracy)	558																																		
LDR (East, Acacia)	543																																		
HDR	549																																		
(Hospital) MDR, MDC, MO	548						5						5															0	0		0		0	0	10
HDR, PUD, GHC, MDR, MDC (E. of Holly, N. of G.L.)	539																	65										0	65		0		0	0	0
LDR, MDR, MDC (El Pescadero Park, S. side Clover)	552					20						20						60										0	100		0		0	0	0
s. side GL, b/t Parker &East	546											22																0	22		0		0	0	0
GHC, HDR, LDR, POM, MDR	547																																		
Highway Service, GHC (Kaiser, Arco)	655						5						5																		0		0	0	10

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General Plan Planning Area/Common Name	TAZ	Total Acres	Adjusted Total Acres	Overall Density (Units per Gross Acre)	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	Taz 2040	TAZ 2040 to Build out	TAZ 2040 to Build out	TAZ Buildout	TAZ Build out	TAZ Build out	TAZ Build out	Very Low Density (1.5 DU per acre typical)	Low Density (4.35 DU per acre typical)	Medium Density (9 DU per acre typical)	High Density SFD (13 DU per acre typical)	High Density Multi-Family (24 DU per acre typical)	Total Resid SF DU	Total Resid MF DU	Senior /Assisted Living		Institutional (Hospital and Medical Office)		Industrial Acres (0.5 FAR)	Retail/Commercial/ Office Acres
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M-1, PUD, HS (N. of I-205, b/t Tracy & Holly)	637																			2											0		0	2	0
M-2	700																																		
Airport	593																		?	?											0		0	0	0
Redbridge	602																																		
I-205 Specific Plan (N. part of Harvest)	799												1																		0		0	0	1
I-205-Auto Plaza	808												3.7																		0		0	0	4
I-205-Auto Plaza	806																																		
I-205 CC-West Valley Mall+	643												20																		0		0	0	20
I-205-Home Depot, Winco	803																																		
I-205-NEC Naglee & GL	809																																		
I-205 Outlets & Surrounding	634						5 acre office +107 room hotel						13																		0		0	0	13
NEI-Yellow freight & IPT 1	632																																		
NEI-Rados Haley	628													52																	0		0	52	0
NEI-Home Depot, Ridgeline +	633							26																							0		0	26	0
NEI-IPT 2, FEMA +	631							75																							0		0	75	0
NEI-Seefried	629							71																							0		0	71	0
NEI Prologis, basin (NWC GL & Paradise)	677							12																							0		0	12	0
NEI-Majestic	648							75																							0		0	75	0
NEI-Barbosa, Animal Shelter, part of PacMed, Katerra	678													20																	0		0	20	0
NEI-Kellogg, part of Katerra	514																																		
NEI-SSI, Best Buy, Prologis (Chabot Ct)	679																																		
Totals		**9825**	**7333**		**2354**	**531**					**10404**	**1266**	**413.95**	**2112**	**60**	**139**	**6072**	**3279**	**478**	**957**	**50**		**751**	**1,898**	**681**	**68**	**156**	**20,518**	**4,812**	**1,557**	**176**	**688,000**	**130**	**3,618**	**1,196**

Does not include units/acreage already built
Does not include schools
Gateway office and industrial is really called "business commercial" in the draft Specific Plan
Cordes Ranch has built 7.7 million square feet of industrial, and about 14-16 million square feet to go

* Tracy Hills MUBP is 50 acres retail, 50 acres office, 80 acres medium density residential
**Pursuant to Ellis DA Ellis receives 2,250 RGAs above the GMO Guidelines Category of F3, which are not yet assigned a location
Larch Clover Planning Ares is largely built out-only assuming 100 acres of land use change (to retail)
Office FAR is assumed at .45, and Retail is .30
Industrial FAR is assumed at .45
Purple=Built Out TAZ

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Appendix B

V&A SEWER FLOW MONITORING STUDY

City of Tracy

Sewer Flow Monitoring Study

Prepared for:

Carollo
100 West Liberty St., Suite 740
Reno, NV 89501

Report Date:

July 2020

Prepared by:

V&A consulting engineers

V&A Project No. 17-0337

City of Tracy, California

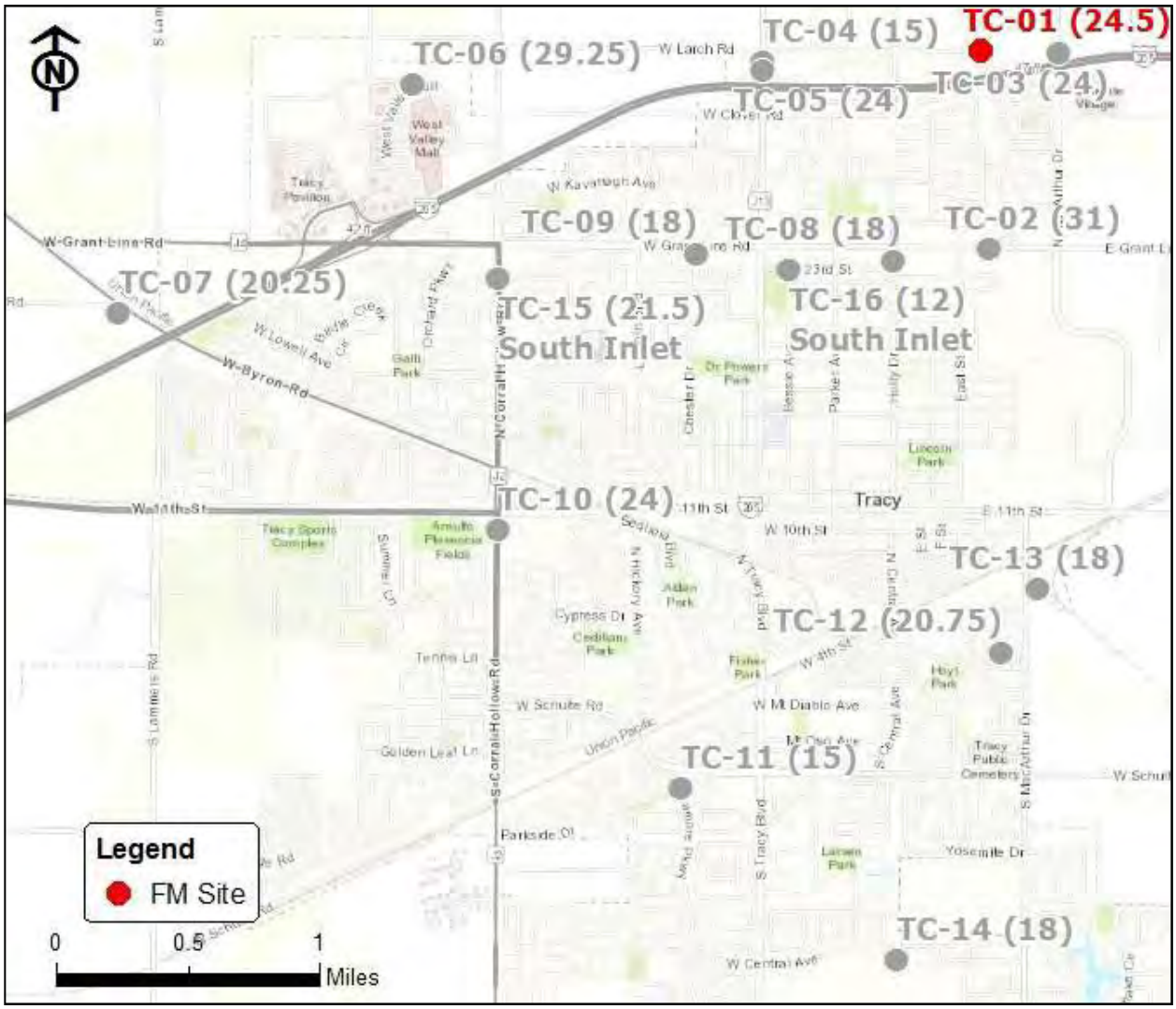
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-01**

Location: **East end of East Larch Road, between curb and railroad tracks**

Data Summary Report



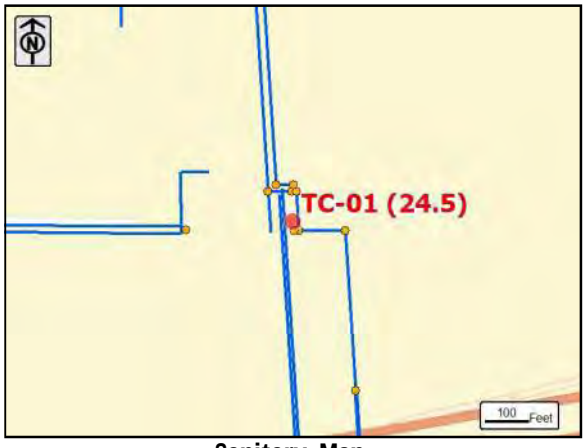
Vicinity Map: TC-01

TC-01

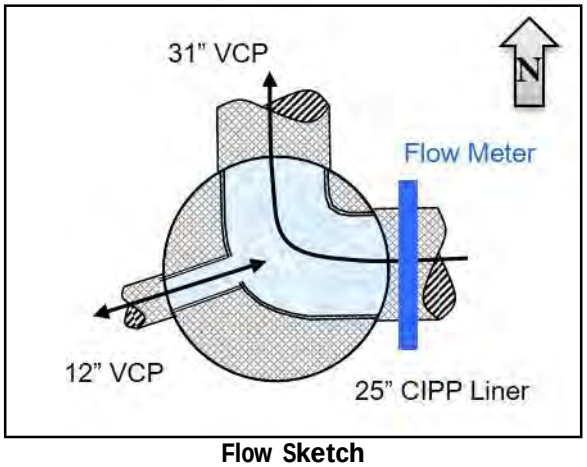
Site Information

Location:	**East end of East Larch Road, between curb and railroad tracks**
City Manhole:	
Coordinates:	**121.4200° W, 37.7650° N**
Rim Elevation (Earth):	**25 feet**
Pipe Diameter:	**24.5 inches**
ADWF:	**1.618 mgd**
Peak Measured Flow:	**3.581 mgd**

Satellite Map



Sanitary Map



Flow Sketch

Street View

Plan View

TC-01

Additional Site Photos

Effluent Pipe

Monitored South Influent Pipe

TC-01

Additional Site Photos

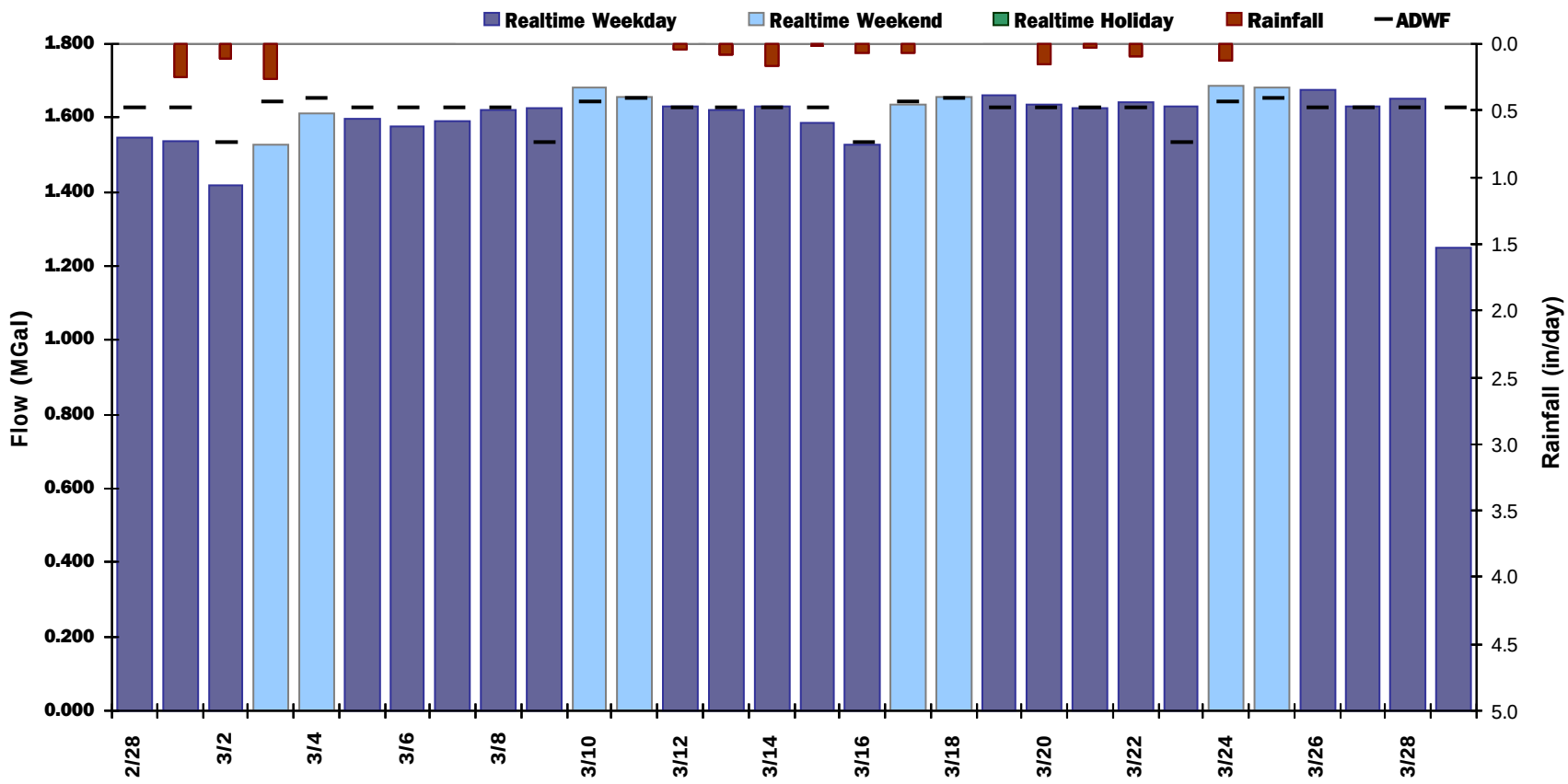
West Influent Pipe

TC-01

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 1.602 MGal Peak Daily Flow: 1.684 MGal Min Daily Flow: 1.249 MGal

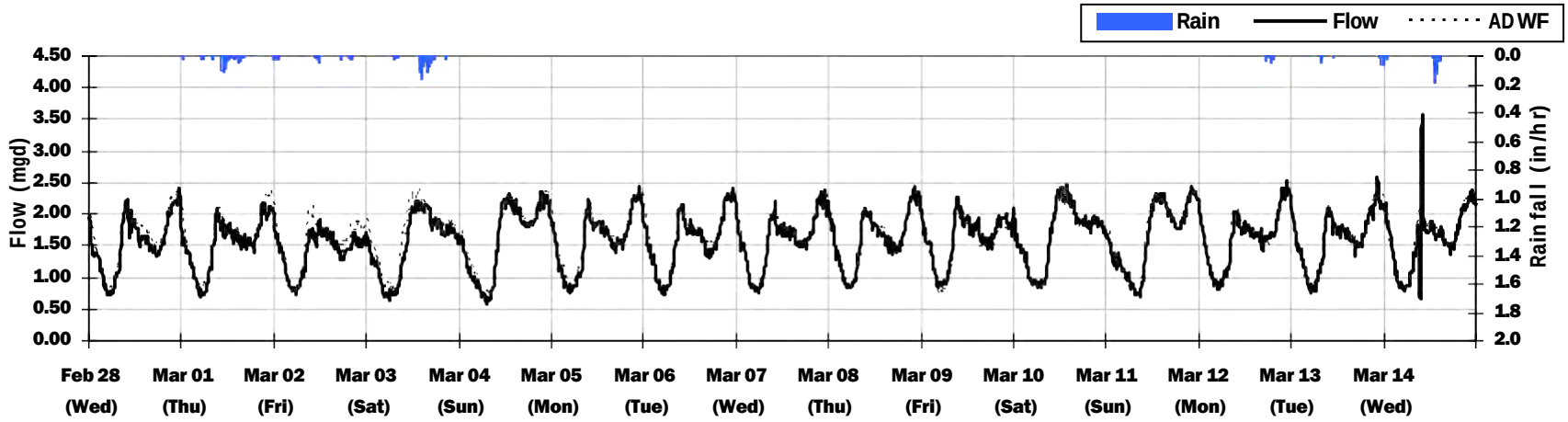
Total Period Rainfall: 1.43 inches

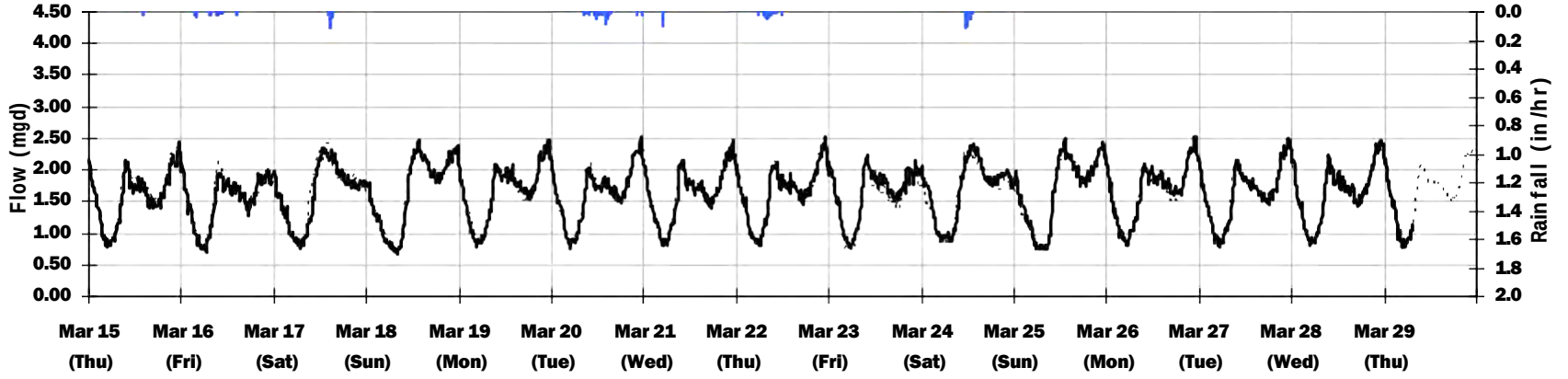


TC-01

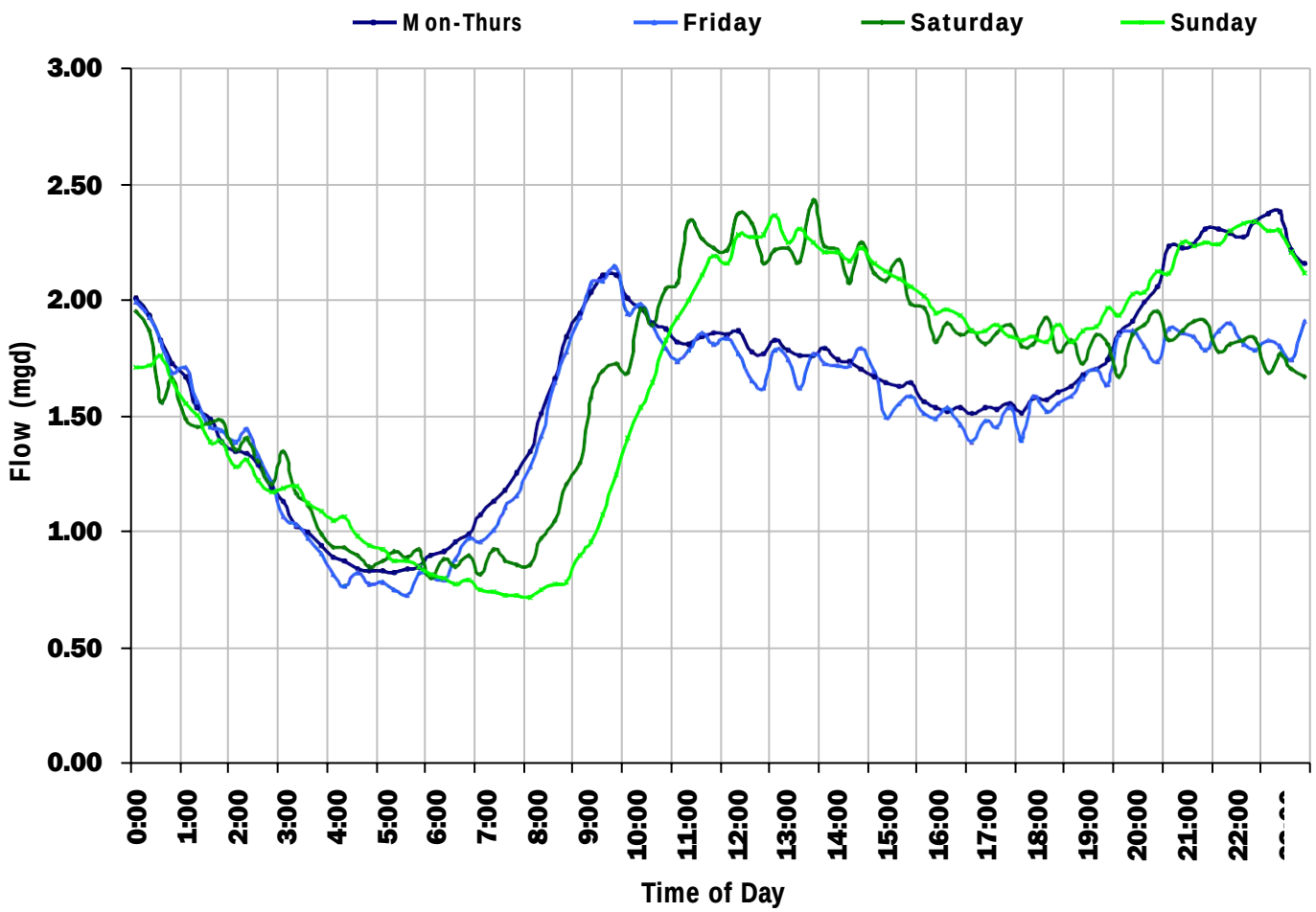
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 1.610 mgd Peak Flow: 3.581 mgd Min Flow: 0.578 mgd



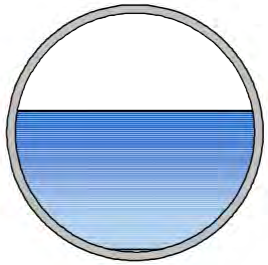


TC-01
Average Dry Weather Flow Hydrographs



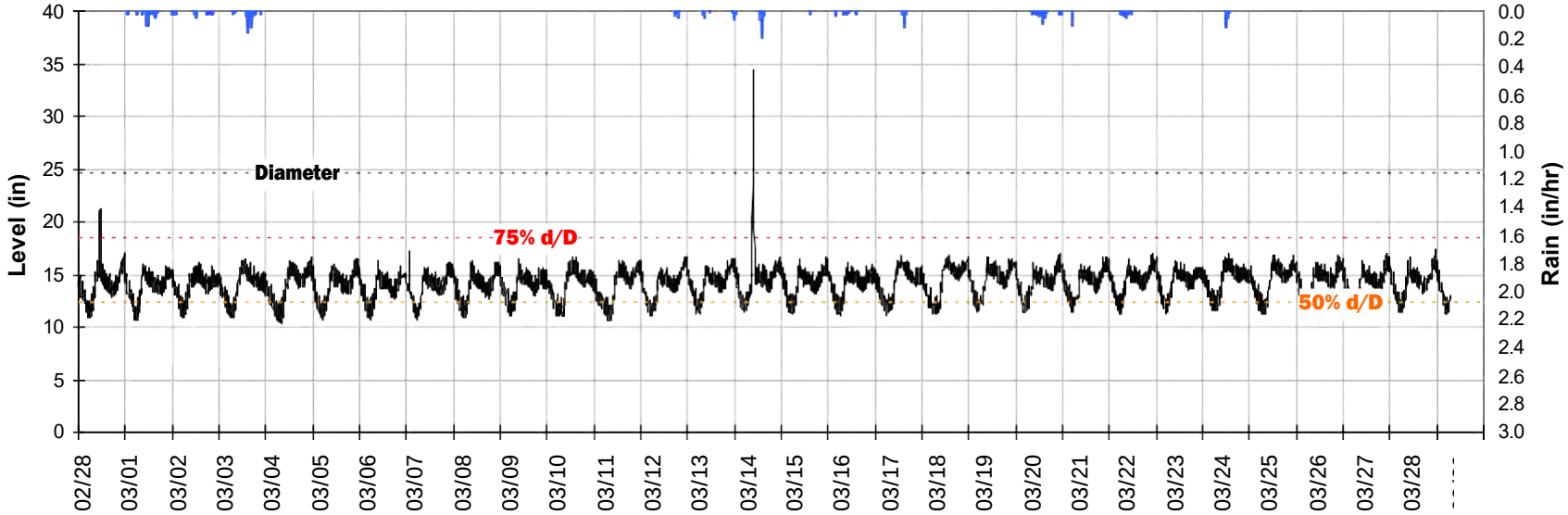
ADWF:

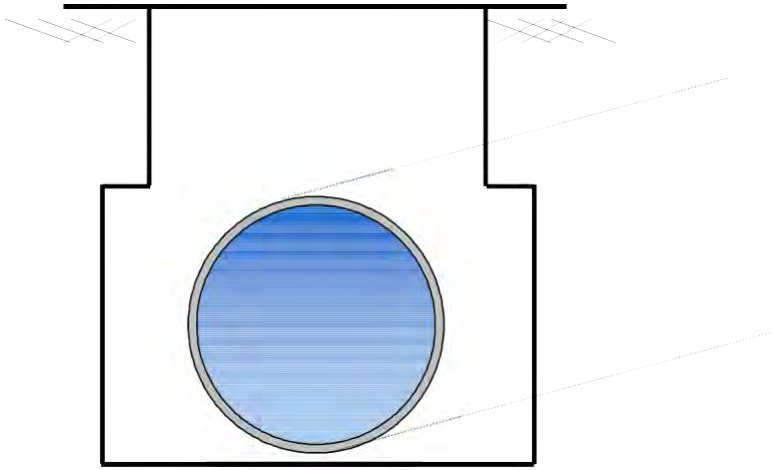
1.618 *mgd*



TC-01
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period





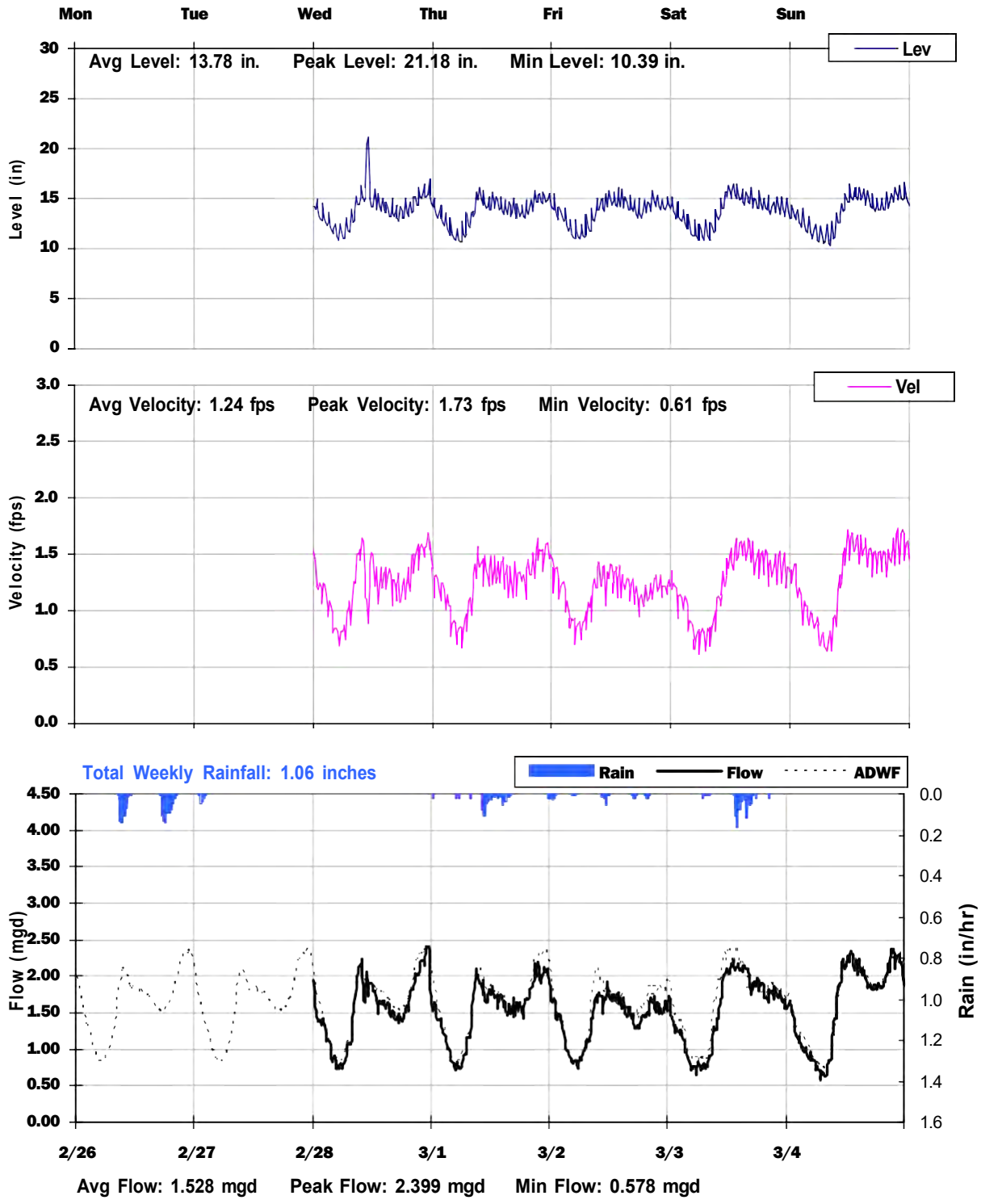
Pipe Diameter:	**24.5**	***inches***
Peak Measured Level:	**34.4**	***inches***
Peak d/D Ratio:	**1.41**	

Surcharged 9.9 inches over crown

TC-01

Weekly Level, Velocity and Flow Hydrographs

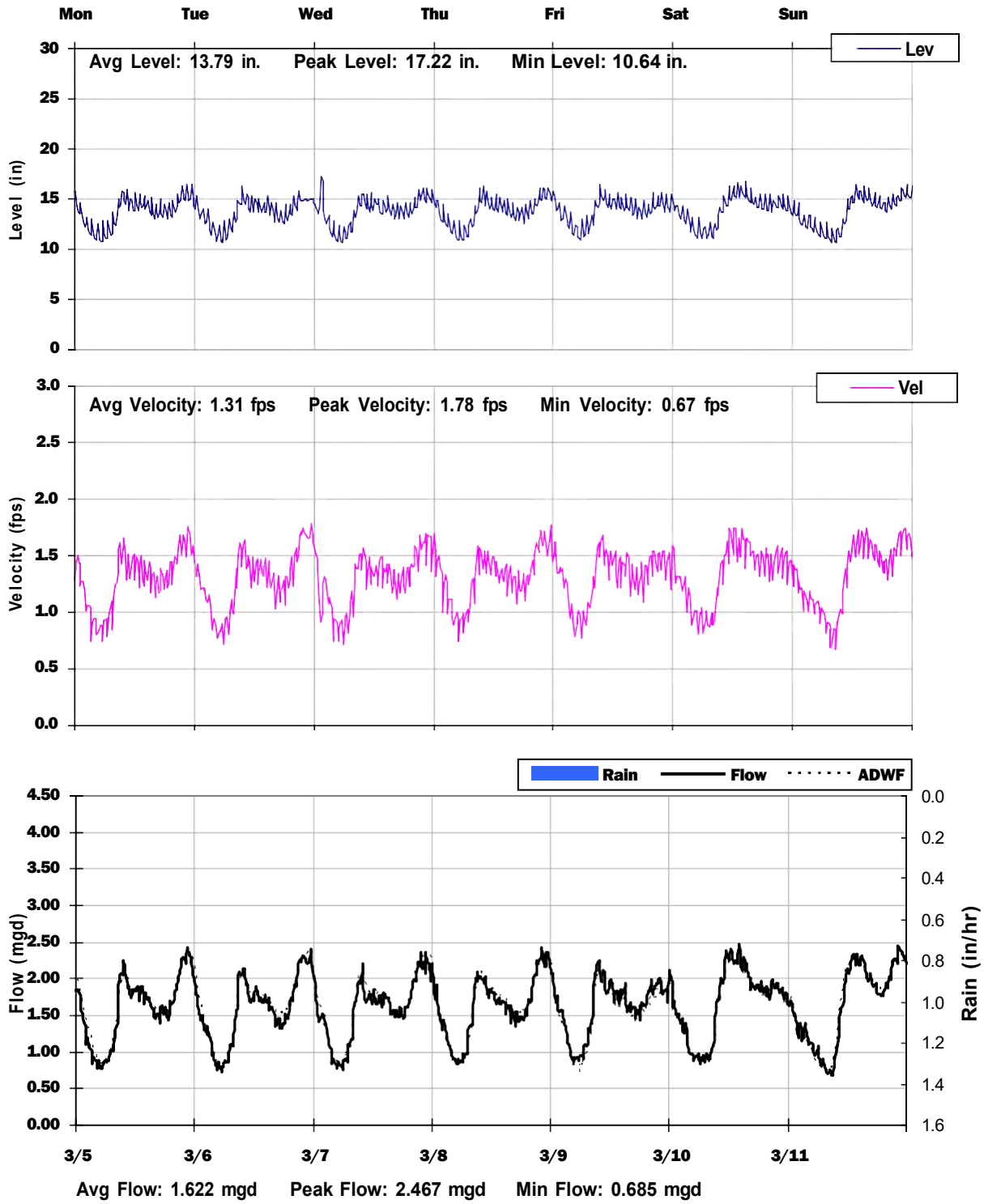
2/26/2018 to 3/5/2018



TC-01

Weekly Level, Velocity and Flow Hydrographs

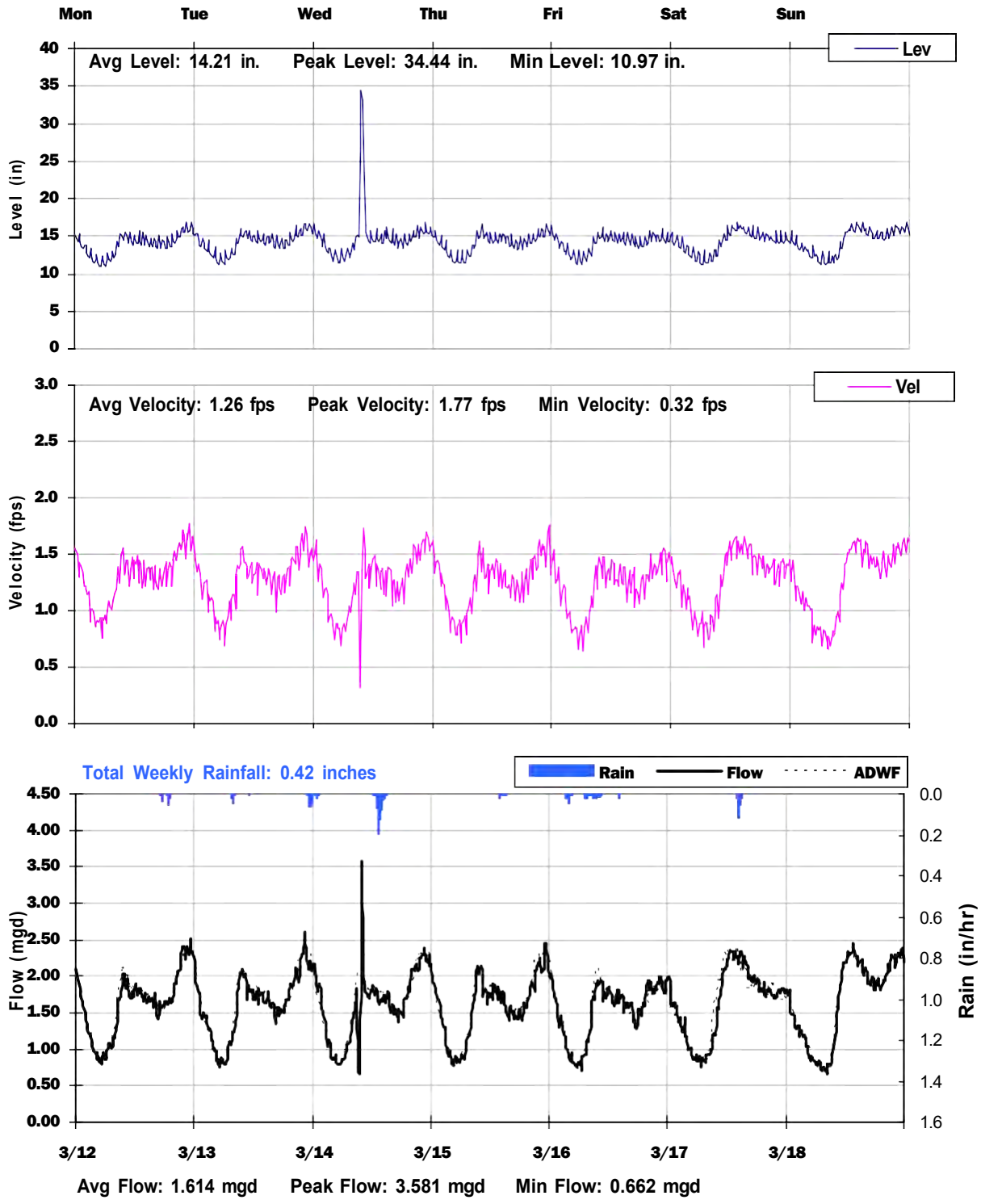
3/5/2018 to 3/12/2018



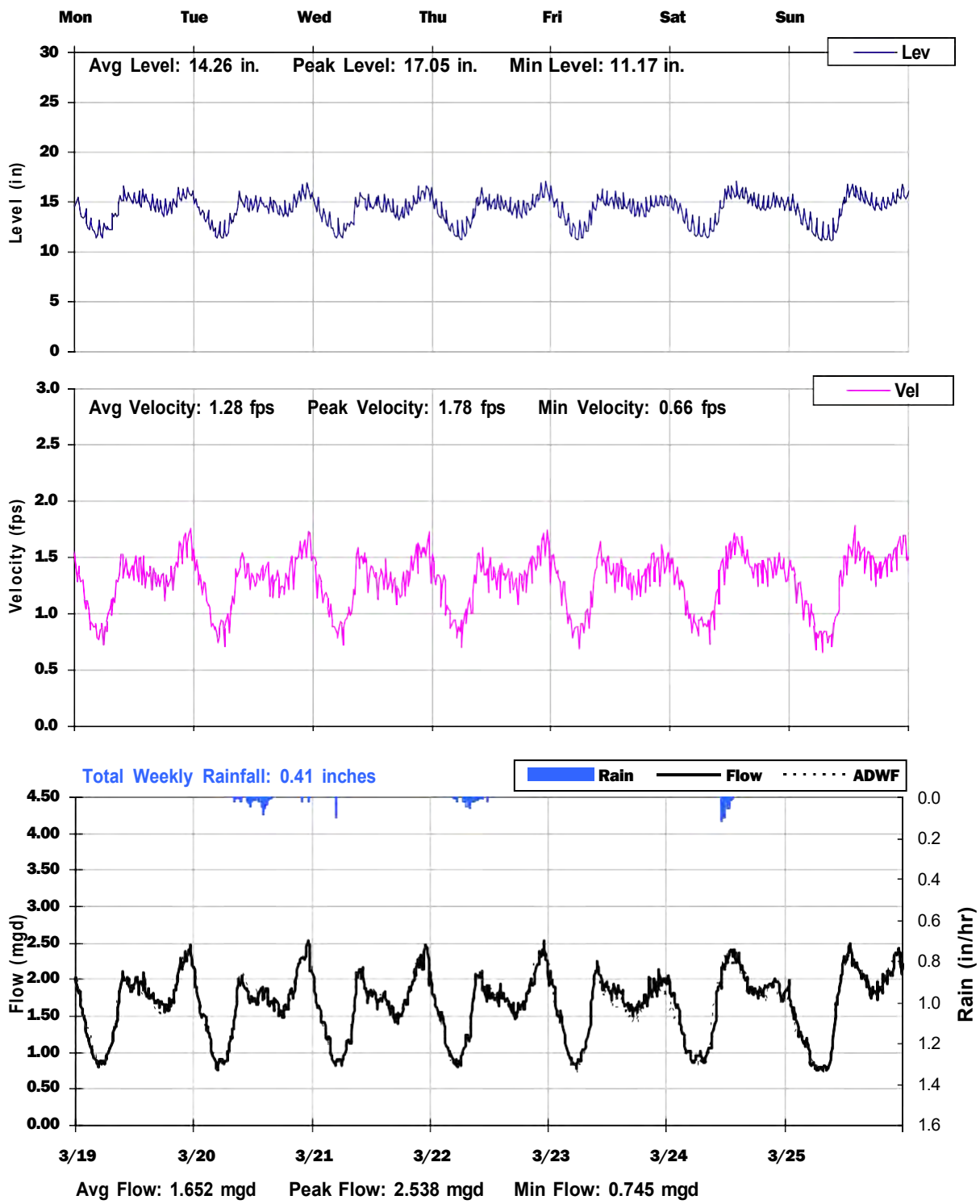
TC-01

Weekly Level, Velocity and Flow Hydrographs

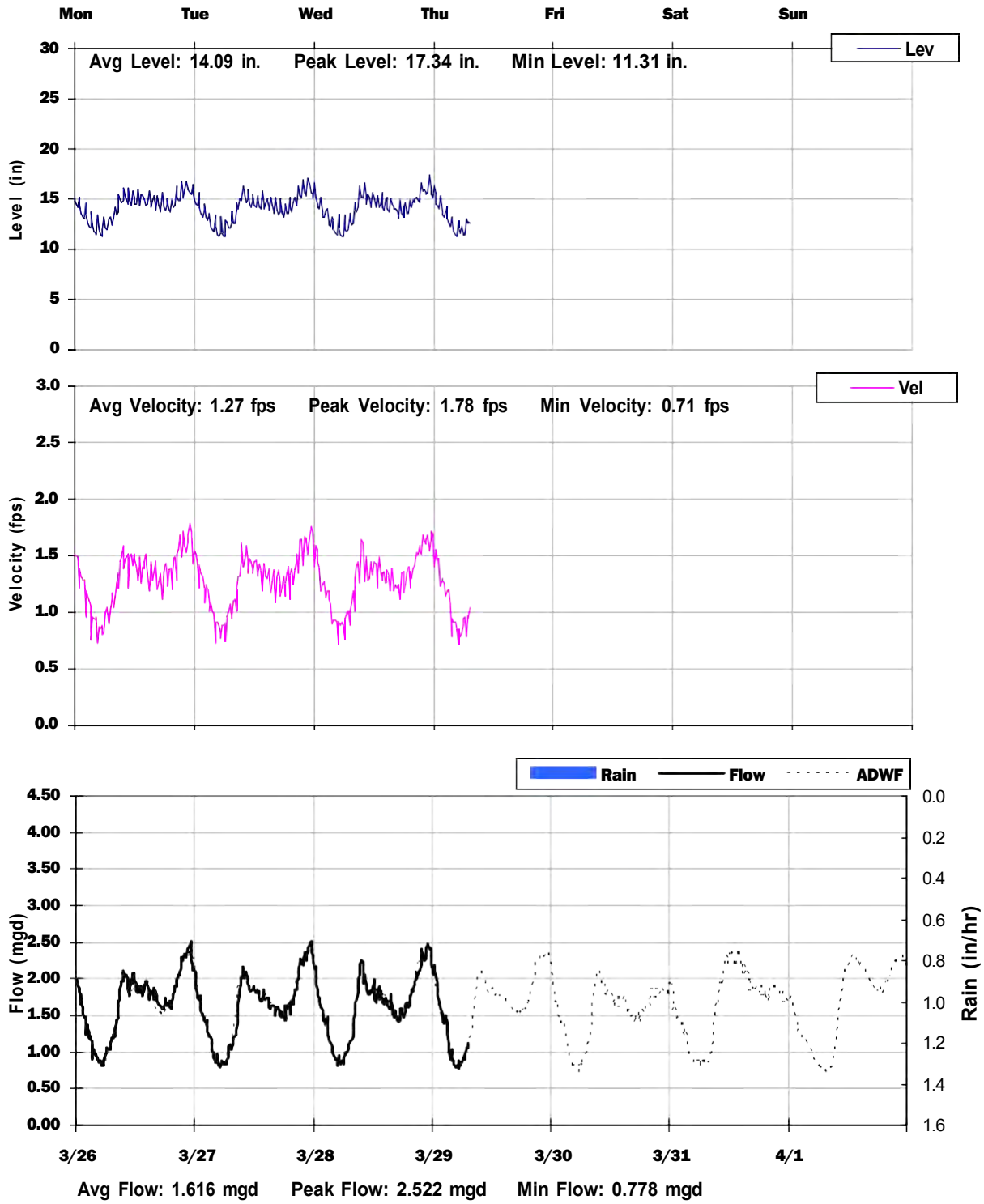
3/12/2018 to 3/19/2018



TC-01
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-01
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



TC-01

City of Tracy, California

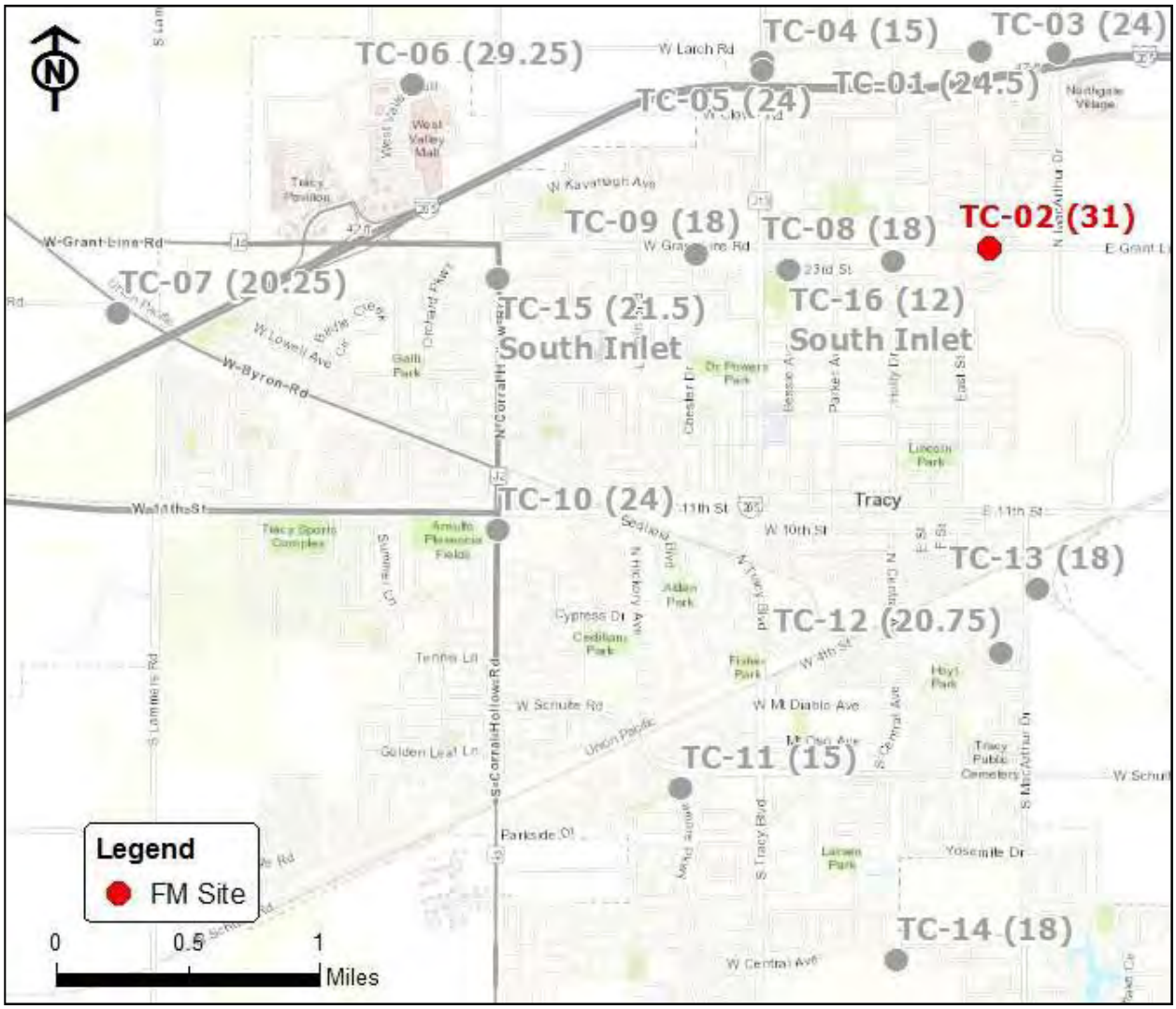
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-02**

Location: **324 Grant Line Road, West of Colony Drive**

Data Summary Report



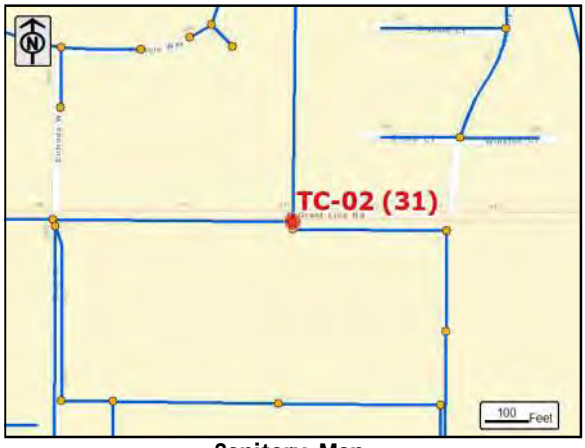
Vicinity Map: TC-02

TC-02

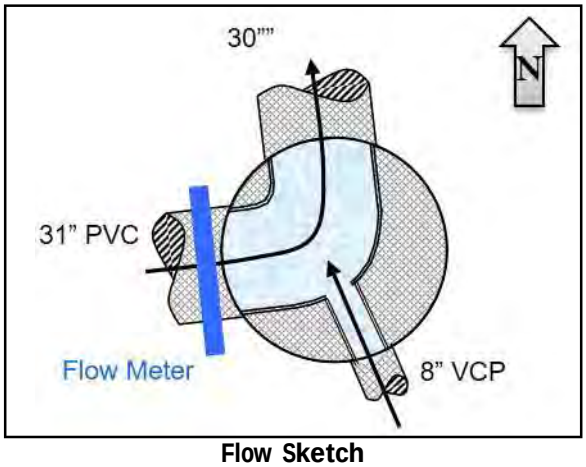
Site Information

Location:	**324 Grant Line Road, West of Colony Drive**
City Manhole:	
Coordinates:	**121.4193° W, 37.7542° N**
Rim Elevation (Earth):	**33 feet**
Pipe Diameter:	**29.75 inches**
ADWF:	**1.109 mgd**
Peak Measured Flow:	**1.842 mgd**

Satellite Map



Sanitary Map



Flow Sketch

Street View

Plan View

TC-02

Additional Site Photos

Effluent Pipe

Monitored West Influent Pipe

TC-02

Additional Site Photos

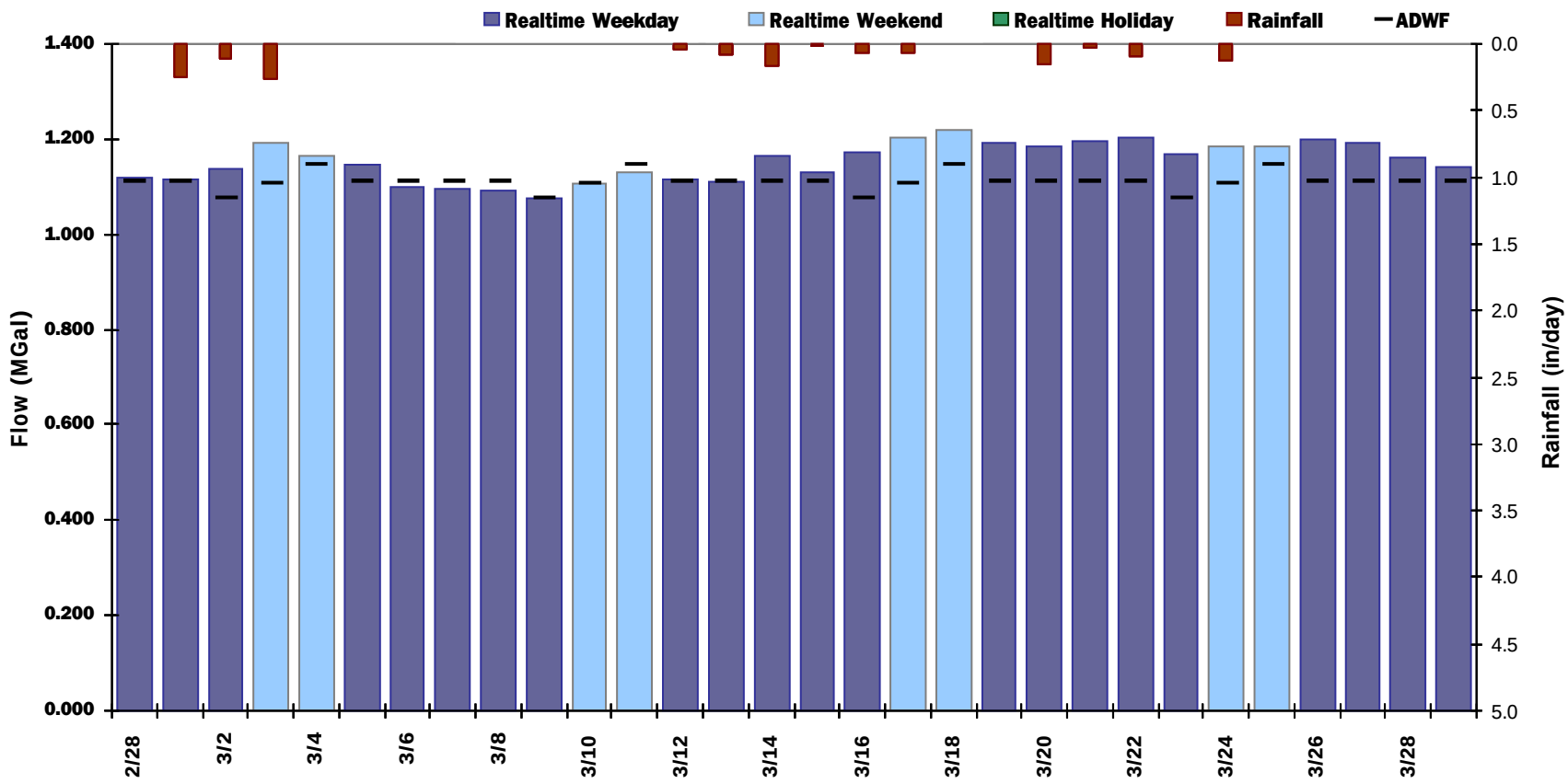
South Lateral

TC-02

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 1.153 MGal Peak Daily Flow: 1.220 MGal Min Daily Flow: 1.078 MGal

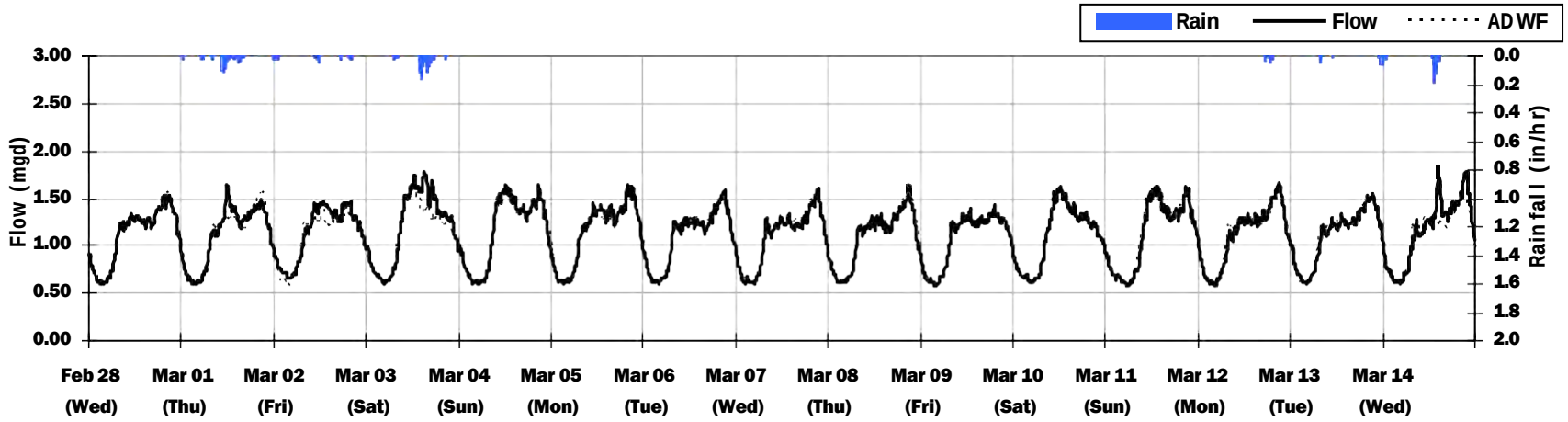
Total Period Rainfall: 1.43 inches

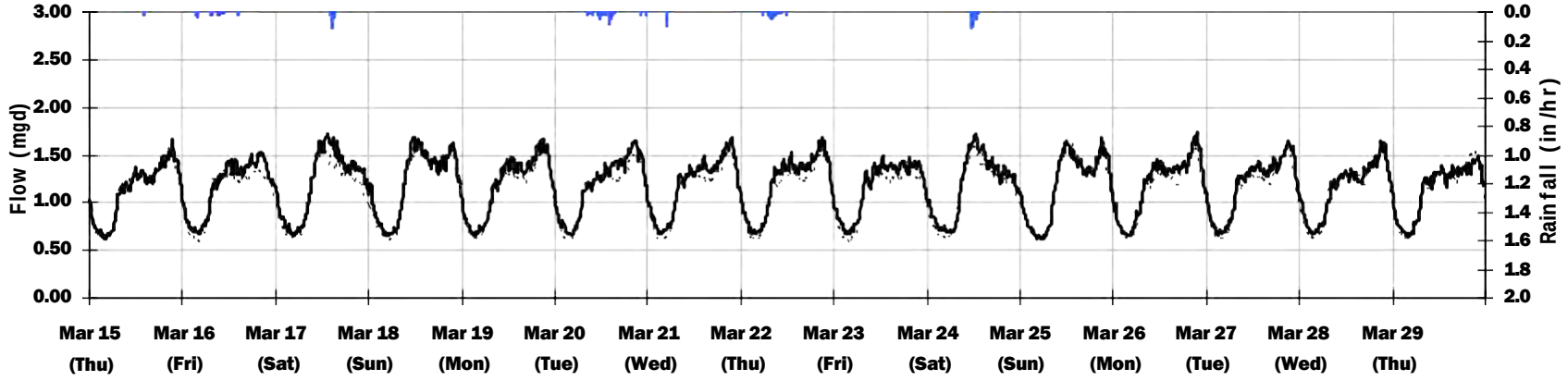


TC-02

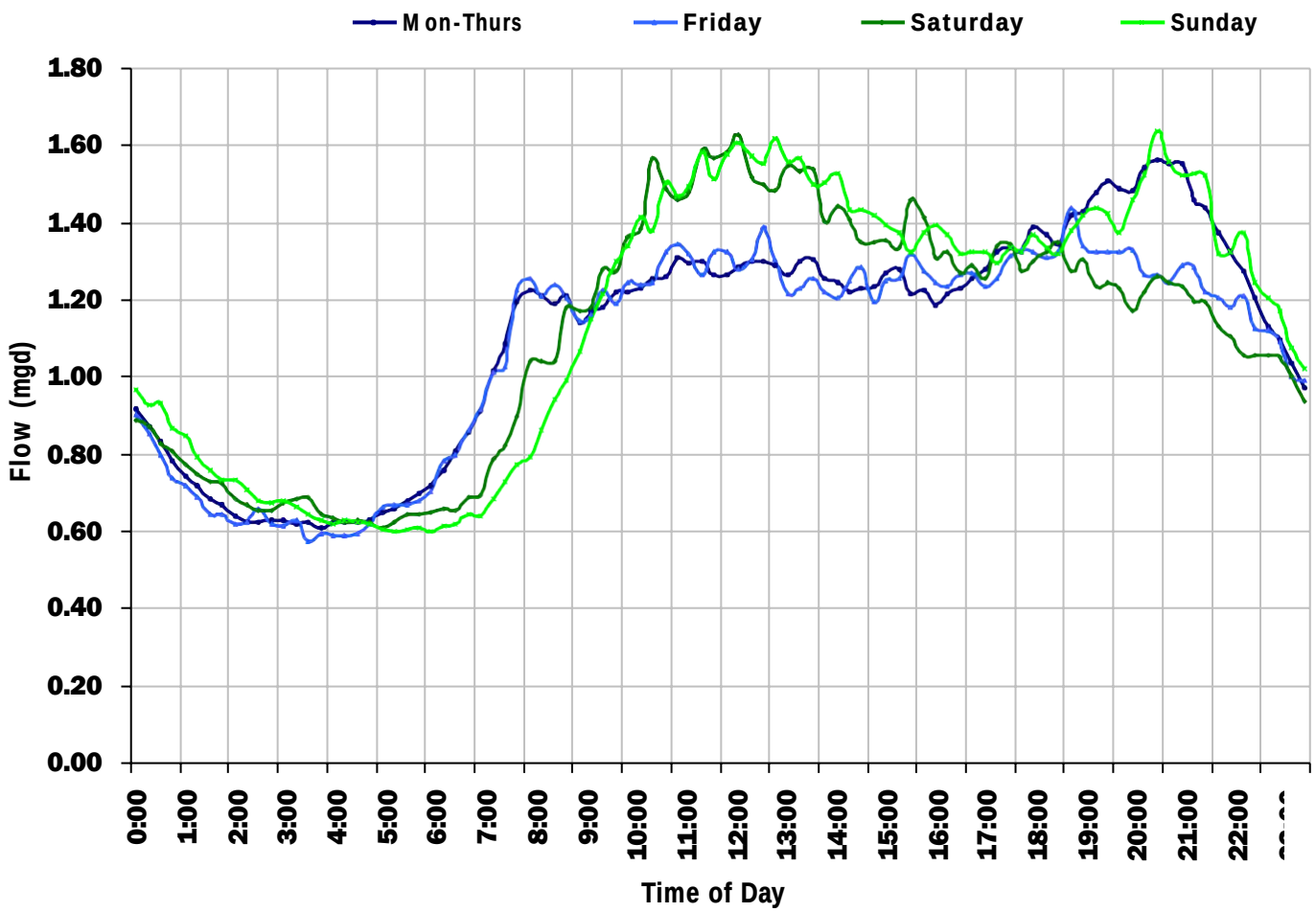
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 1.153 mgd Peak Flow: 1.842 mgd Min Flow: 0.577 mgd



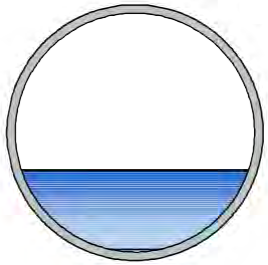


TC-02
Average Dry Weather Flow Hydrographs



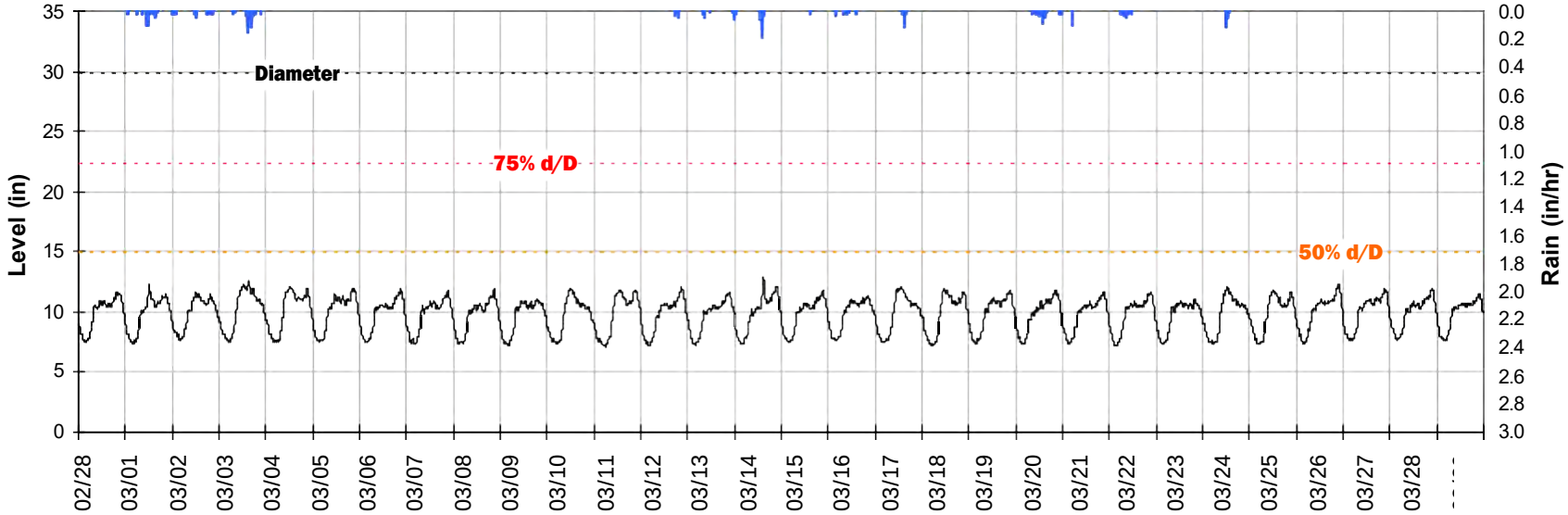
ADWF:

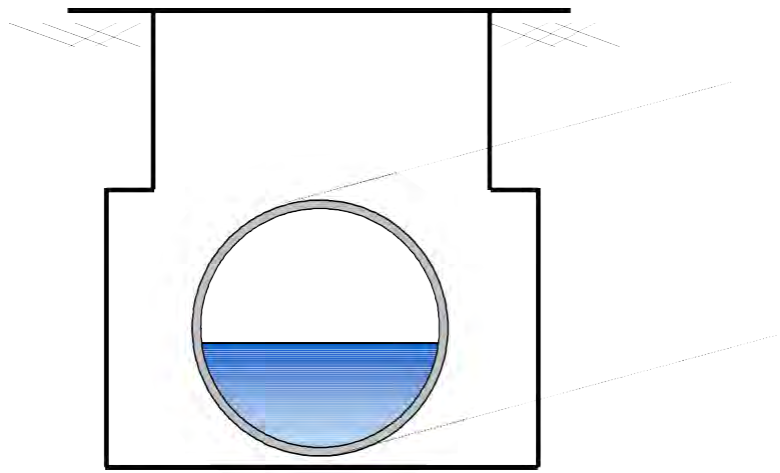
1.109 *mgd*



TC-02
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



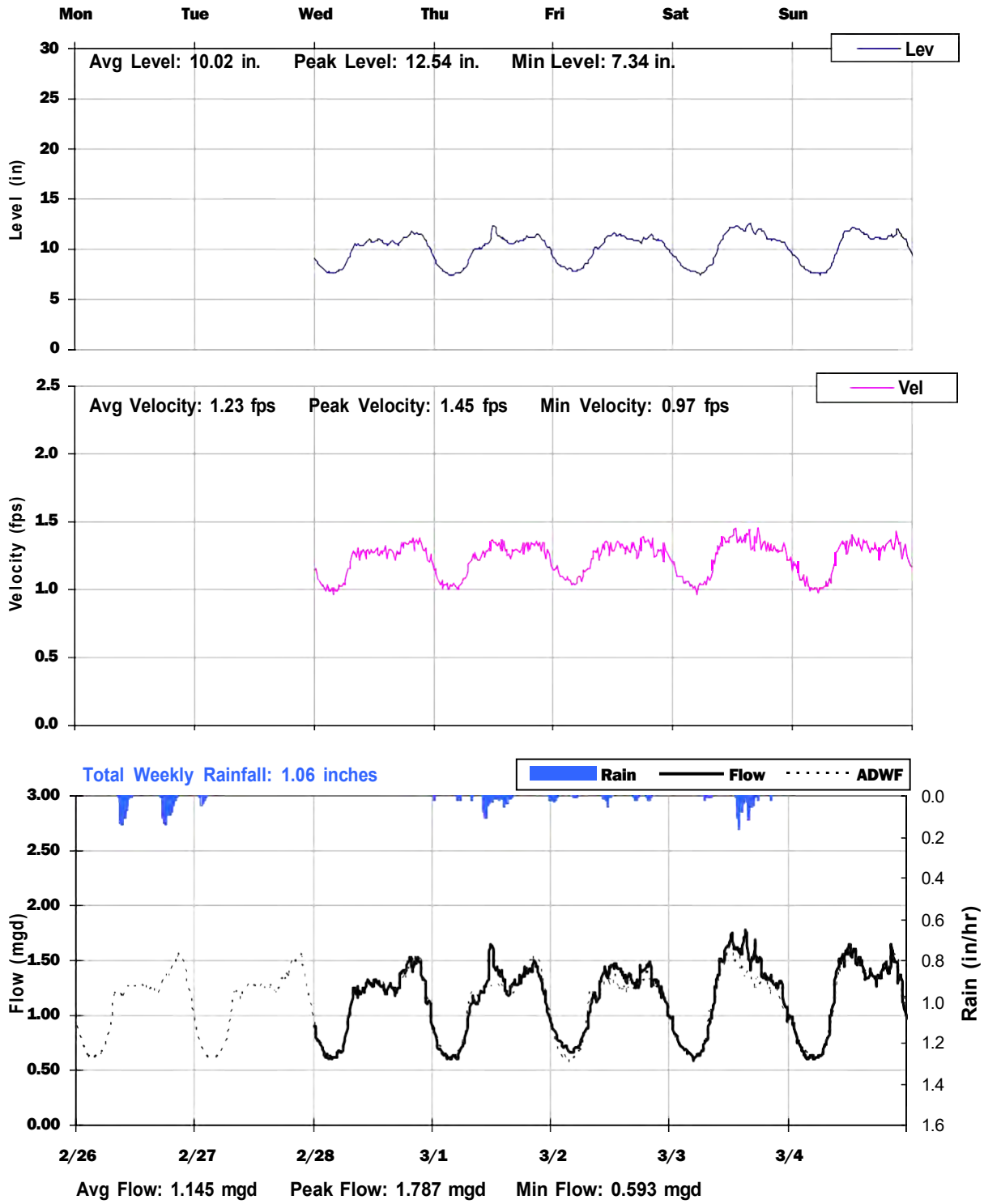


Pipe Diameter:	**29.8**	***inches***
Peak Measured Level:	**12.9**	***inches***
Peak d/D Ratio:	**0.43**	

TC-02

Weekly Level, Velocity and Flow Hydrographs

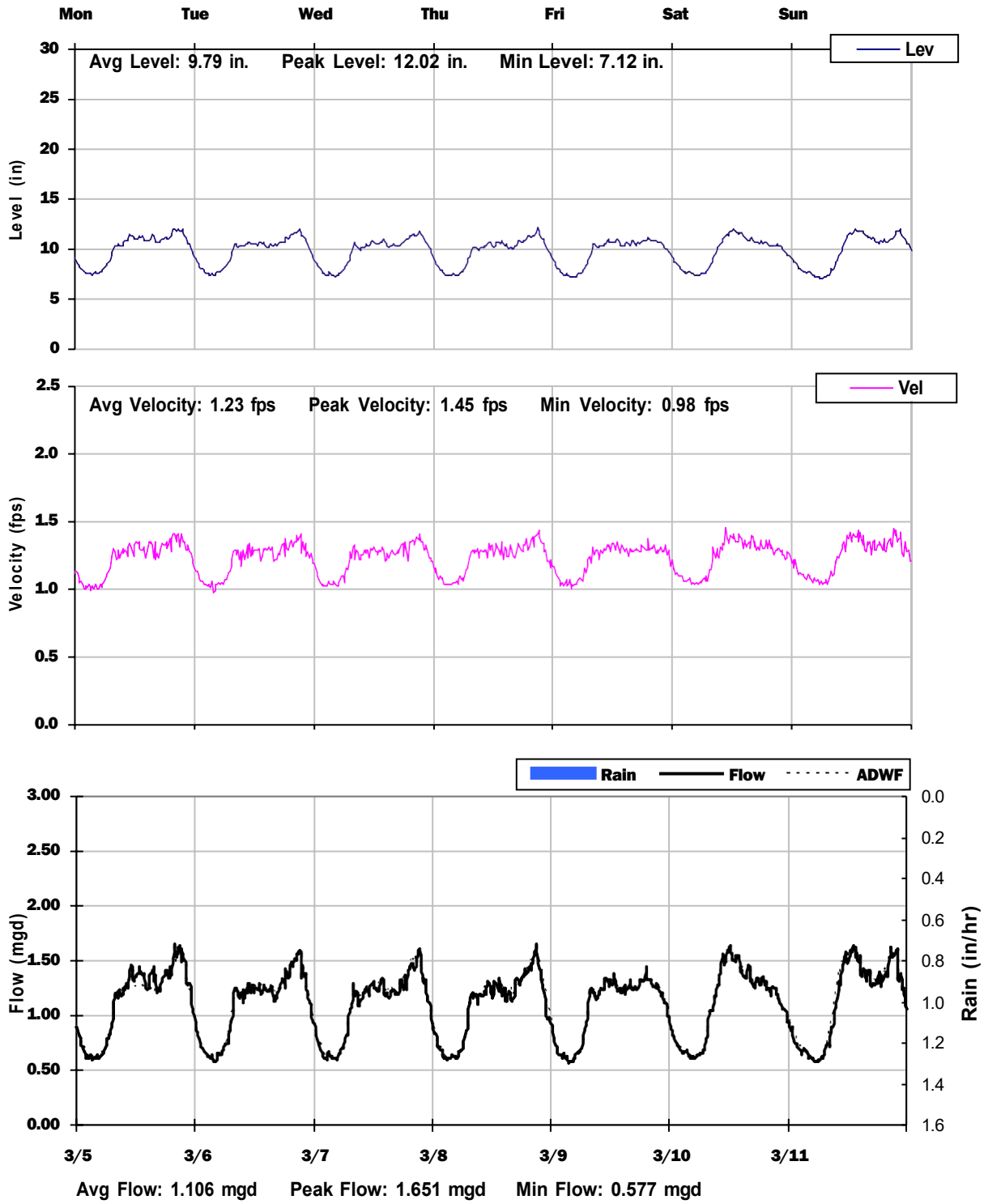
2/26/2018 to 3/5/2018



TC-02

Weekly Level, Velocity and Flow Hydrographs

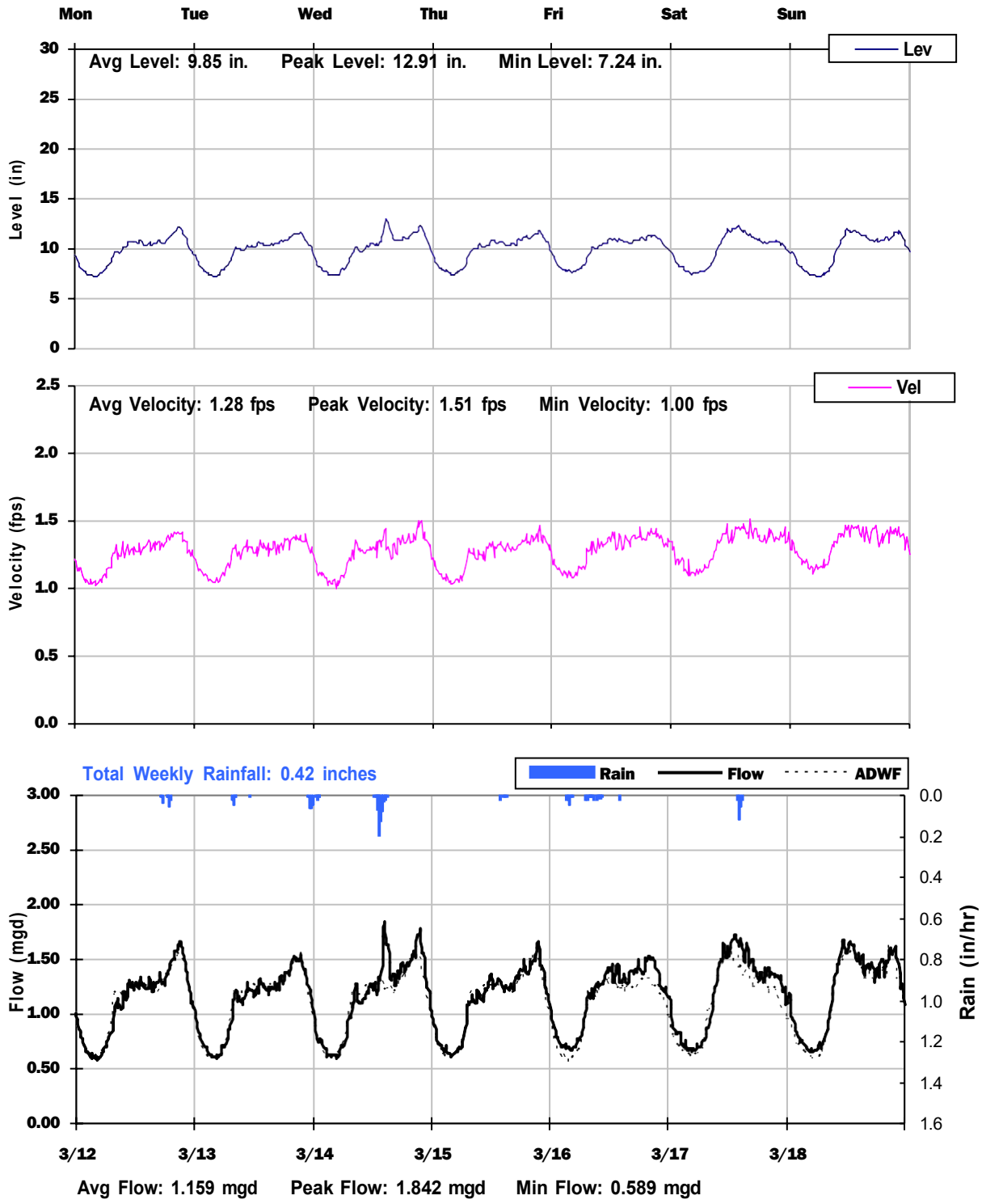
3/5/2018 to 3/12/2018



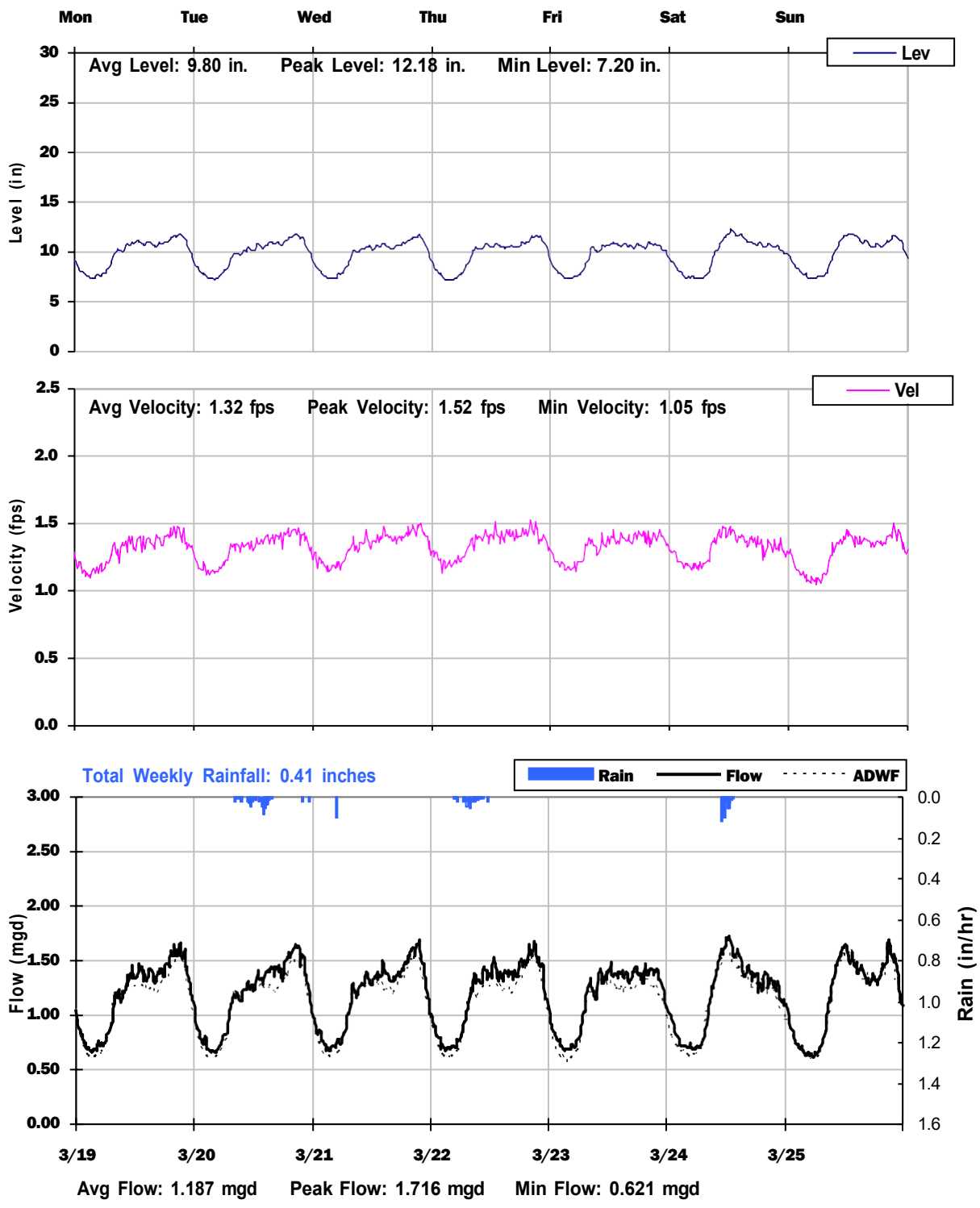
TC-02

Weekly Level, Velocity and Flow Hydrographs

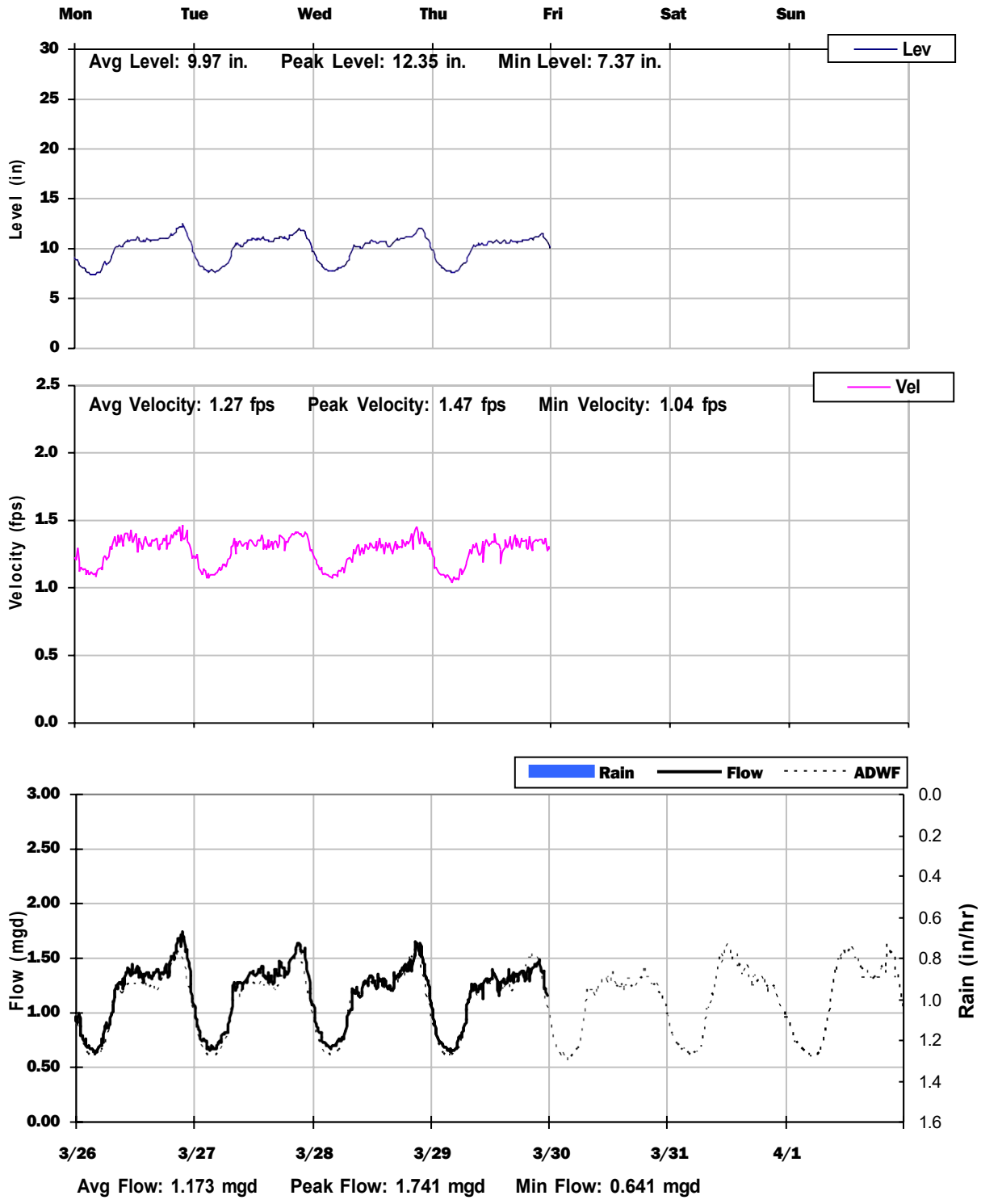
3/12/2018 to 3/19/2018



TC-02
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-02
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



TC-02

City of Tracy, California

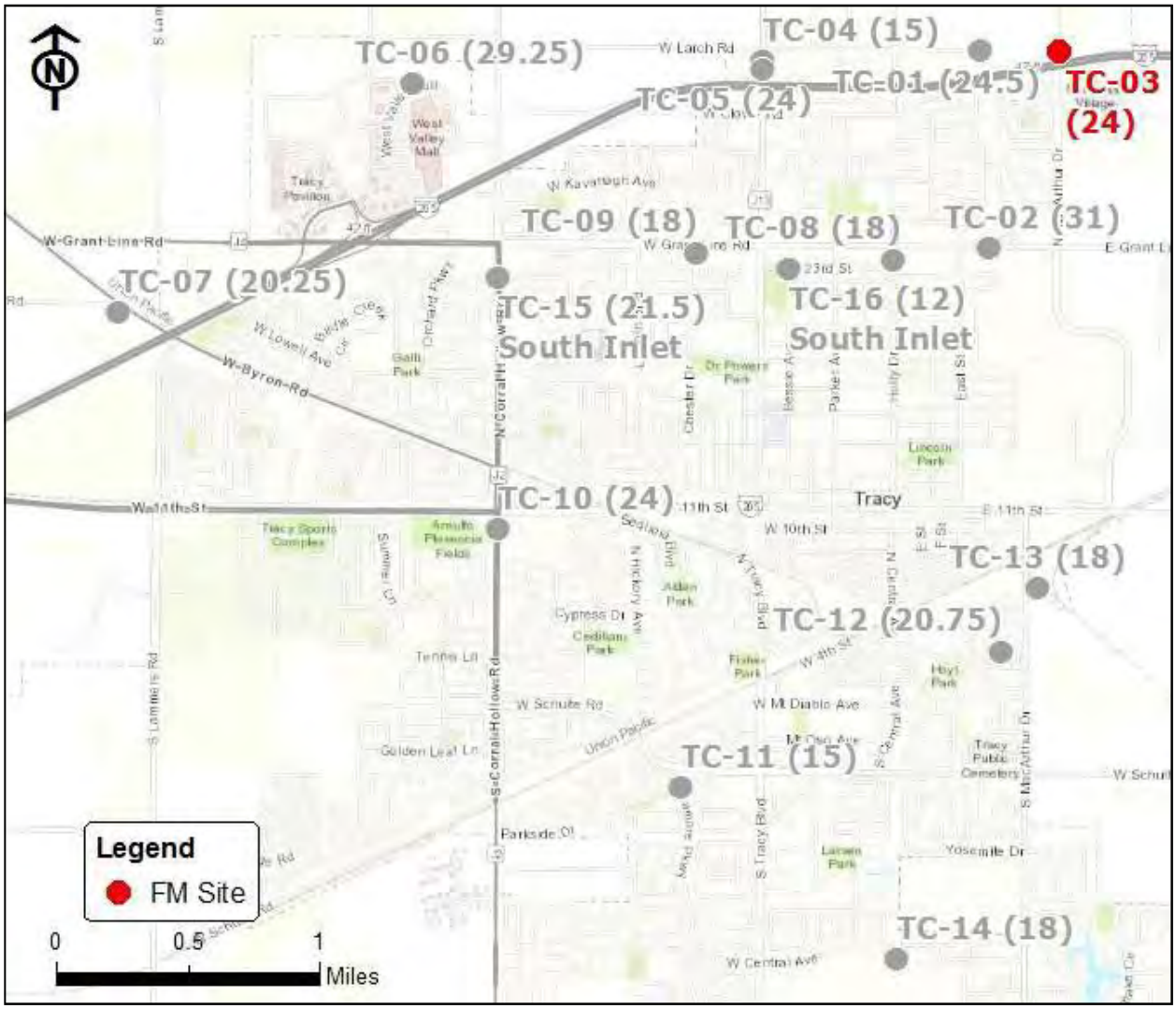
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-03**

Location: **MacArthur Drive, approx 265 feet north of Hwy 205, near pump station entrance**

Data Summary Report



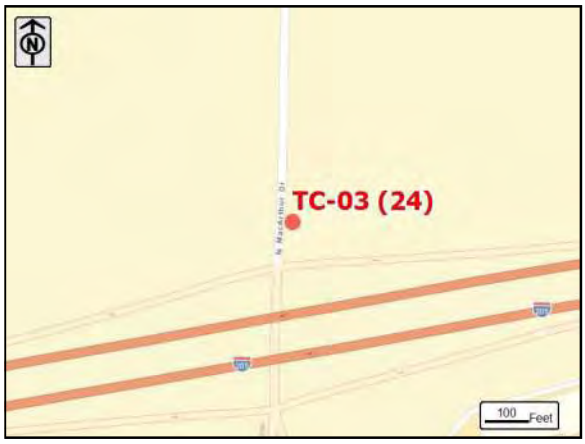
Vicinity Map: TC-03

TC-03

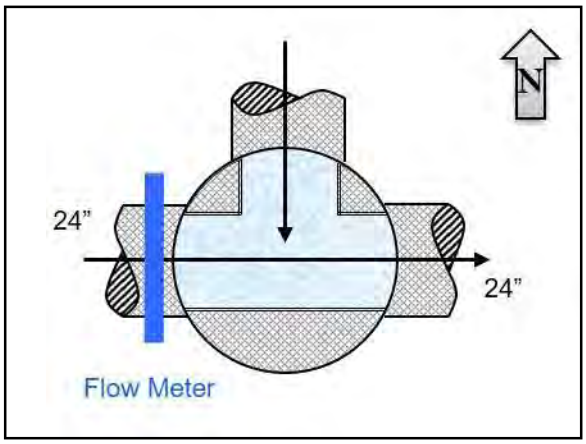
Site Information

Location:	**MacArthur Drive, approx 265 feet north of Hwy 205, near pump station entrance**
City Manhole:	
Coordinates:	**121.4146° W, 37.7650° N**
Rim Elevation (Earth):	**21 feet**
Pipe Diameter:	**24 inches**
ADWF:	**0.270 mgd**
Peak Measured Flow:	**0.424 mgd**

Satellite Map



Sanitary Map



Flow Sketch

Street View

Plan View

TC-03

Additional Site Photos

Effluent Pipe

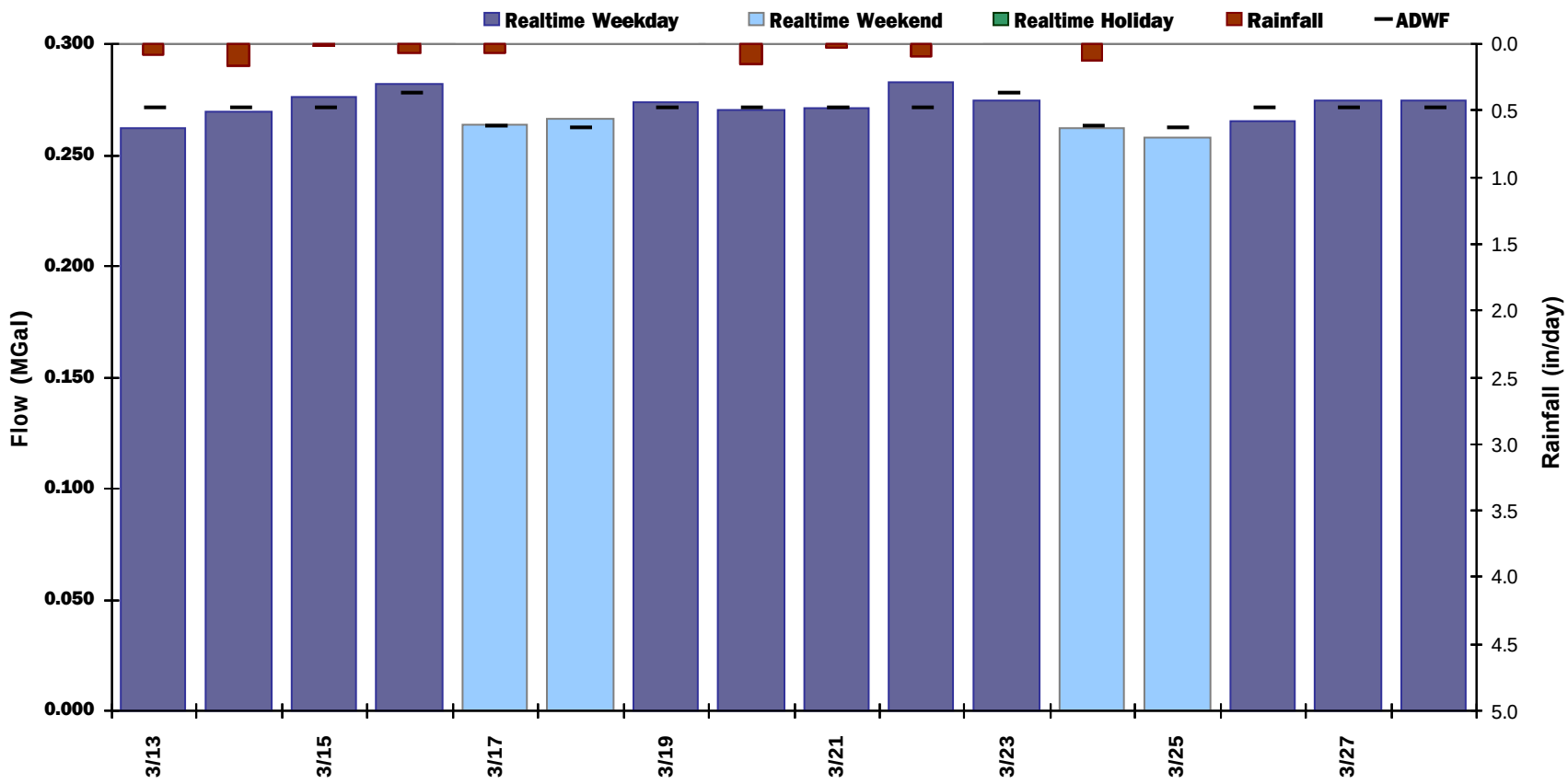
Monitored Influent Pipe

TC-03

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 0.270 MGal Peak Daily Flow: 0.283 MGal Min Daily Flow: 0.258 MGal

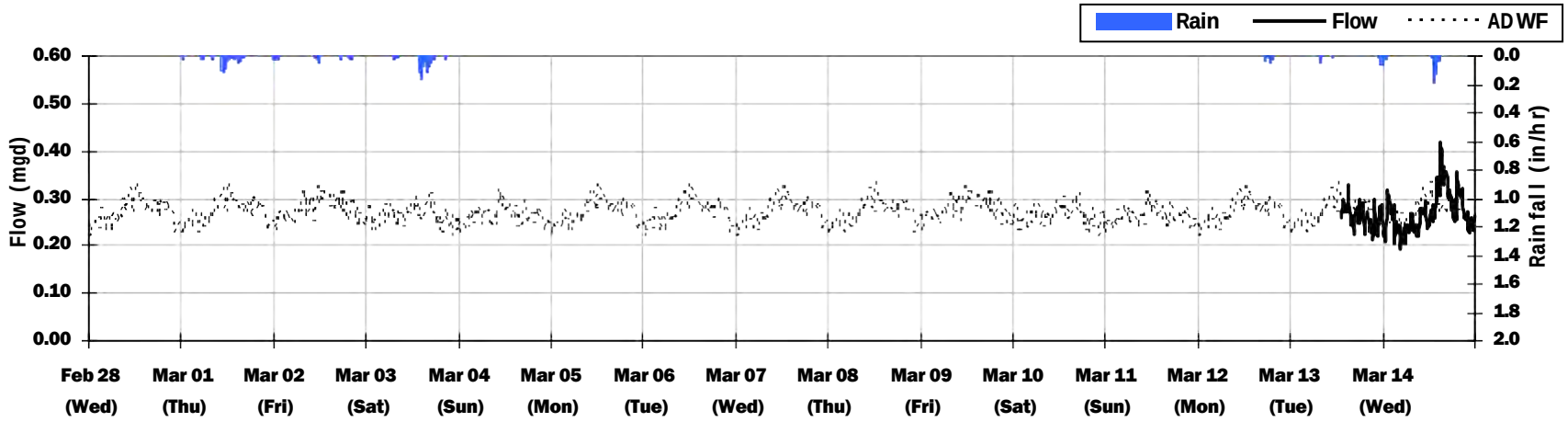
Total Period Rainfall: 0.77 inches

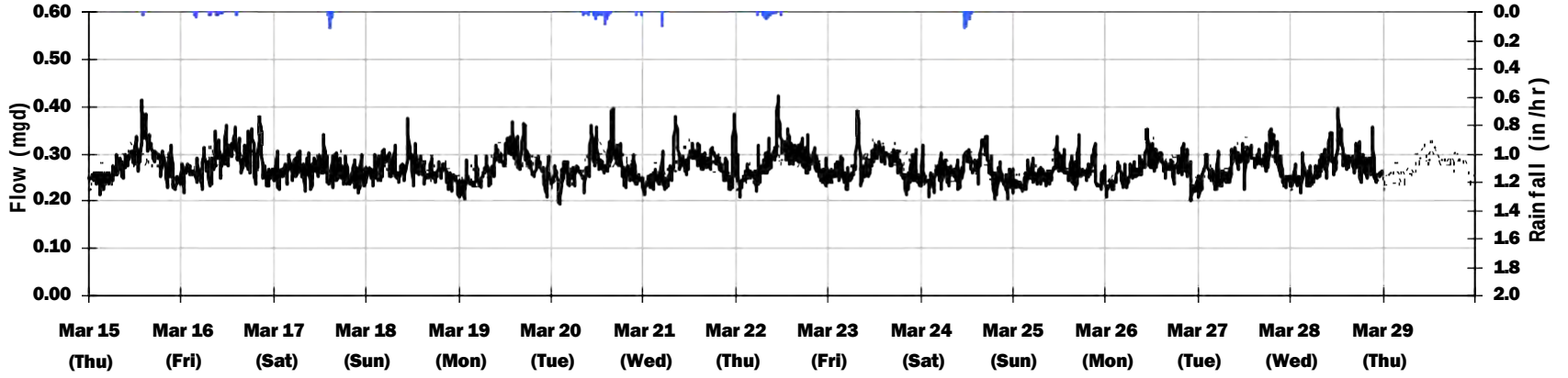


TC-03

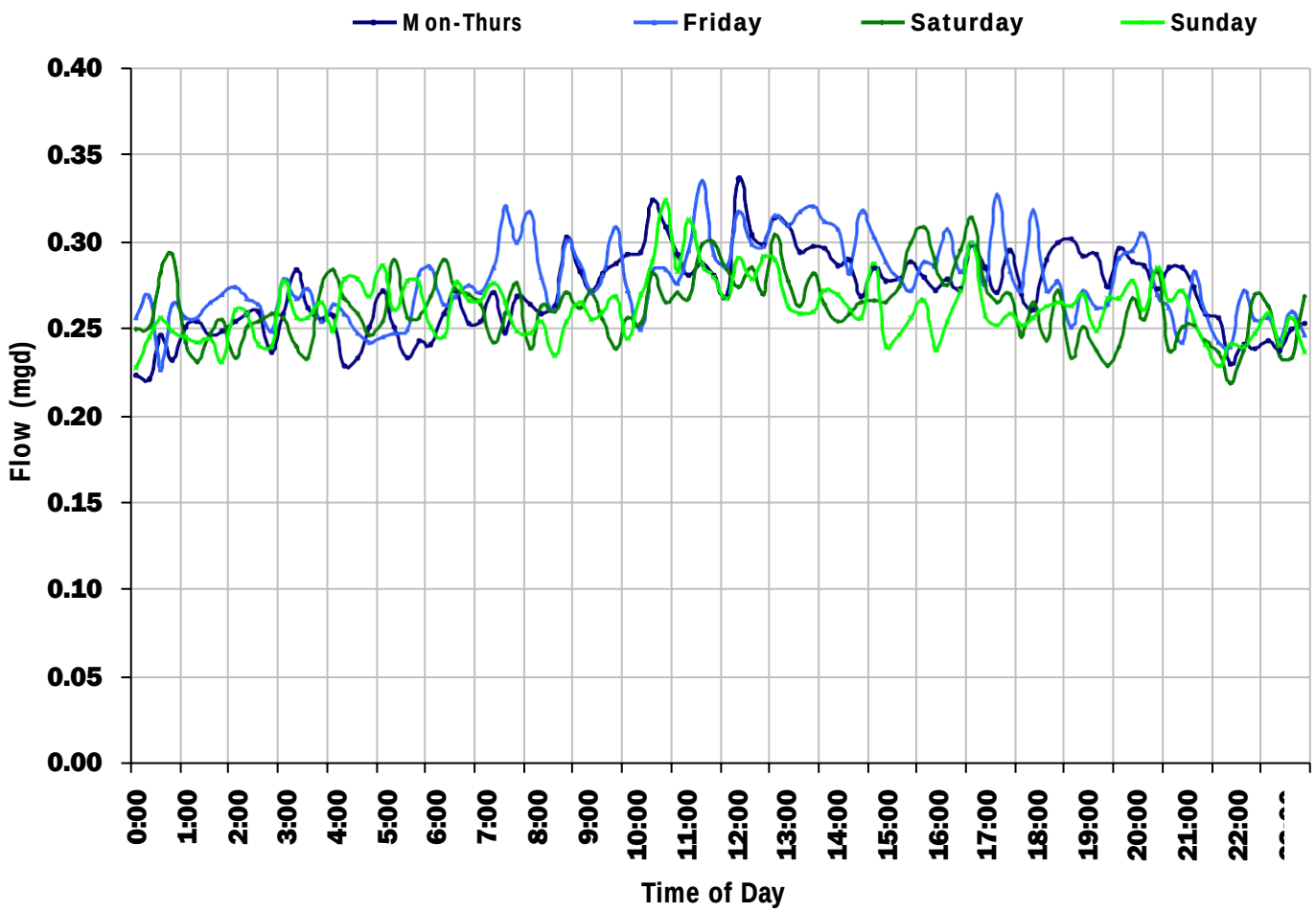
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 0.271 mgd Peak Flow: 0.424 mgd Min Flow: 0.193 mgd



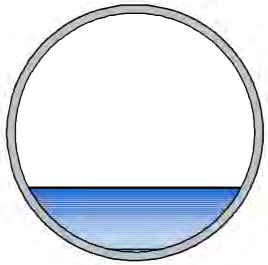


TC-03
Average Dry Weather Flow Hydrographs



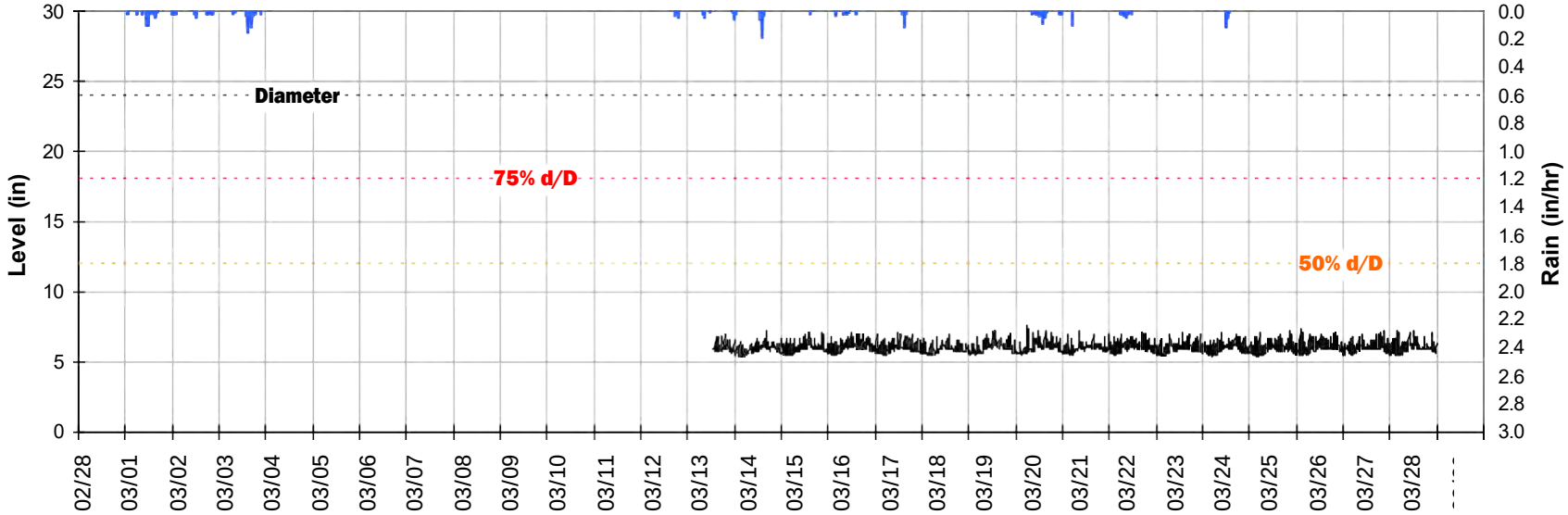
ADWF:

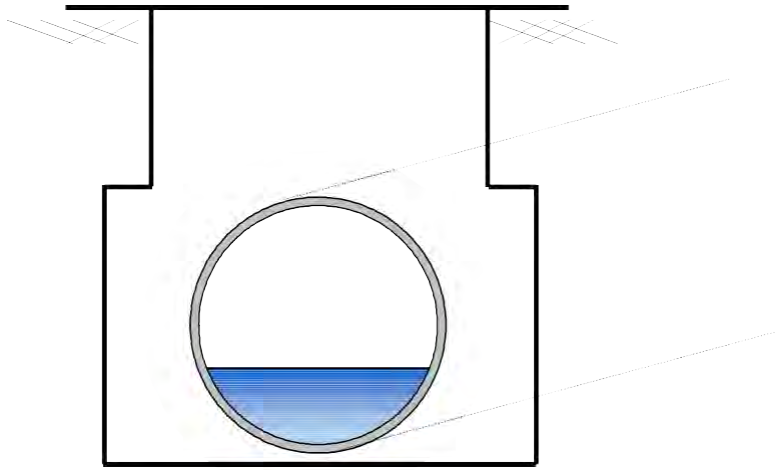
0.270 *mgd*



TC-03
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



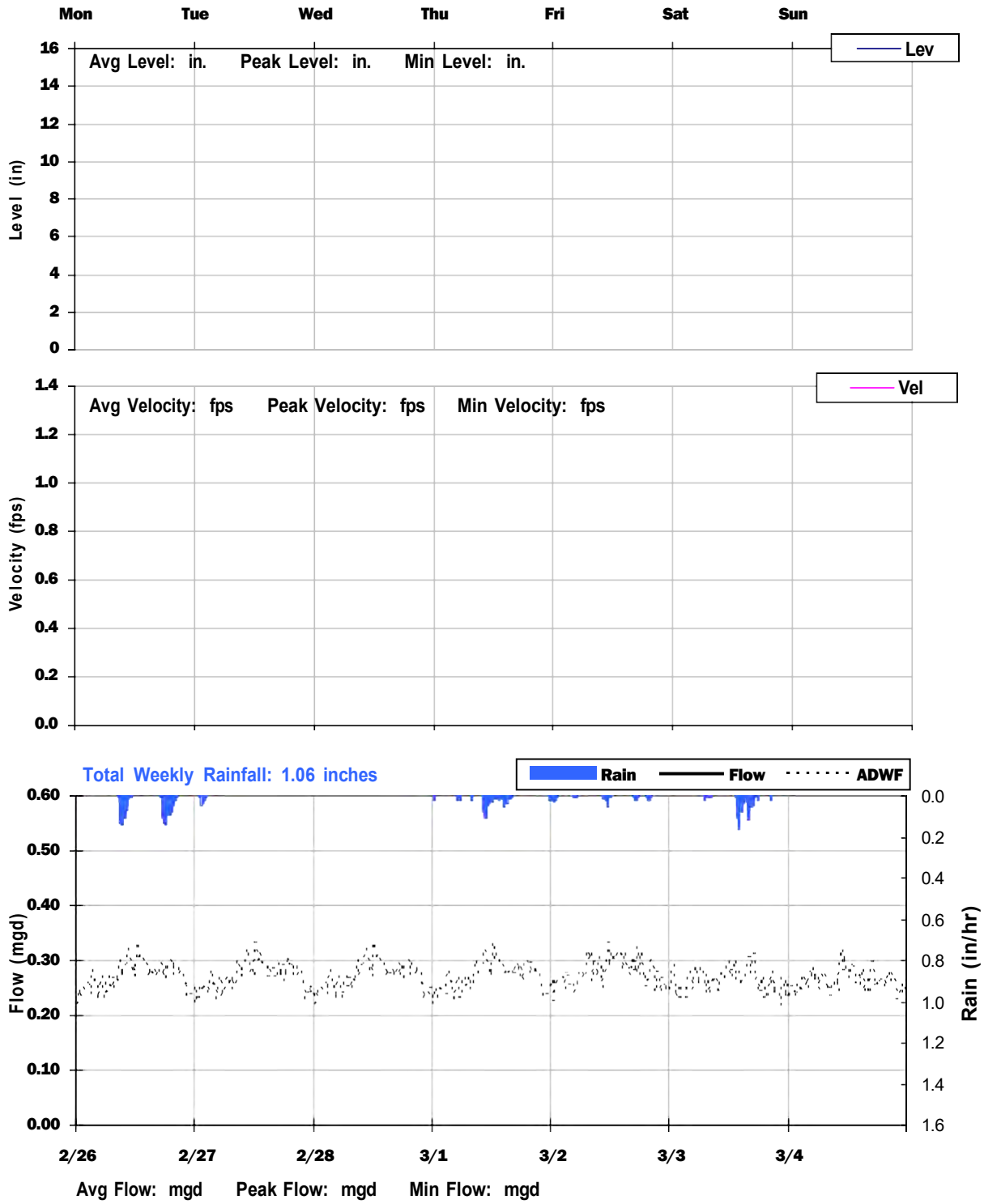


Pipe Diameter:	**24**	***inches***
Peak Measured Level:	**7.59**	***inches***
Peak d/D Ratio:	**0.32**	

TC-03

Weekly Level, Velocity and Flow Hydrographs

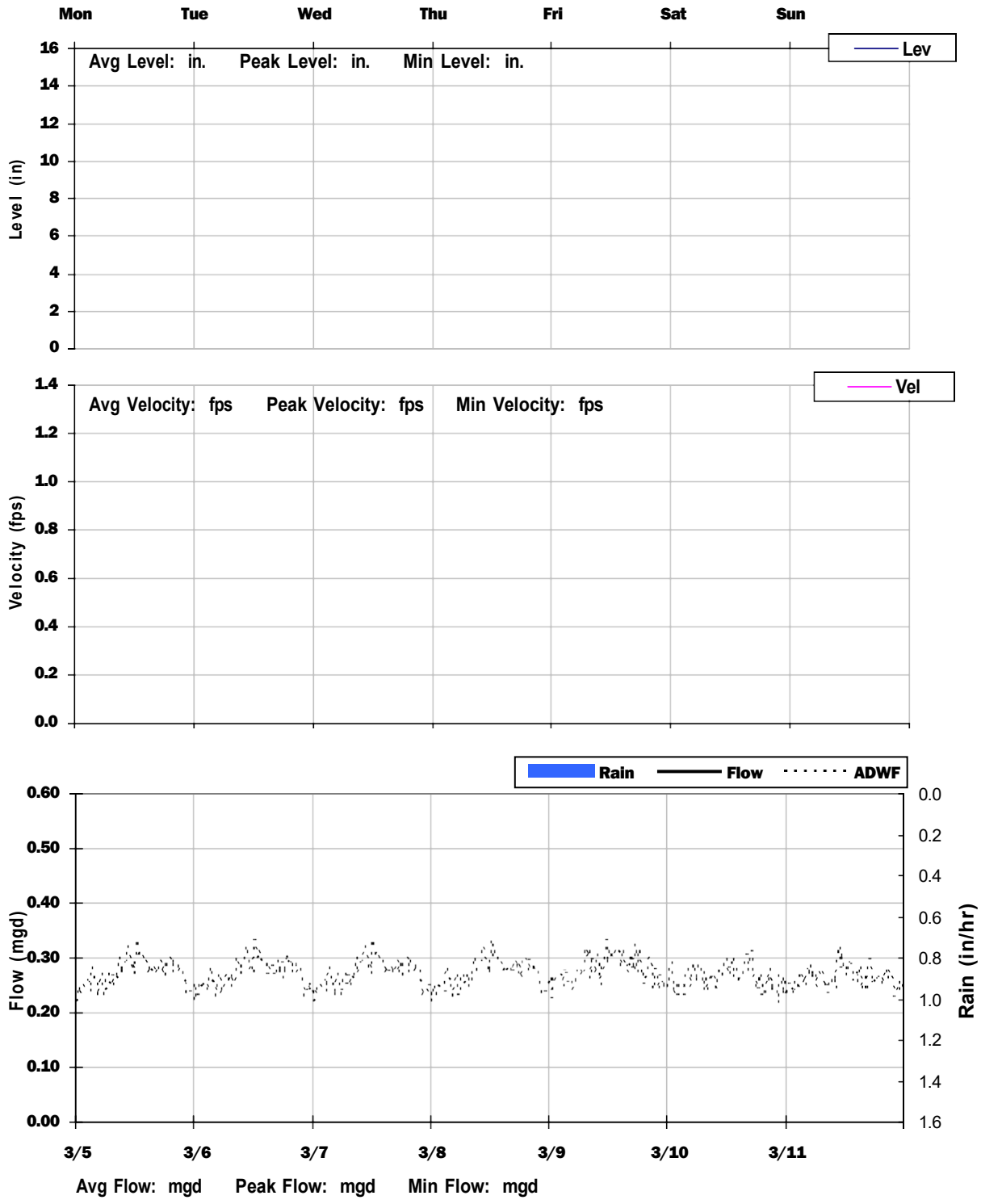
2/26/2018 to 3/5/2018



TC-03

Weekly Level, Velocity and Flow Hydrographs

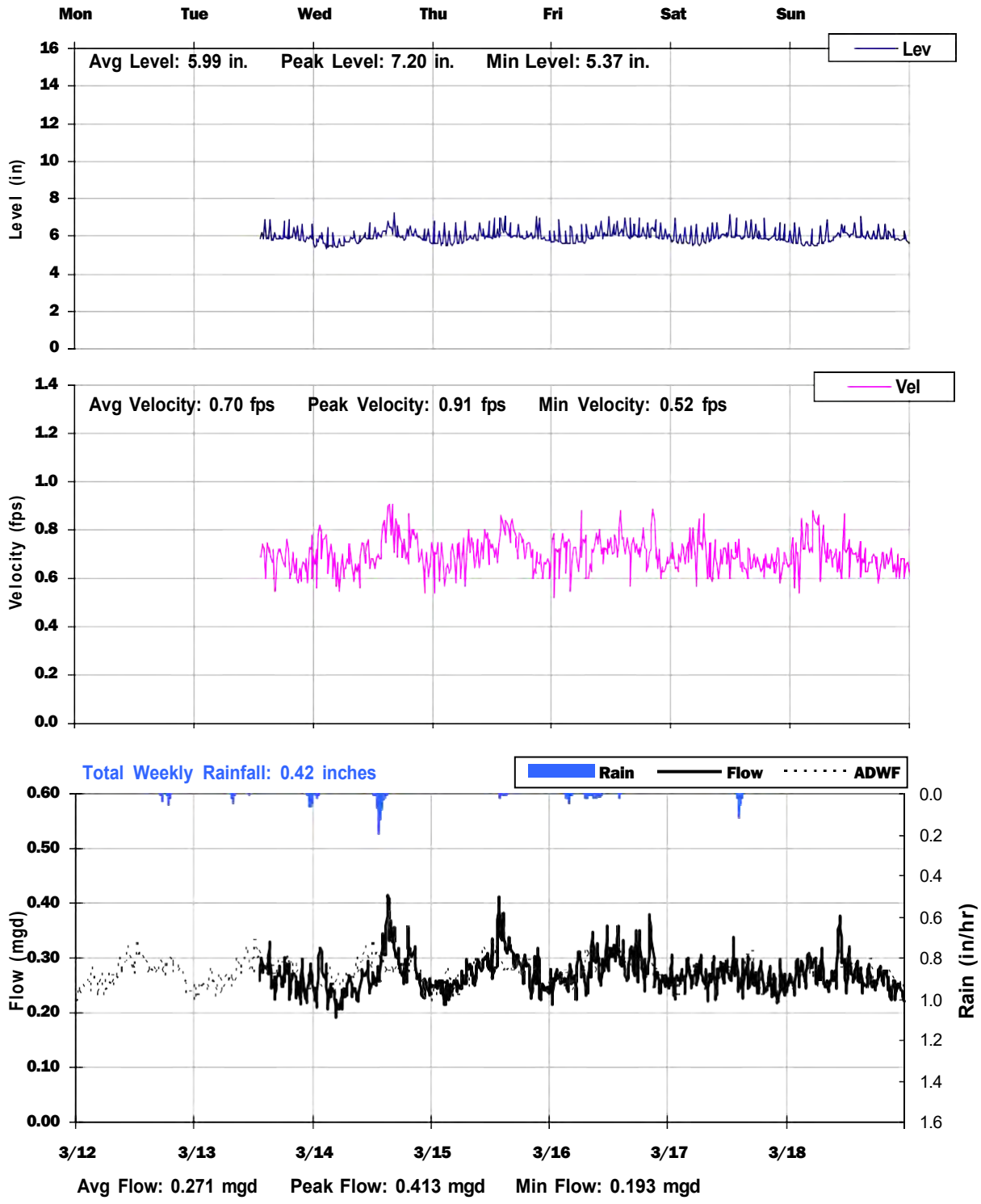
3/5/2018 to 3/12/2018



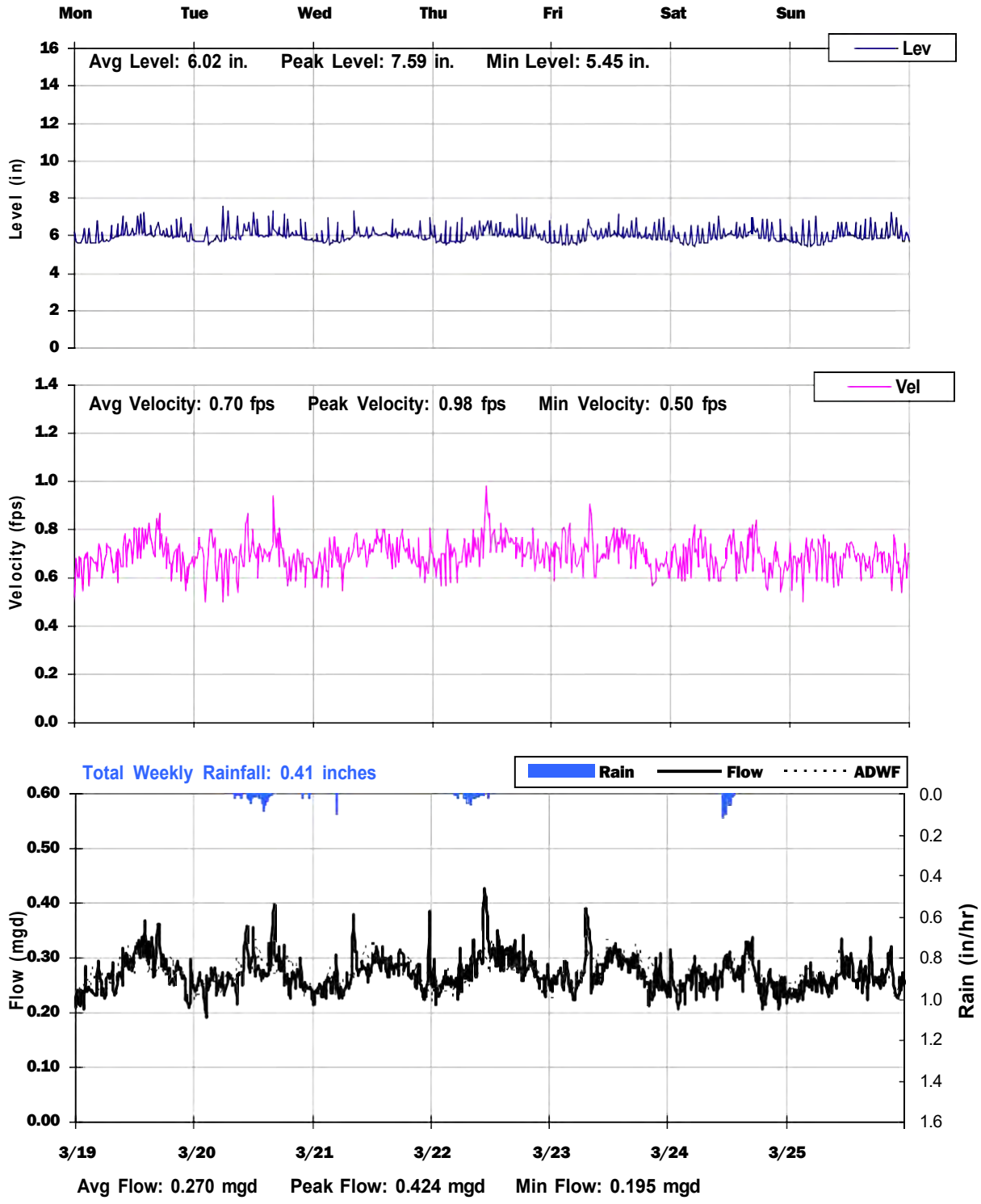
TC-03

Weekly Level, Velocity and Flow Hydrographs

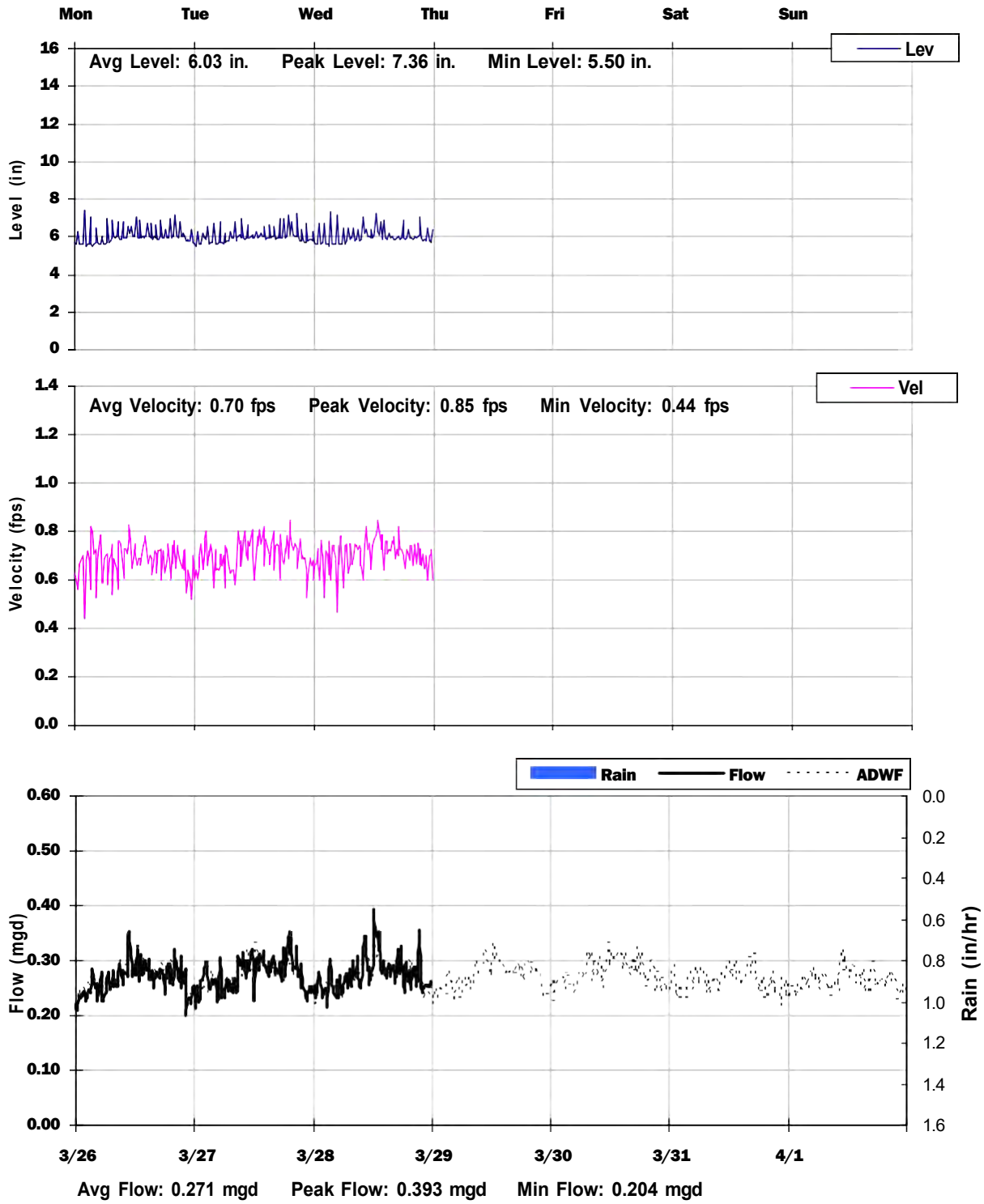
3/12/2018 to 3/19/2018



TC-03
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-03
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



City of Tracy, California

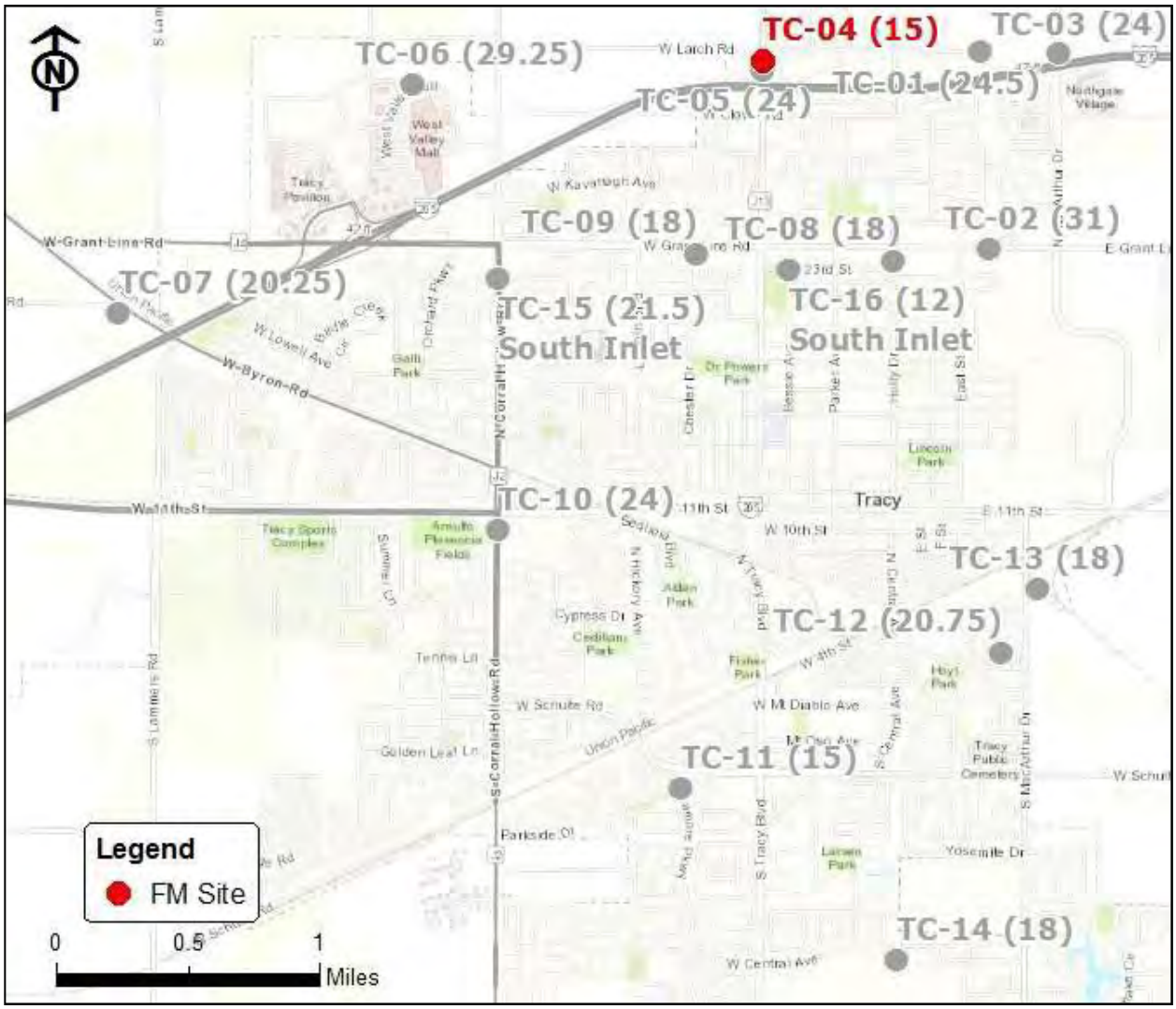
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-04**

Location: **Tracy Blvd, approx 240 feet south of Larch Road**

Data Summary Report



Vicinity Map: TC-04

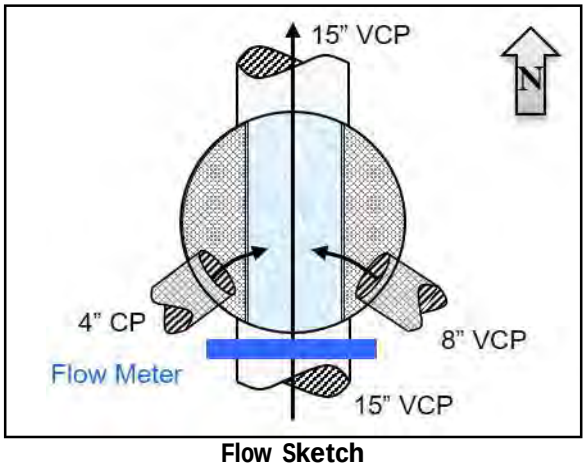
TC-04

Site Information

Location:	**Tracy Blvd, approx 240 feet south of Larch Road**
City Manhole:	
Coordinates:	**121.4350° W, 37.7644° N**
Rim Elevation (Earth):	**12 feet**
Pipe Diameter:	**15 inches**
ADWF:	**0.603 mgd**
Peak Measured Flow:	**1.029 mgd**

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

TC-04

Additional Site Photos

Effluent Pipe

Monitored South Influent Pipe

TC-04

Additional Site Photos

Southeast Lateral

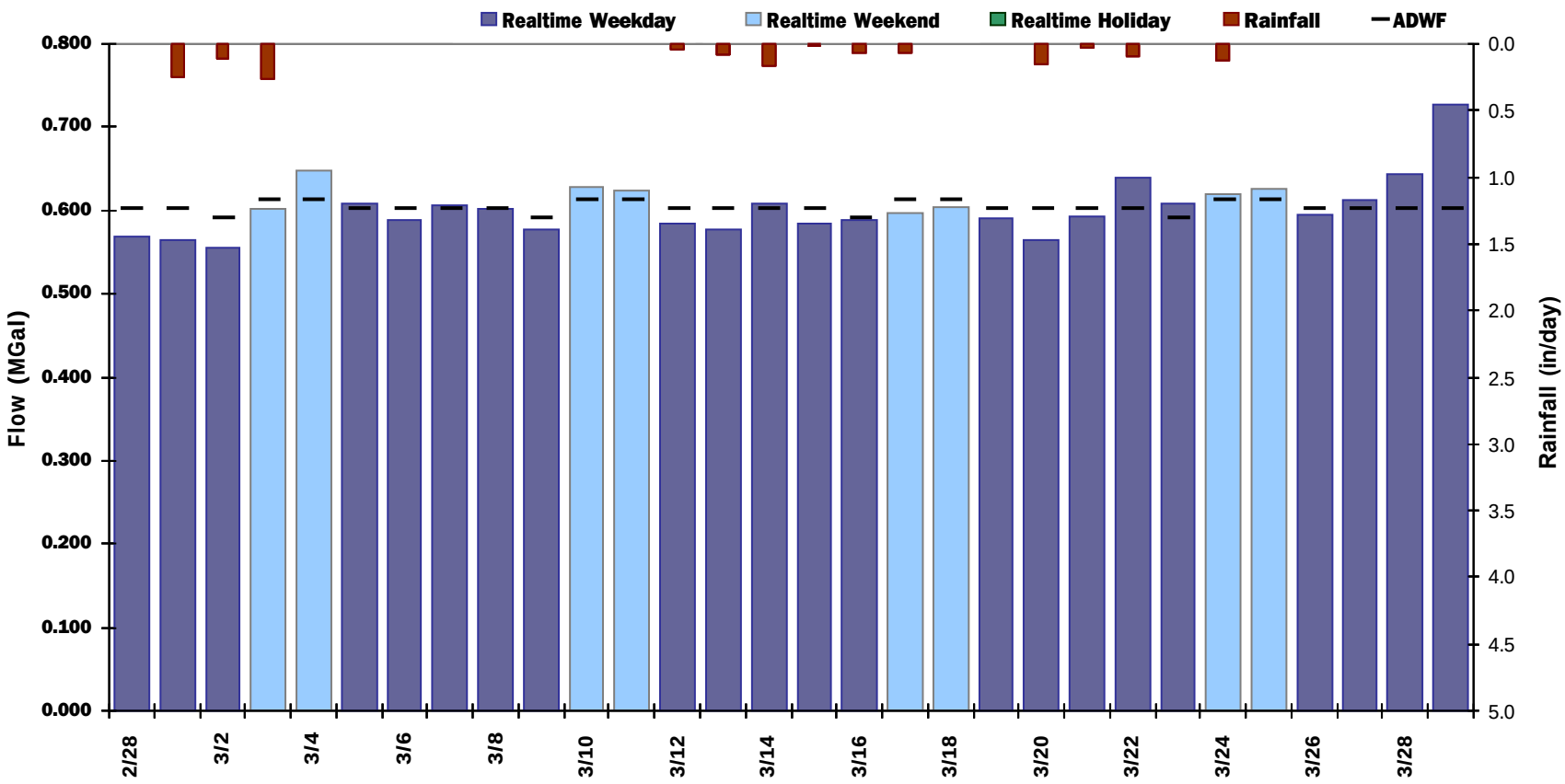
Southwest Lateral

TC-04

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 0.605 MGal Peak Daily Flow: 0.728 MGal Min Daily Flow: 0.554 MGal

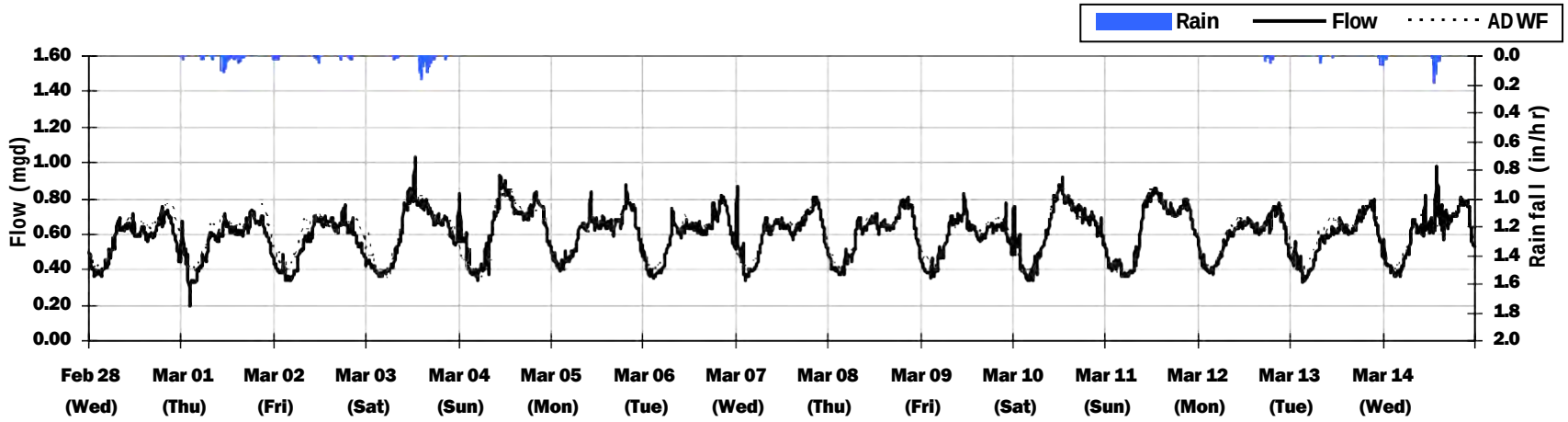
Total Period Rainfall: 1.43 inches

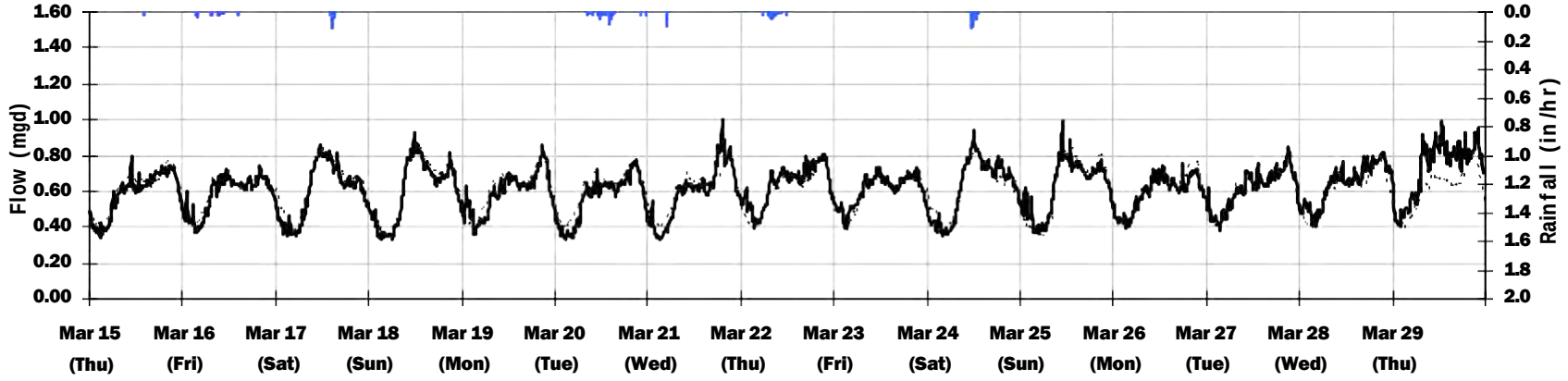


TC-04

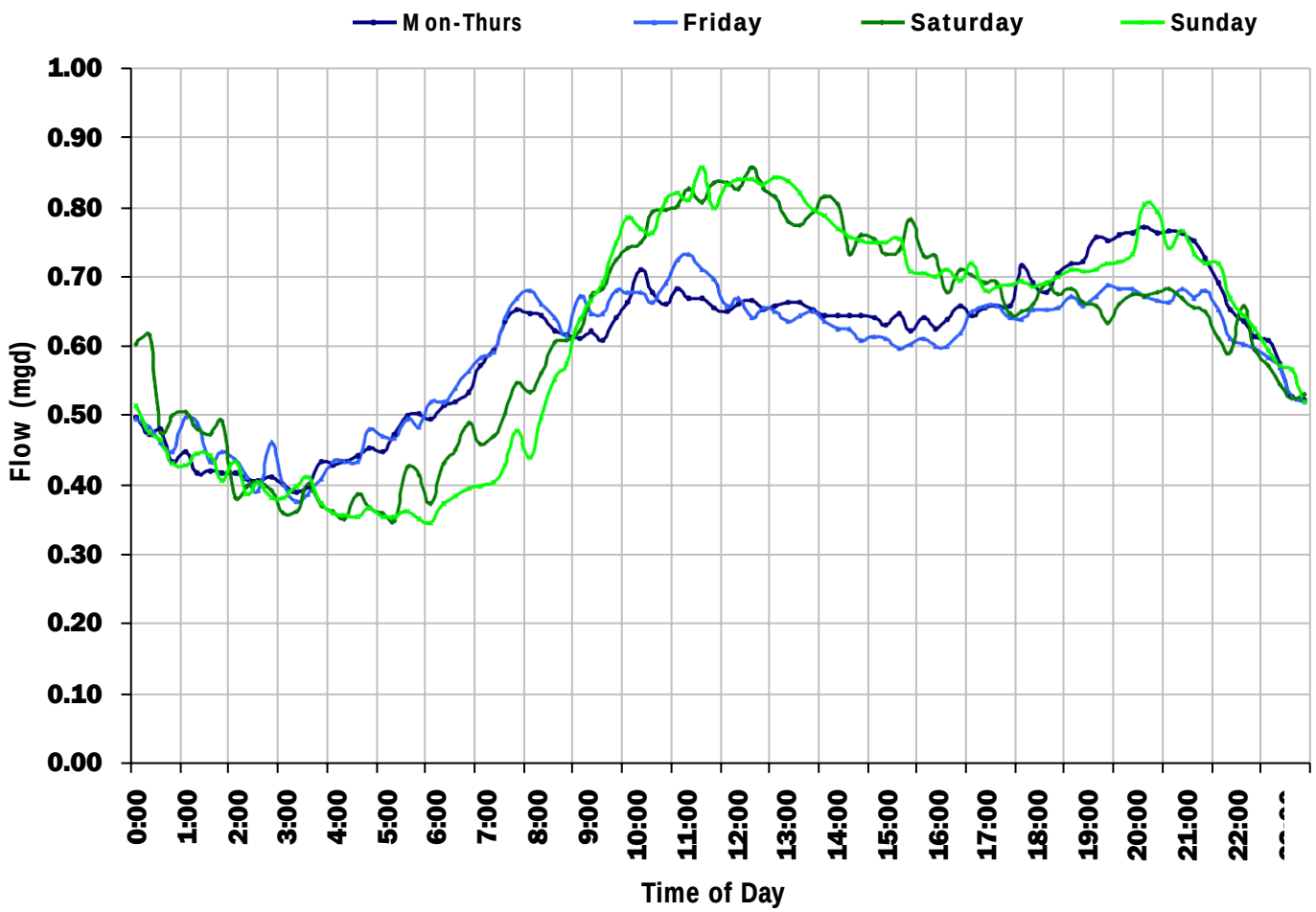
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 0.604 mgd Peak Flow: 1.029 mgd Min Flow: 0.210 mgd



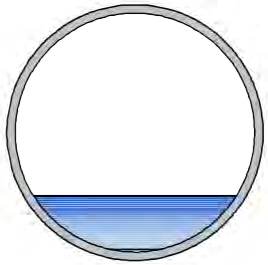


TC-04
Average Dry Weather Flow Hydrographs



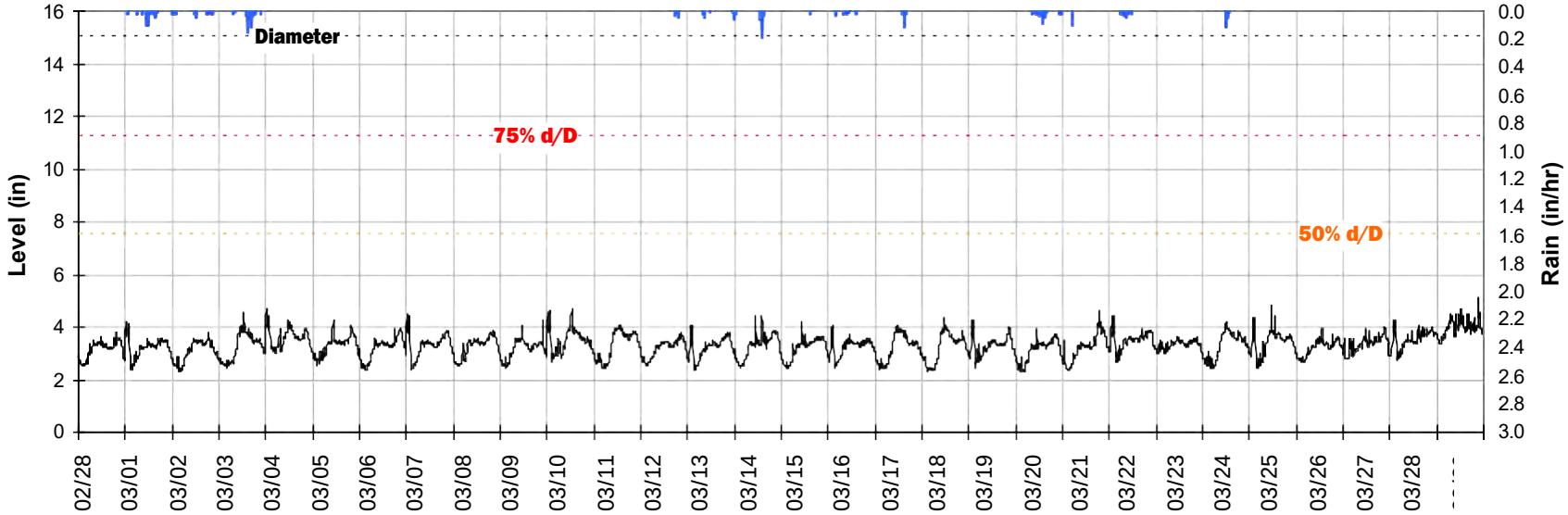
ADWF:

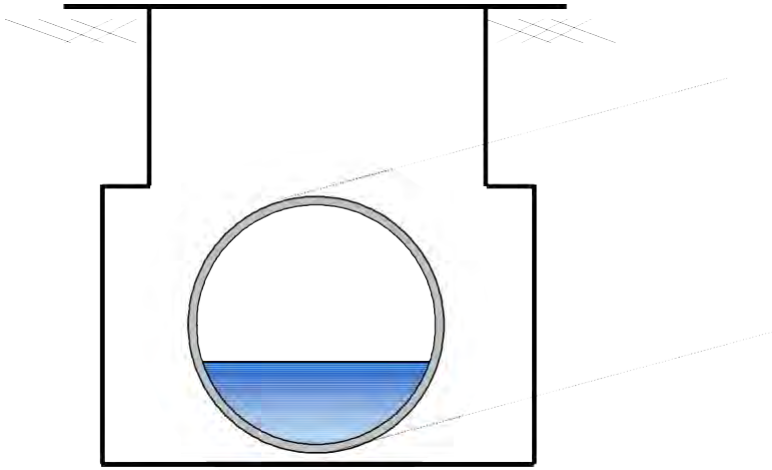
0.603 *mgd*



TC-04
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



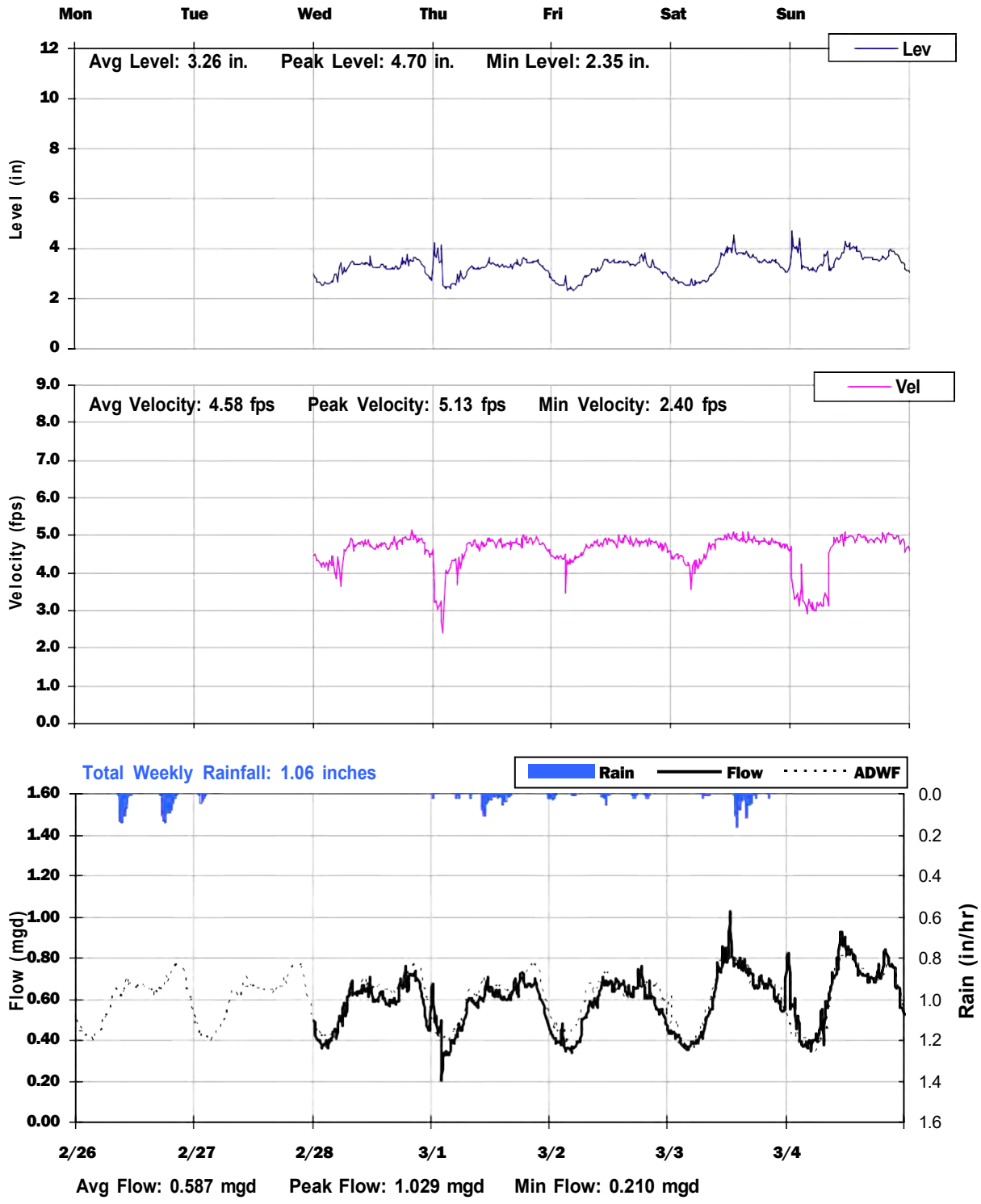


Pipe Diameter:	**15**	***inches***
Peak Measured Level:	**5.15**	***inches***
Peak d/D Ratio:	**0.34**	

TC-04

Weekly Level, Velocity and Flow Hydrographs

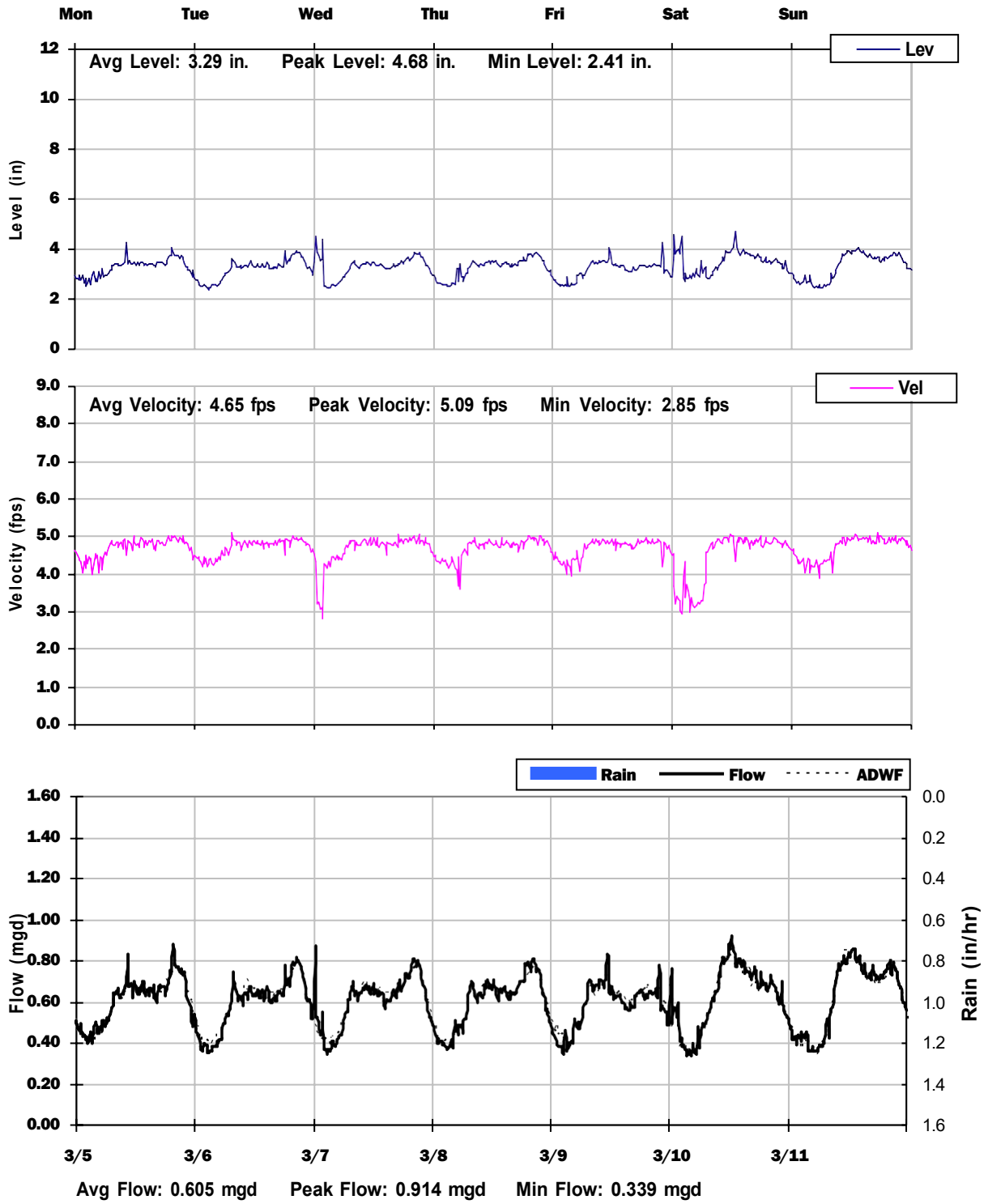
2/26/2018 to 3/5/2018



TC-04

Weekly Level, Velocity and Flow Hydrographs

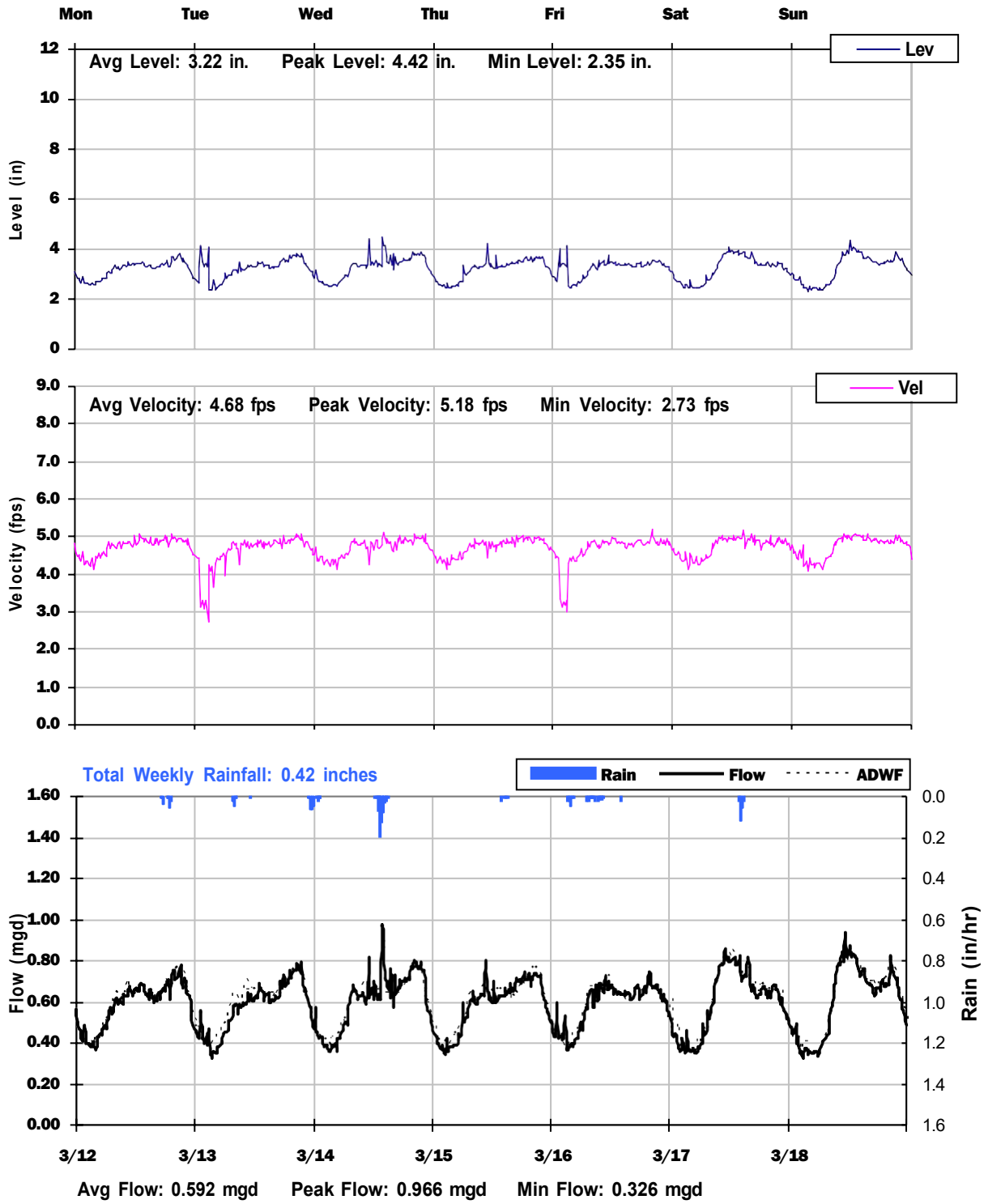
3/5/2018 to 3/12/2018



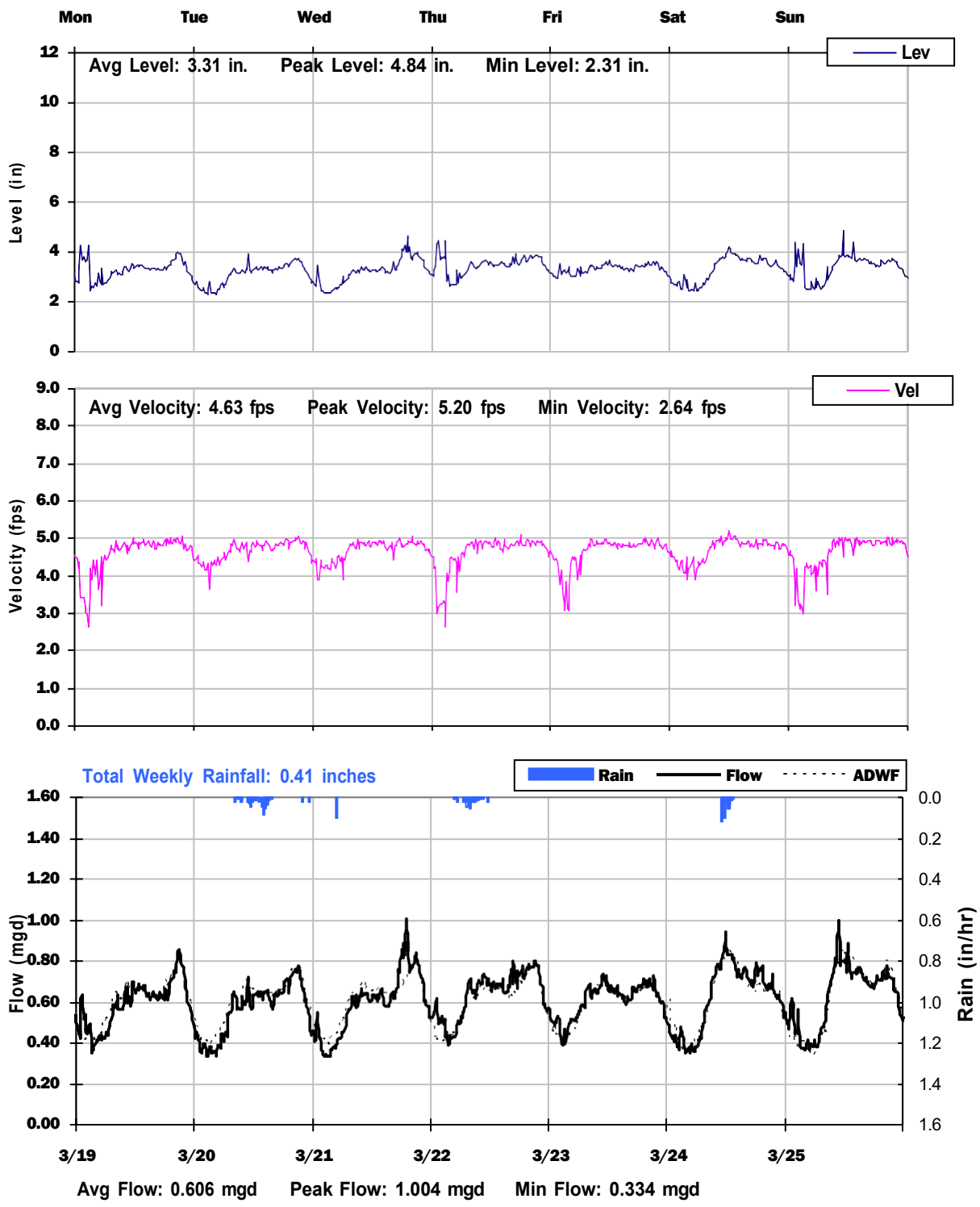
TC-04

Weekly Level, Velocity and Flow Hydrographs

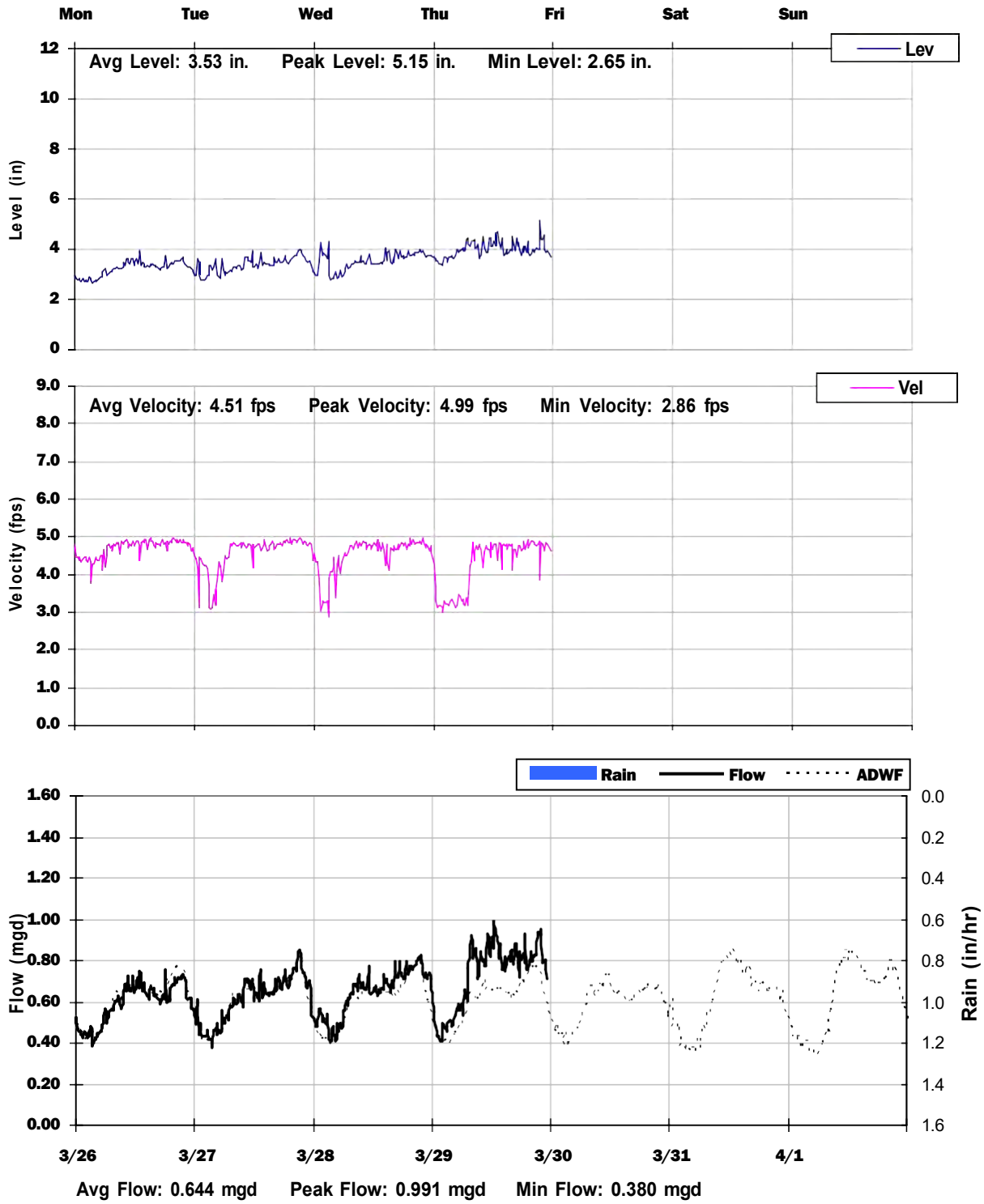
3/12/2018 to 3/19/2018



TC-04
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-04
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



TC-04

City of Tracy, California

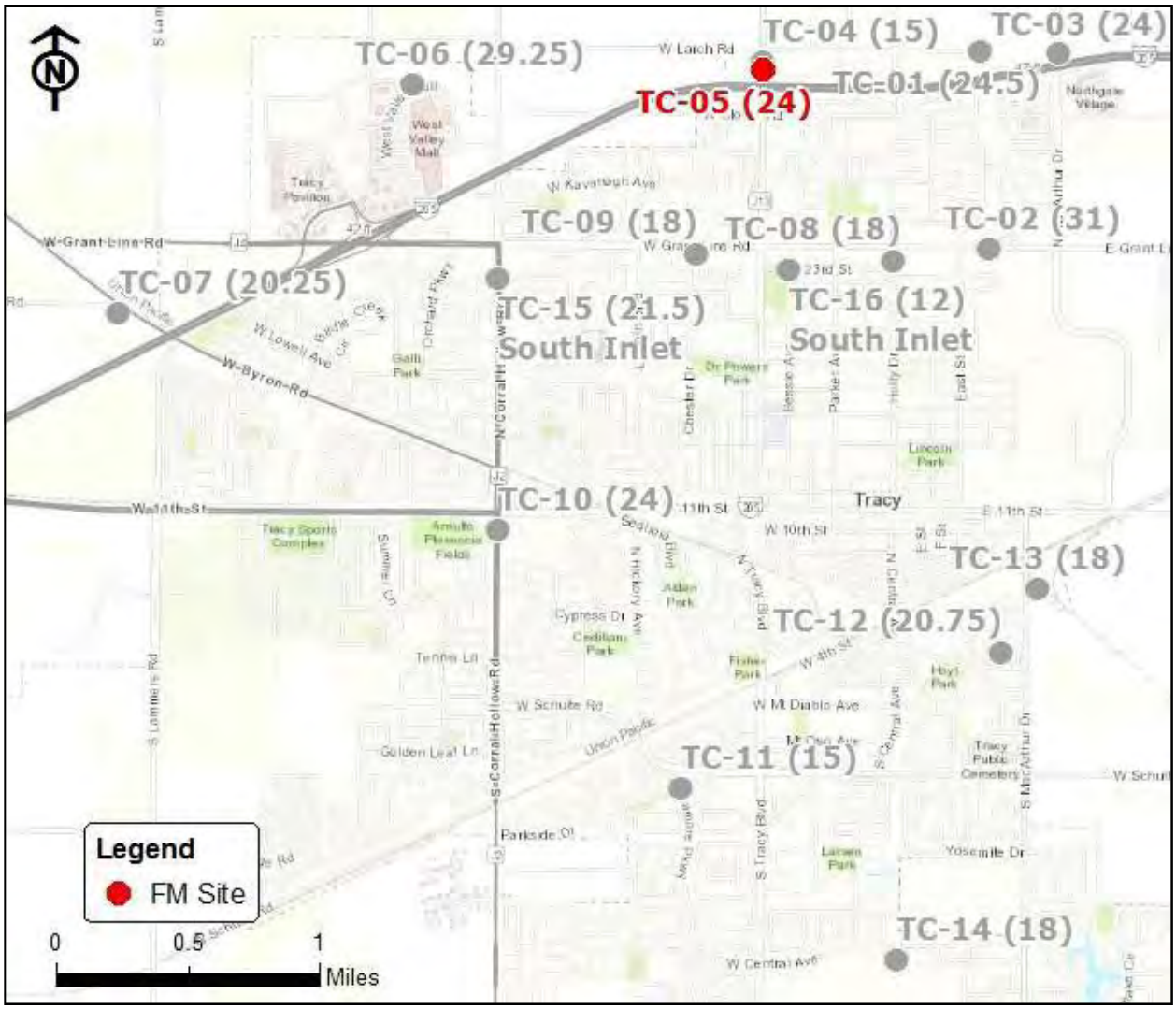
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-05**

Location: **Tracy Blvd, approx 405 feet south of Larch Road**

Data Summary Report



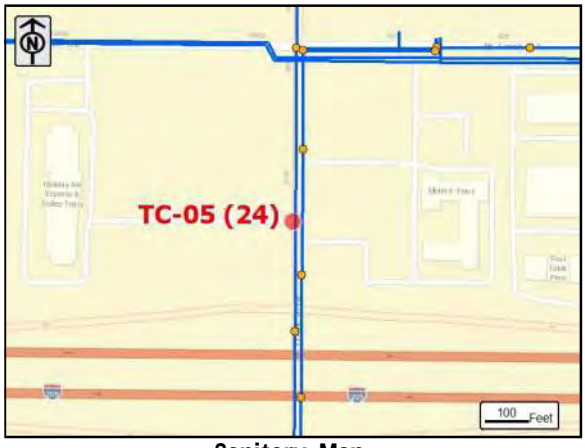
Vicinity Map: TC-05

TC-05

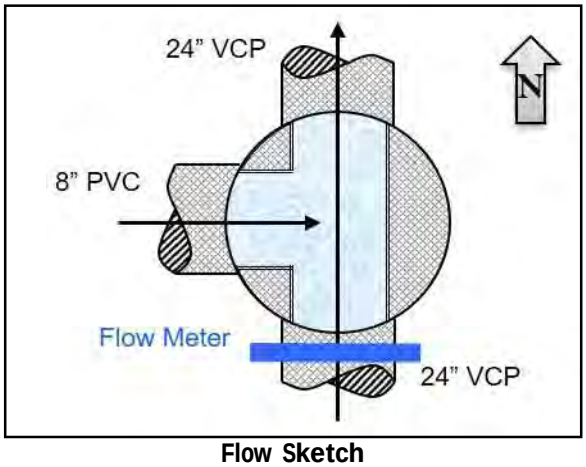
Site Information

Location:	**Tracy Blvd, approx 405 feet south of Larch Road**
City Manhole:	
Coordinates:	**121.4351° W, 37.7639° N**
Rim Elevation (Earth):	**13 feet**
Pipe Diameter:	**24 inches**
ADWF:	**2.361 mgd**
Peak Measured Flow:	**3.816 mgd**

Satellite Map



Sanitary Map



Flow Sketch

Street View

Plan View

TC-05

Additional Site Photos

Effluent Pipe

Monitored South Influent Pipe

TC-05

Additional Site Photos

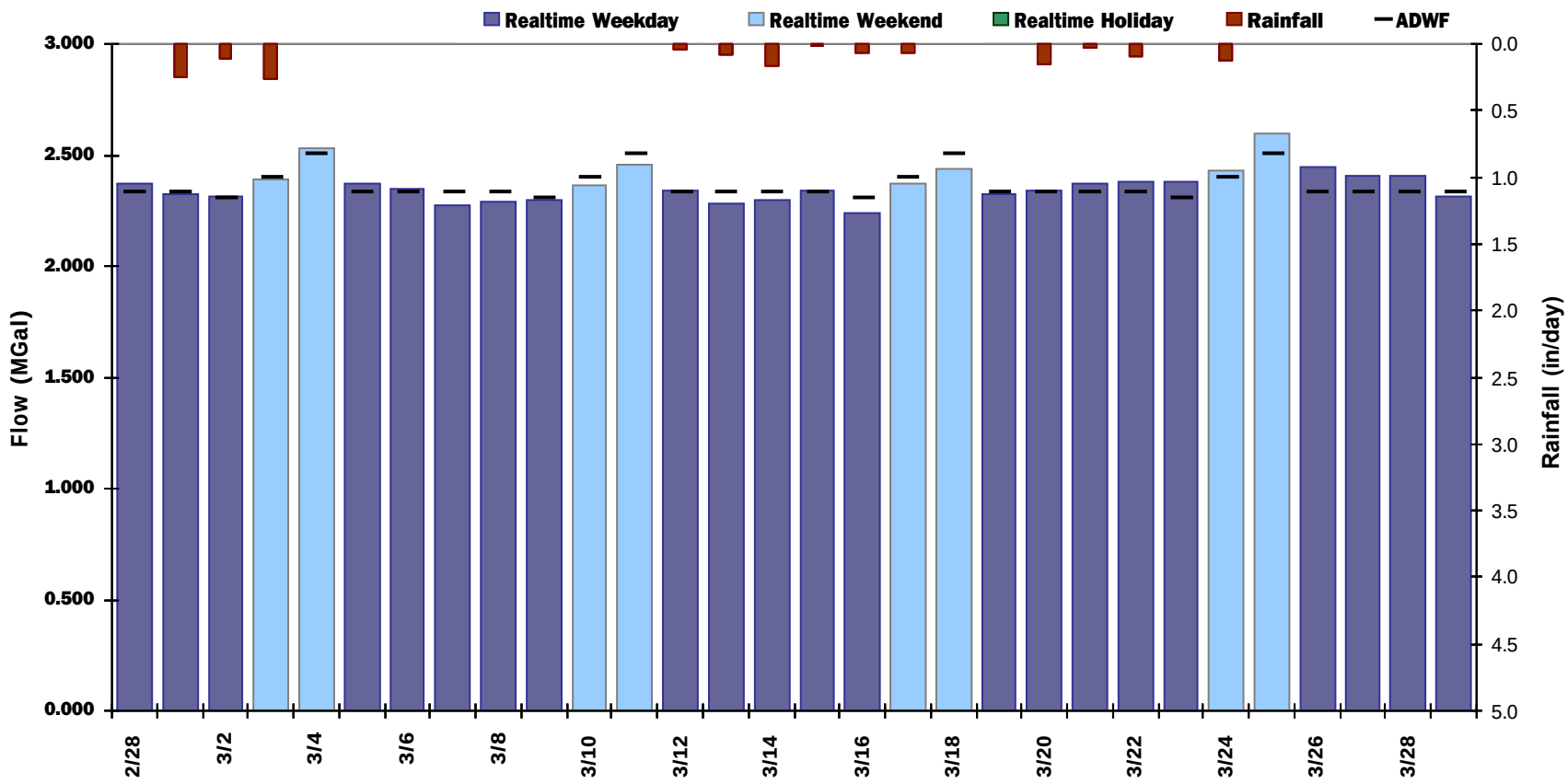
West Lateral

TC-05

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 2.368 MGal Peak Daily Flow: 2.599 MGal Min Daily Flow: 2.242 MGal

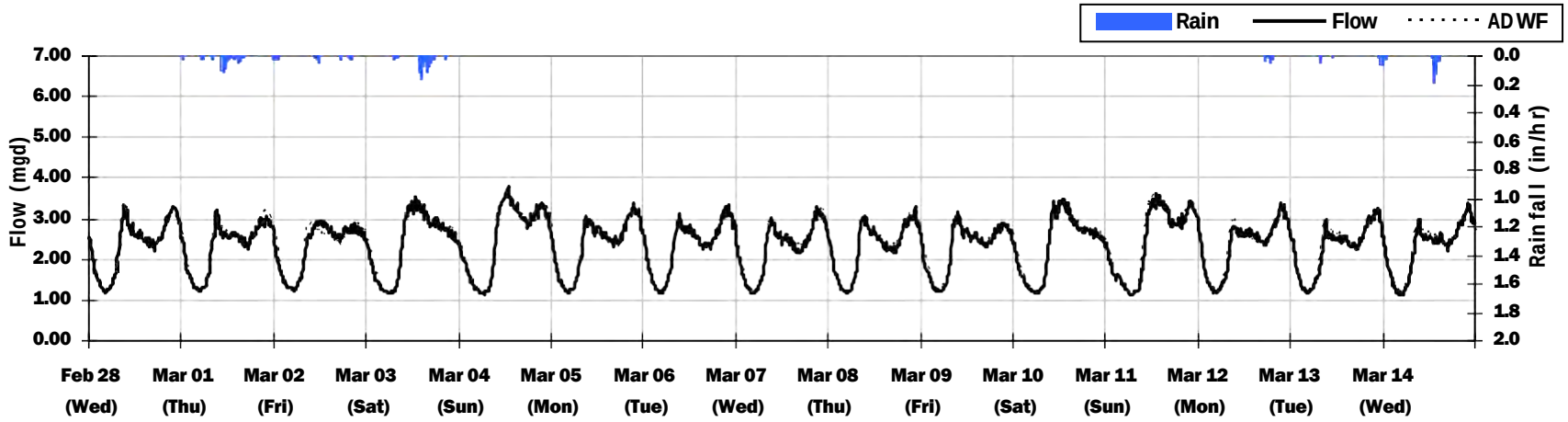
Total Period Rainfall: 1.43 inches

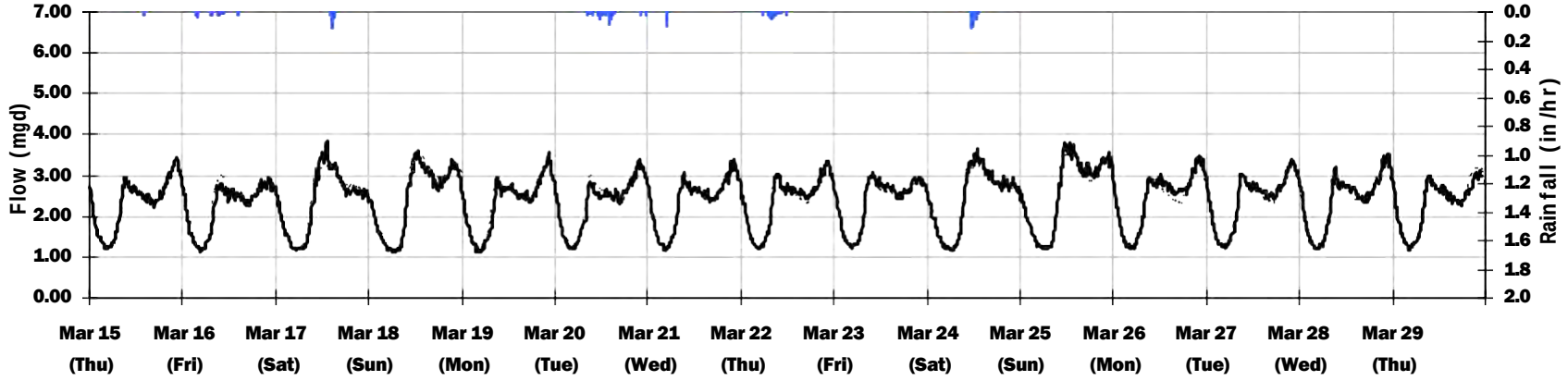


TC-05

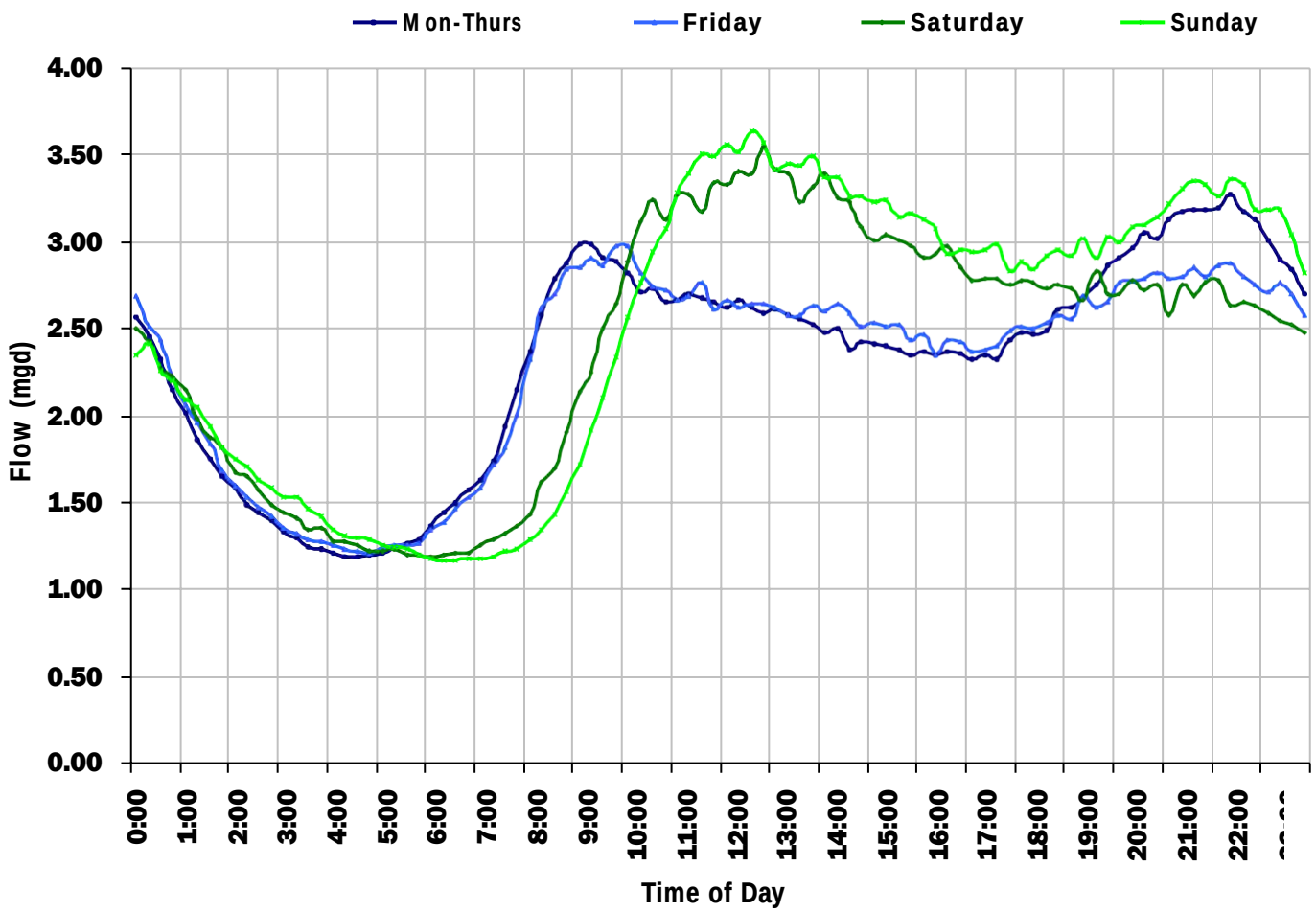
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 2.368 mgd Peak Flow: 3.816 mgd Min Flow: 1.115 mgd



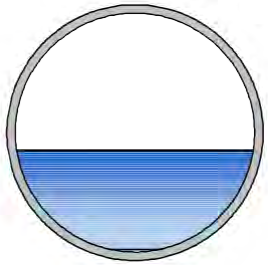


TC-05
Average Dry Weather Flow Hydrographs



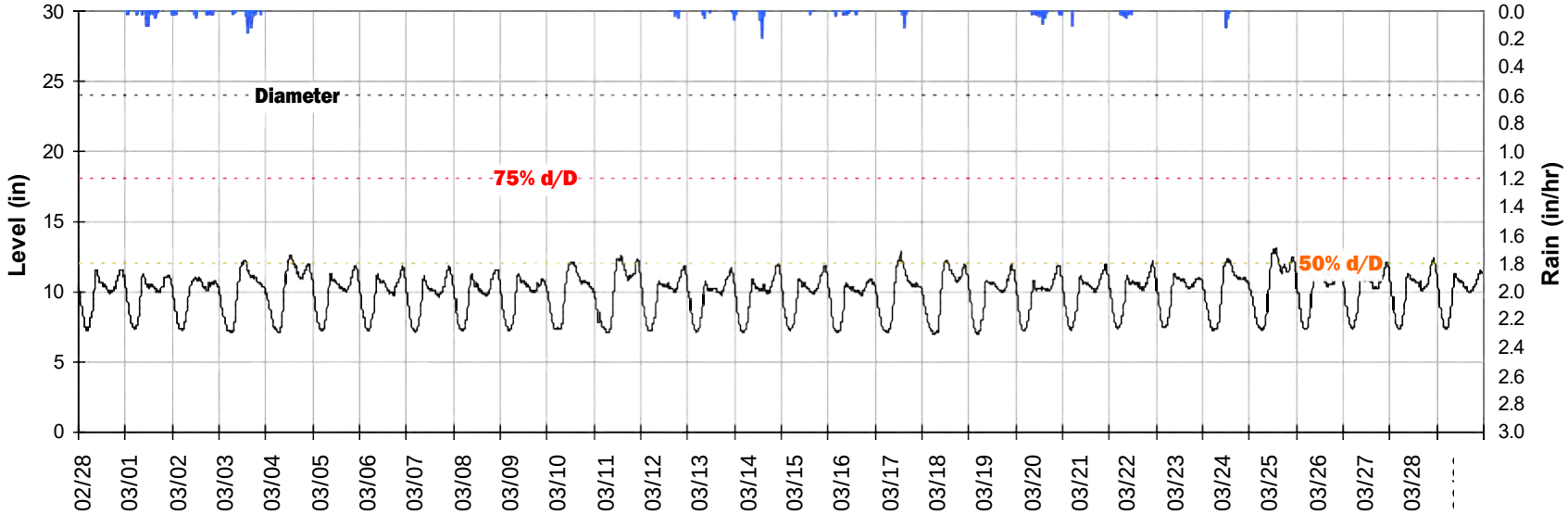
ADWF:

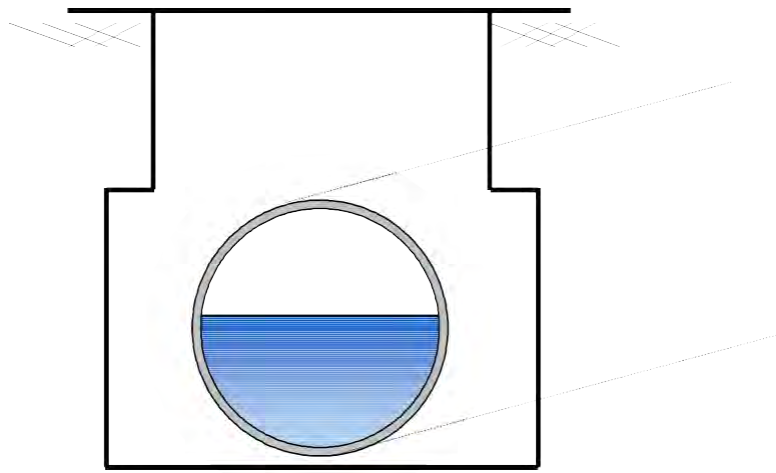
2.361 *mgd*



TC-05
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



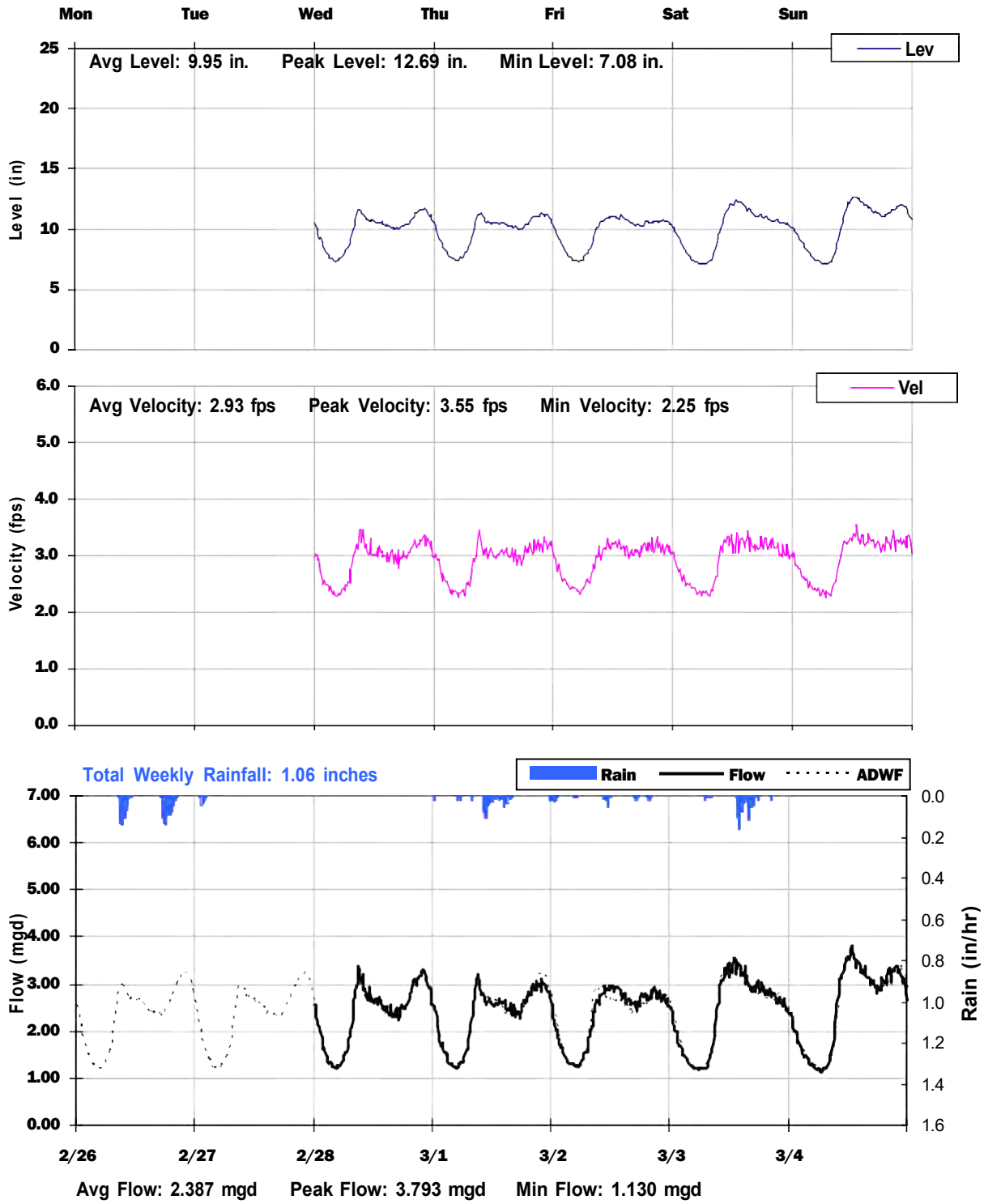


Pipe Diameter:	**24**	***inches***
Peak Measured Level:	**13.1**	***inches***
Peak d/D Ratio:	**0.55**	

TC-05

Weekly Level, Velocity and Flow Hydrographs

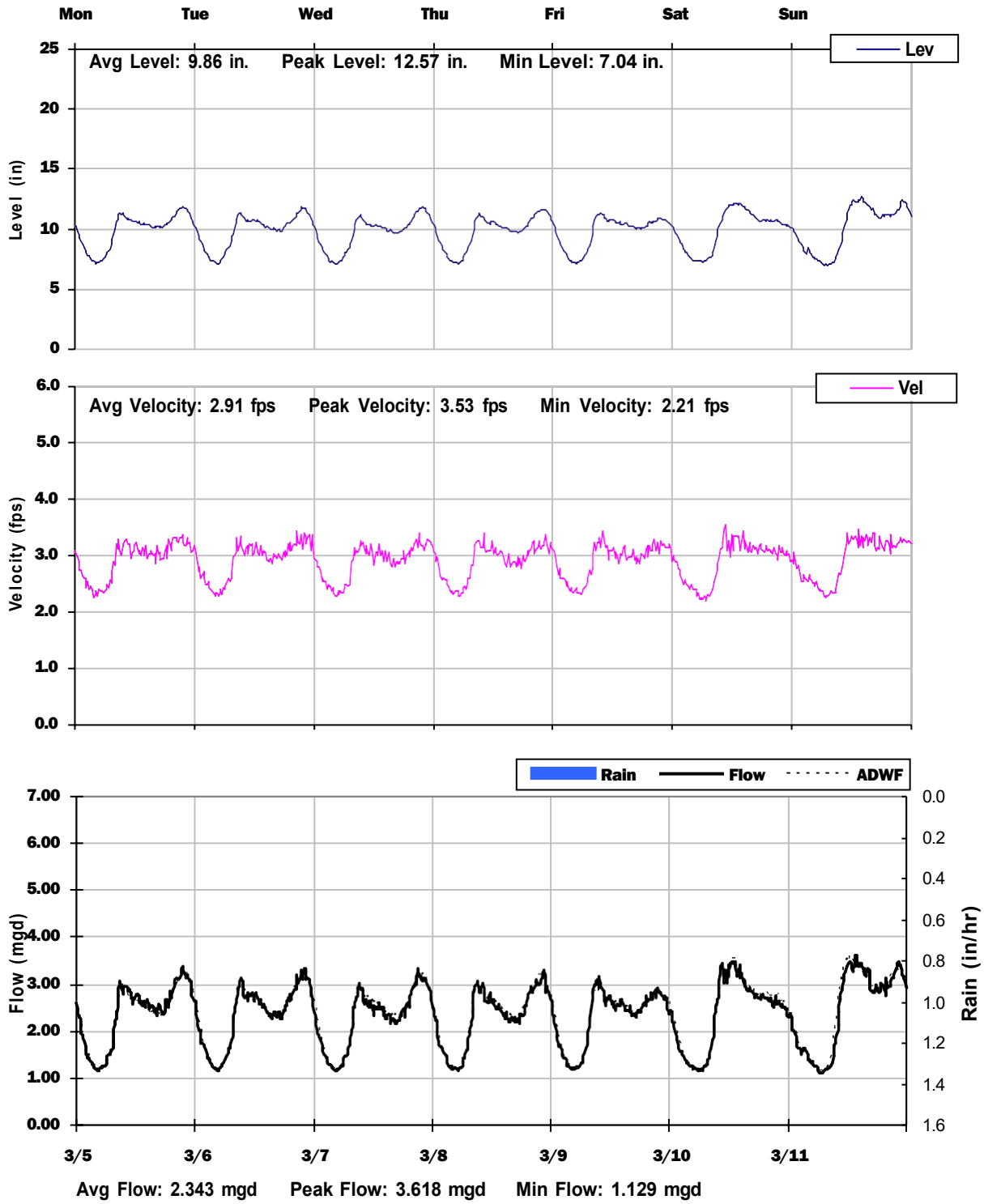
2/26/2018 to 3/5/2018



TC-05

Weekly Level, Velocity and Flow Hydrographs

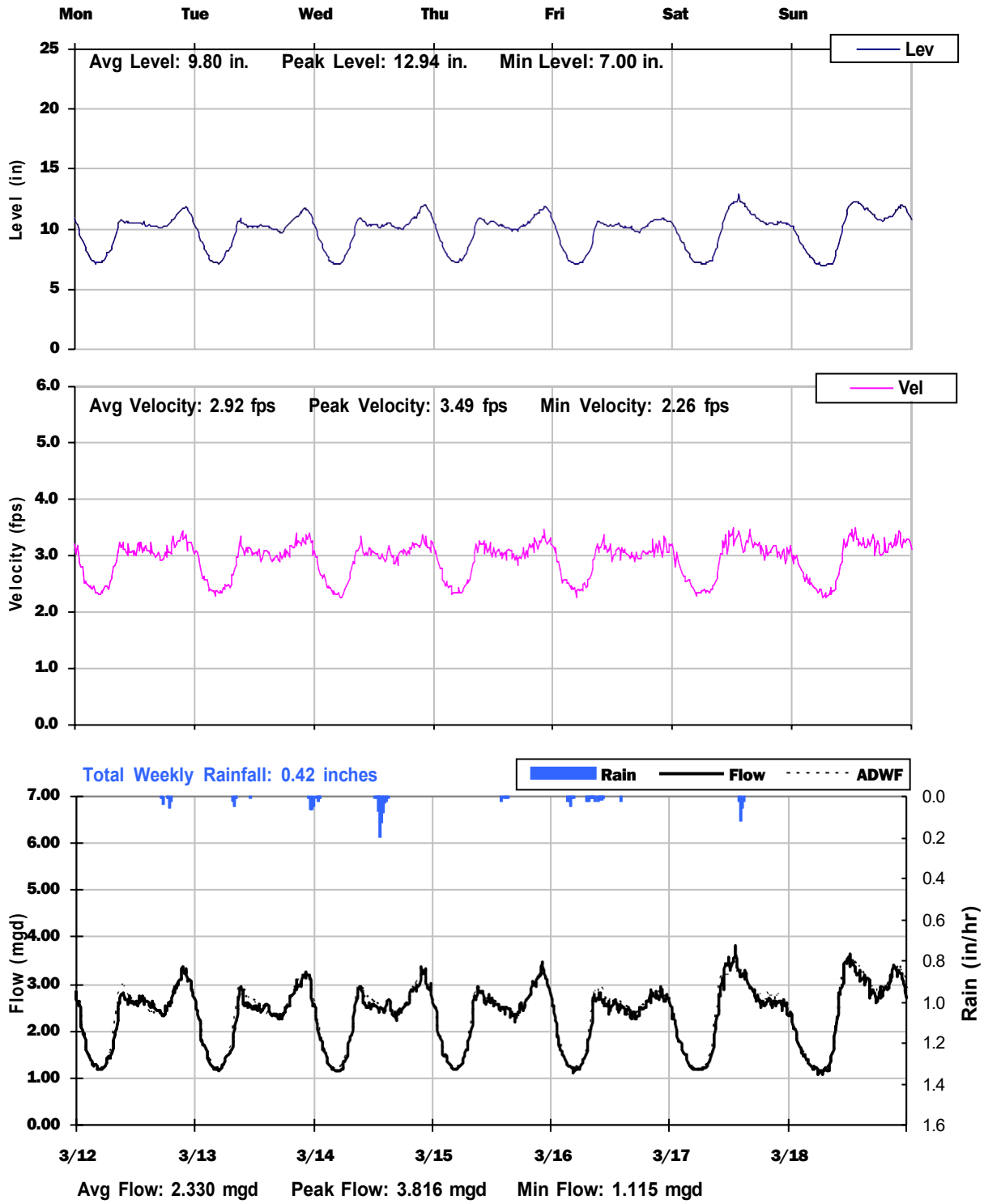
3/5/2018 to 3/12/2018



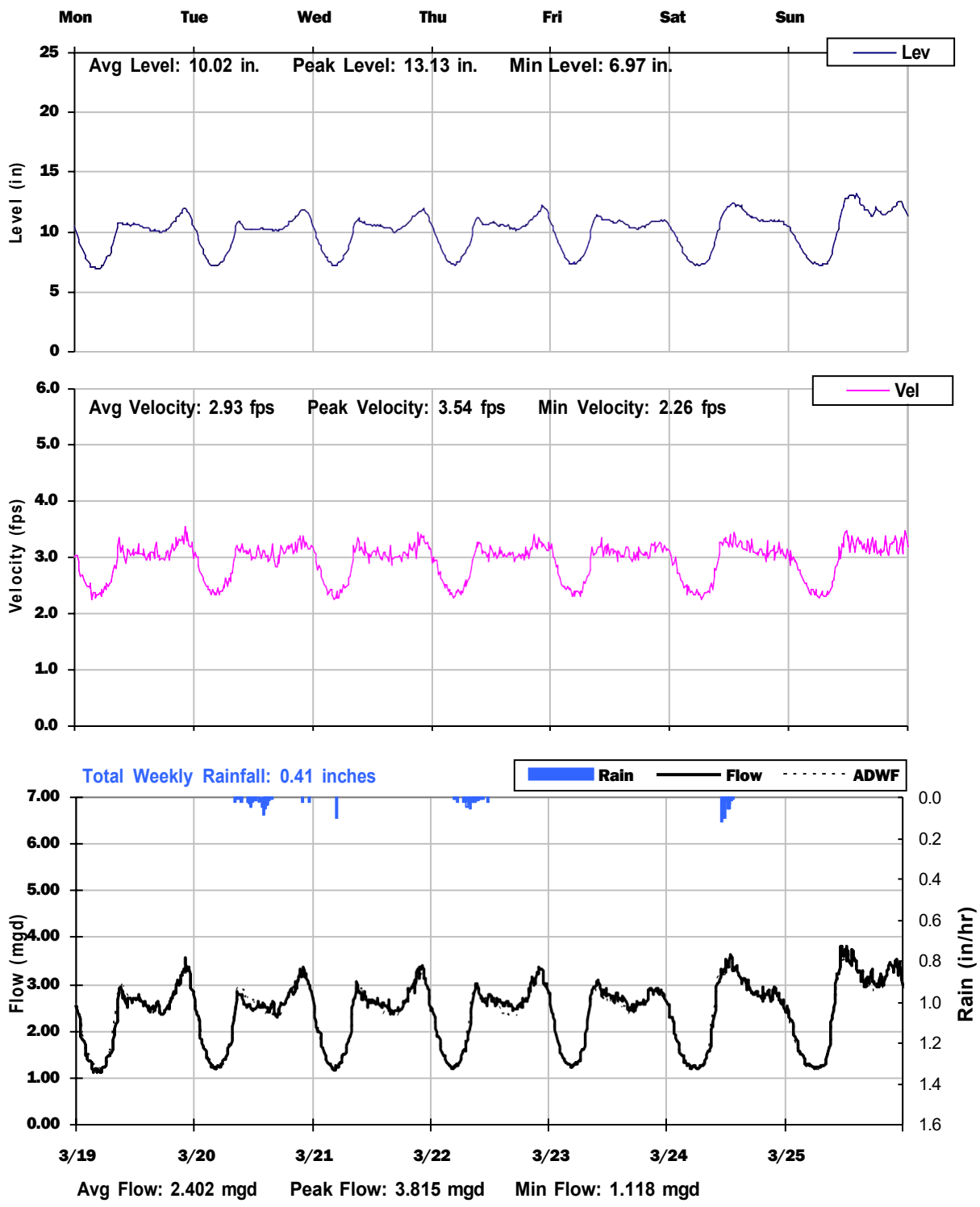
TC-05

Weekly Level, Velocity and Flow Hydrographs

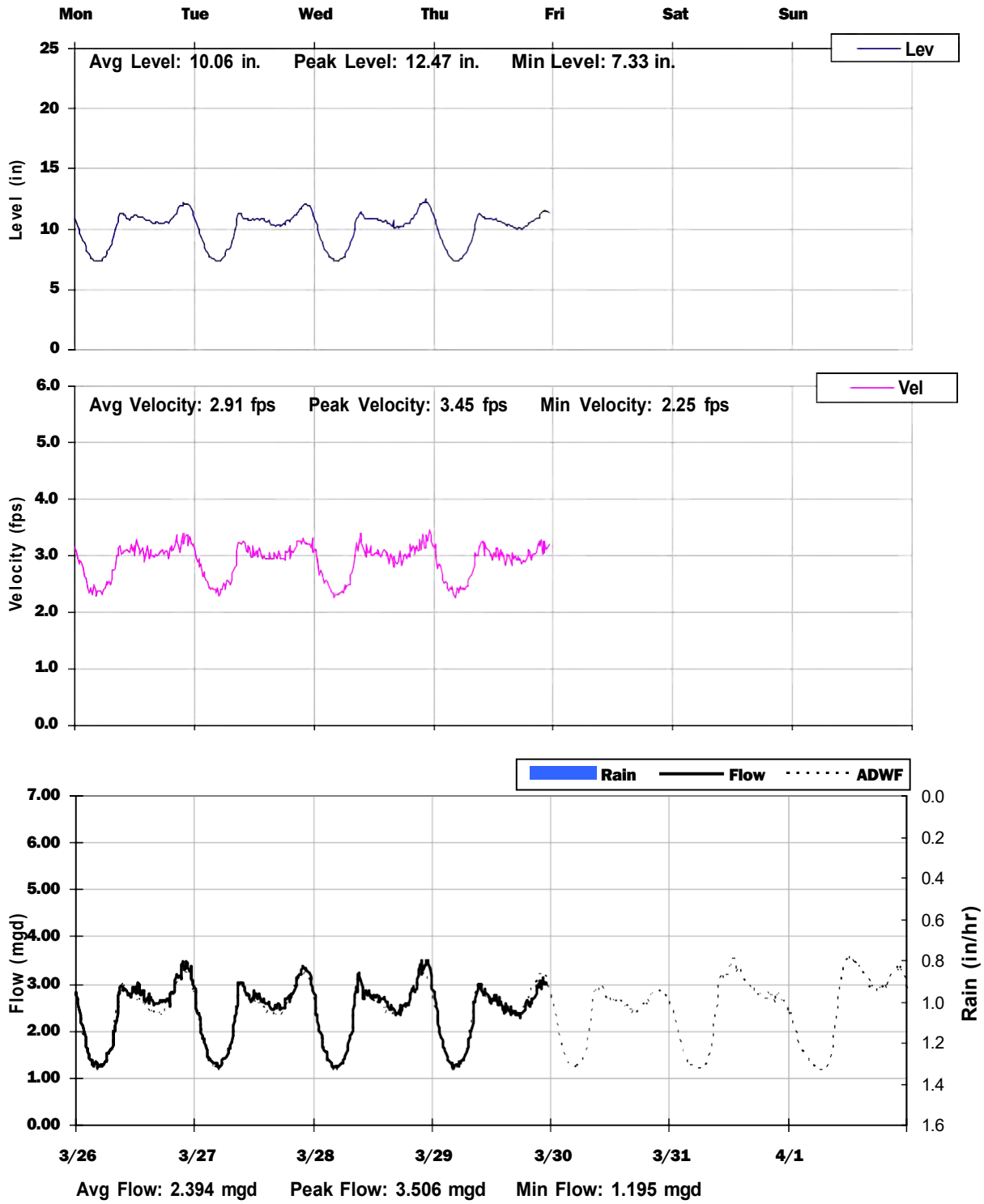
3/12/2018 to 3/19/2018



TC-05
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-05
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



TC-05

City of Tracy, California

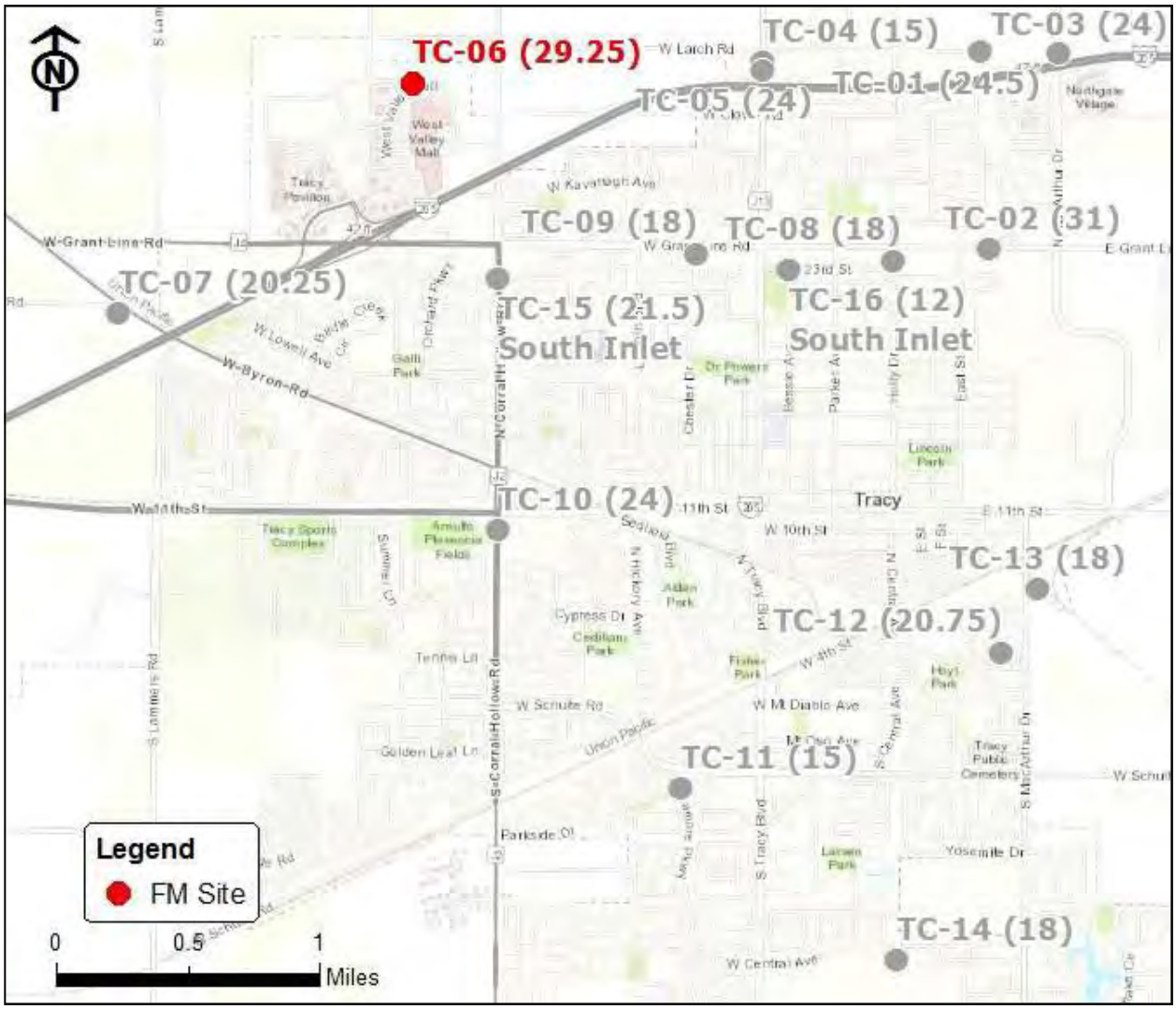
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-06**

Location: **Naglee Road, approx 315 feet northeast of Auto Plaza Drive (off road approx 25 feet north of curb)**

Data Summary Report



Vicinity Map: TC-06

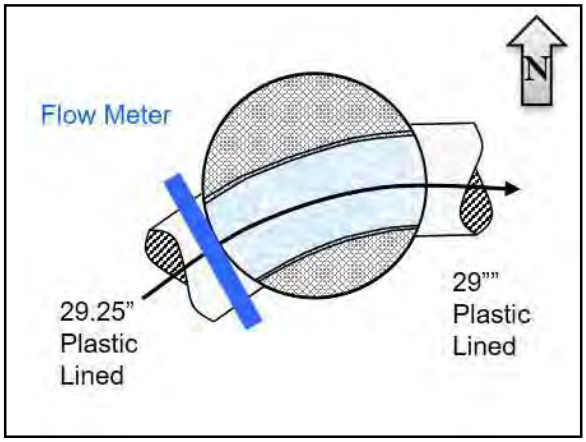
TC-06

Site Information

Location:	**Naglee Road, approx 315 feet northeast of Auto Plaza Drive (off road approx 25 feet north of curb)**
City Manhole:	
Coordinates:	**121.4592° W, 37.7630° N**
Rim Elevation (Earth):	**10 feet**
Pipe Diameter:	**29.25 inches**
ADWF:	**1.332 mgd**
Peak Measured Flow:	**1.777 mgd**

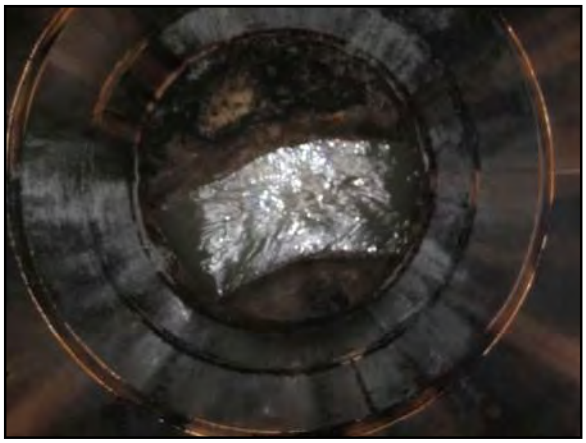
Satellite Map

Sanitary Map



Flow Sketch

Street View



Plan View

TC-06

Additional Site Photos

Effluent Pipe

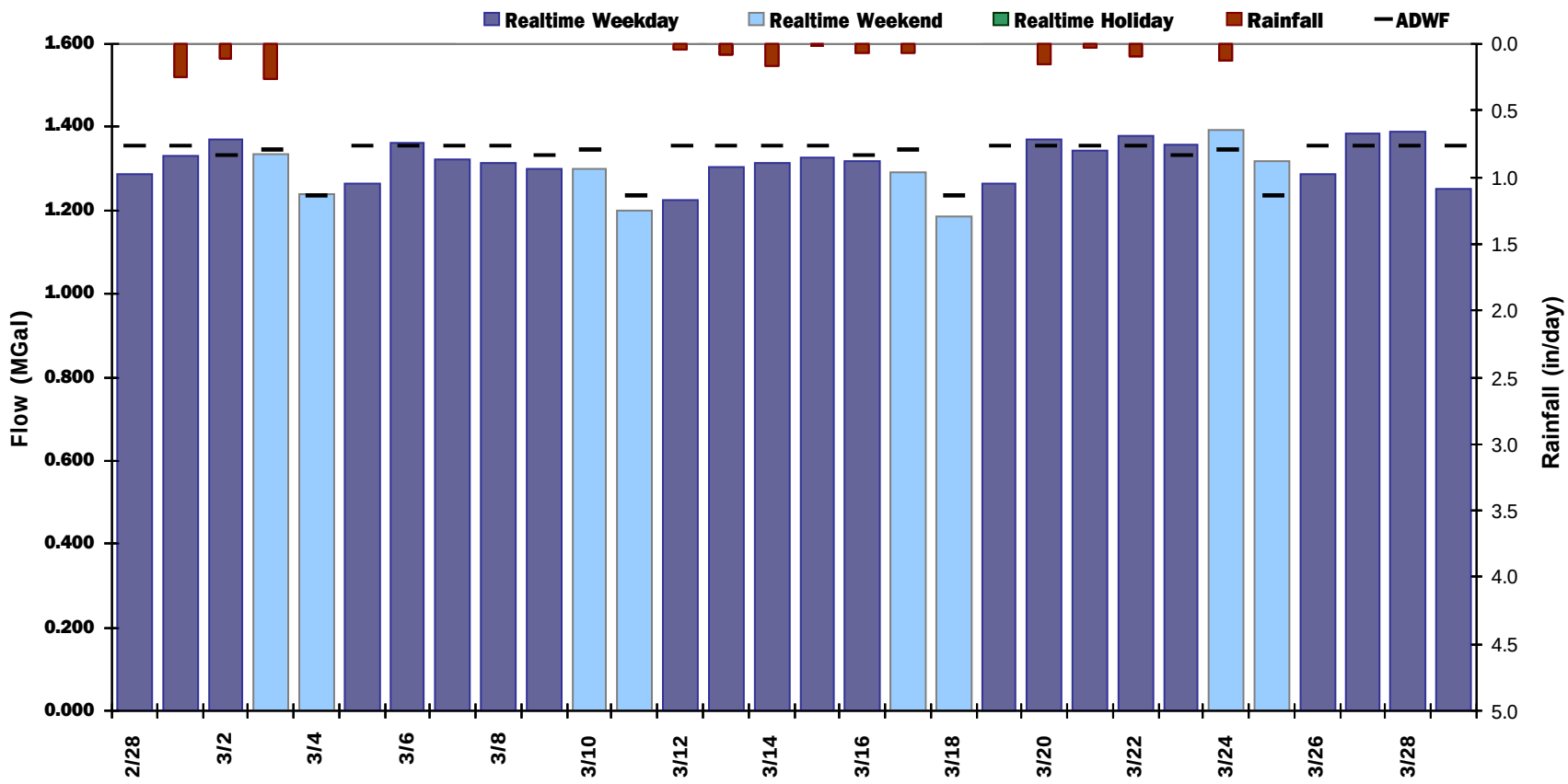
Monitored Influent Pipe

TC-06

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 1.311 MGal Peak Daily Flow: 1.391 MGal Min Daily Flow: 1.184 MGal

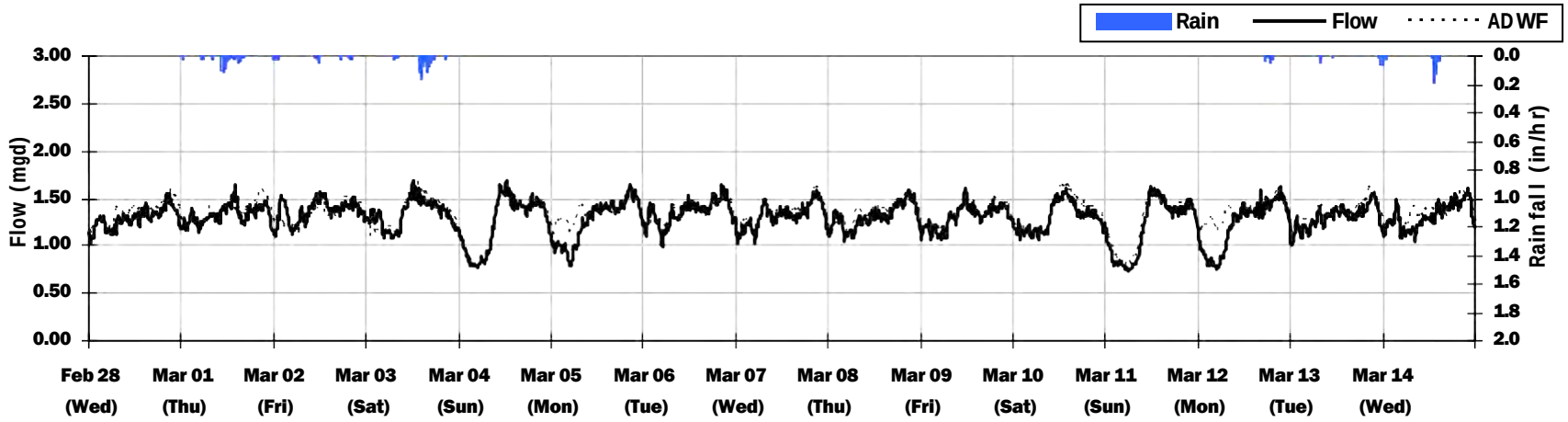
Total Period Rainfall: 1.43 inches

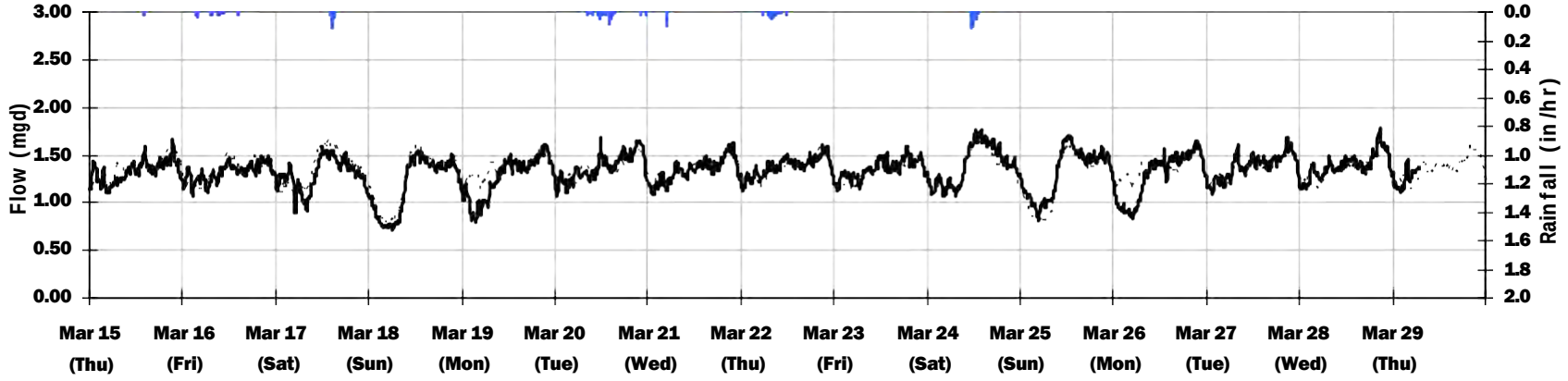


TC-06

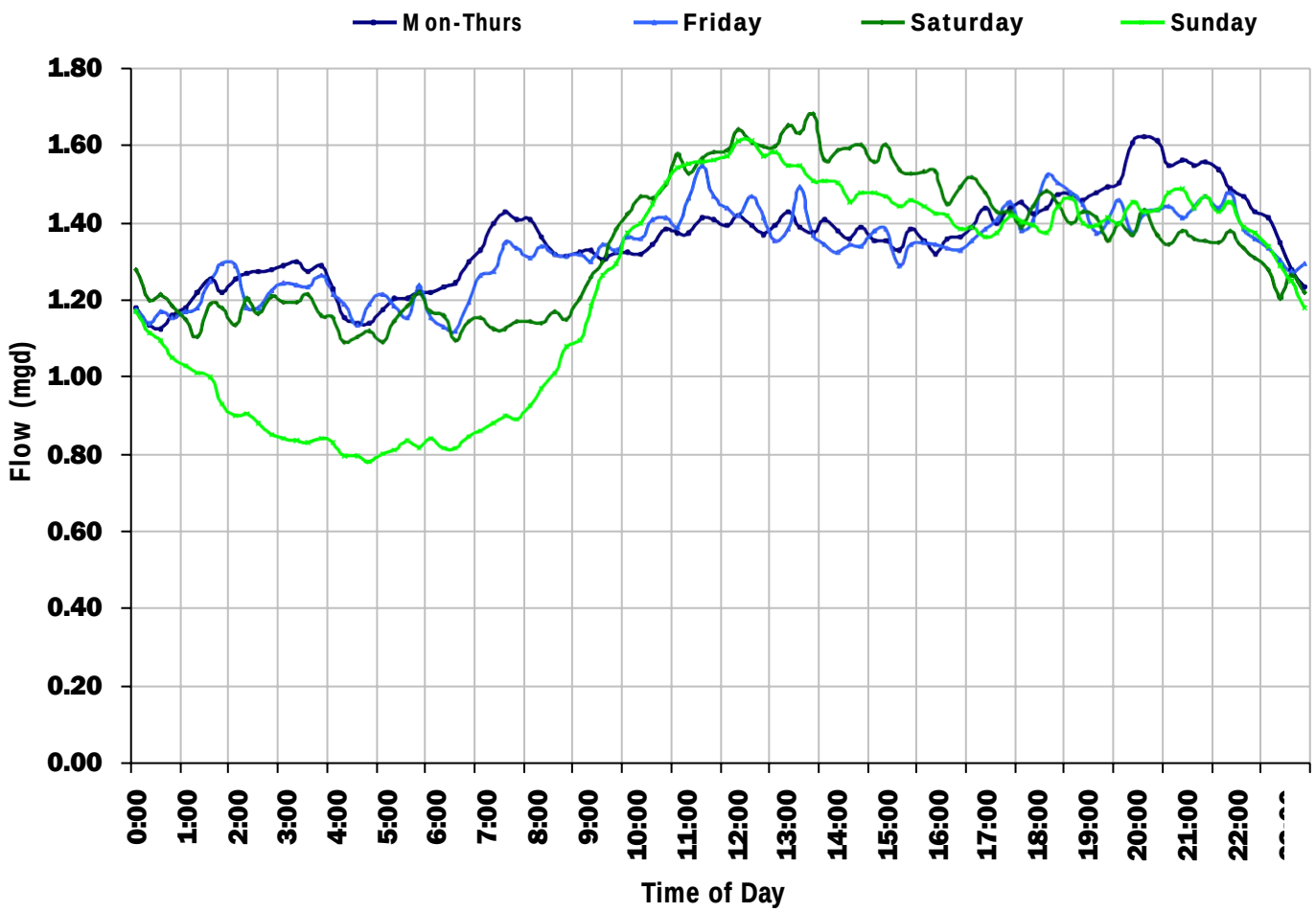
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 1.312 mgd Peak Flow: 1.777 mgd Min Flow: 0.712 mgd



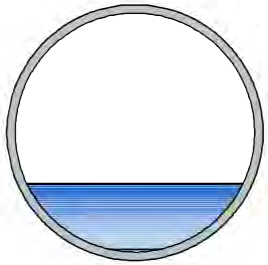


TC-06
Average Dry Weather Flow Hydrographs



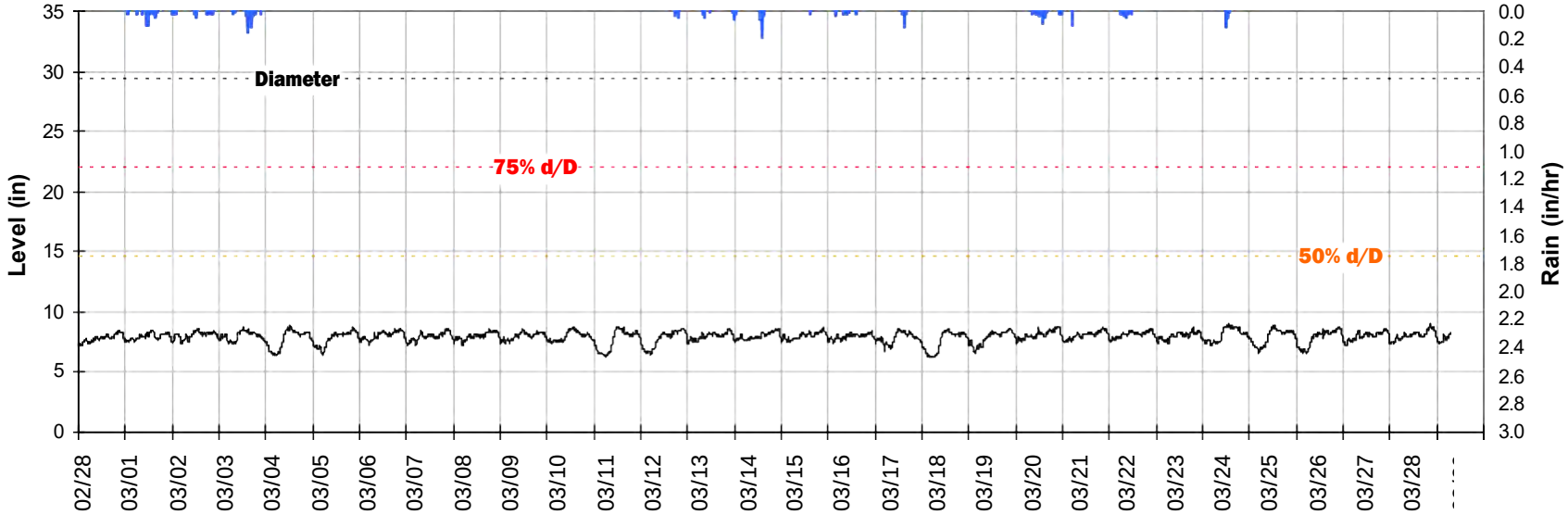
ADWF:

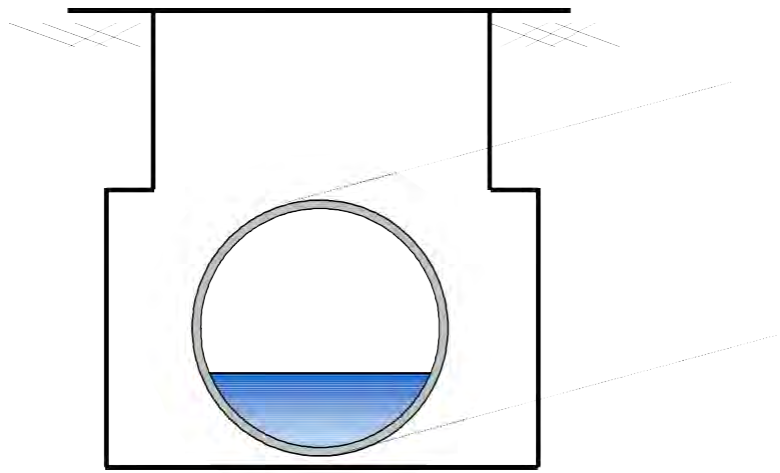
1.332 *mgd*



TC-06
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



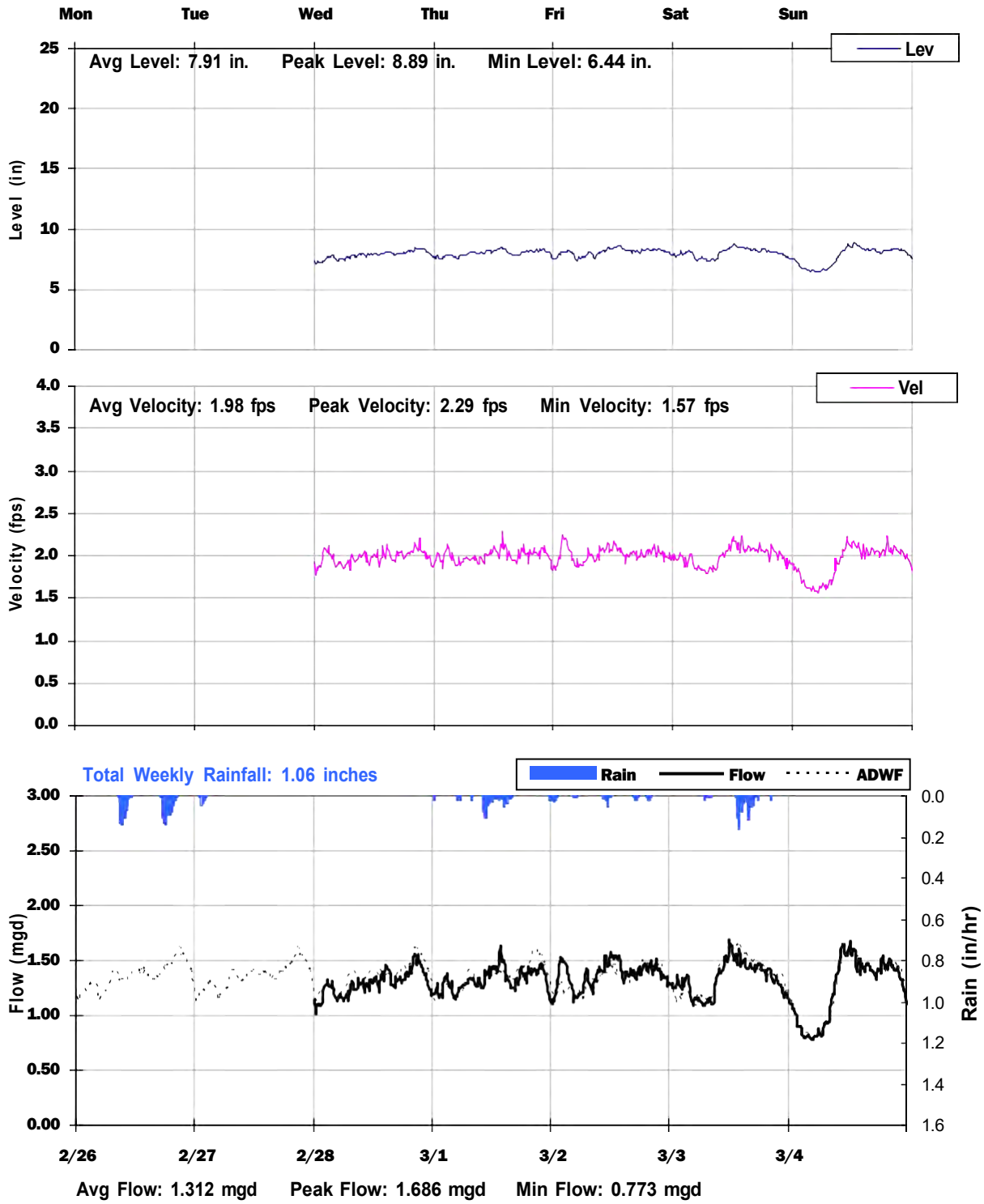


Pipe Diameter:	**29.3**	***inches***
Peak Measured Level:	**9**	***inches***
Peak d/D Ratio:	**0.31**	

TC-06

Weekly Level, Velocity and Flow Hydrographs

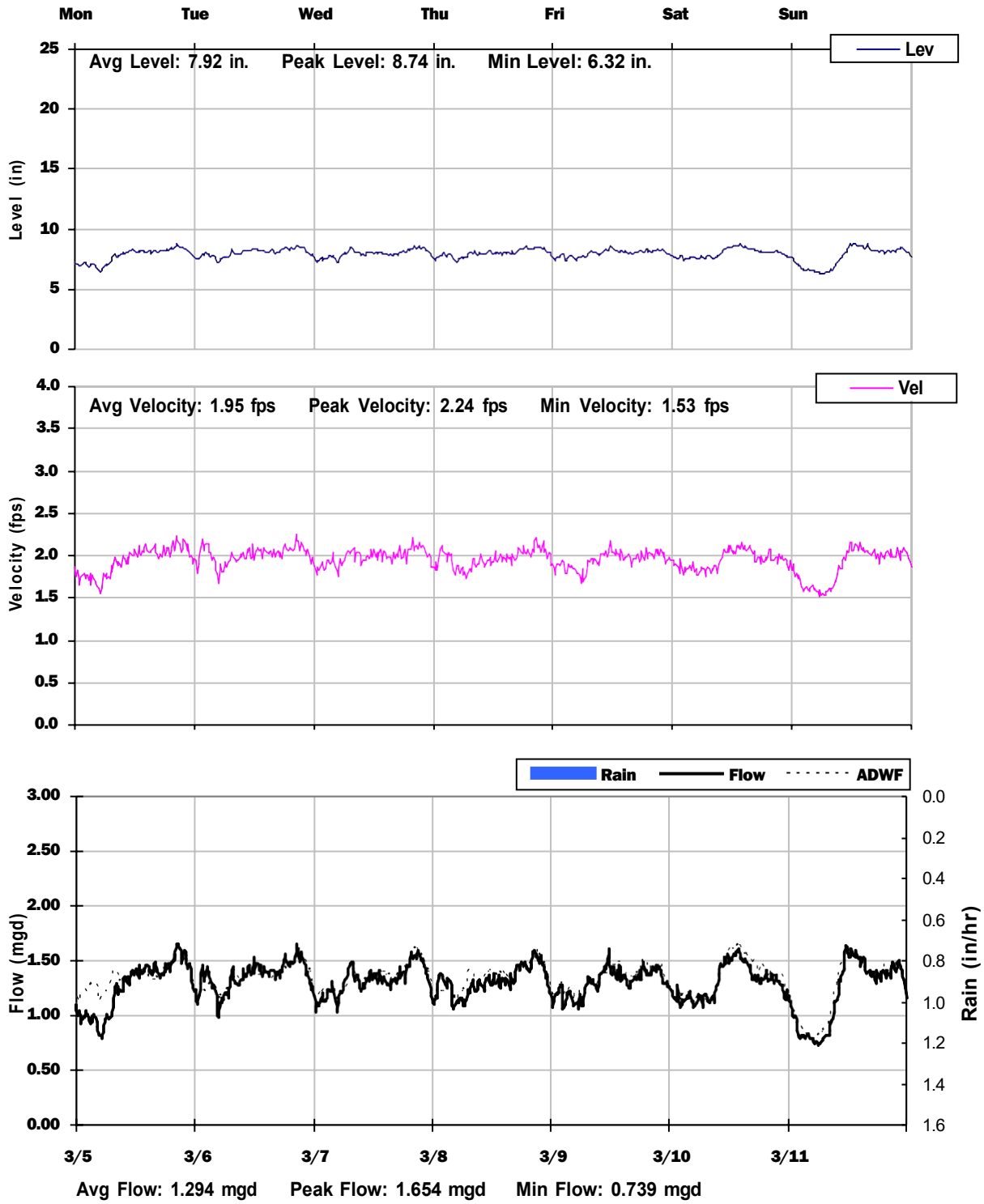
2/26/2018 to 3/5/2018



TC-06

Weekly Level, Velocity and Flow Hydrographs

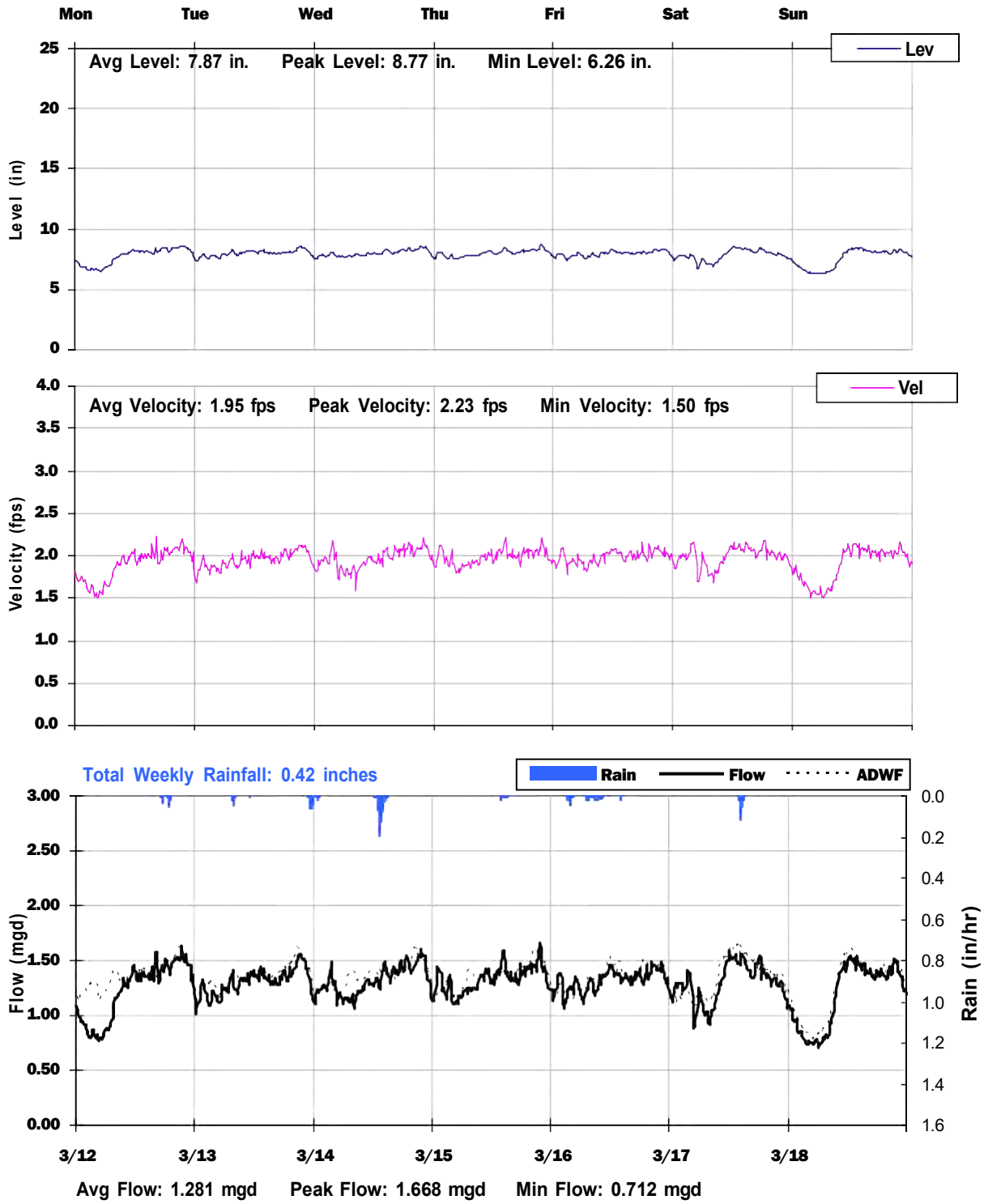
3/5/2018 to 3/12/2018



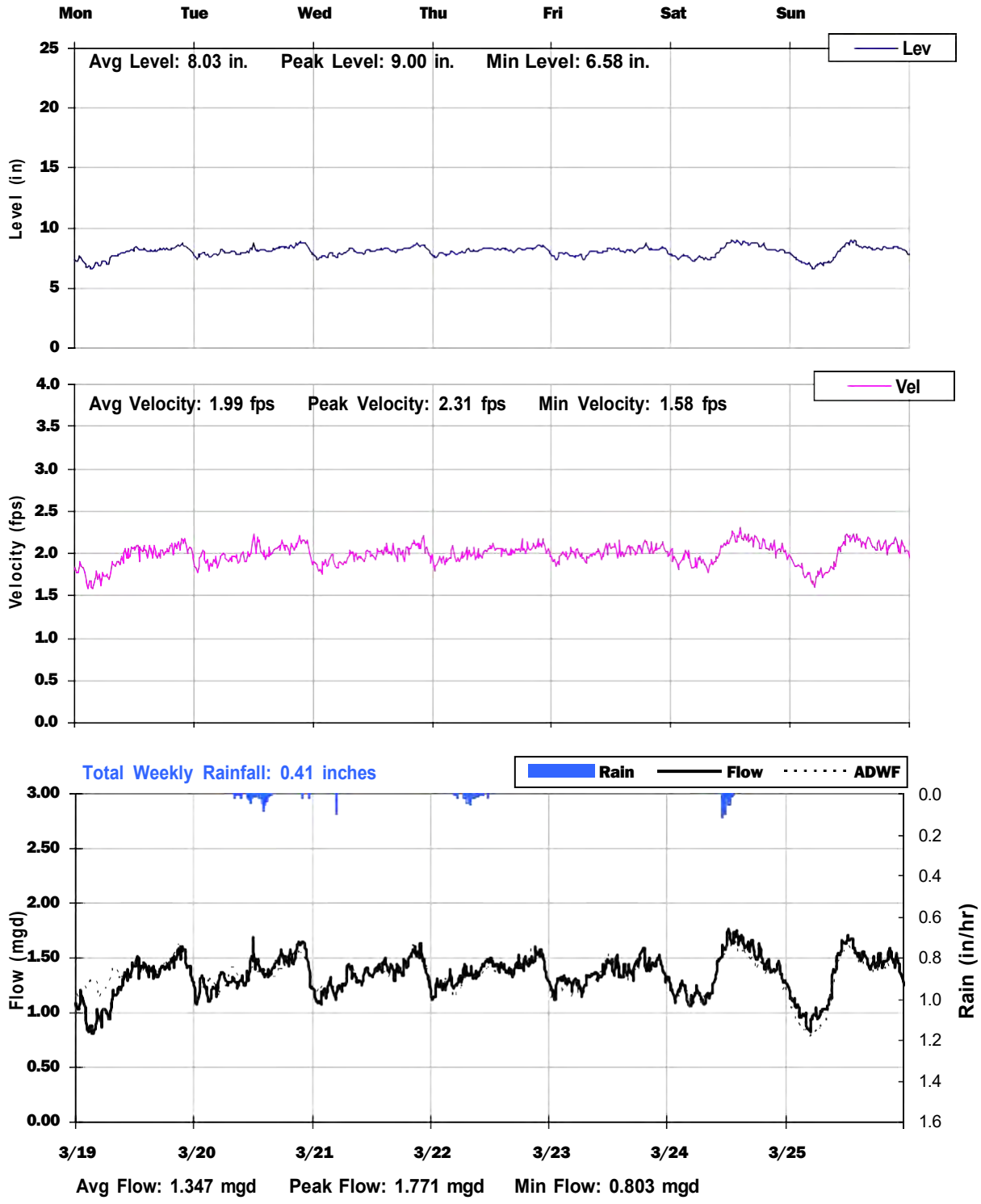
TC-06

Weekly Level, Velocity and Flow Hydrographs

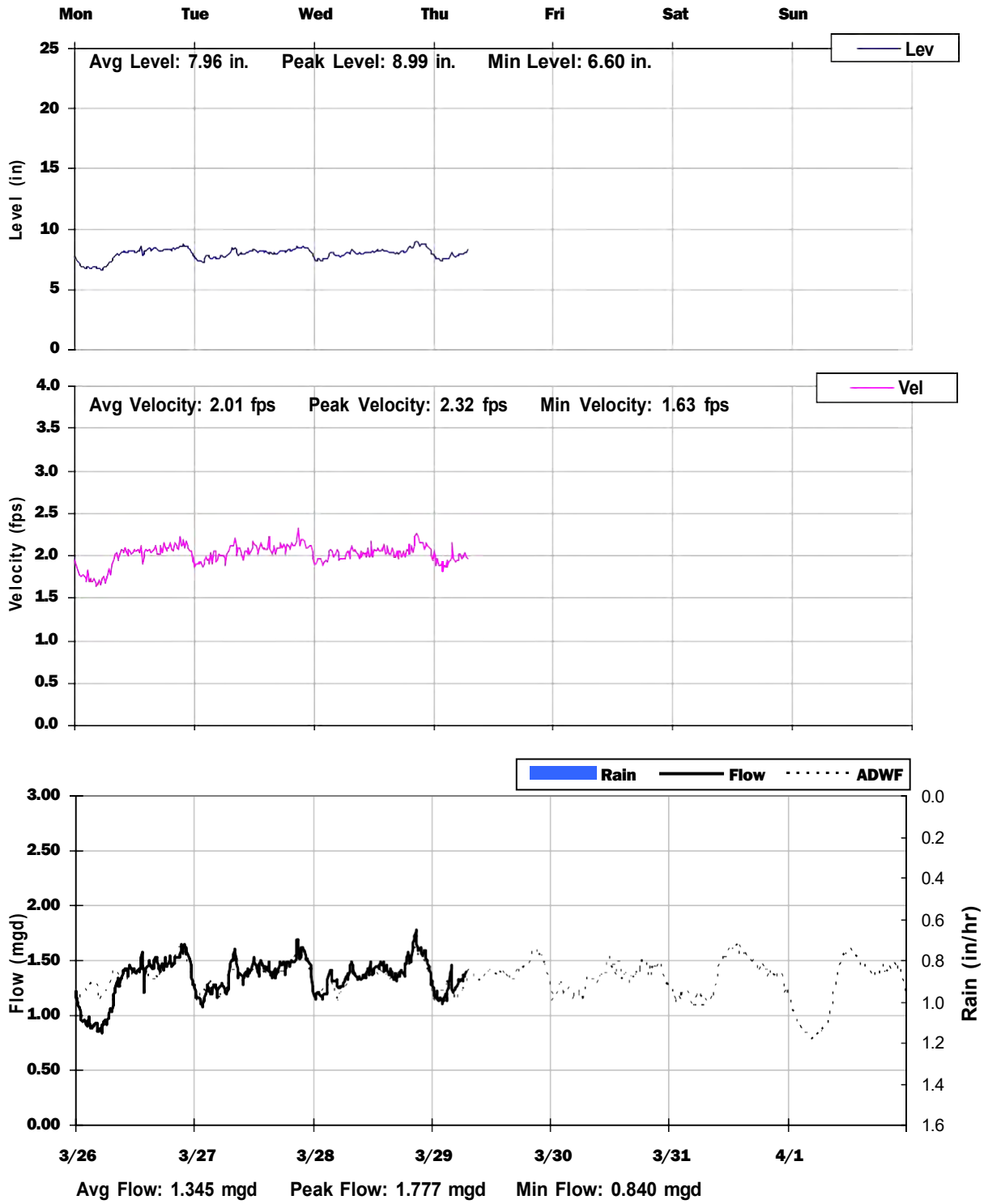
3/12/2018 to 3/19/2018



TC-06
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-06
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



City of Tracy, California

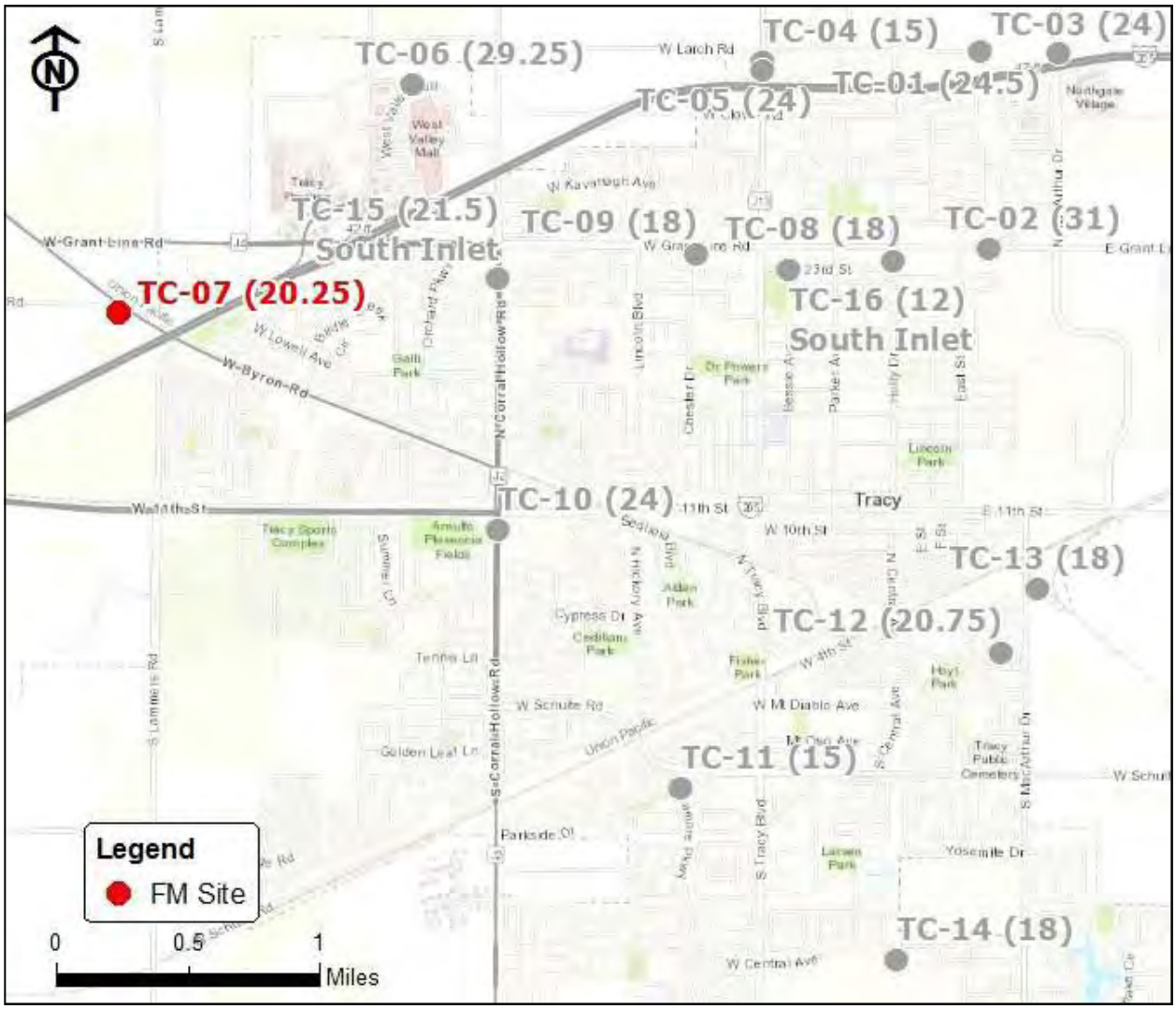
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-07**

Location: **In field, approx 180 feet south of intersection of Byron Road and Von Sosten Road**

Data Summary Report



Vicinity Map: TC-07

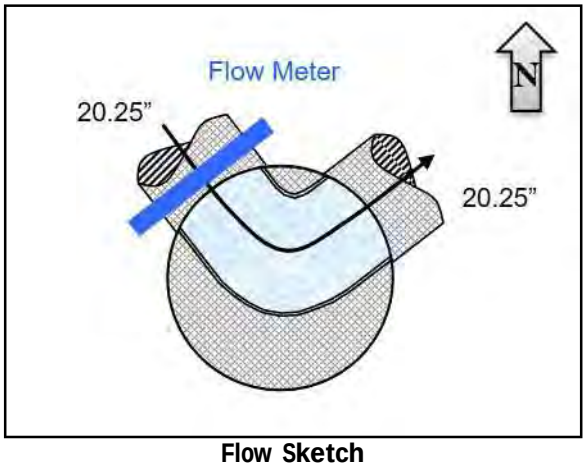
TC-07

Site Information

Location:	**In field, approx 180 feet south of intersection of Byron Road and Von Sosten Road**
City Manhole:	
Coordinates:	**121.4794° W, 37.7502° N**
Rim Elevation (Earth):	**29 feet**
Pipe Diameter:	**20.25 inches**
ADWF:	**0.300 mgd**
Peak Measured Flow:	**1.168 mgd**

Satellite Map

Sanitary Map



Flow Sketch

Street View

Plan View

TC-07

Additional Site Photos

Effluent Pipe

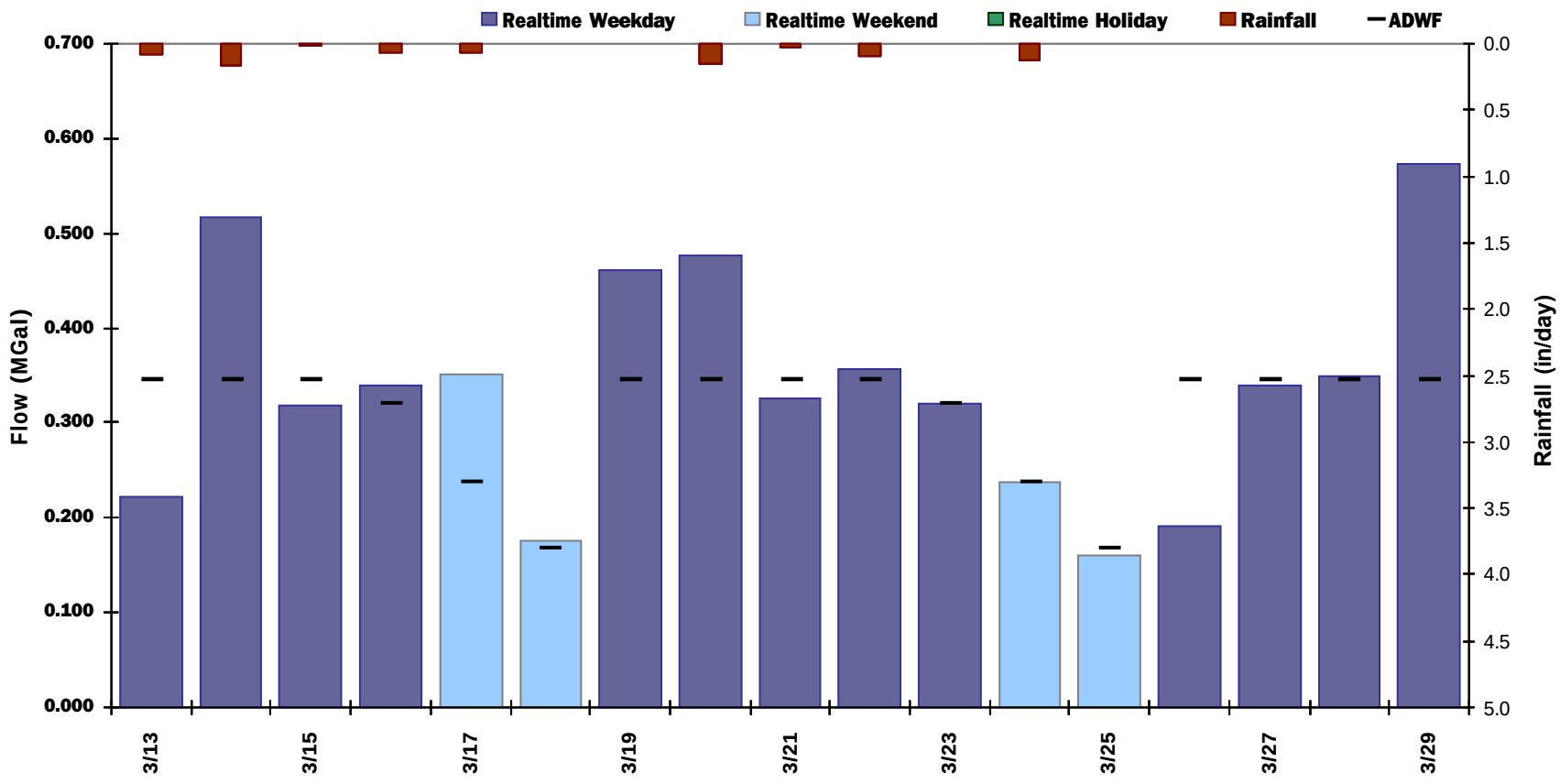
Monitored Influent Pipe

TC-07

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 0.336 MGal Peak Daily Flow: 0.572 MGal Min Daily Flow: 0.161 MGal

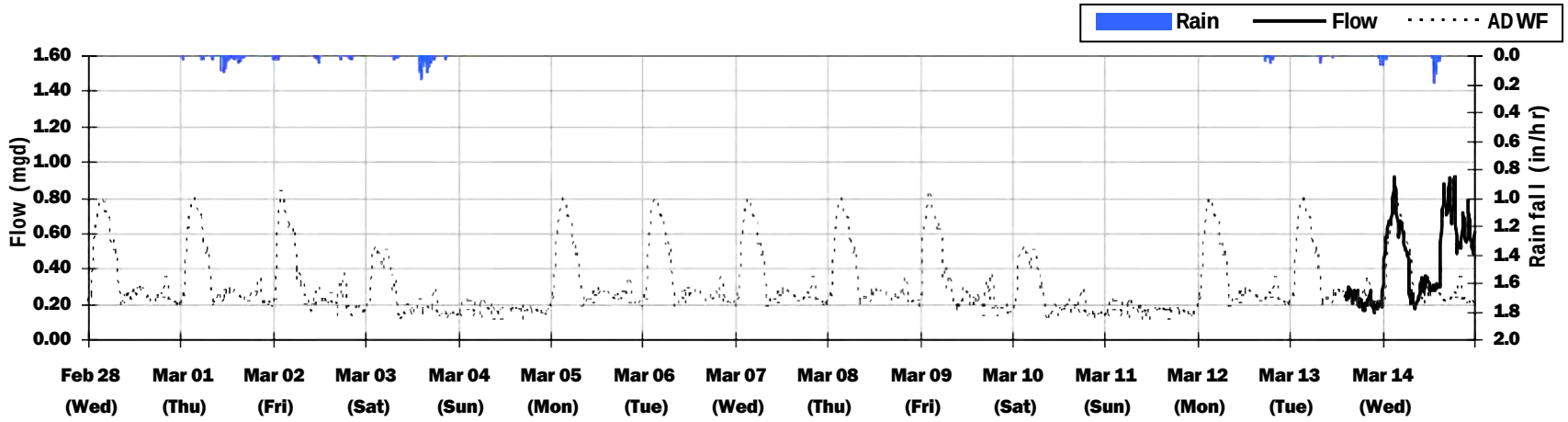
Total Period Rainfall: 0.77 inches

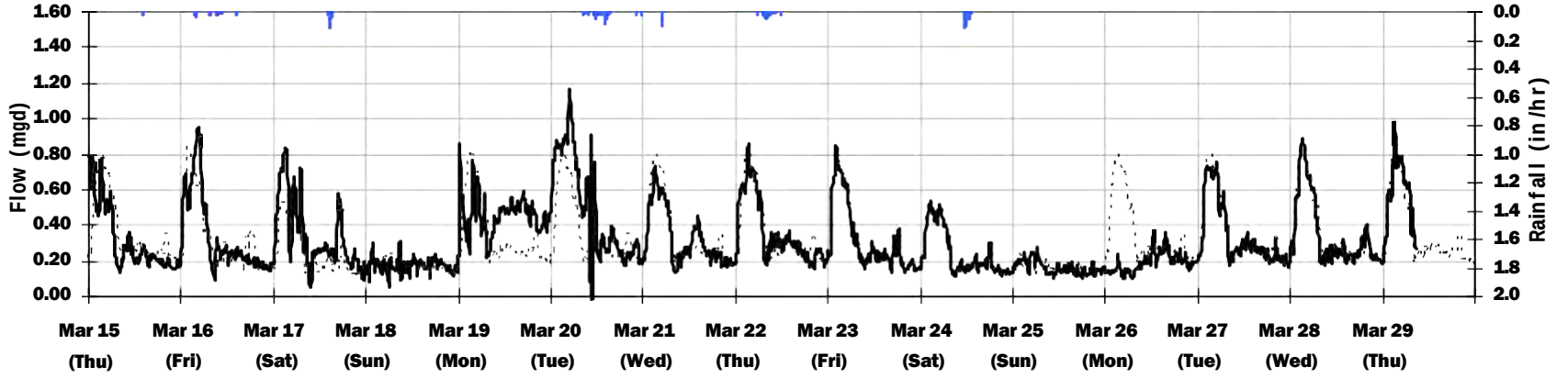


TC-07

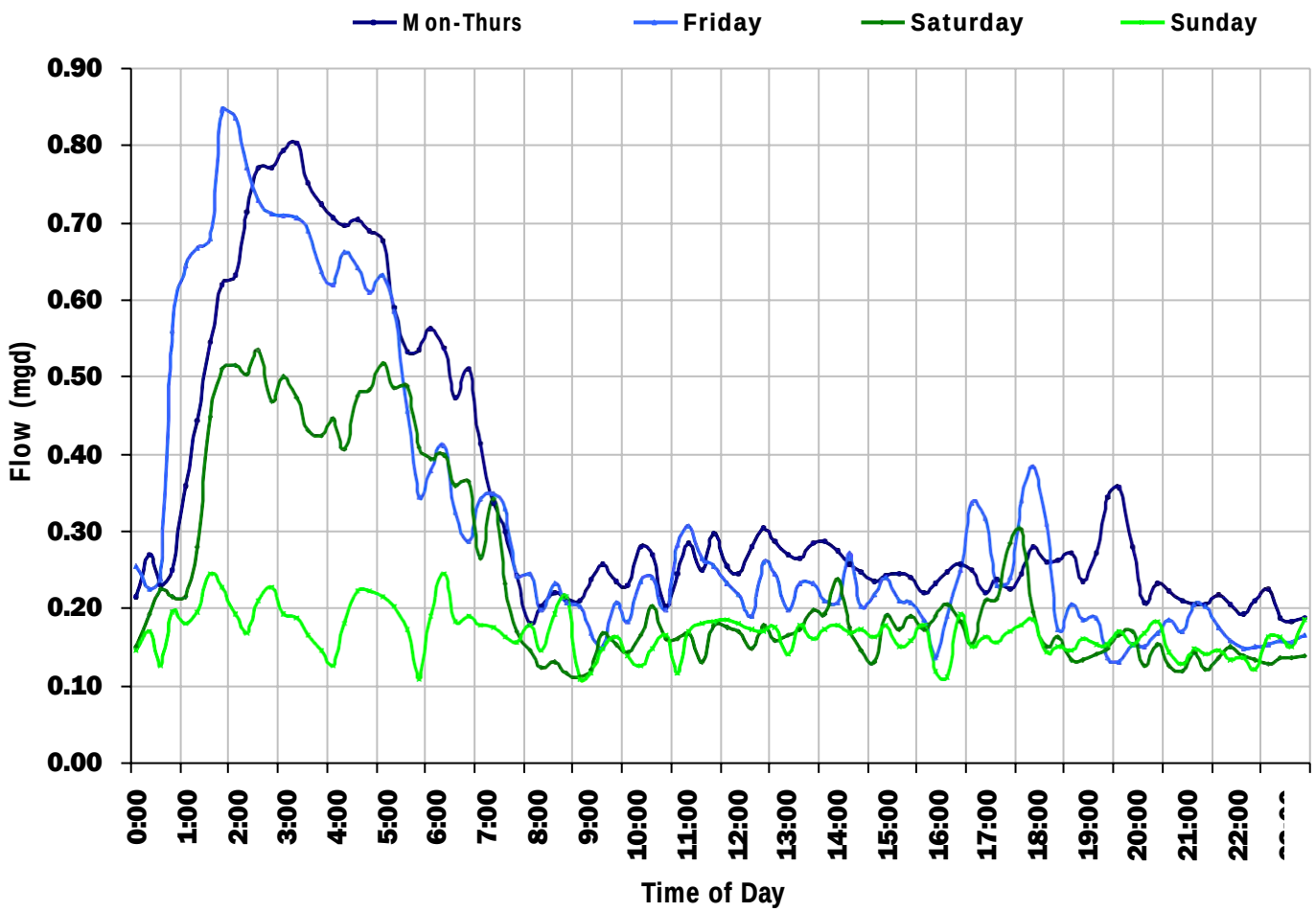
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 0.331 mgd Peak Flow: 1.168 mgd Min Flow: -0.821 mgd



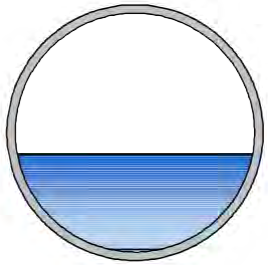


TC-07
Average Dry Weather Flow Hydrographs



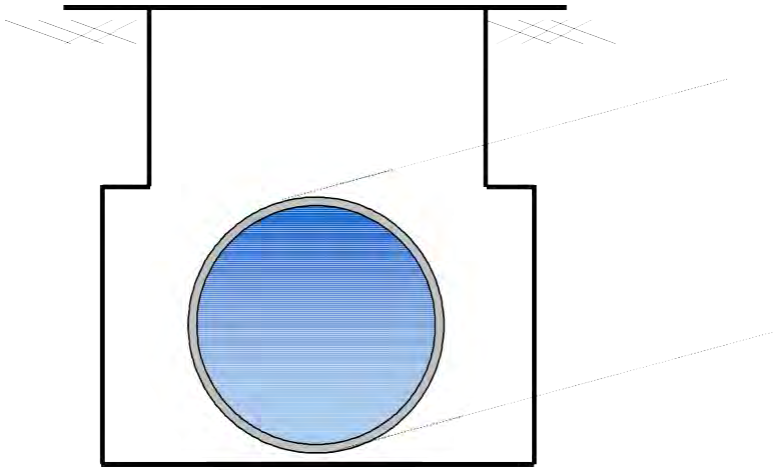
ADWF:

0.300 *mgd*



TC-07
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period

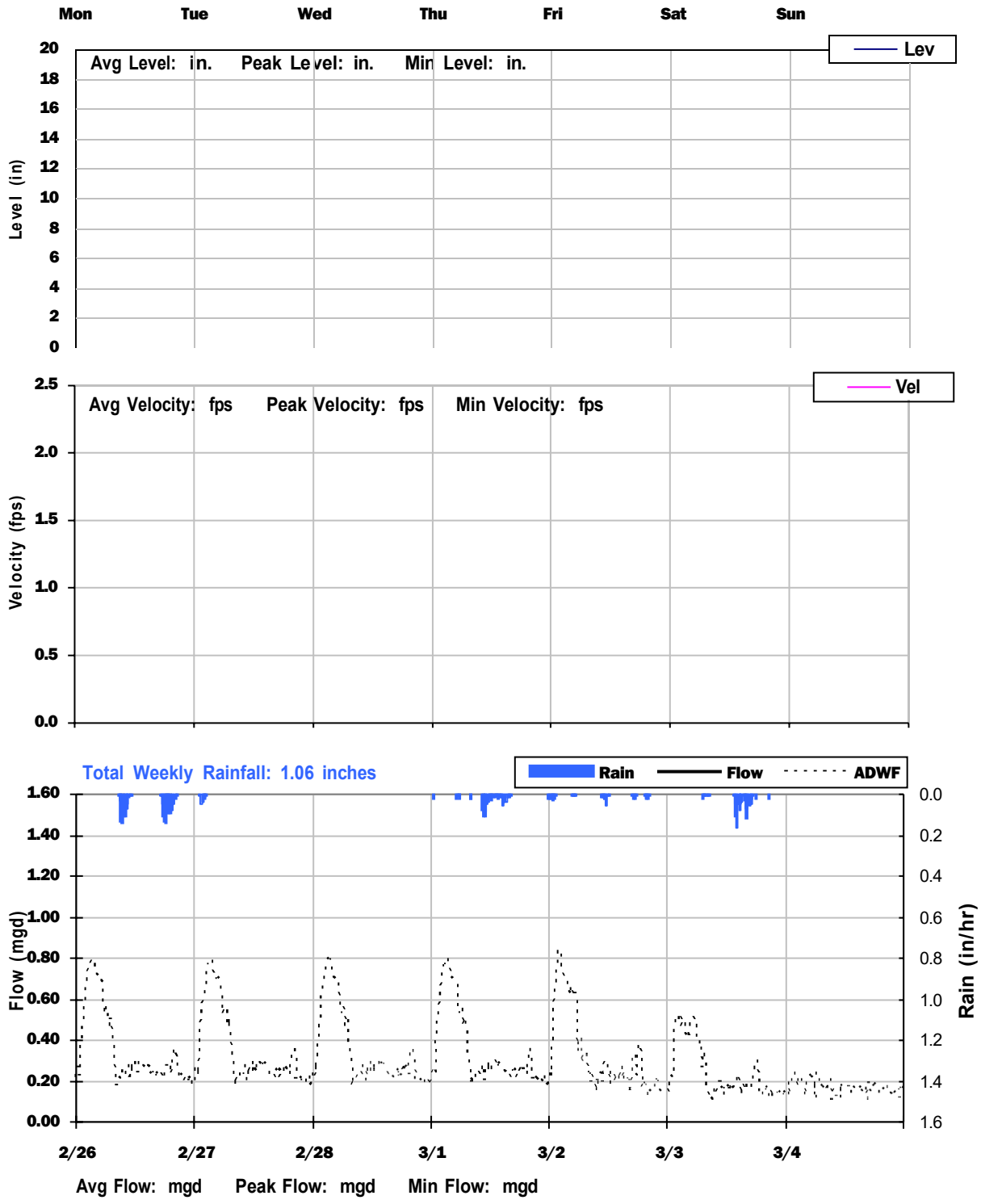


Pipe Diameter:	**20.3**	***inches***
Peak Measured Level:	**20.2**	***inches***
Peak d/D Ratio:	**1.00**	

TC-07

Weekly Level, Velocity and Flow Hydrographs

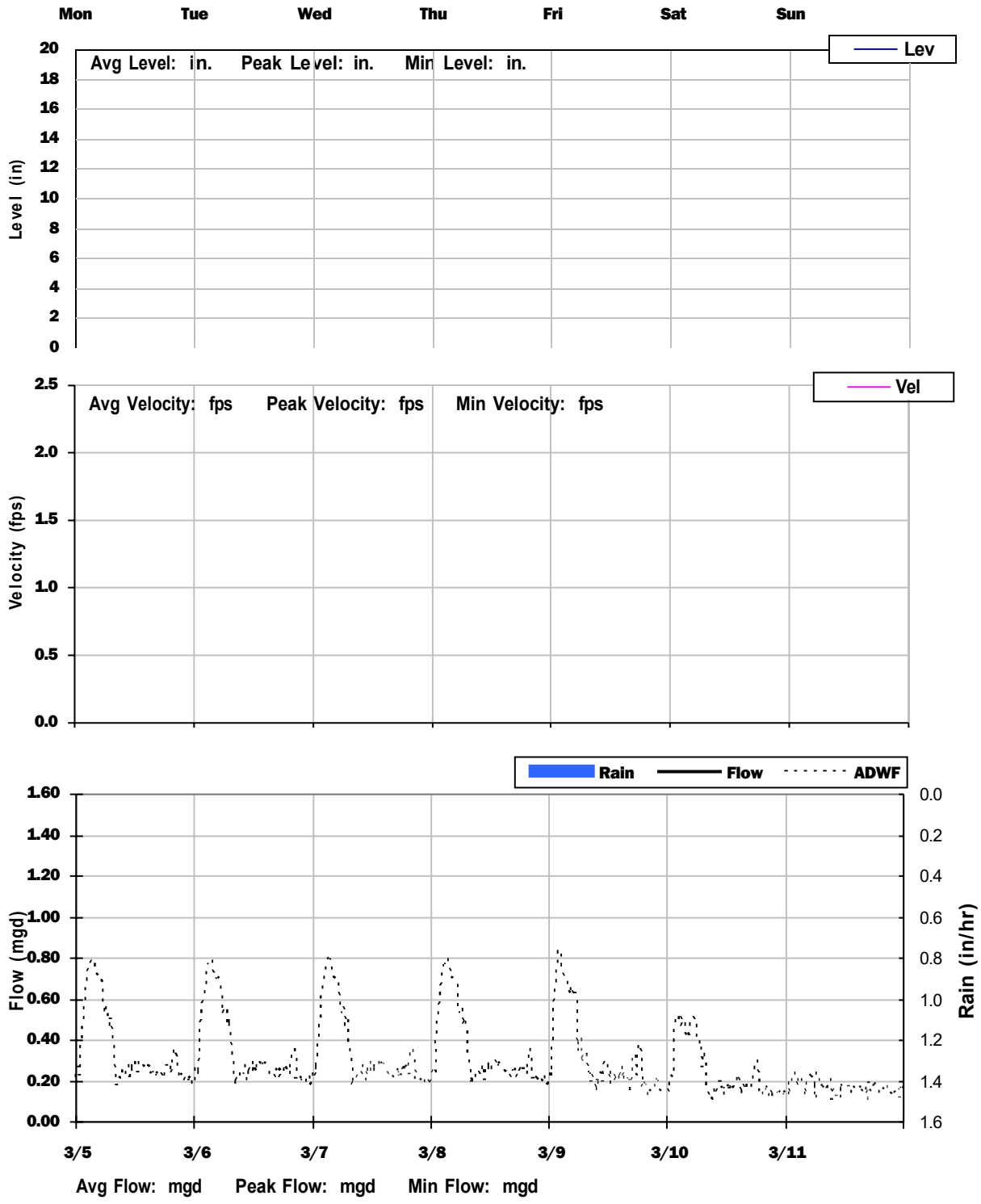
2/26/2018 to 3/5/2018



TC-07

Weekly Level, Velocity and Flow Hydrographs

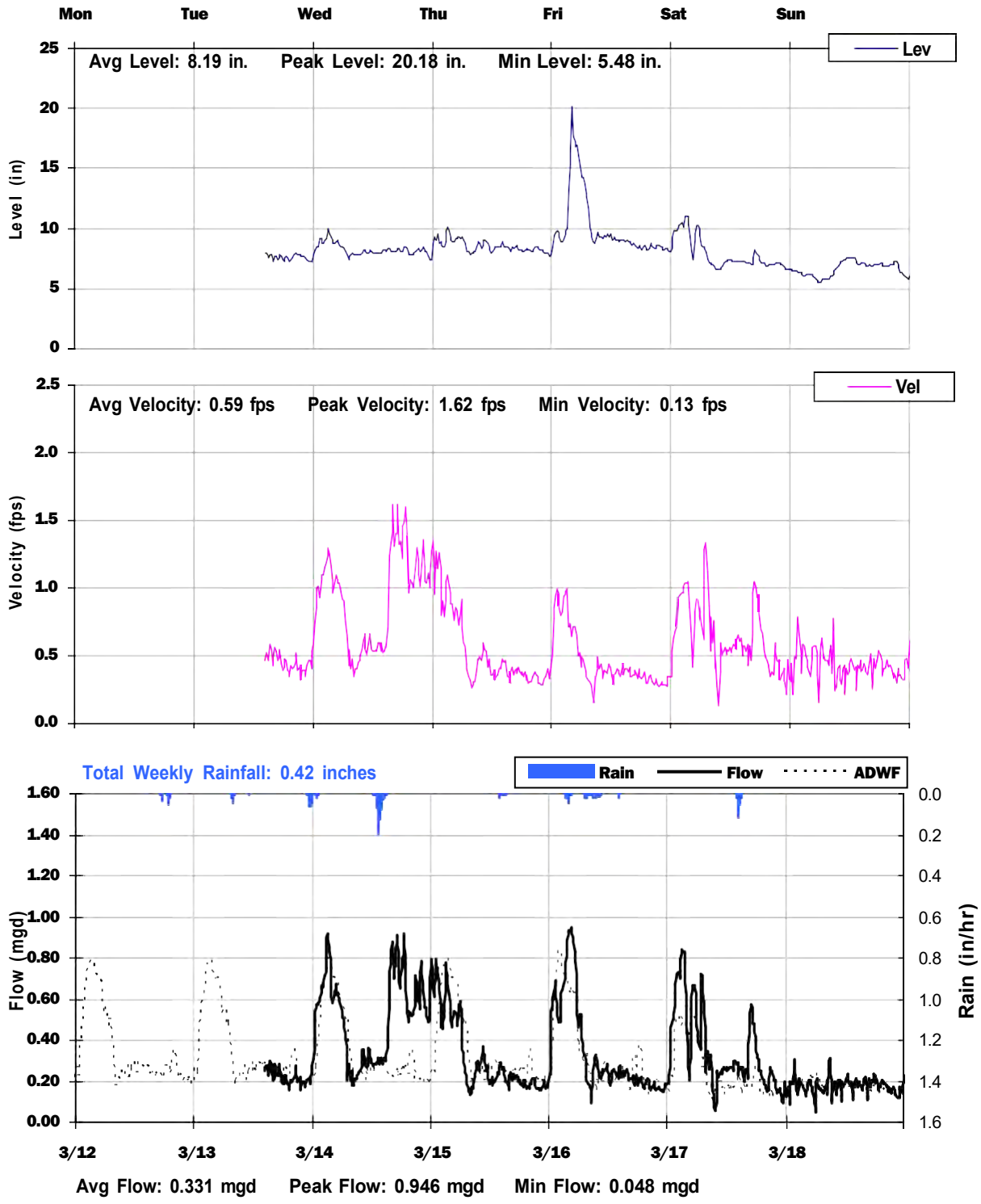
3/5/2018 to 3/12/2018



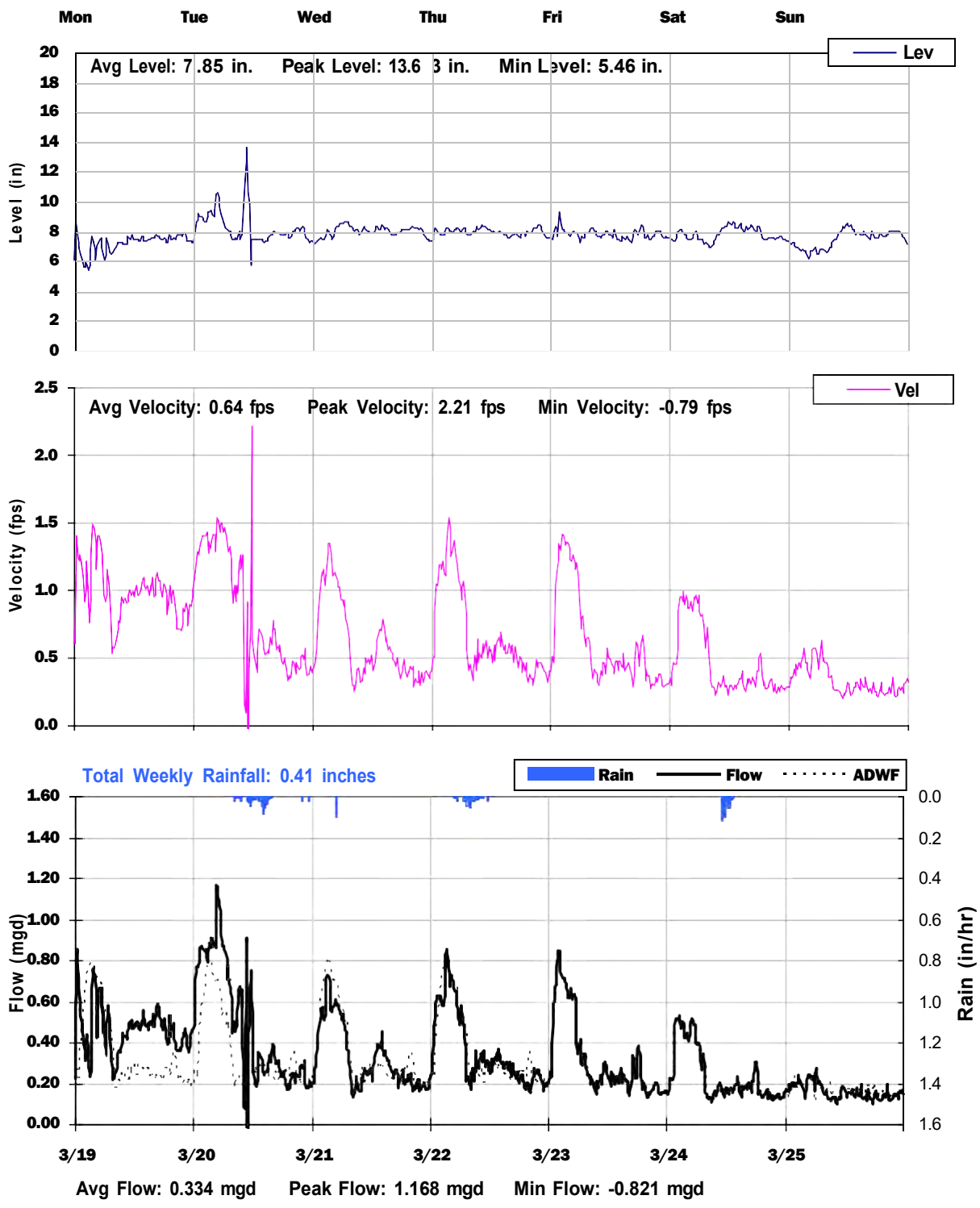
TC-07

Weekly Level, Velocity and Flow Hydrographs

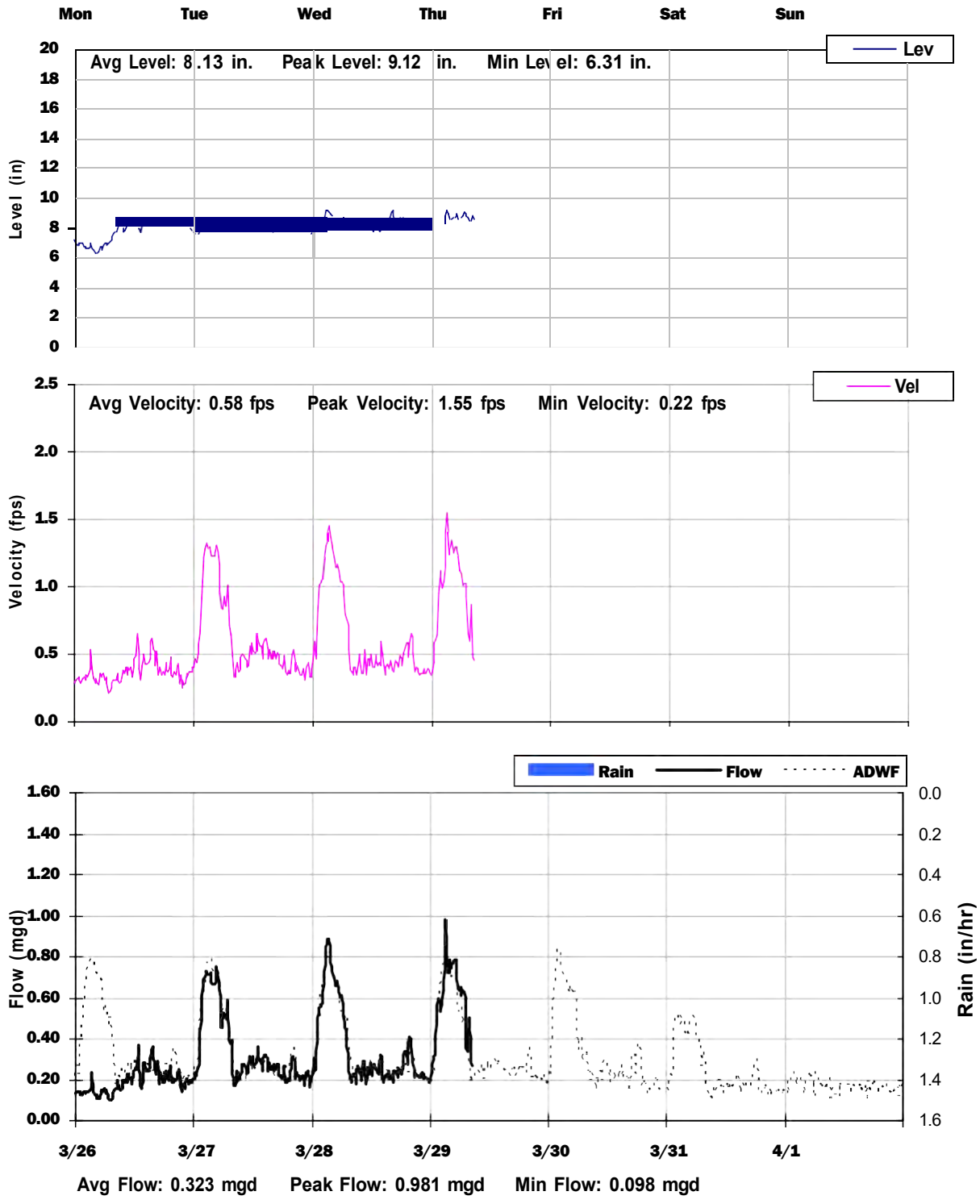
3/12/2018 to 3/19/2018



TC-07
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-07
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



City of Tracy, California

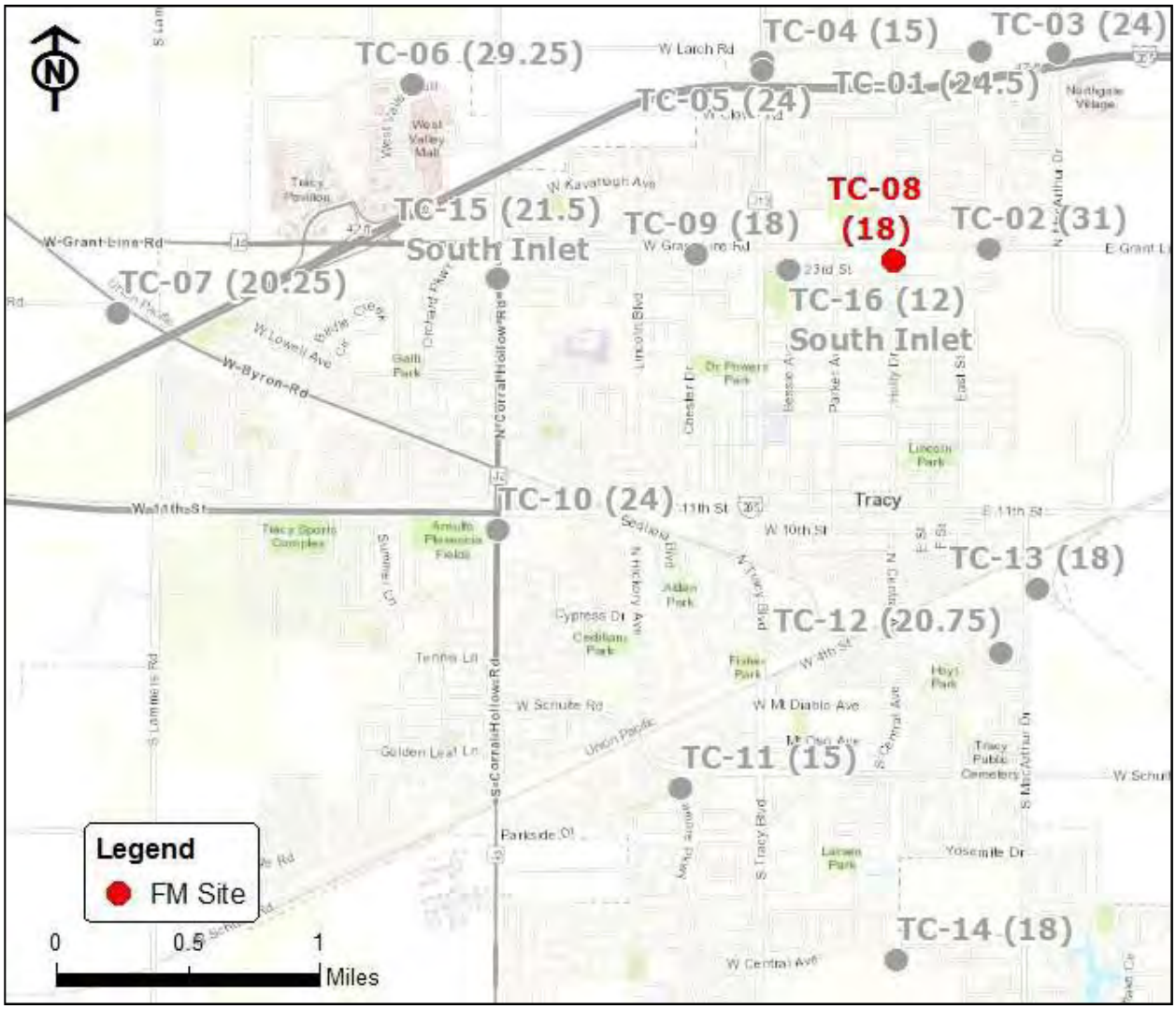
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-08**

Location: **2322 Holly Drive, south of Grant Line Road**

Data Summary Report



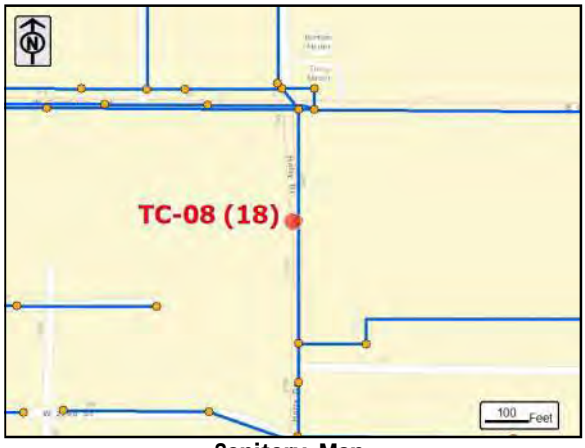
Vicinity Map: TC-08

TC-08

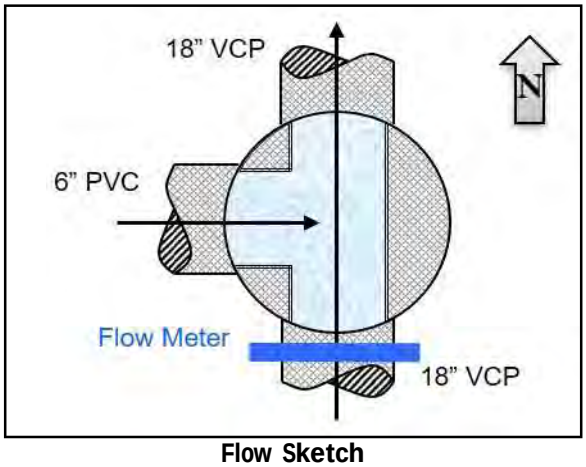
Site Information

Location:	**2322 Holly Drive, south of Grant Line Road**
City Manhole:	
Coordinates:	**121.4259° W, 37.7535° N**
Rim Elevation (Earth):	**39 feet**
Pipe Diameter:	**18 inches**
ADWF:	**0.447 mgd**
Peak Measured Flow:	**0.912 mgd**

Satellite Map



Sanitary Map



Flow Sketch

Street View

Plan View

TC-08

Additional Site Photos

Effluent Pipe

Monitored South Influent Pipe

TC-08

Additional Site Photos

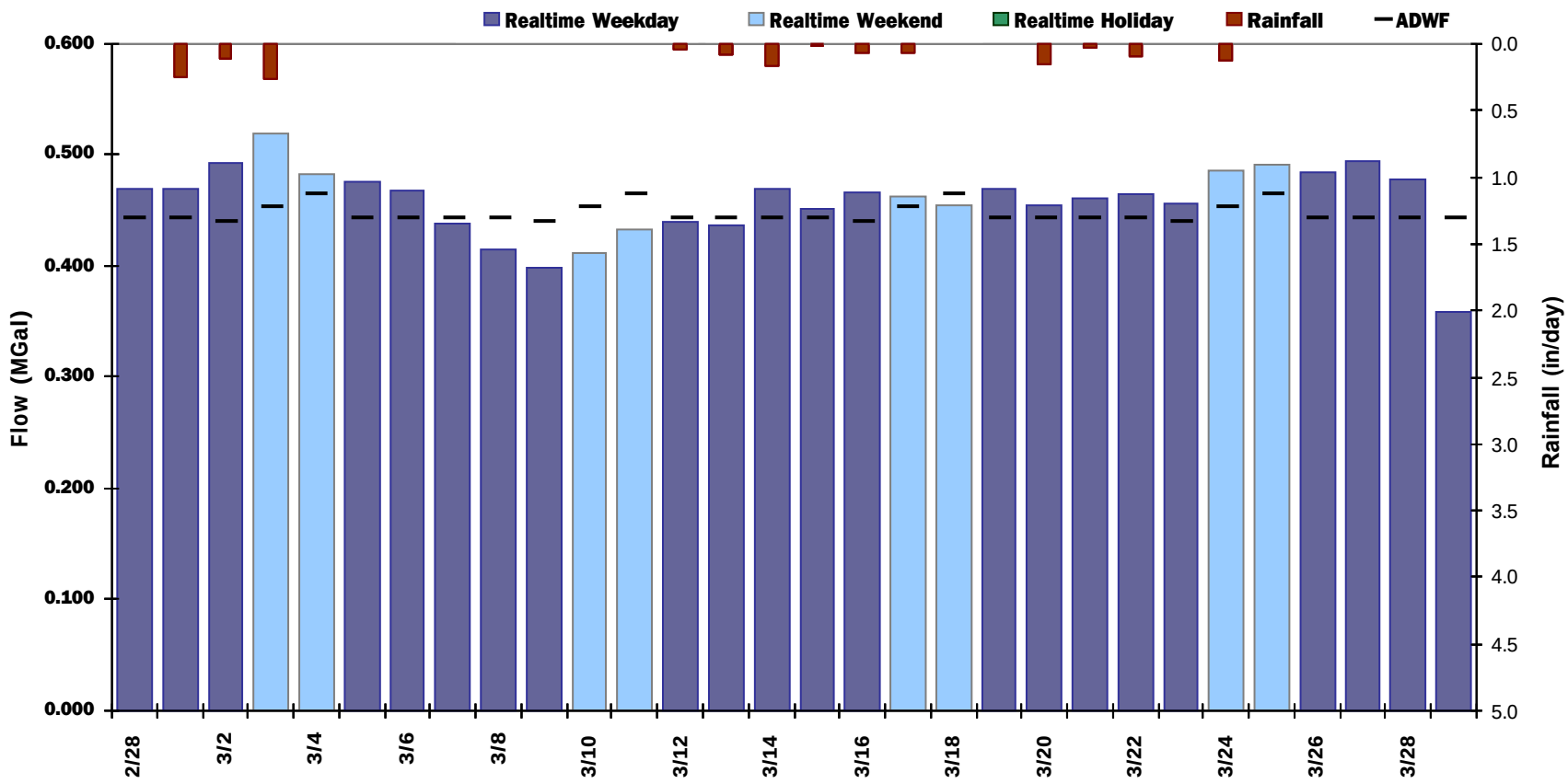
West Lateral

TC-08

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 0.458 MGal Peak Daily Flow: 0.518 MGal Min Daily Flow: 0.359 MGal

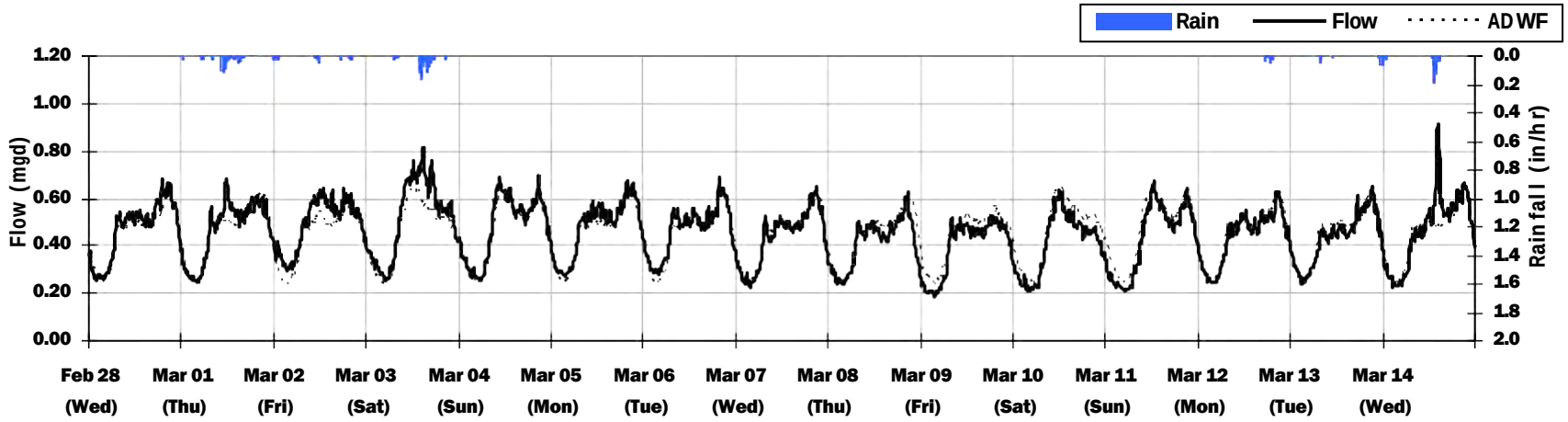
Total Period Rainfall: 1.43 inches

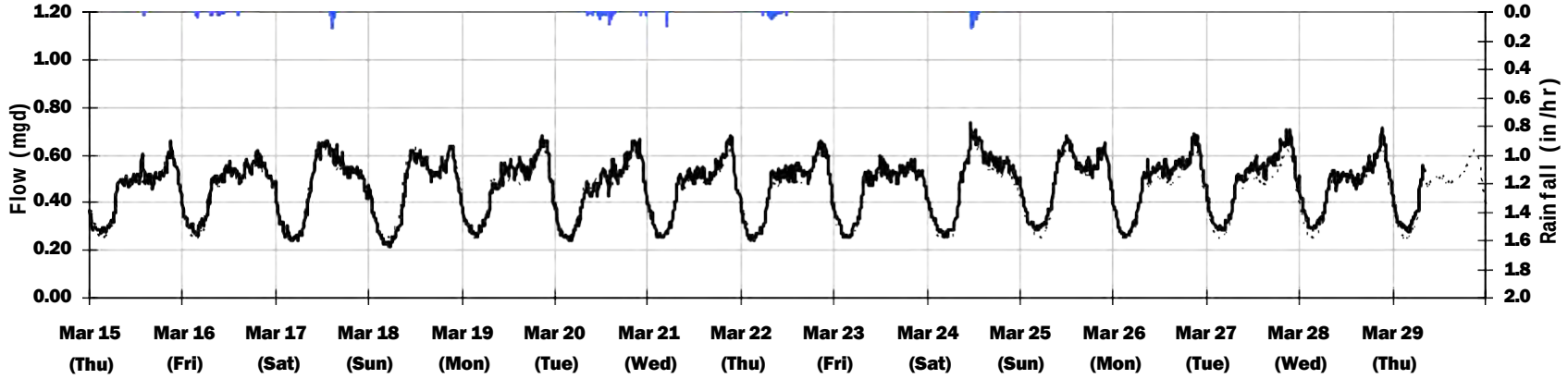


TC-08

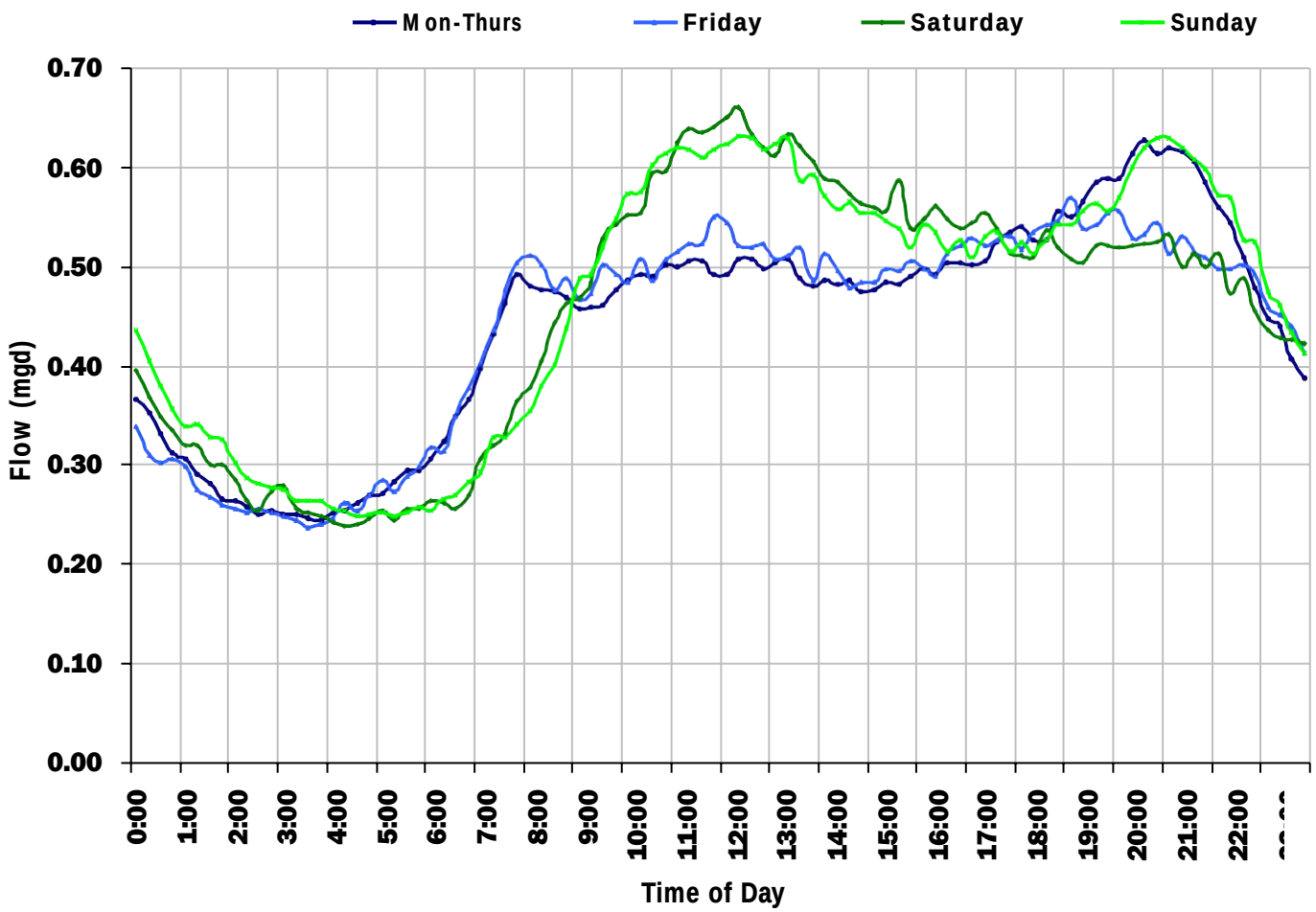
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 0.461 mgd Peak Flow: 0.912 mgd Min Flow: 0.187 mgd



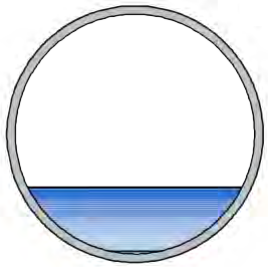


TC-08
Average Dry Weather Flow Hydrographs



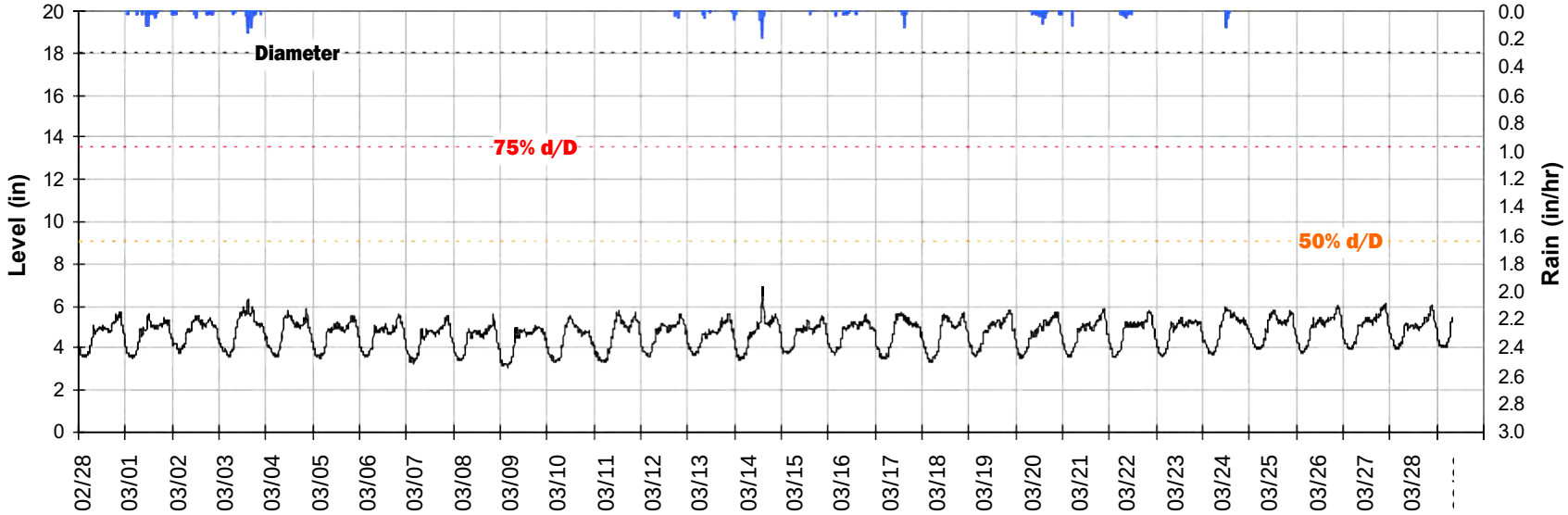
ADWF:

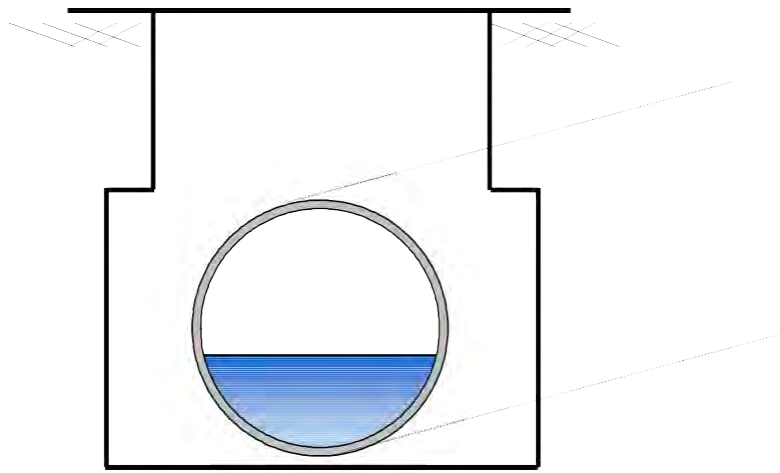
0.447 *mgd*



TC-08
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



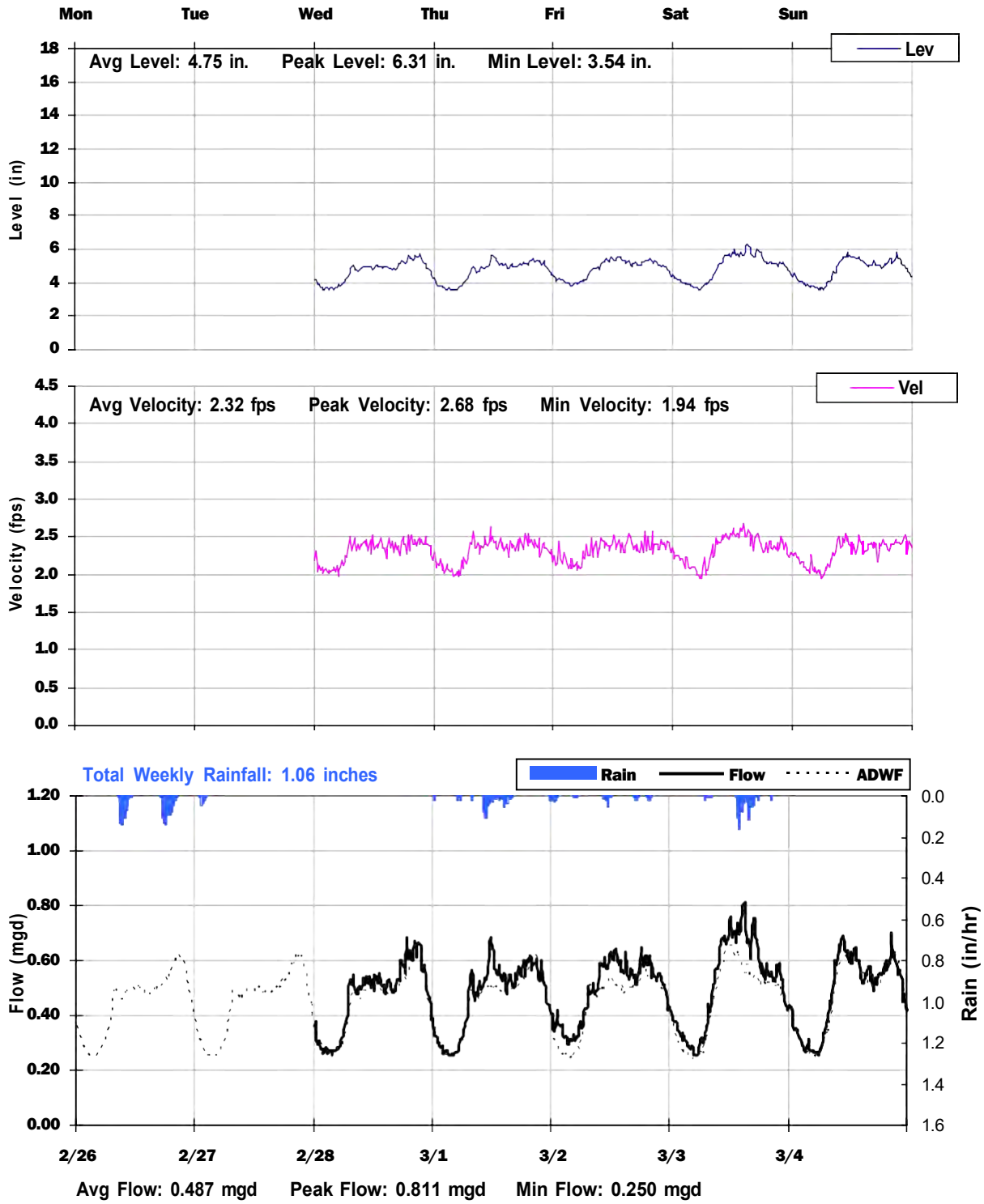


Pipe Diameter:	**18**	***inches***
Peak Measured Level:	**6.94**	***inches***
Peak d/D Ratio:	**0.39**	

TC-08

Weekly Level, Velocity and Flow Hydrographs

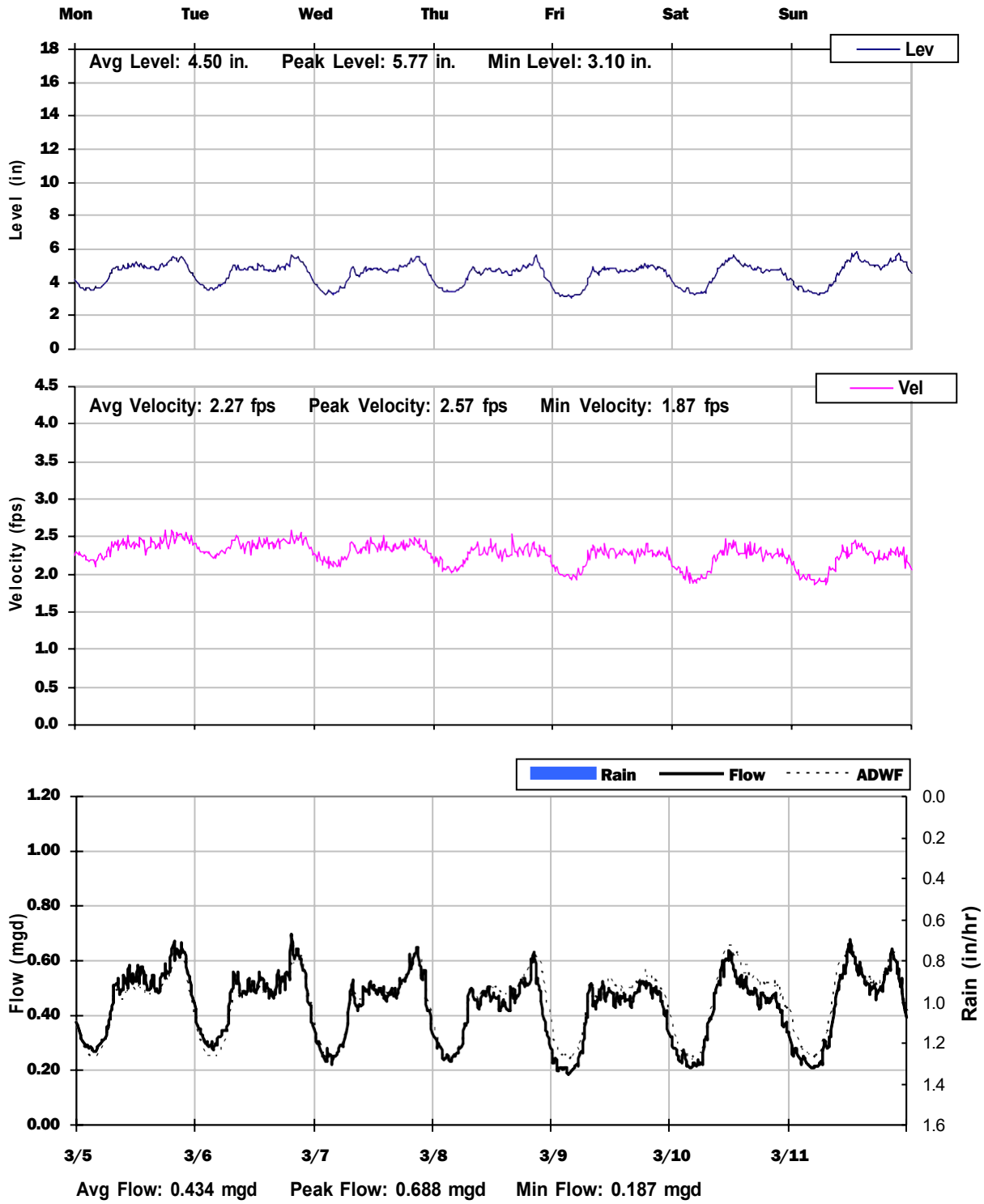
2/26/2018 to 3/5/2018



TC-08

Weekly Level, Velocity and Flow Hydrographs

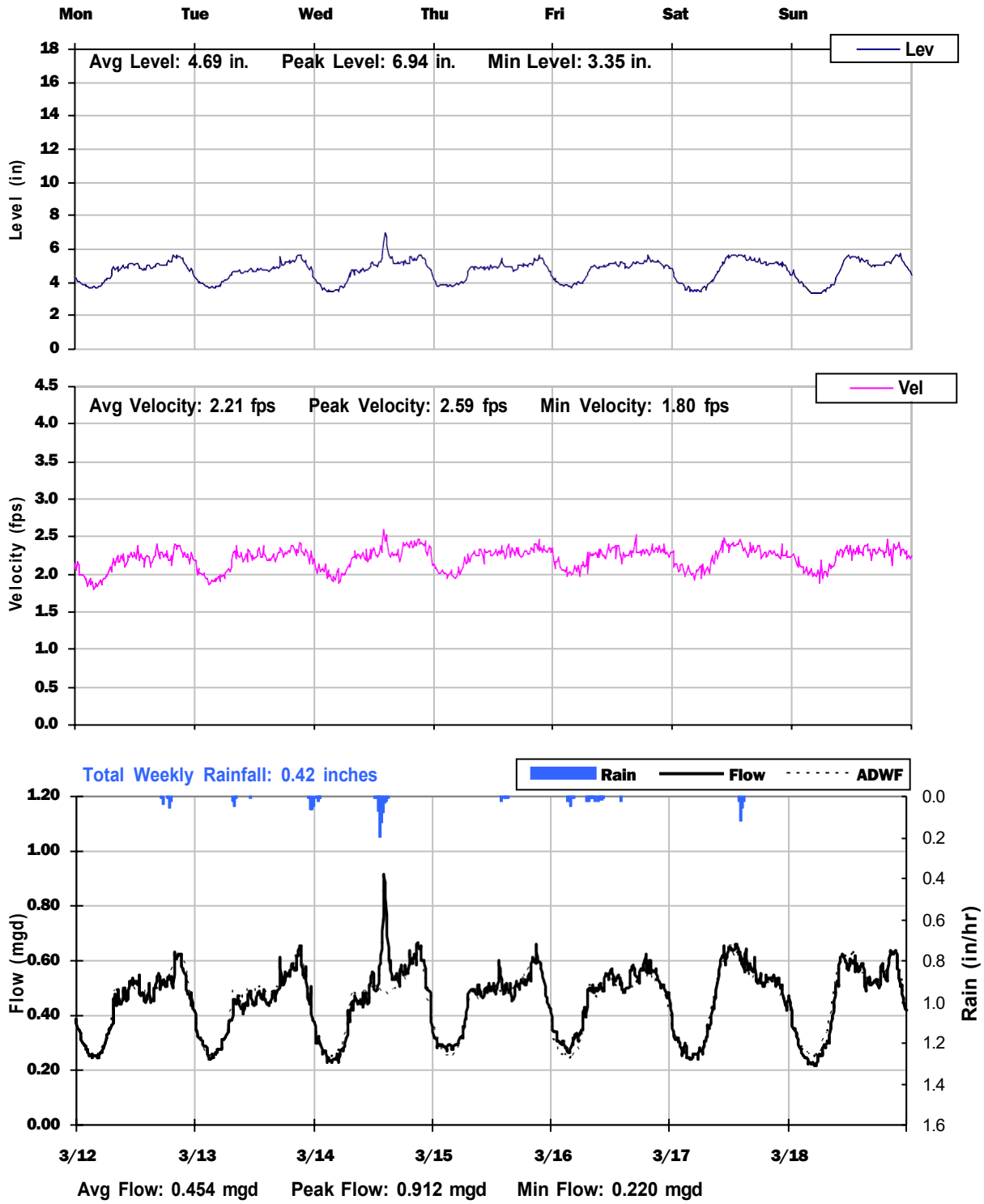
3/5/2018 to 3/12/2018



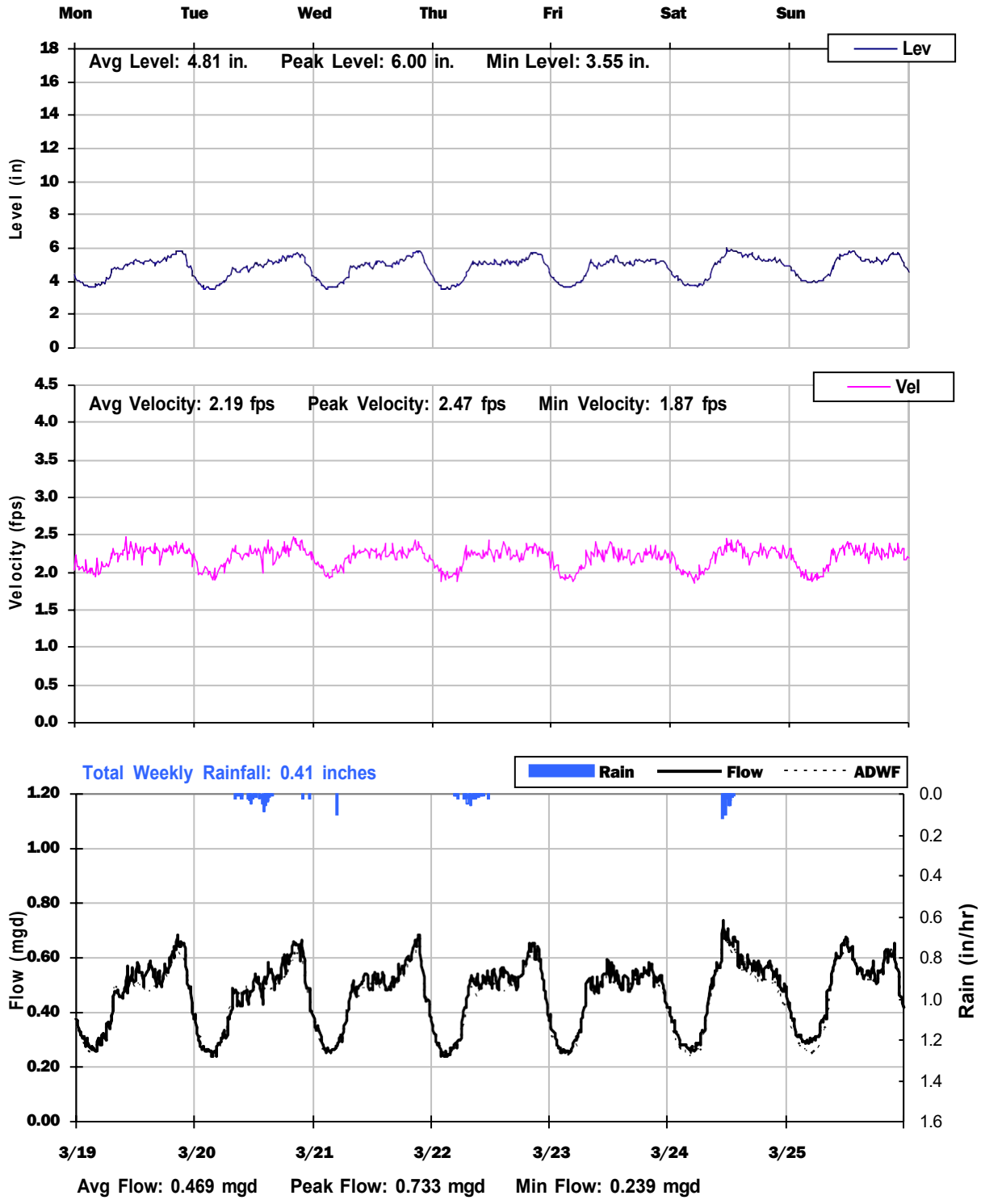
TC-08

Weekly Level, Velocity and Flow Hydrographs

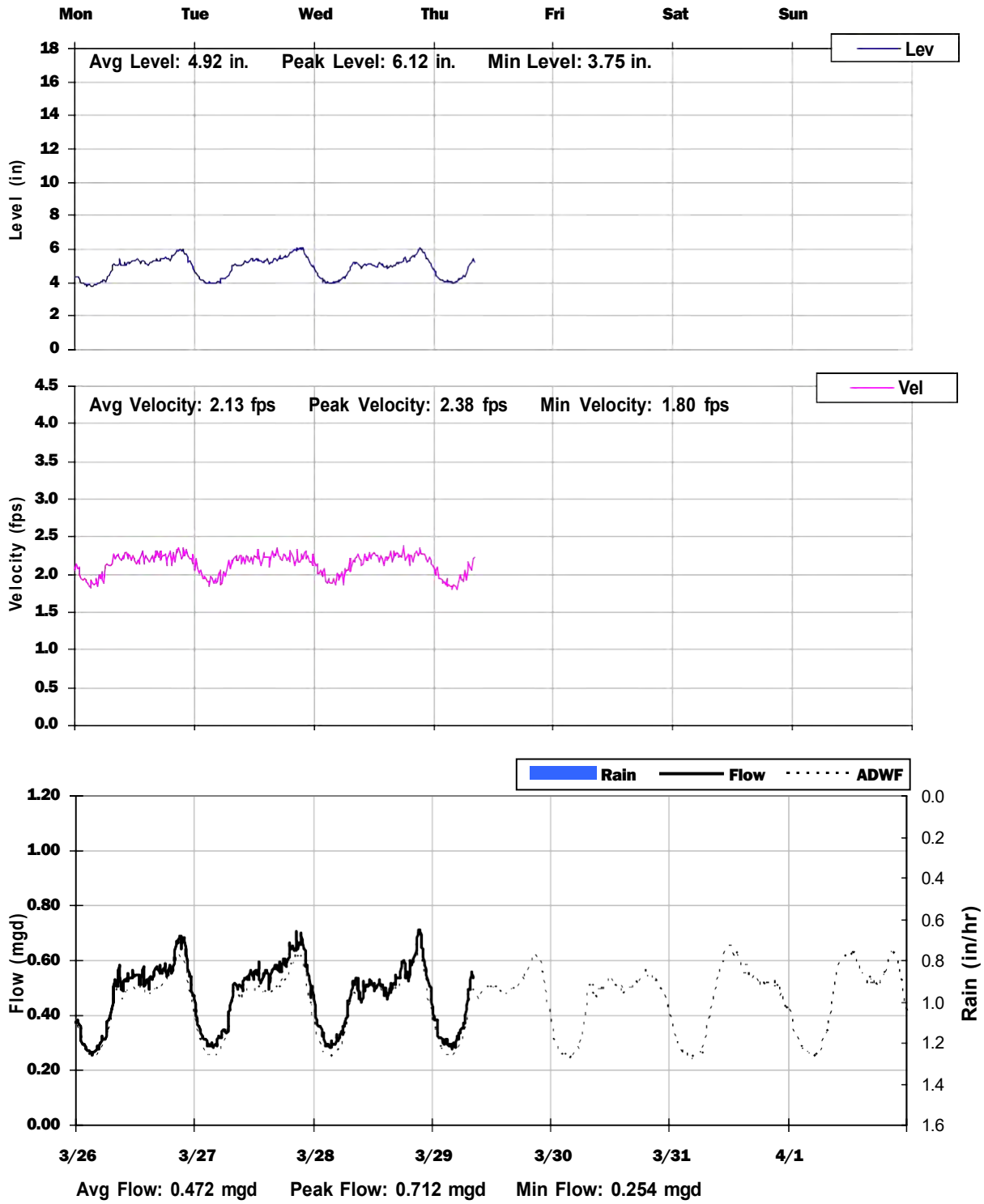
3/12/2018 to 3/19/2018



TC-08
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-08
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



TC-08

City of Tracy, California

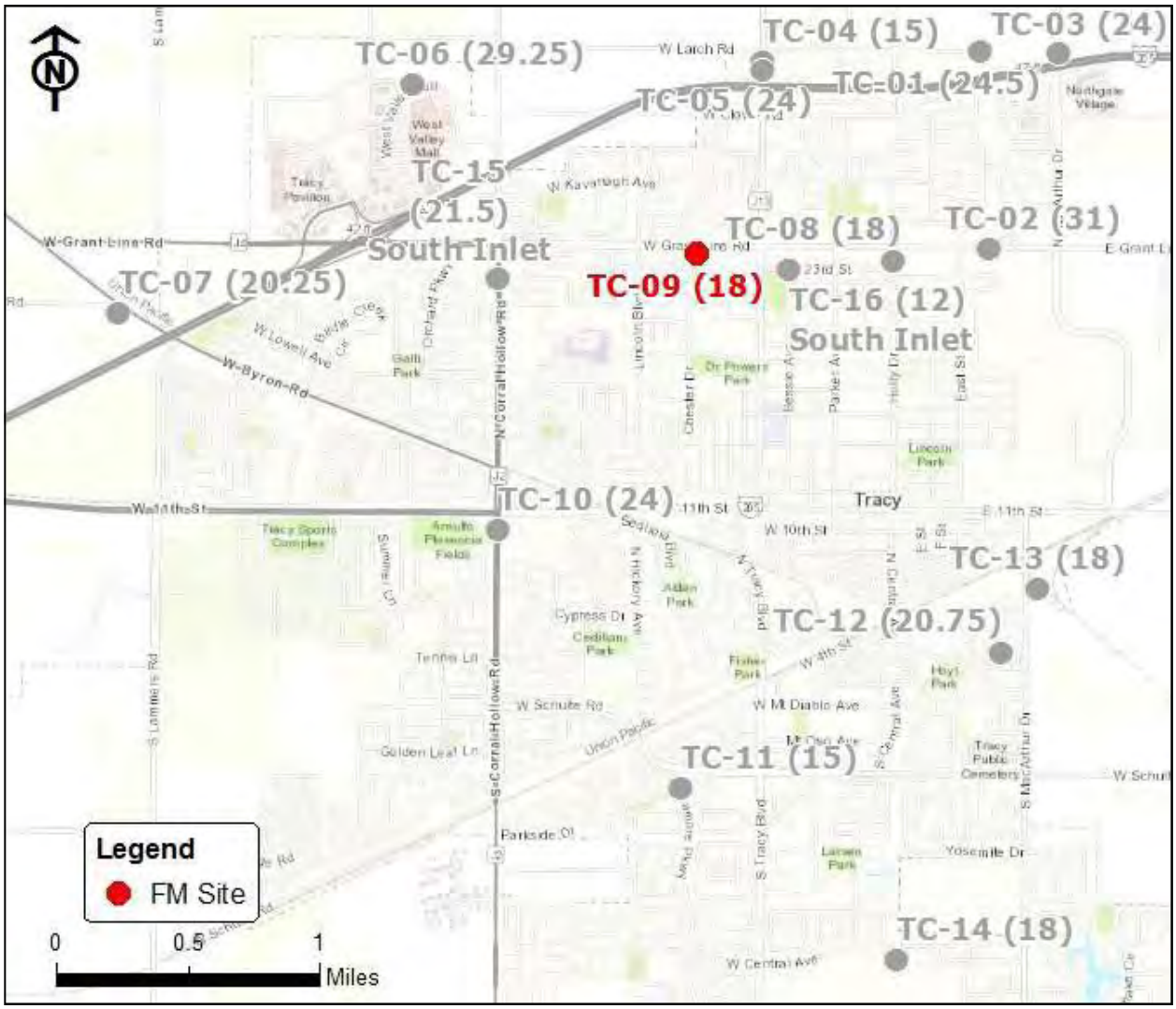
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-09**

Location: **Inside of The Village at Summergate Apartments**

Data Summary Report



Vicinity Map: TC-09

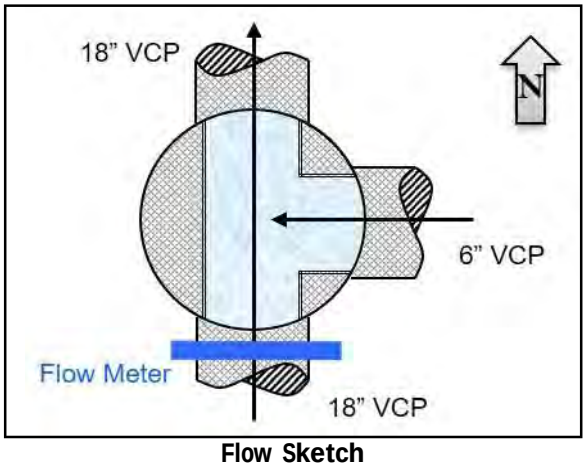
TC-09

Site Information

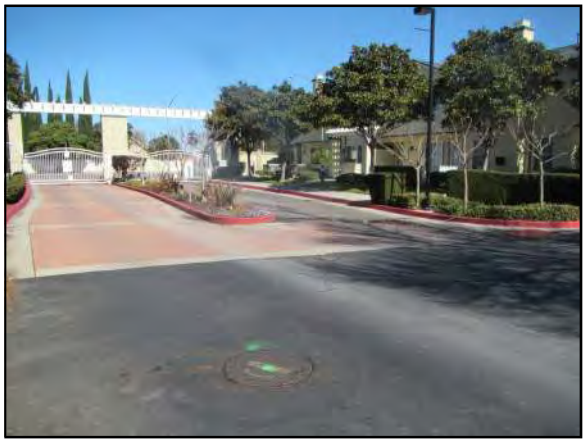
Location:	**Inside of The Village at Summergate Apartments**
City Manhole:	
Coordinates:	**121.4395° W, 37.7537° N**
Rim Elevation (Earth):	**32 feet**
Pipe Diameter:	**18 inches**
ADWF:	**0.338 mgd**
Peak Measured Flow:	**0.585 mgd**

Satellite Map

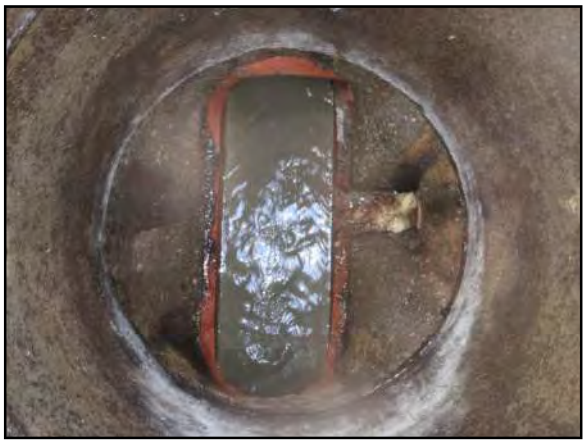
Sanitary Map



Flow Sketch



Street View



Plan View

TC-09

Additional Site Photos

Effluent Pipe

Monitored South Influent Pipe

TC-09

Additional Site Photos

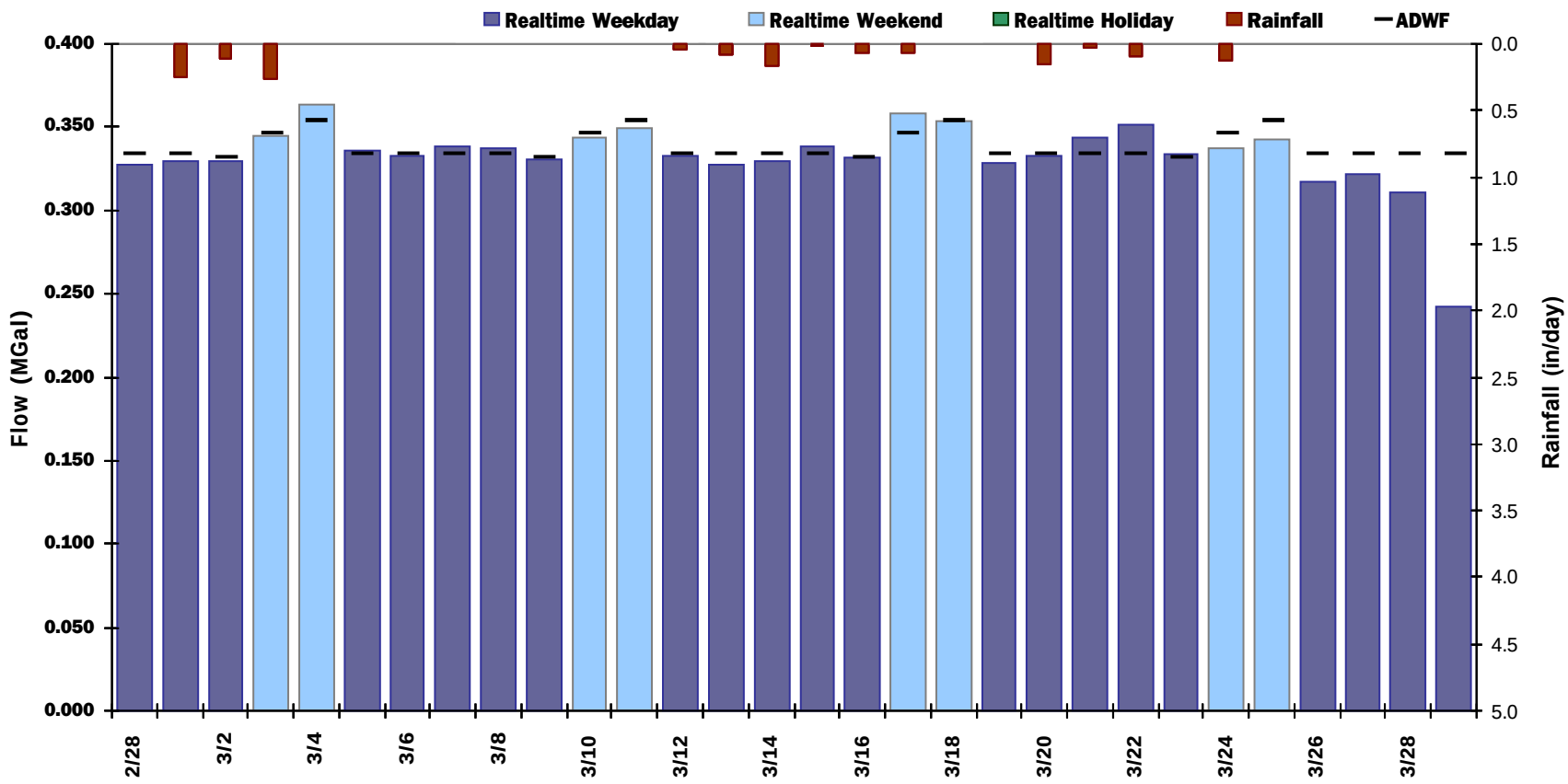
East Lateral

TC-09

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 0.333 MGal Peak Daily Flow: 0.364 MGal Min Daily Flow: 0.242 MGal

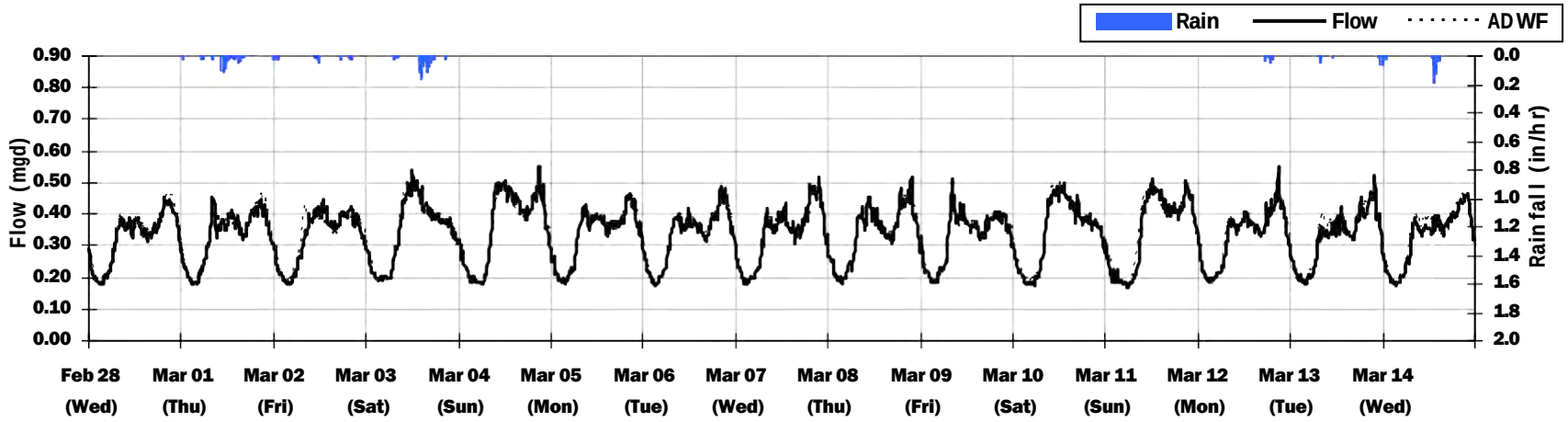
Total Period Rainfall: 1.43 inches

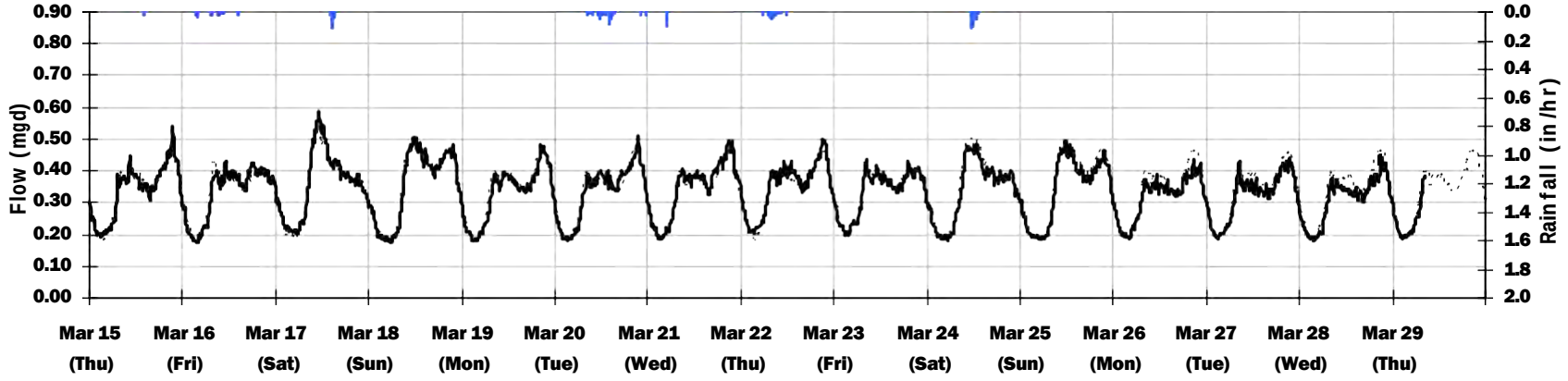


TC-09

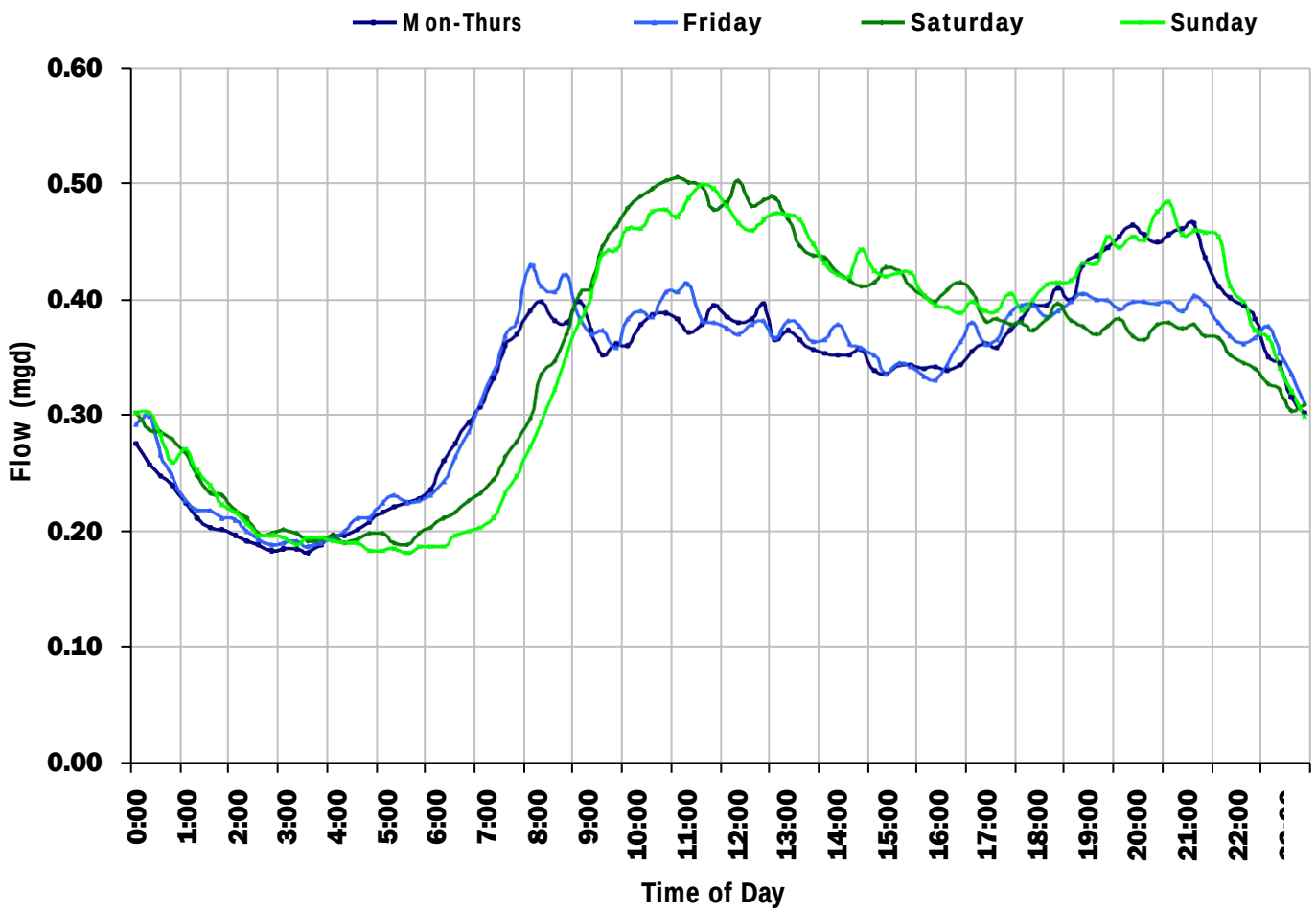
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 0.335 mgd Peak Flow: 0.585 mgd Min Flow: 0.170 mgd



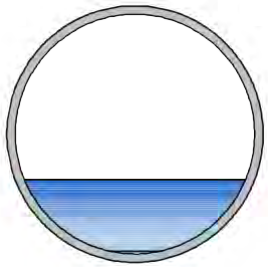


TC-09
Average Dry Weather Flow Hydrographs



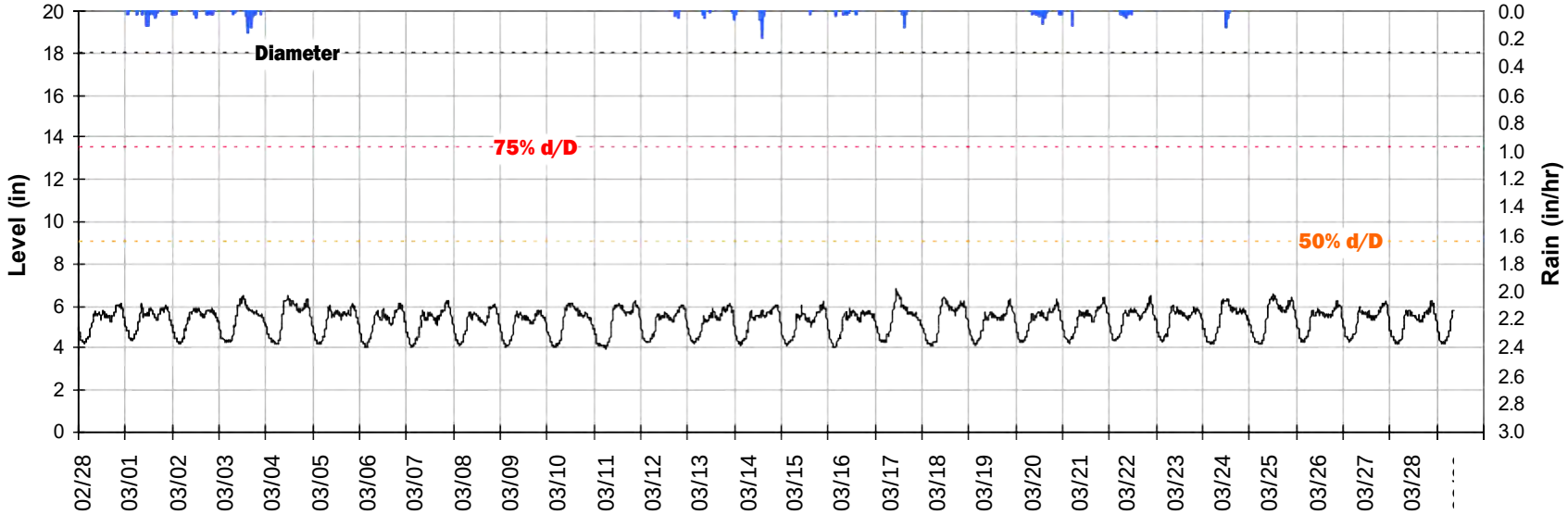
ADWF:

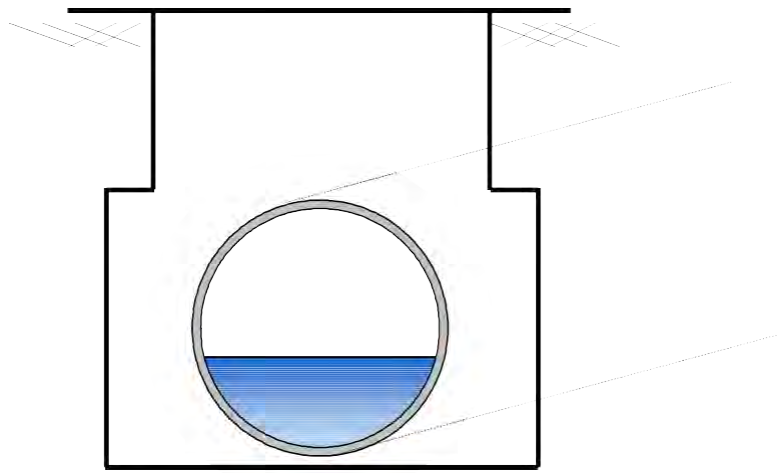
0.338 *mgd*



TC-09
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



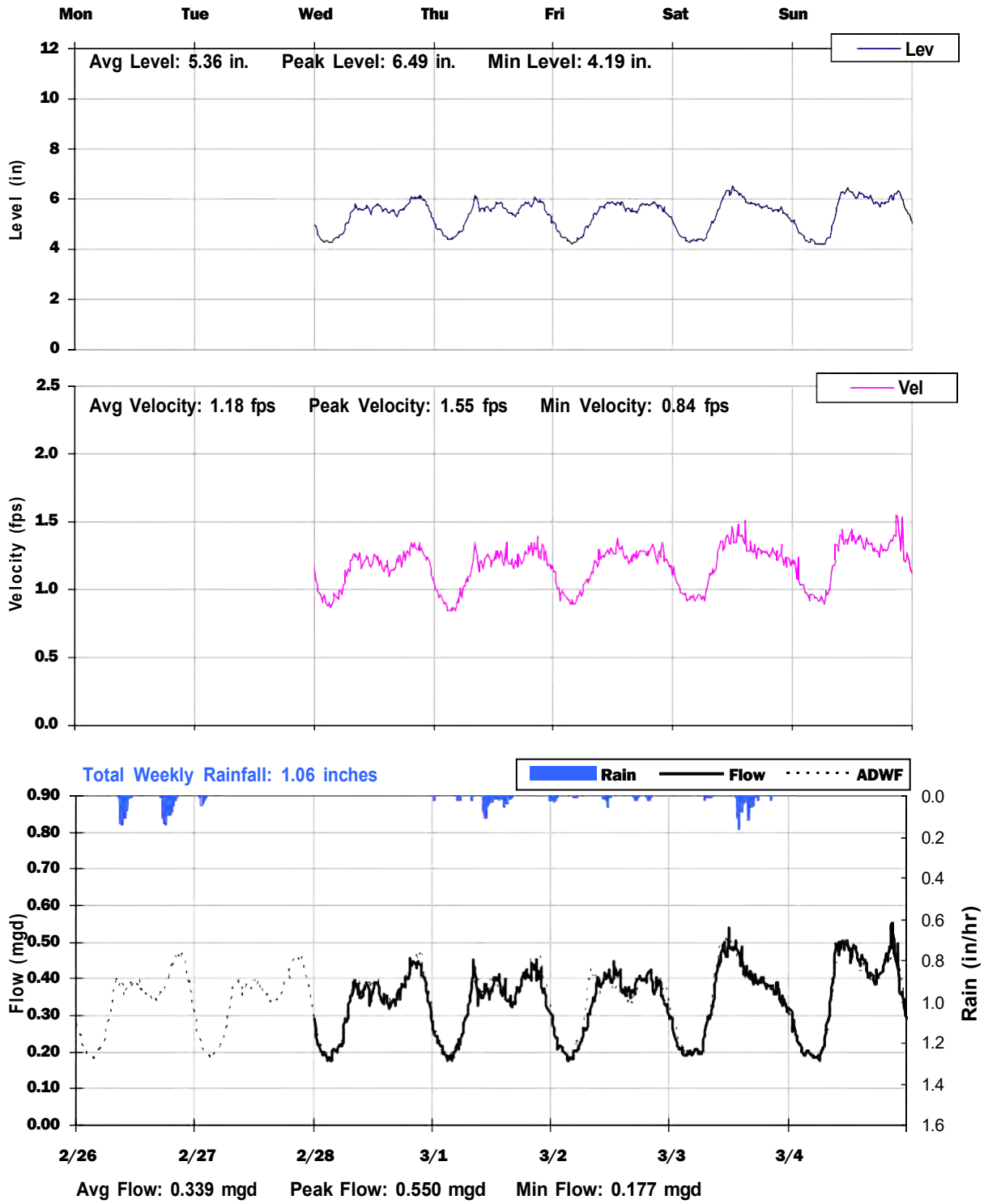


Pipe Diameter:	**18**	***inches***
Peak Measured Level:	**6.8**	***inches***
Peak d/D Ratio:	**0.38**	

TC-09

Weekly Level, Velocity and Flow Hydrographs

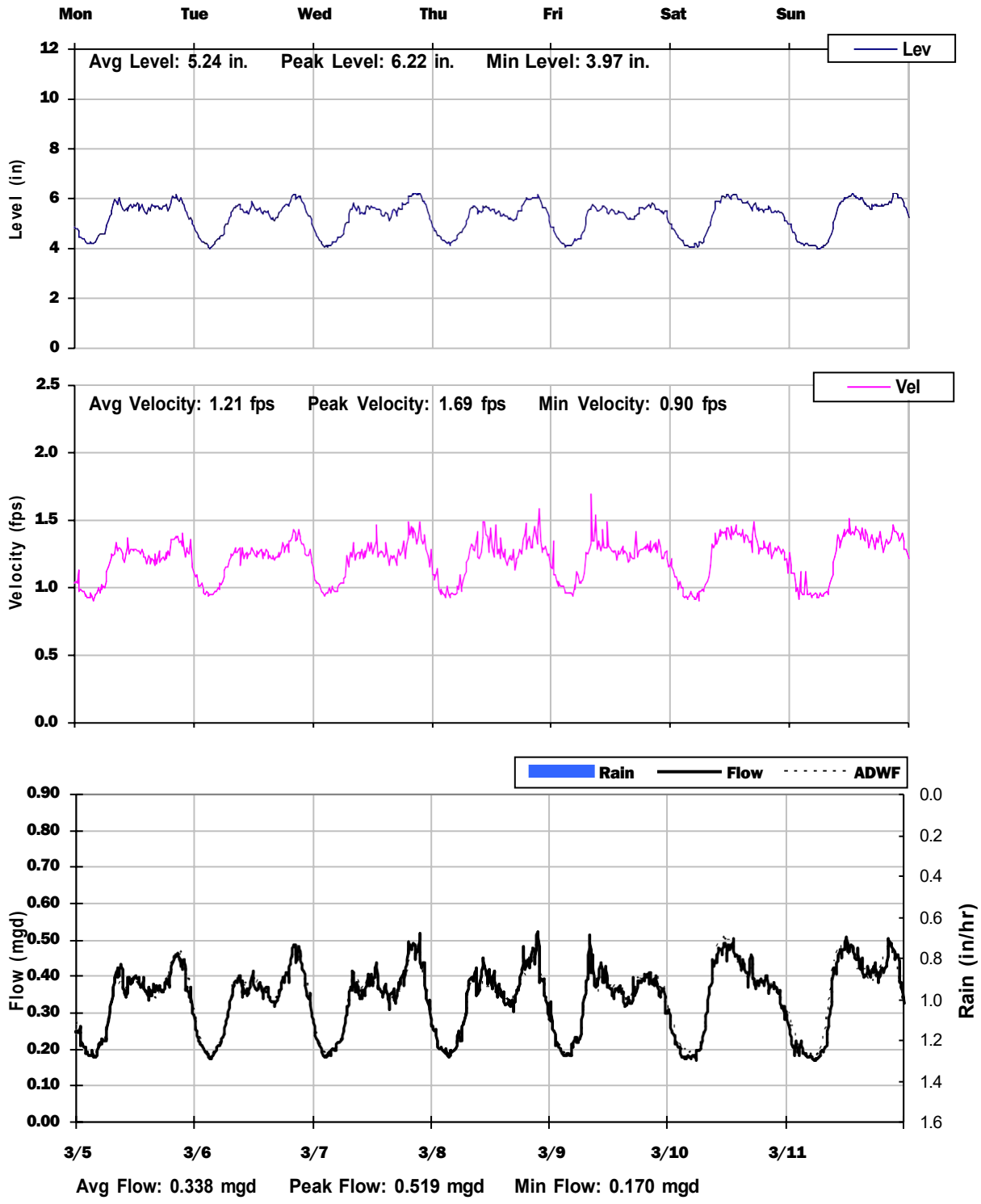
2/26/2018 to 3/5/2018



TC-09

Weekly Level, Velocity and Flow Hydrographs

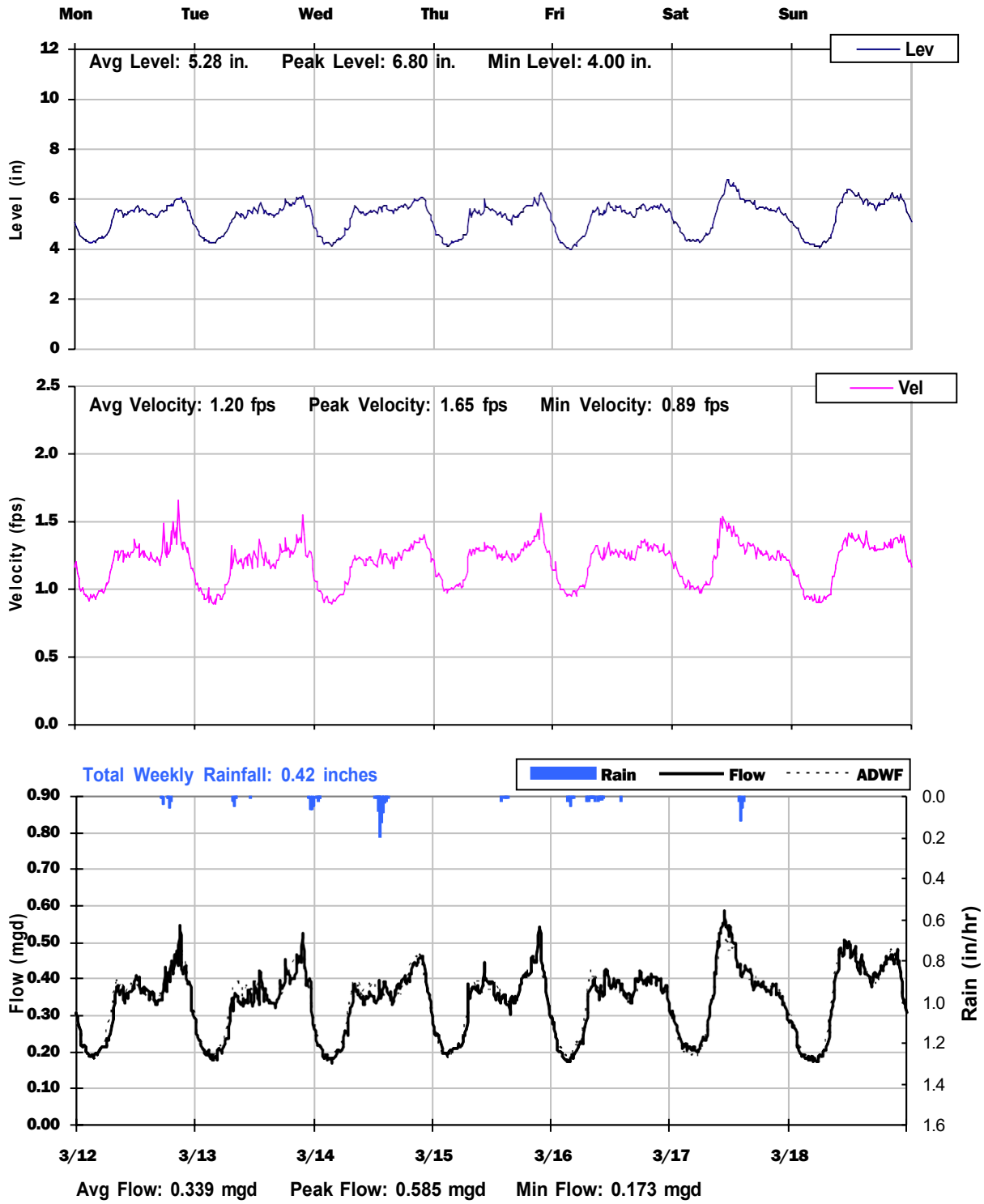
3/5/2018 to 3/12/2018



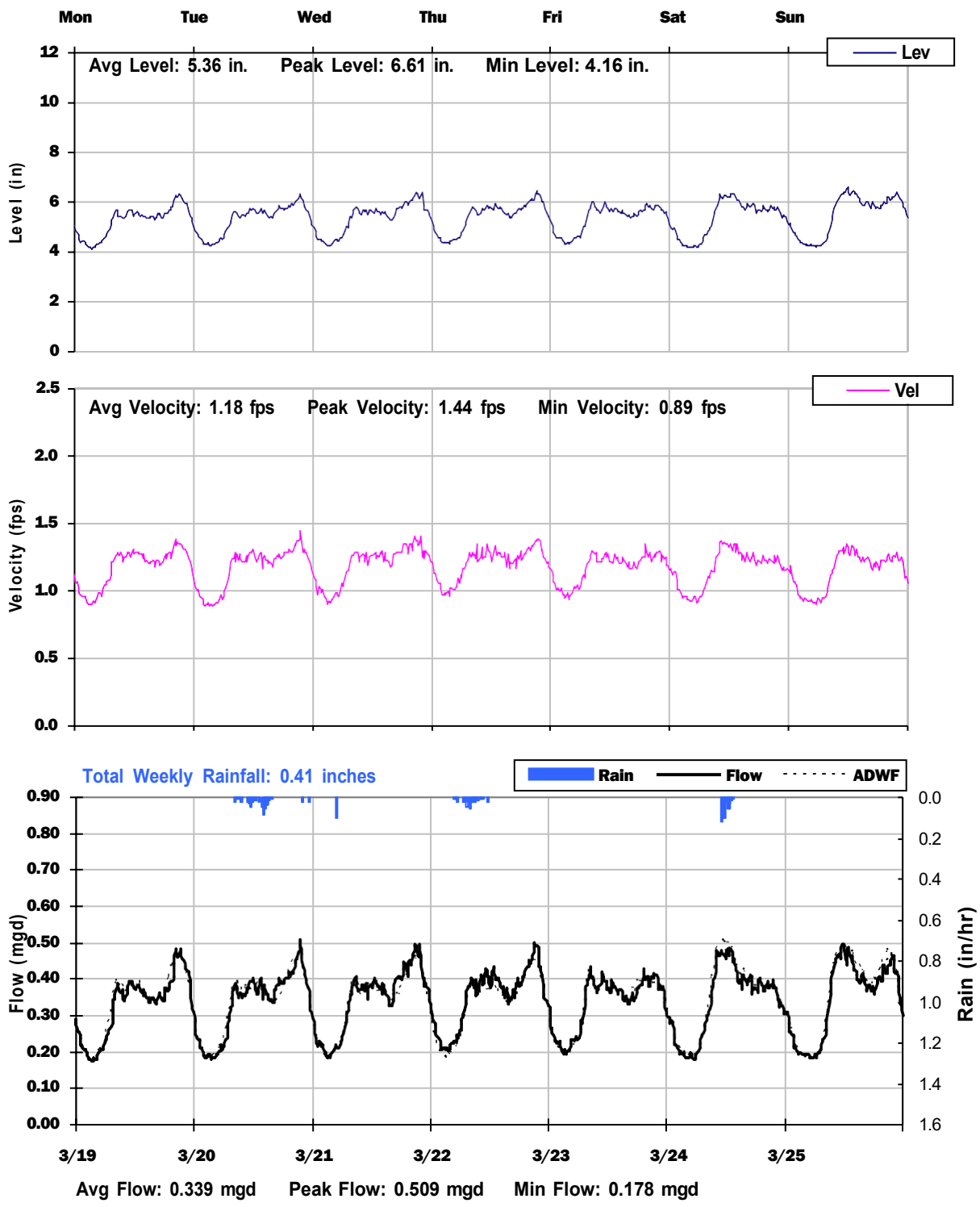
TC-09

Weekly Level, Velocity and Flow Hydrographs

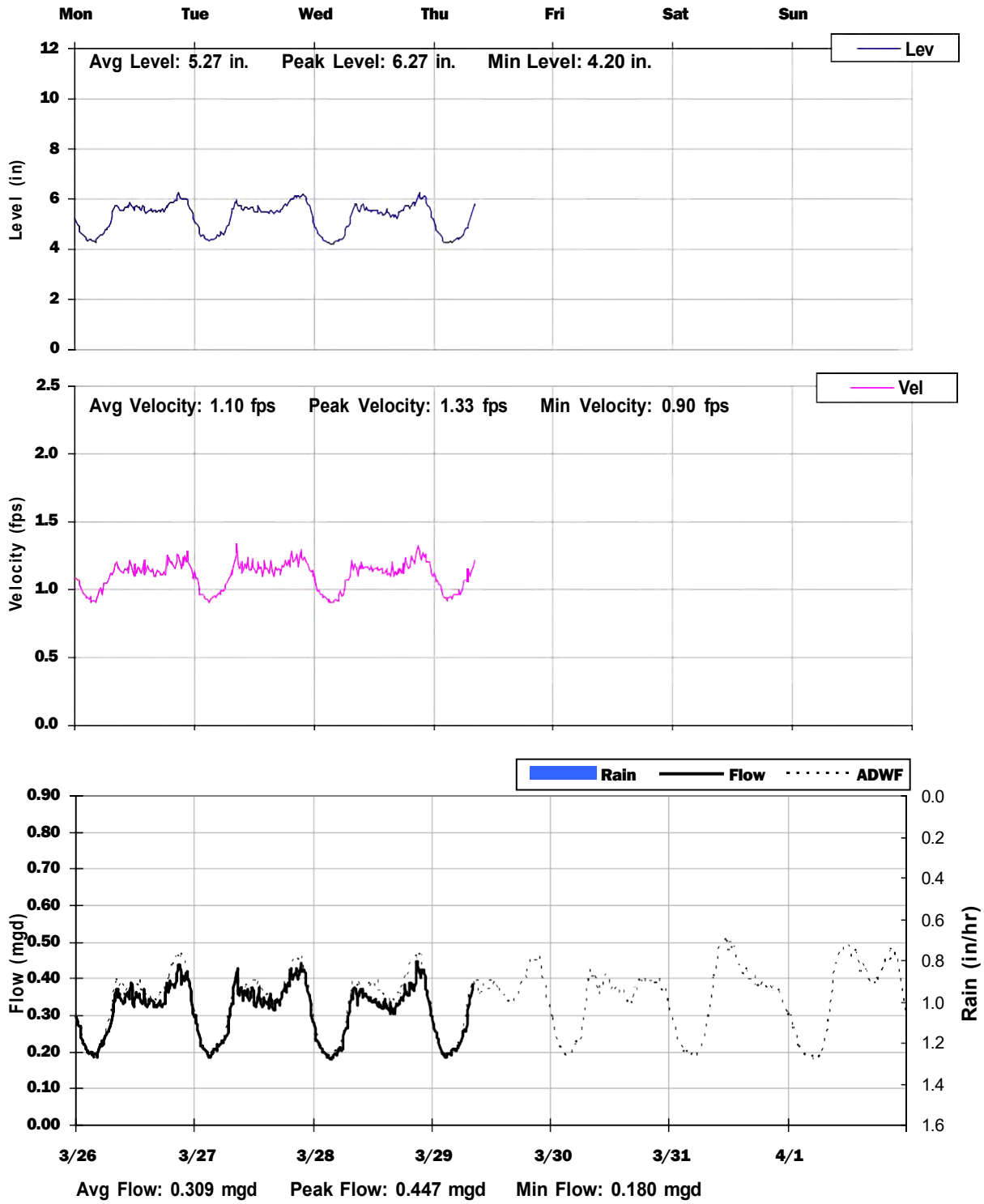
3/12/2018 to 3/19/2018



TC-09
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-09
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



TC-09

City of Tracy, California

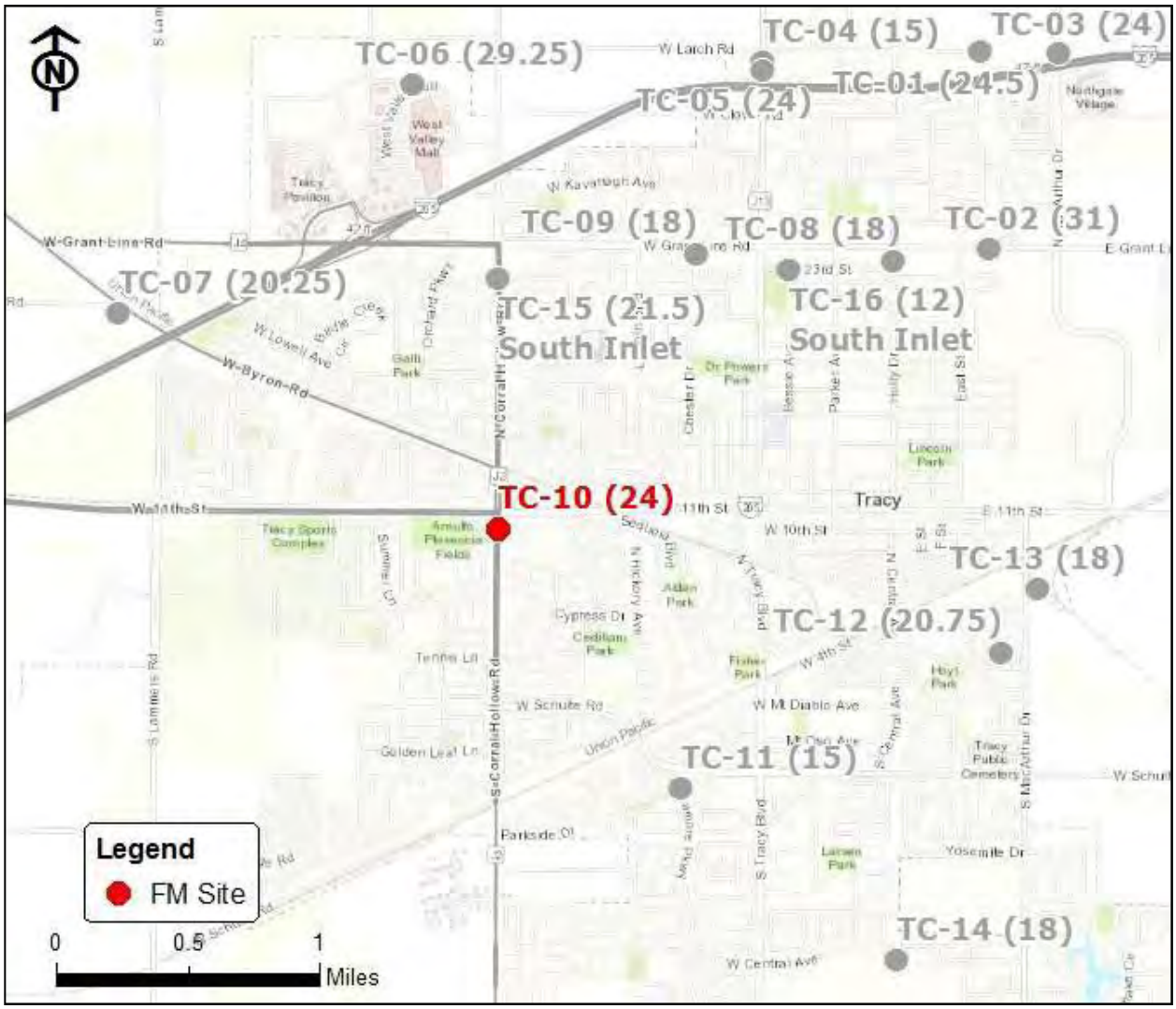
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-10**

Location: **Corral Hollow Road, approx 335 feet souht of West 11th Street**

Data Summary Report



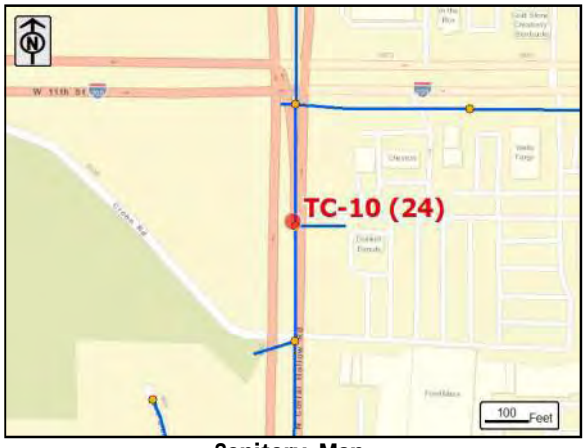
Vicinity Map: TC-10

TC-10

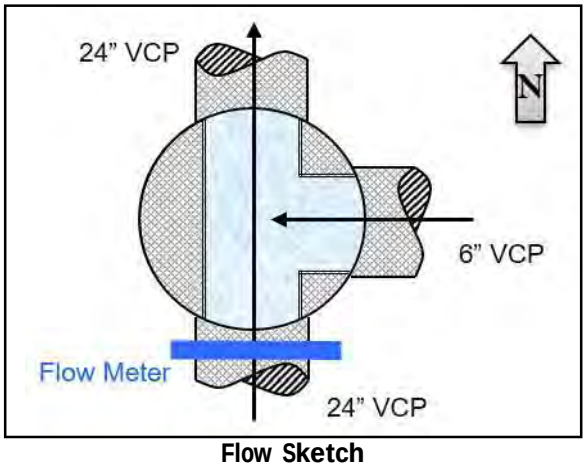
Site Information

Location:	**Corral Hollow Road, approx 335 feet souht of West 11th Street**
City Manhole:	
Coordinates:	**121.4531° W, 37.7384° N**
Rim Elevation (Earth):	**45 feet**
Pipe Diameter:	**24 inches**
ADWF:	**1.141 mgd**
Peak Measured Flow:	**2.030 mgd**

Satellite Map



Sanitary Map



Flow Sketch

Street View

Plan View

TC-10

Additional Site Photos

Effluent Pipe

Monitored Influent Pipe

TC-10

Additional Site Photos

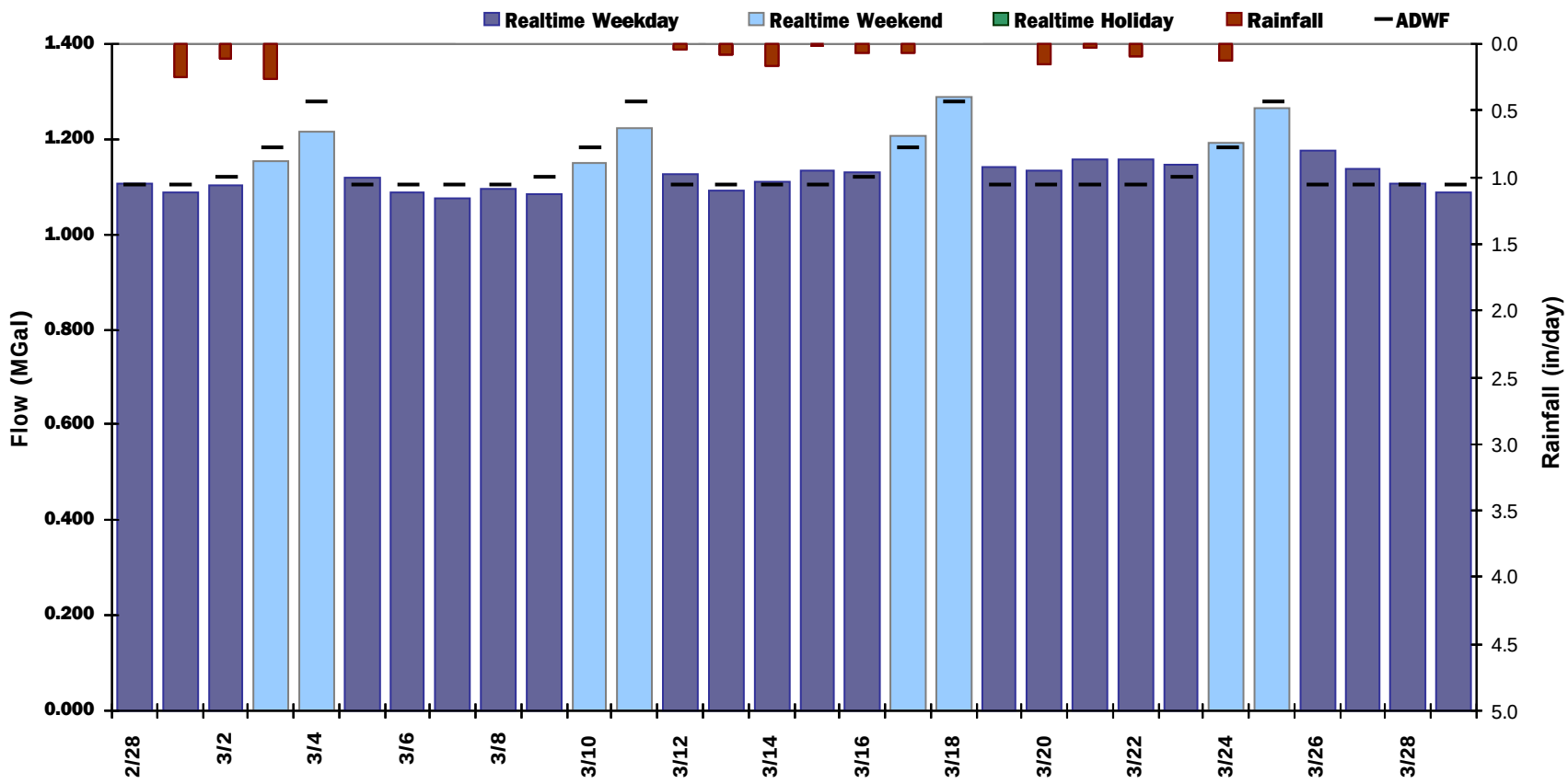
East Lateral

TC-10

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 1.143 MGal Peak Daily Flow: 1.286 MGal Min Daily Flow: 1.075 MGal

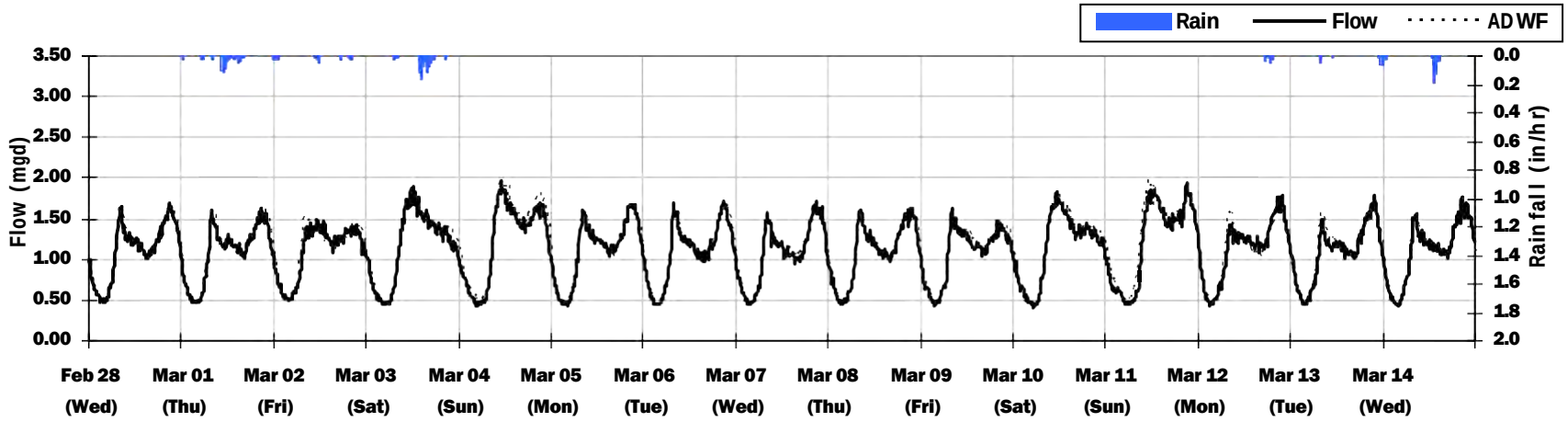
Total Period Rainfall: 1.43 inches

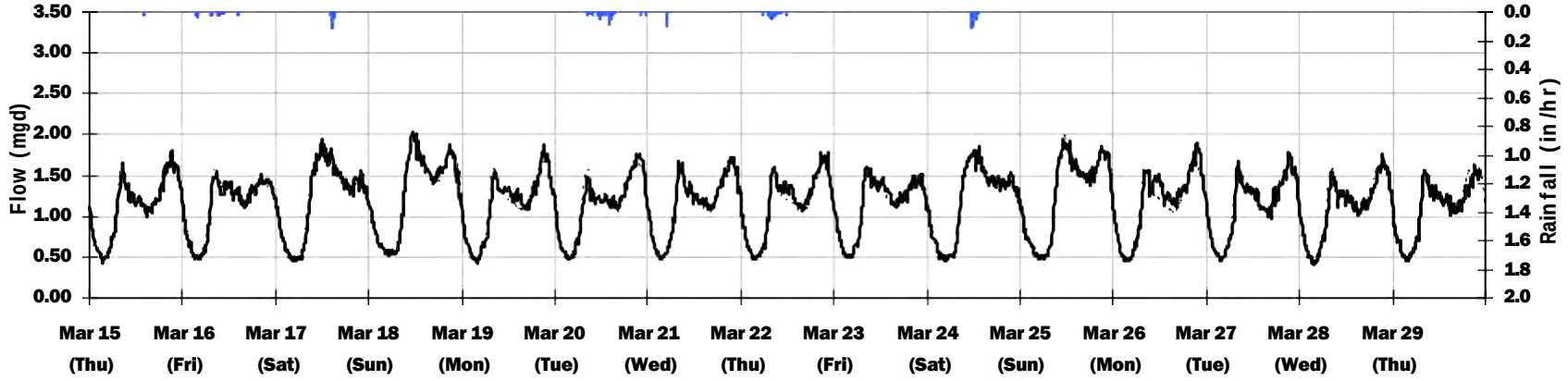


TC-10

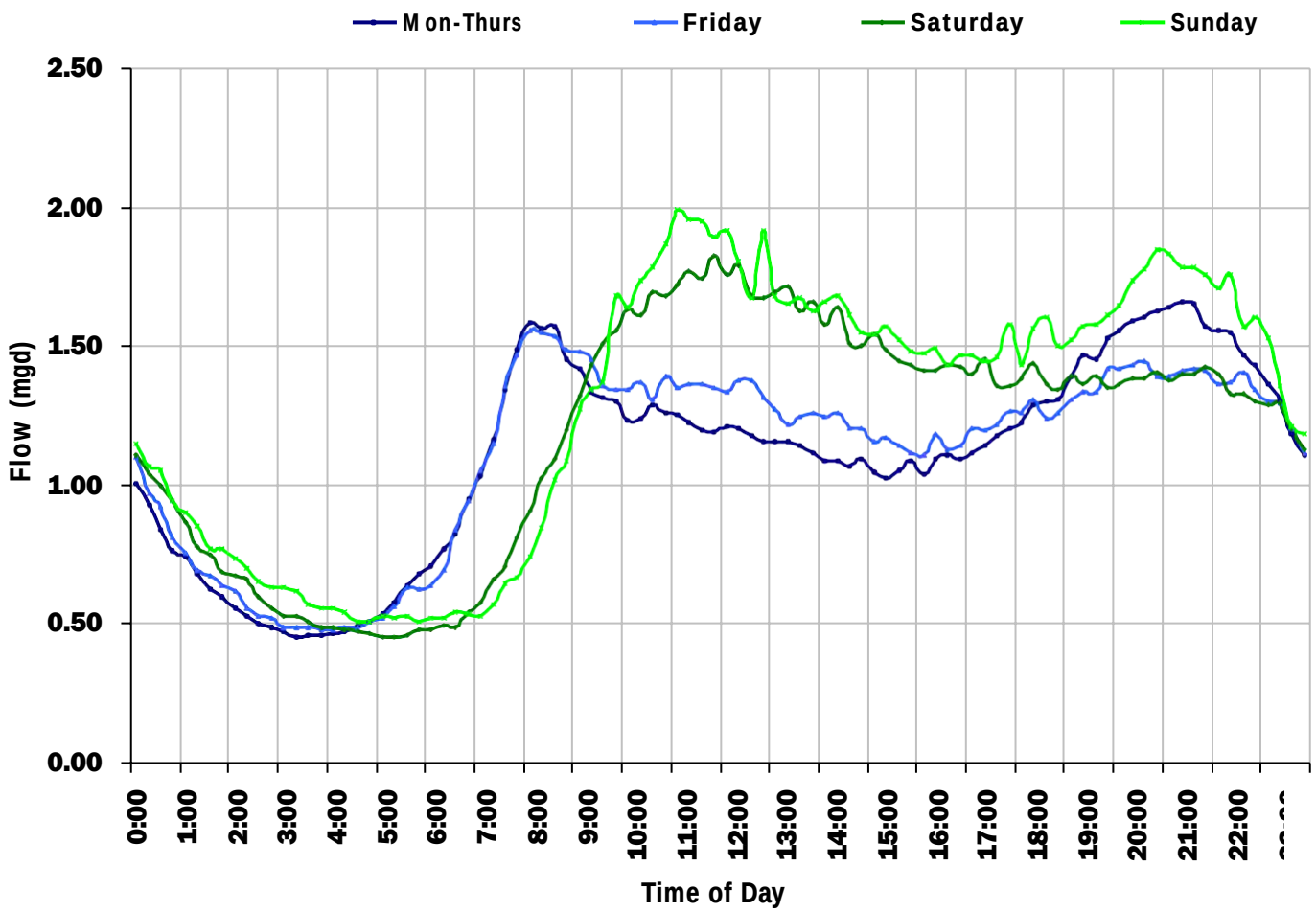
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 1.143 mgd Peak Flow: 2.030 mgd Min Flow: 0.414 mgd



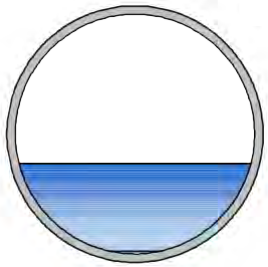


TC-10
Average Dry Weather Flow Hydrographs



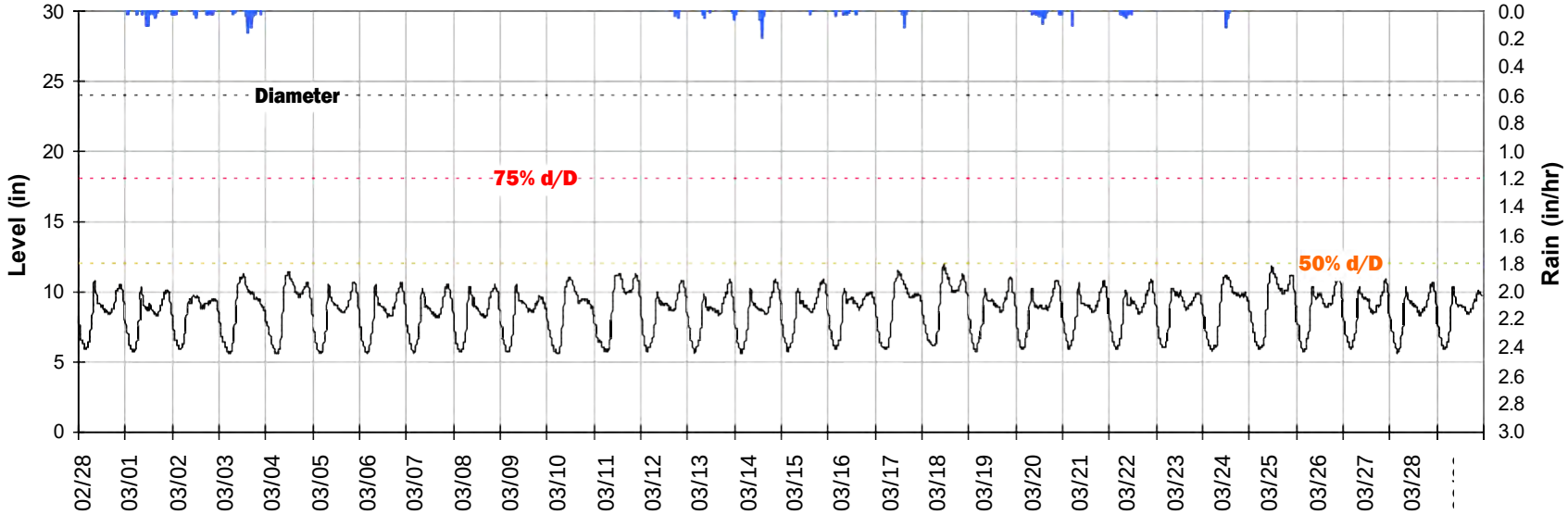
ADWF:

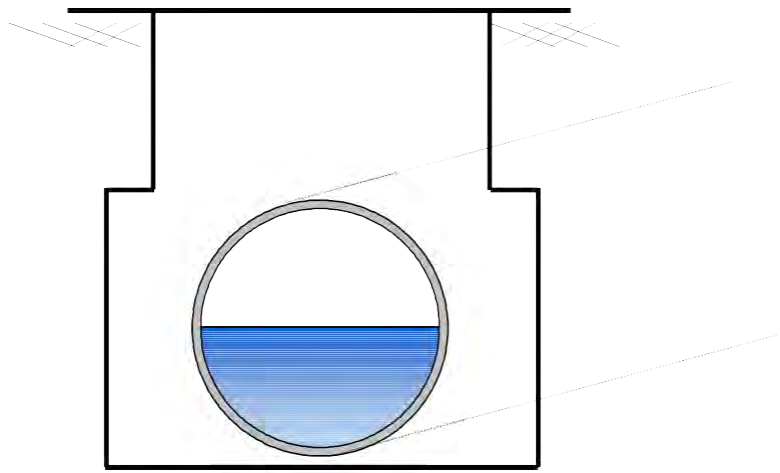
1.141 *mgd*



TC-10
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



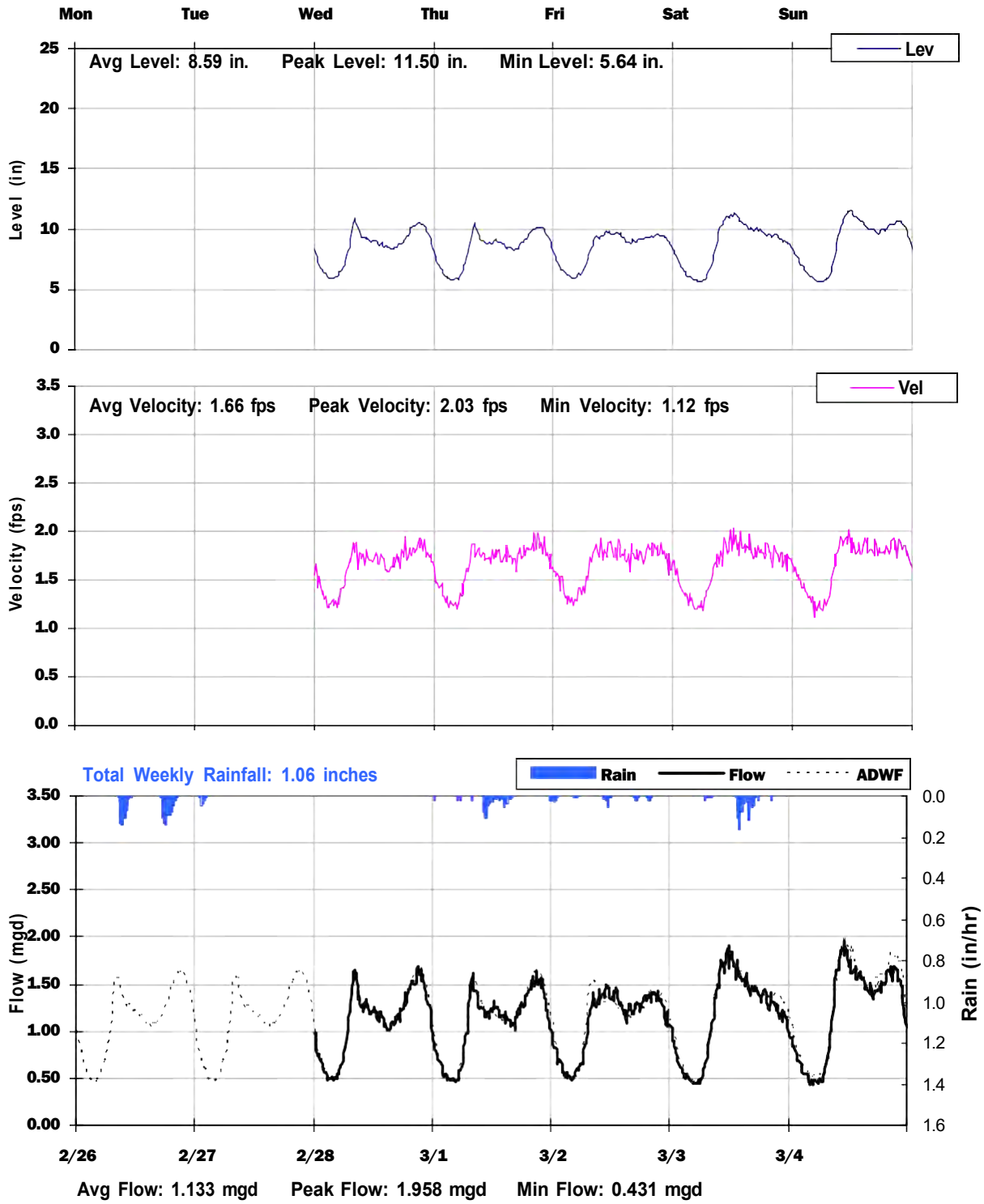


Pipe Diameter:	**24**	***inches***
Peak Measured Level:	**11.9**	***inches***
Peak d/D Ratio:	**0.50**	

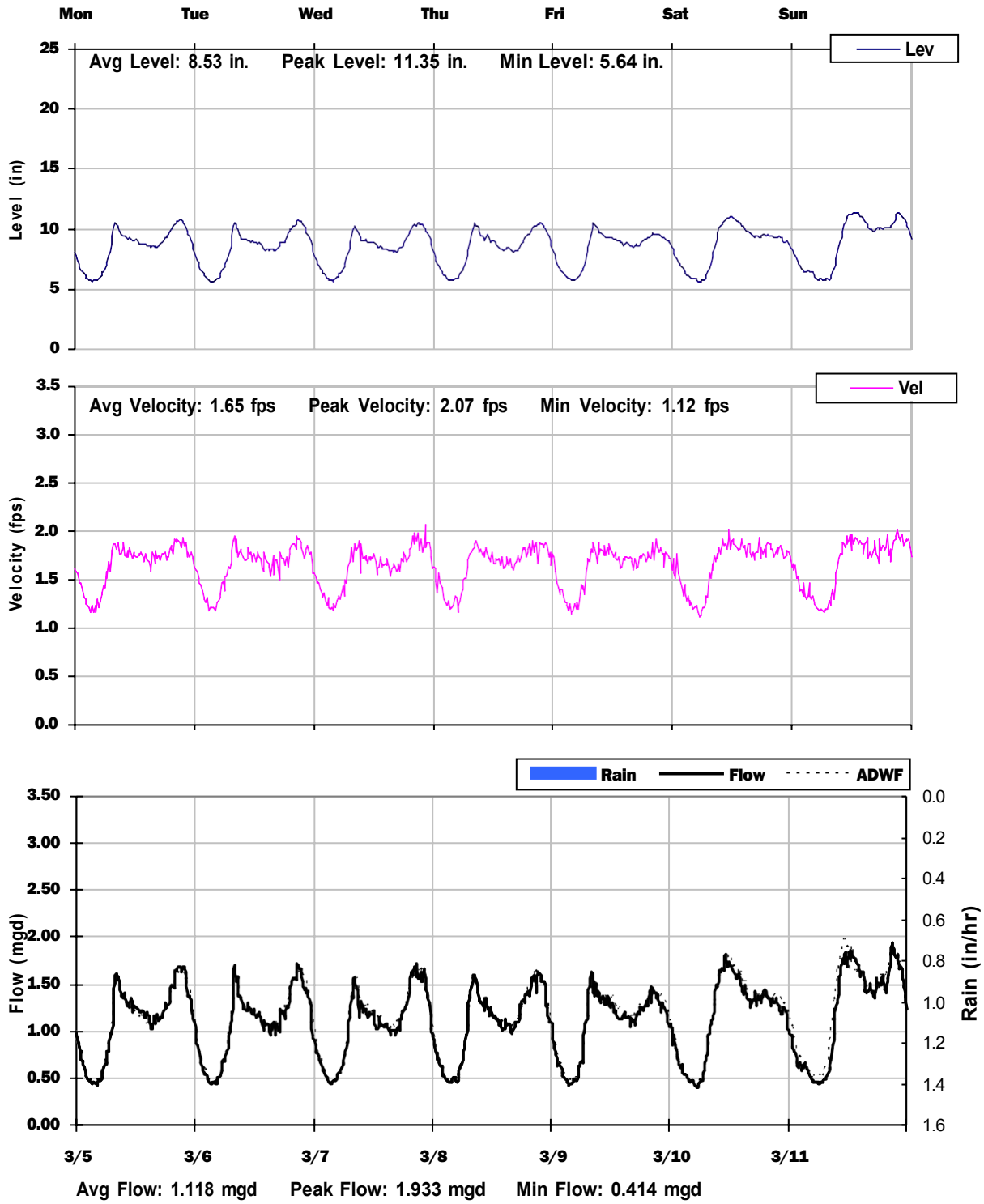
TC-10

Weekly Level, Velocity and Flow Hydrographs

2/26/2018 to 3/5/2018



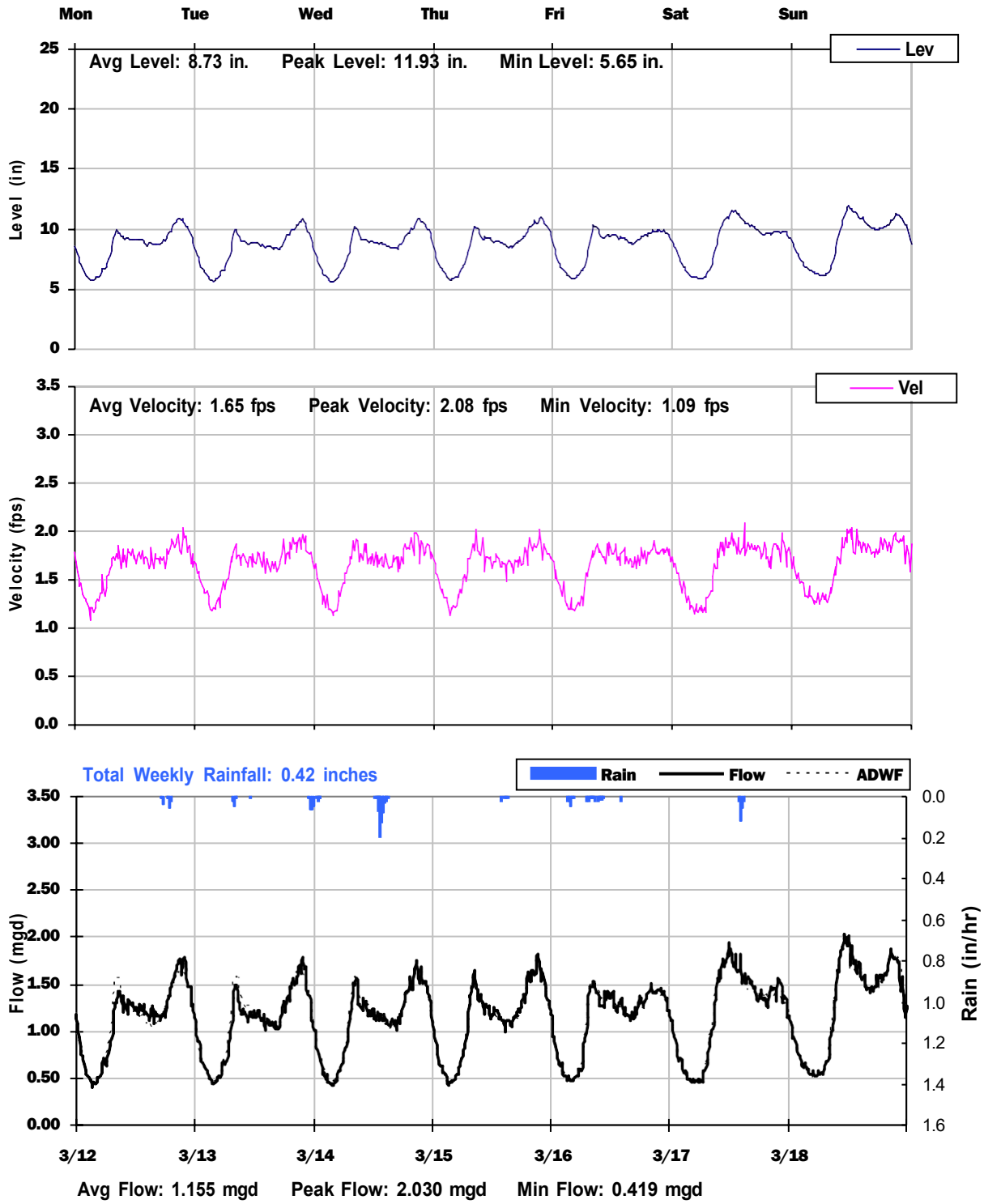
TC-10
Weekly Level, Velocity and Flow Hydrographs
3/5/2018 to 3/12/2018



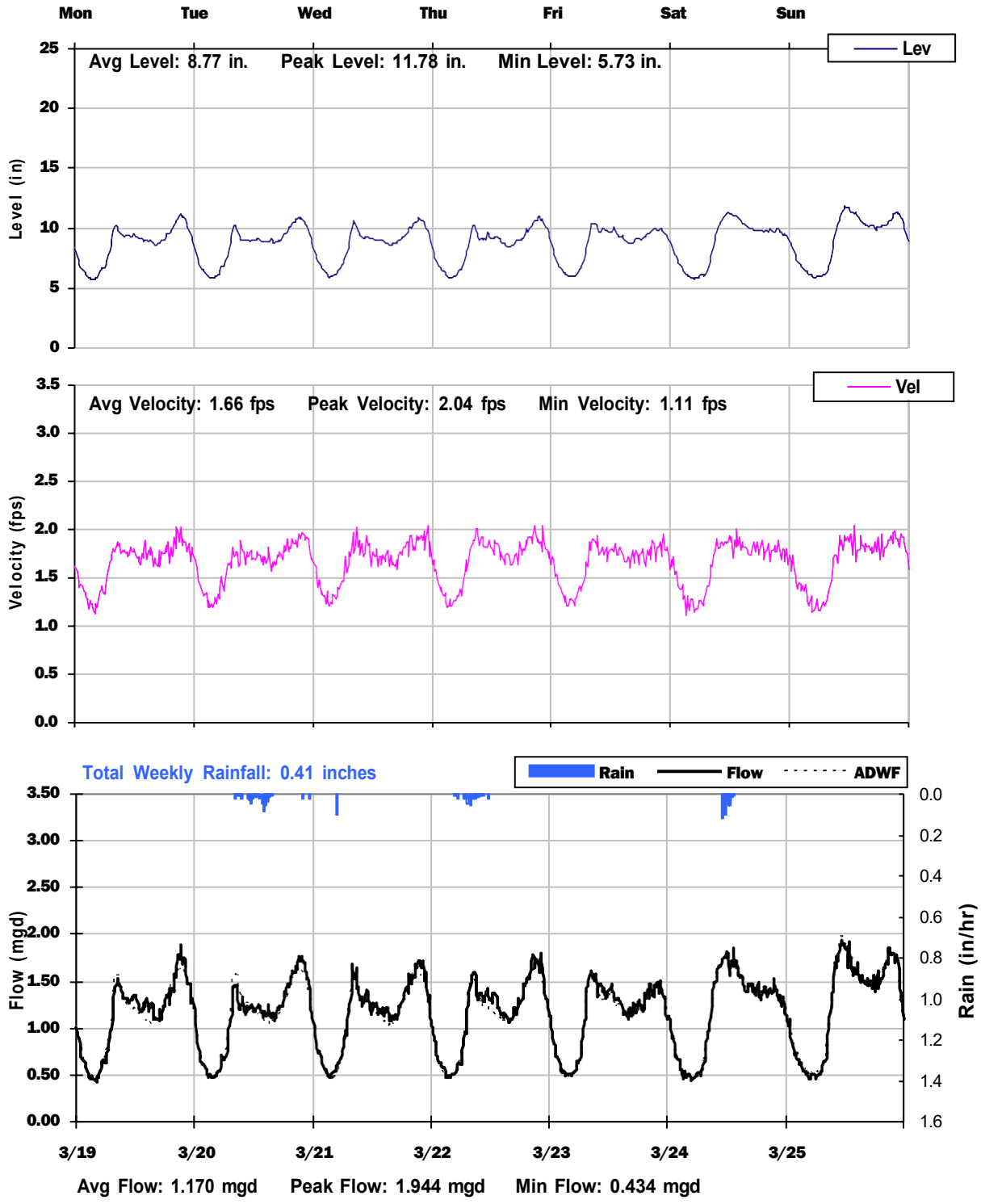
TC-10

Weekly Level, Velocity and Flow Hydrographs

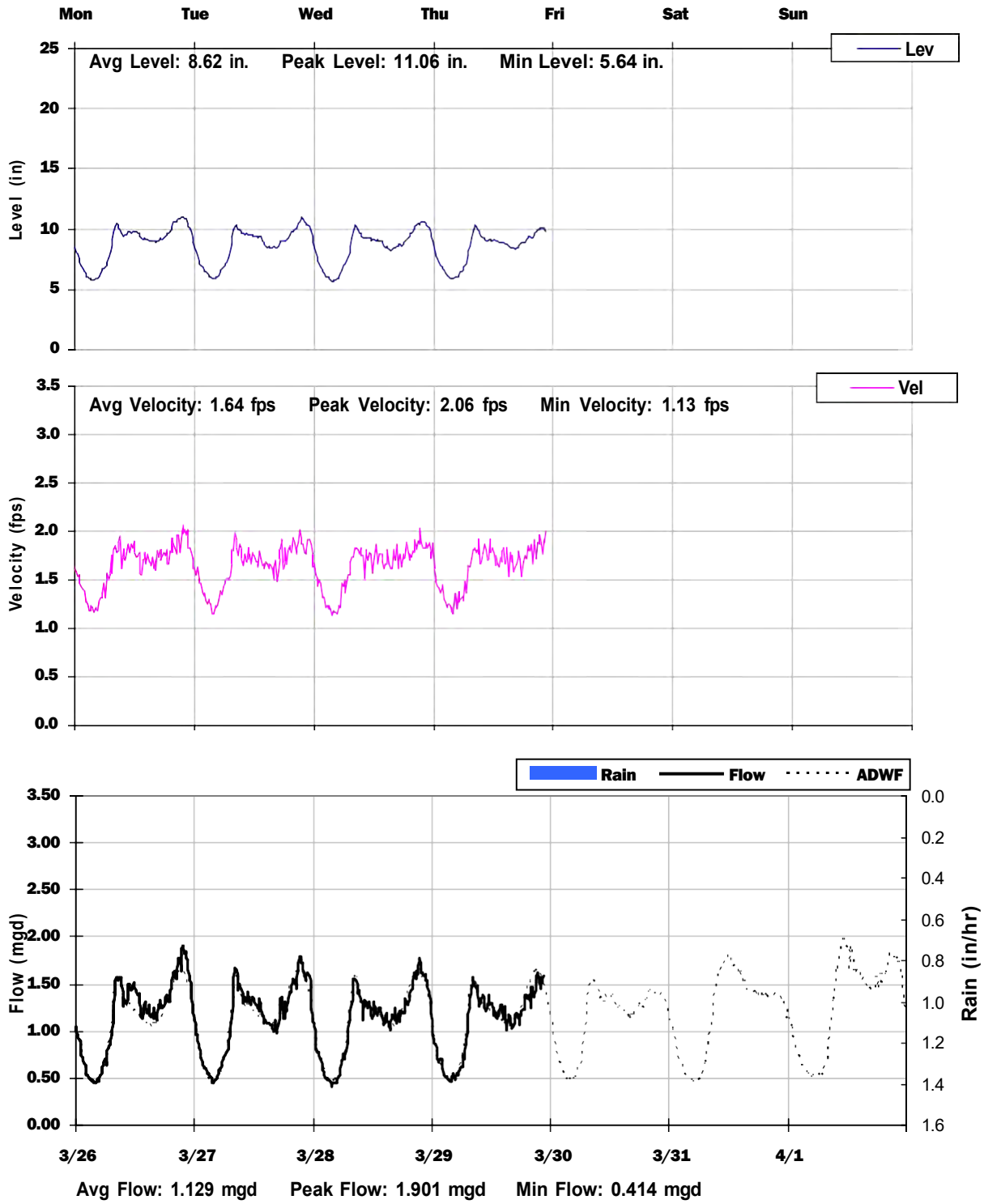
3/12/2018 to 3/19/2018



TC-10
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-10
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



TC-10

City of Tracy, California

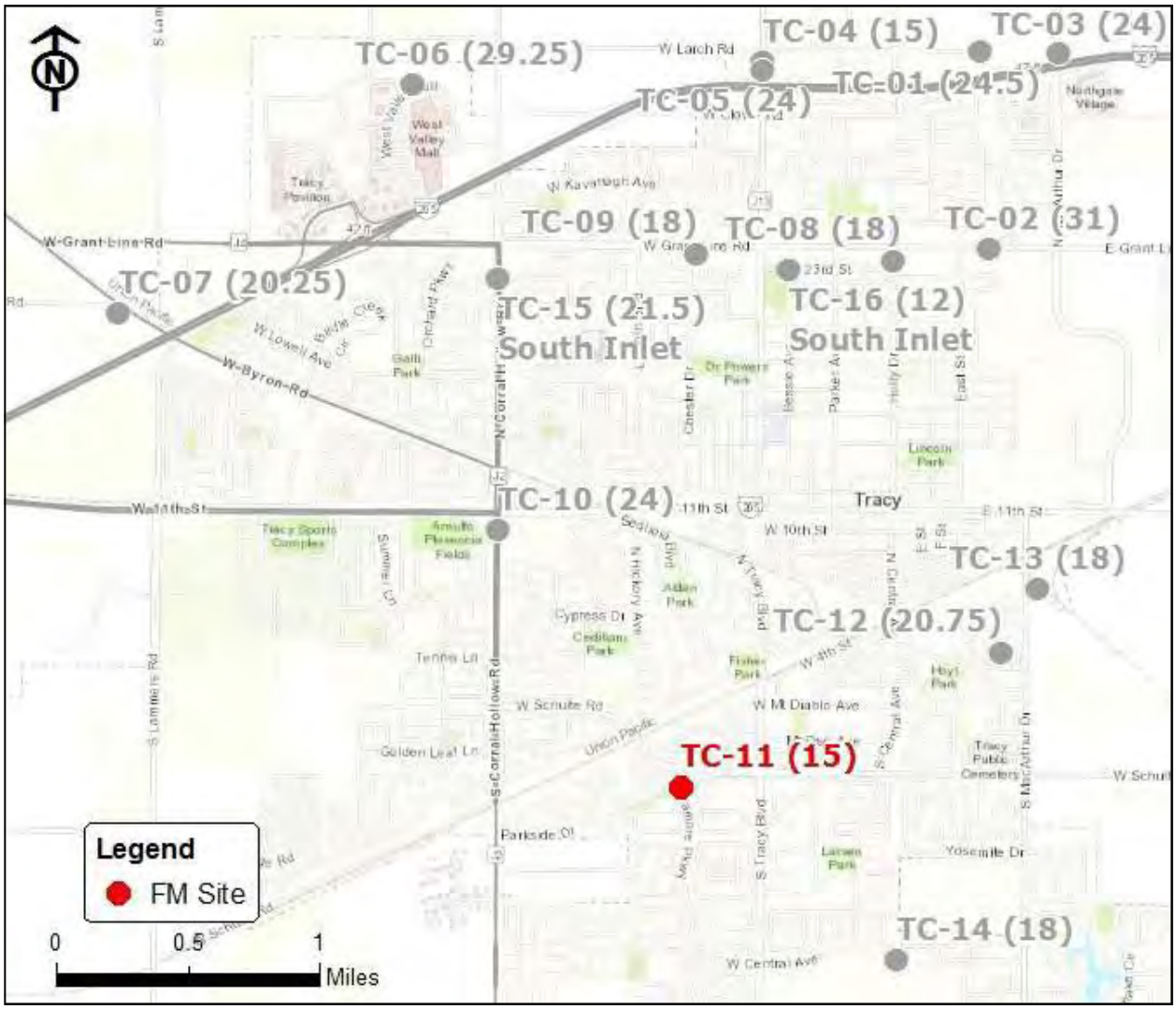
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-11**

Location: **Sycamore Pkwy at Sienna Park Drive**

Data Summary Report



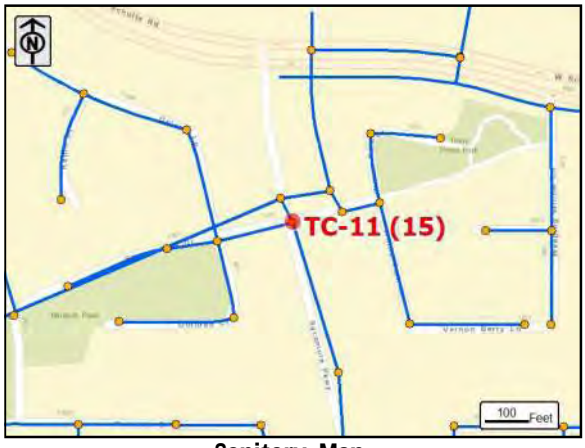
Vicinity Map: TC-11

TC-11

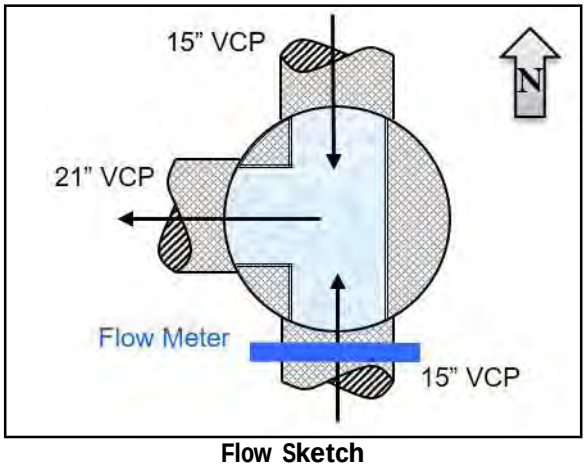
Site Information

Location:	**Sycamore Pkwy at Sienna Park Drive**
City Manhole:	
Coordinates:	**121.4402° W, 37.7243° N**
Rim Elevation (Earth):	**67 feet**
Pipe Diameter:	**15 inches**
ADWF:	**0.342 mgd**
Peak Measured Flow:	**0.594 mgd**

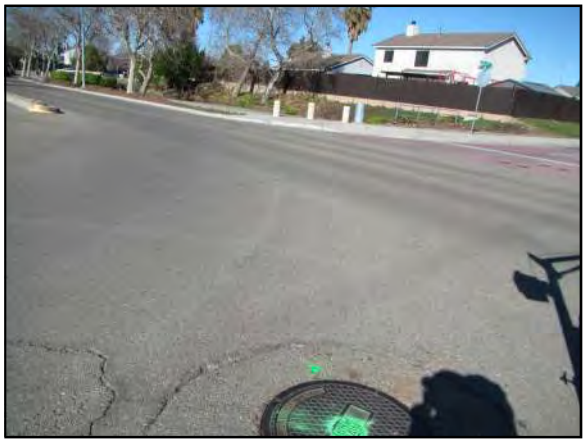
Satellite Map



Sanitary Map



Flow Sketch



Street View

Plan View

TC-11

Additional Site Photos

Effluent Pipe

North Influent Pipe

TC-11

Additional Site Photos

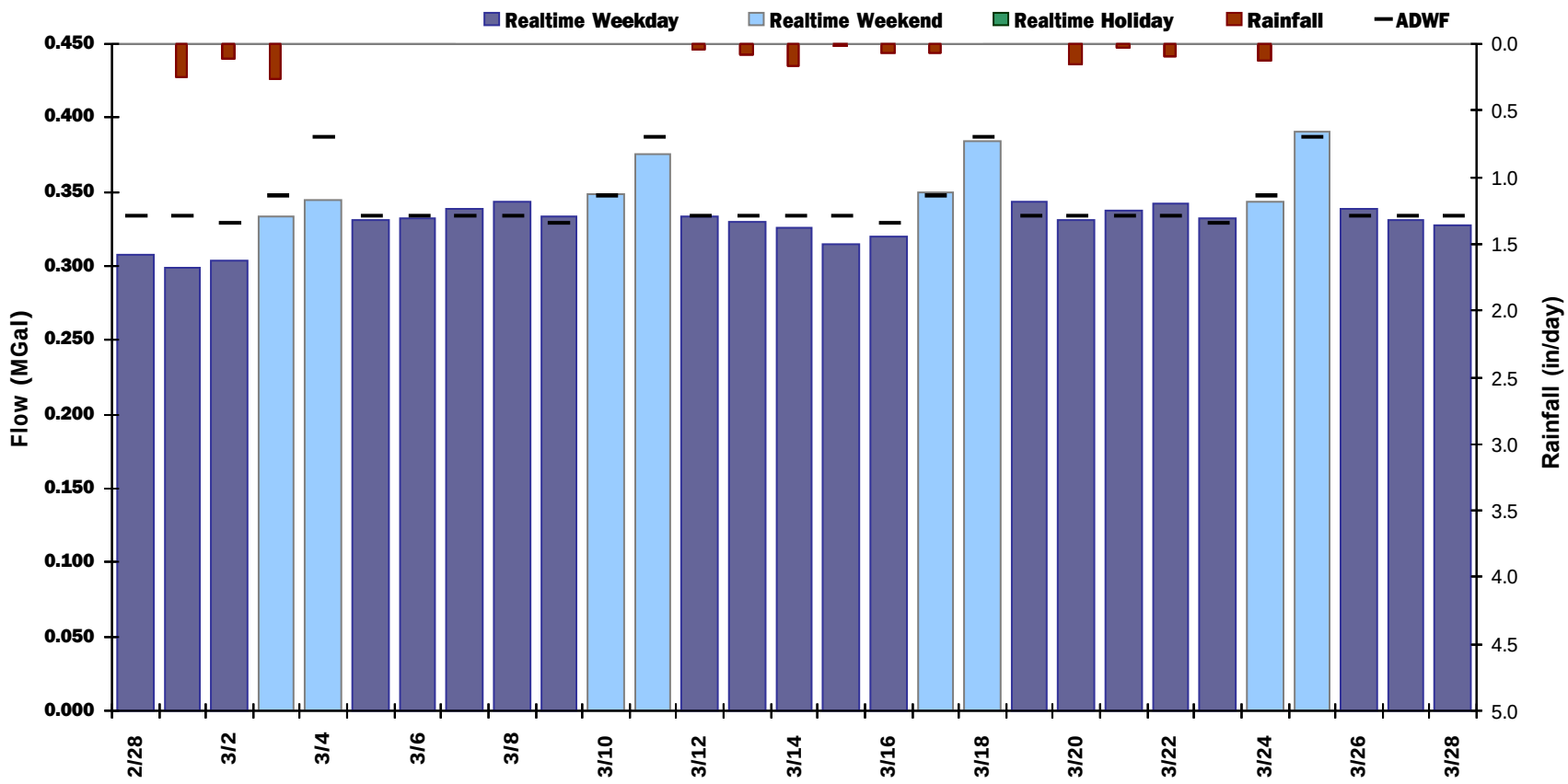
South Influent Pipe

TC-11

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 0.337 MGal Peak Daily Flow: 0.390 MGal Min Daily Flow: 0.299 MGal

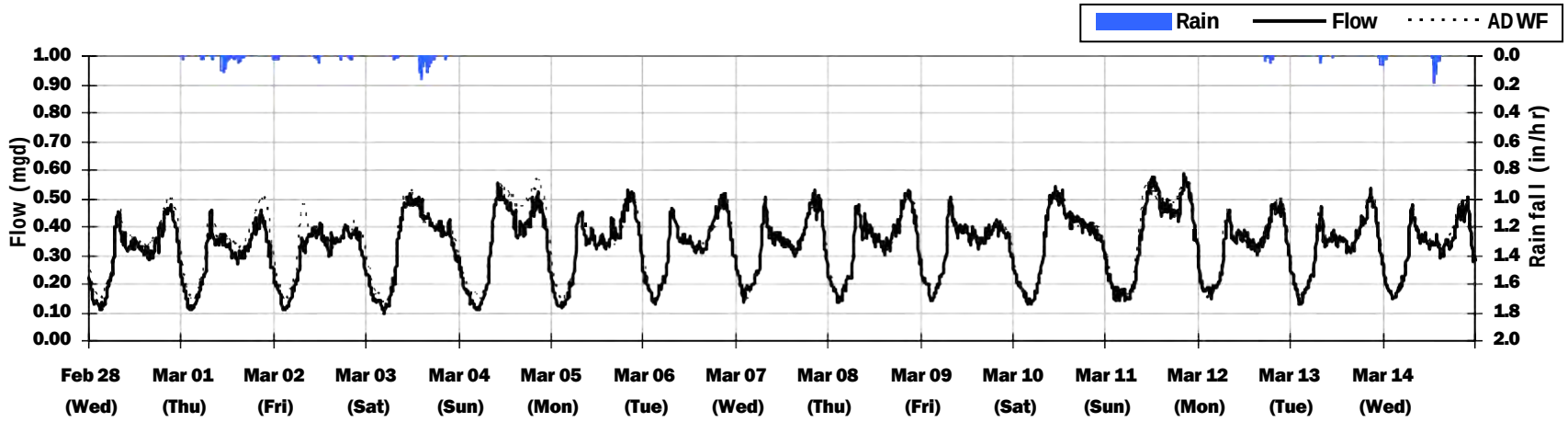
Total Period Rainfall: 1.43 inches

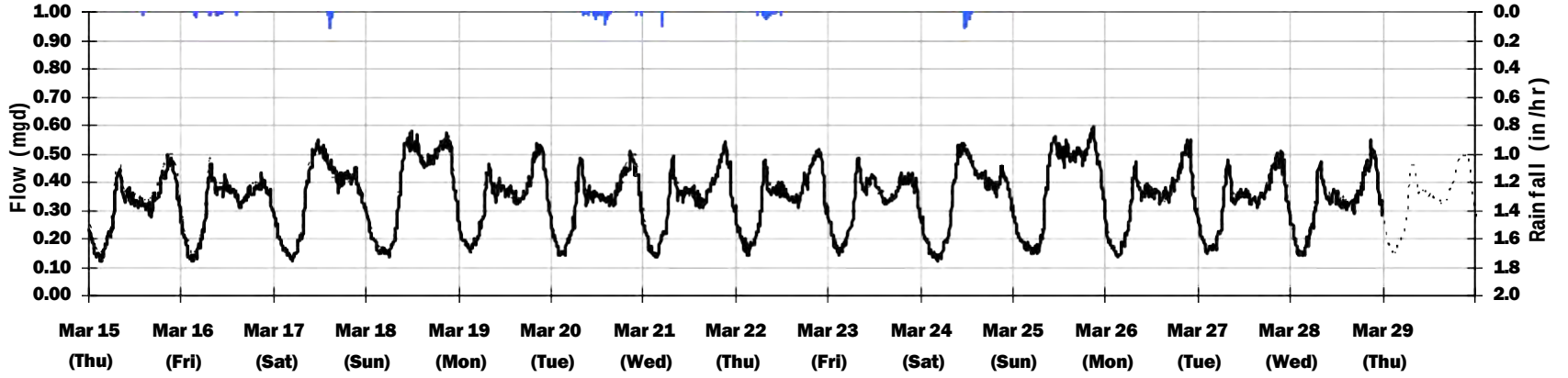


TC-11

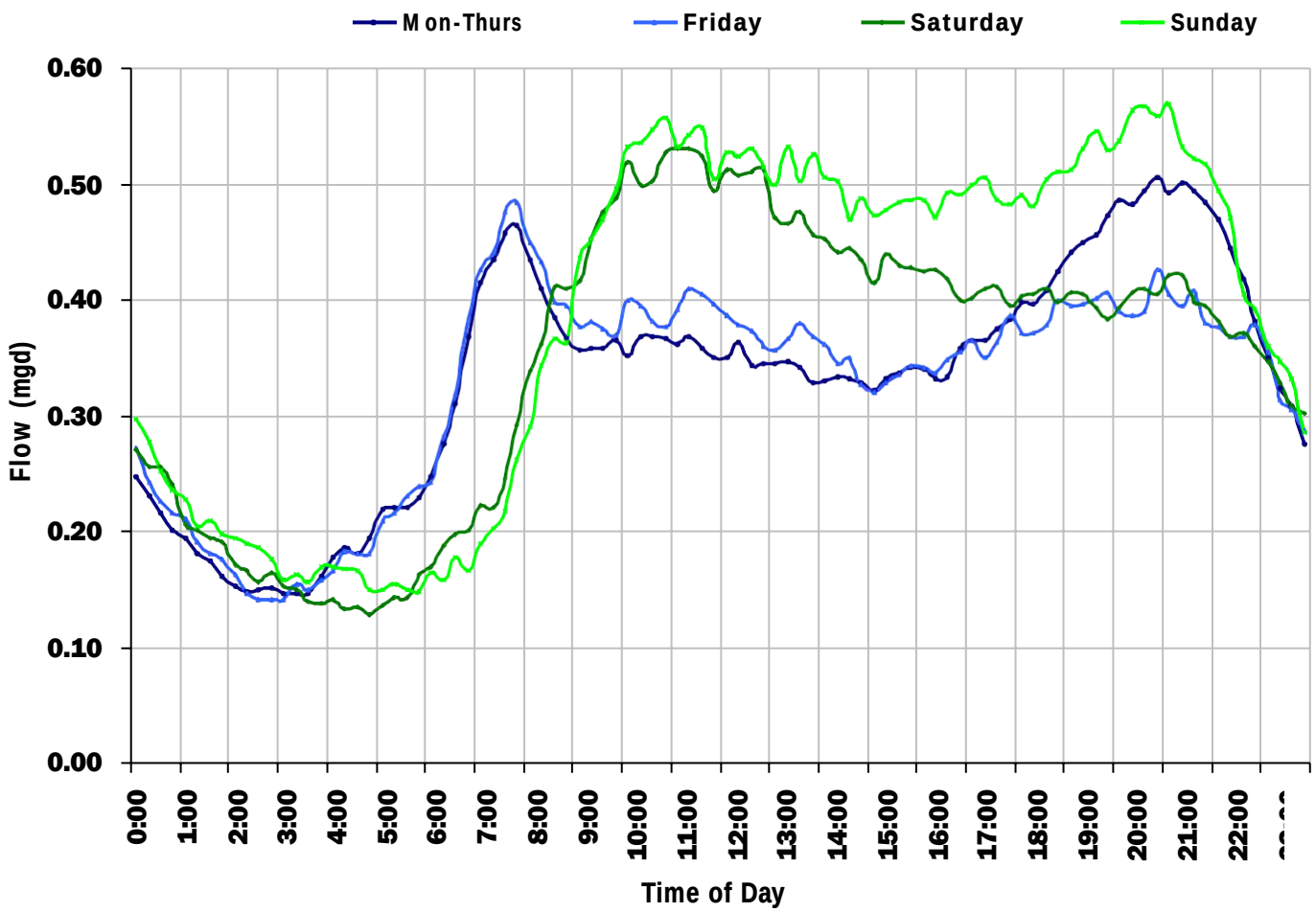
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 0.337 mgd Peak Flow: 0.594 mgd Min Flow: 0.099 mgd



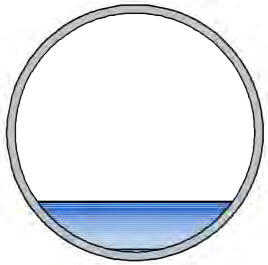


TC-11
Average Dry Weather Flow Hydrographs



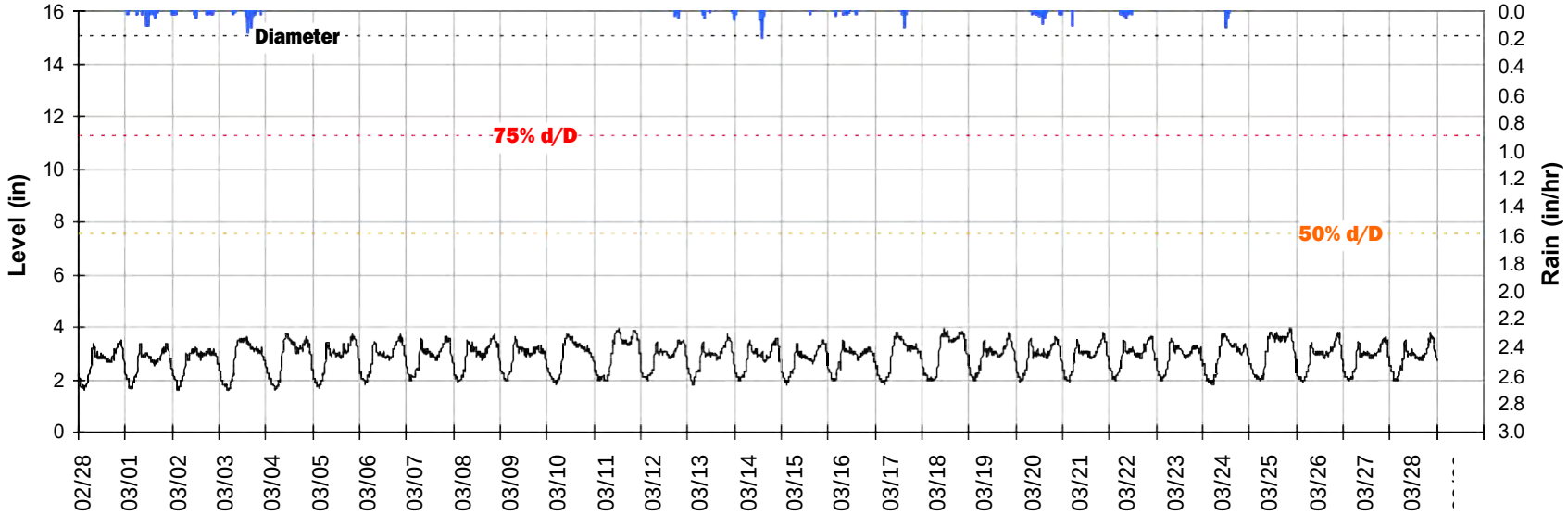
ADWF:

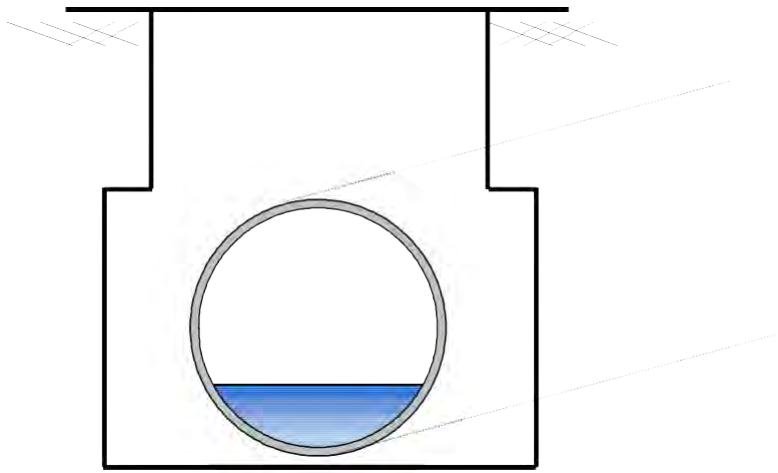
0.342 *mgd*



TC-11
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



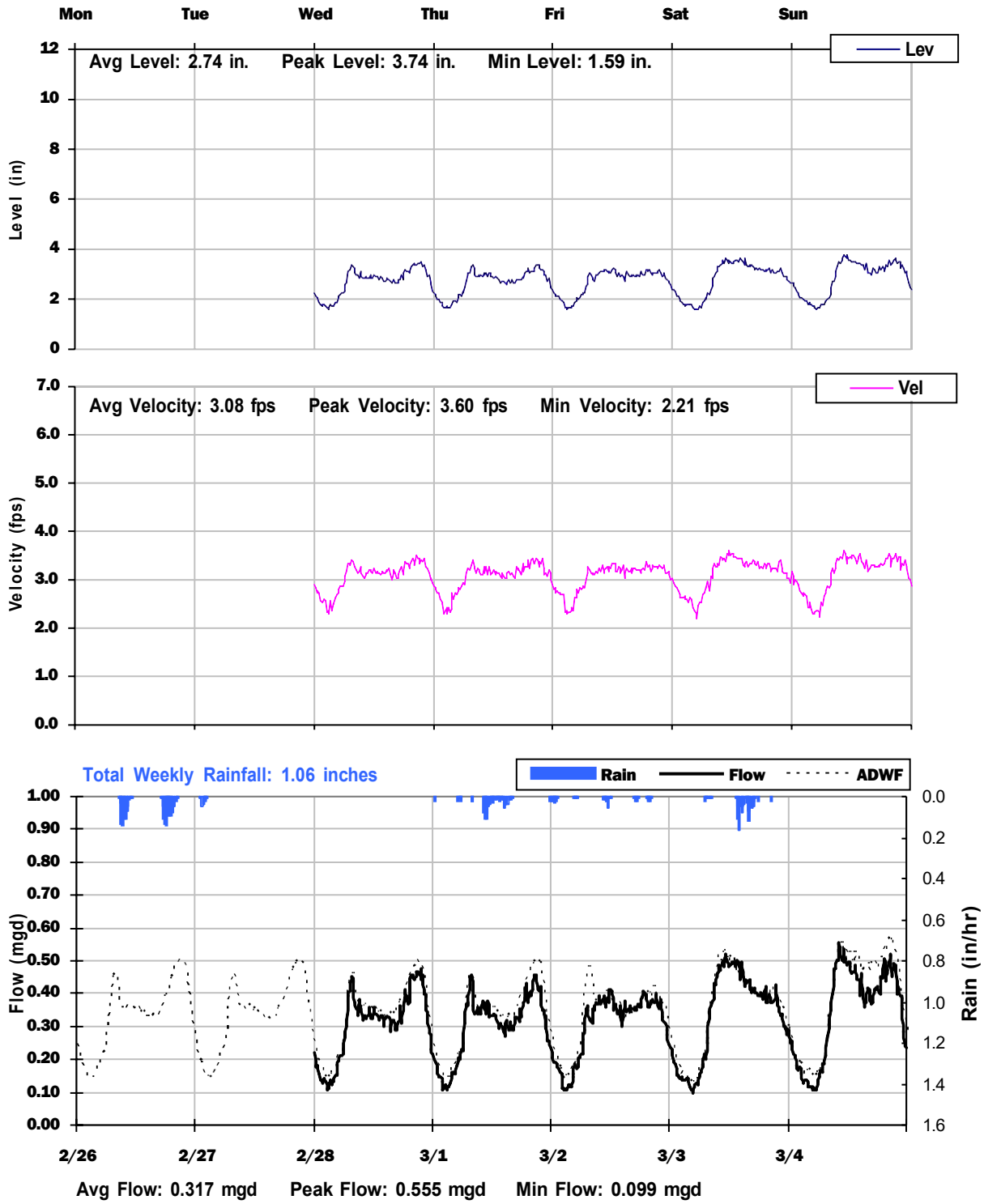


Pipe Diameter:	**15**	***inches***
Peak Measured Level:	**3.95**	***inches***
Peak d/D Ratio:	**0.26**	

TC-11

Weekly Level, Velocity and Flow Hydrographs

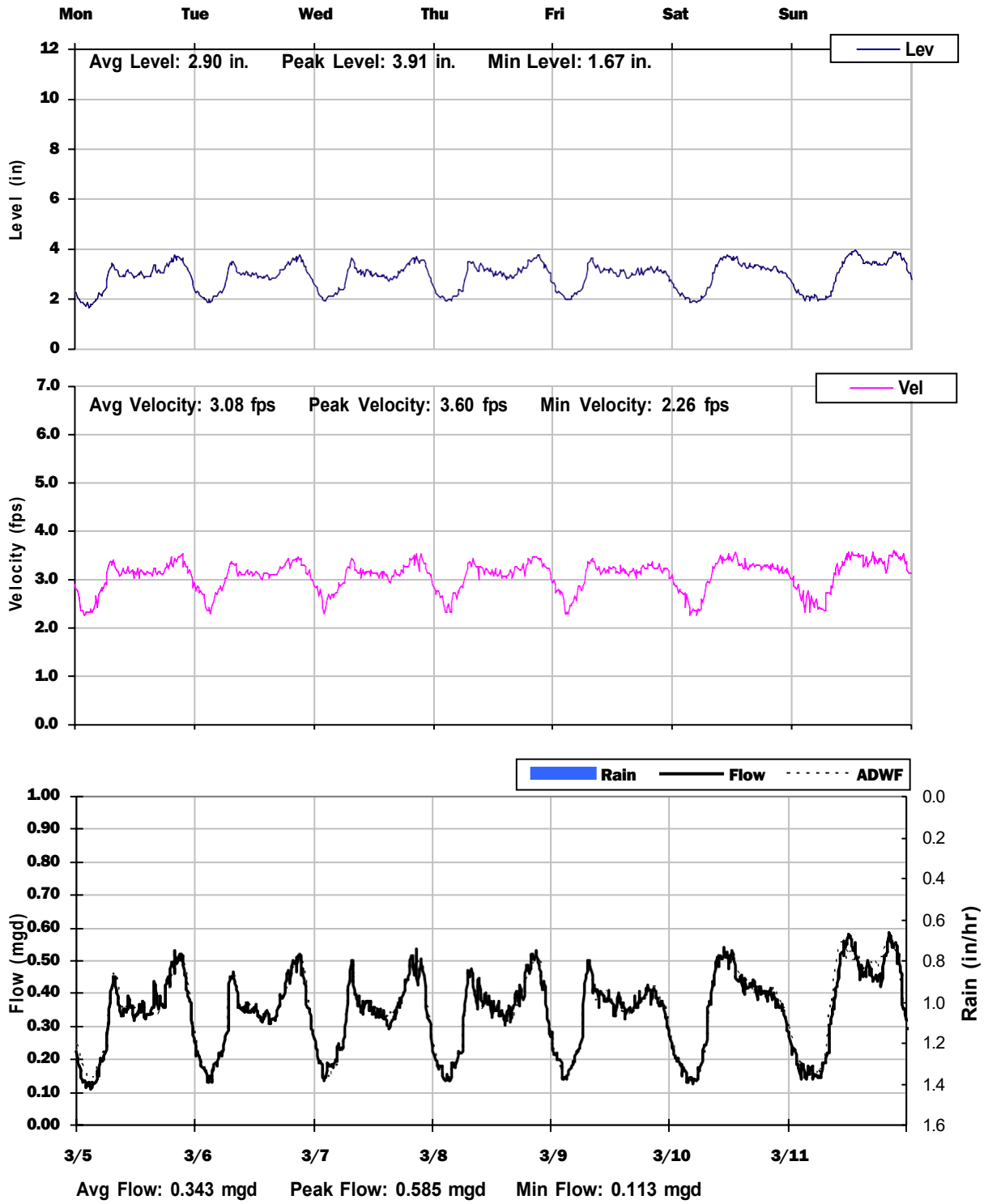
2/26/2018 to 3/5/2018



TC-11

Weekly Level, Velocity and Flow Hydrographs

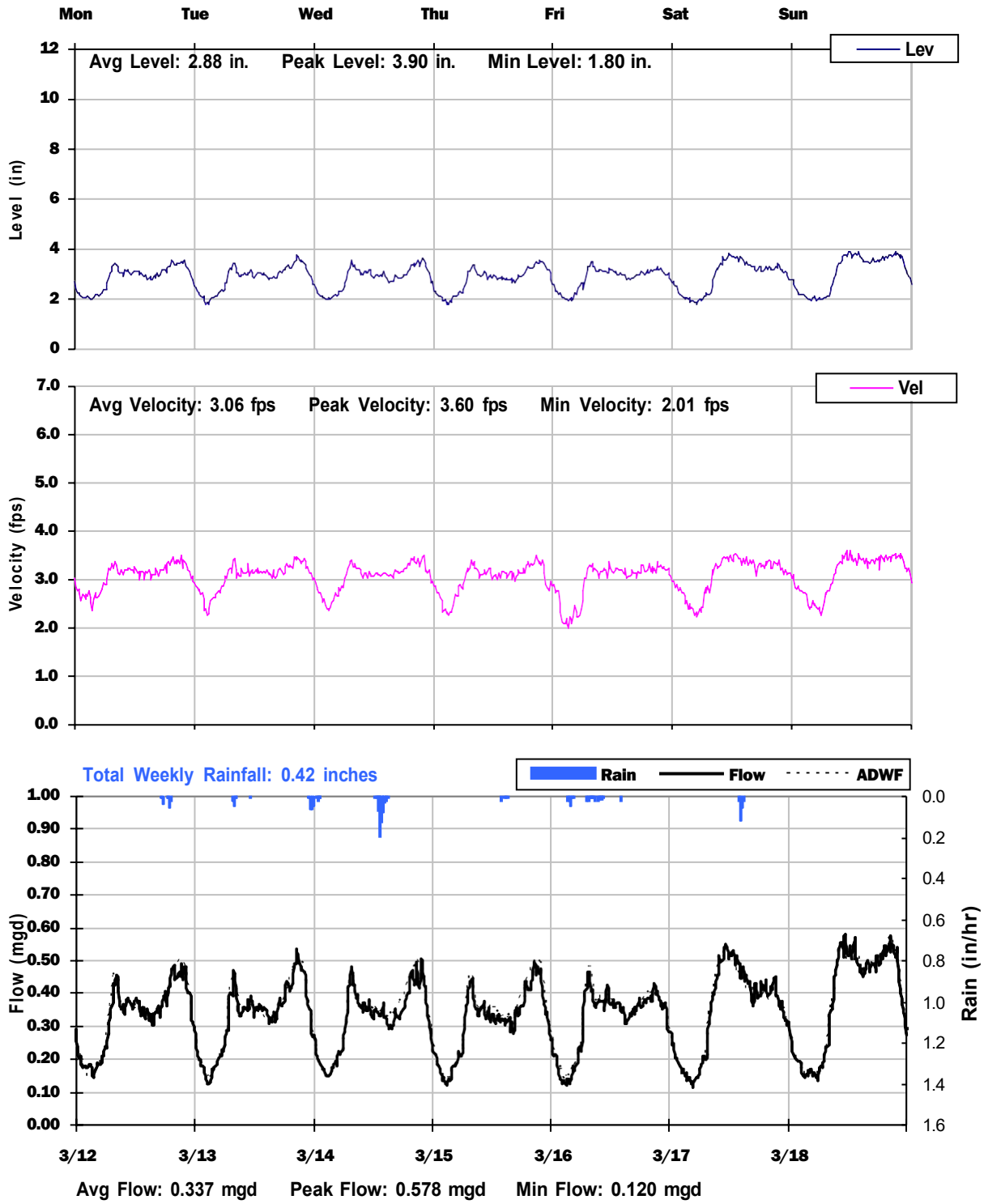
3/5/2018 to 3/12/2018



TC-11

Weekly Level, Velocity and Flow Hydrographs

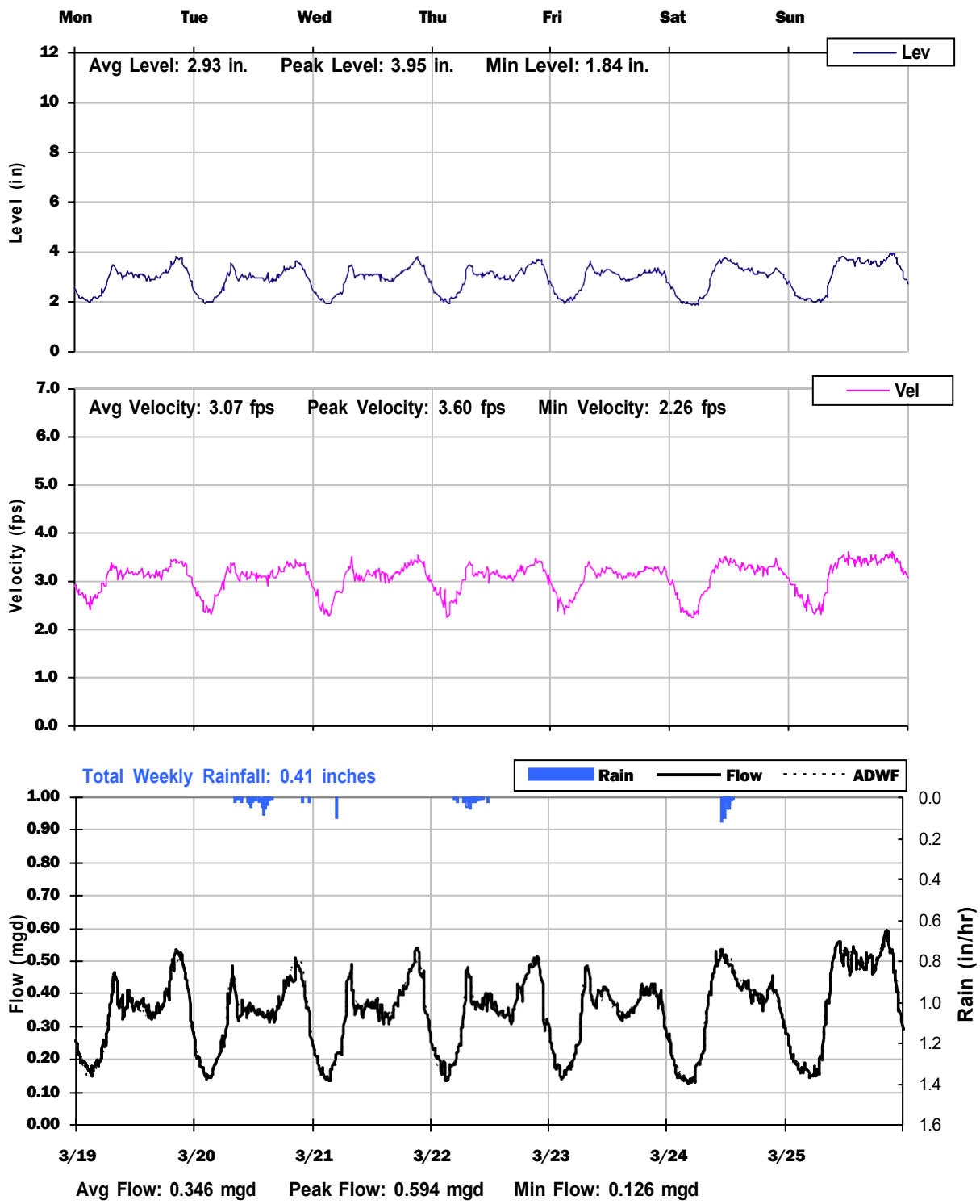
3/12/2018 to 3/19/2018



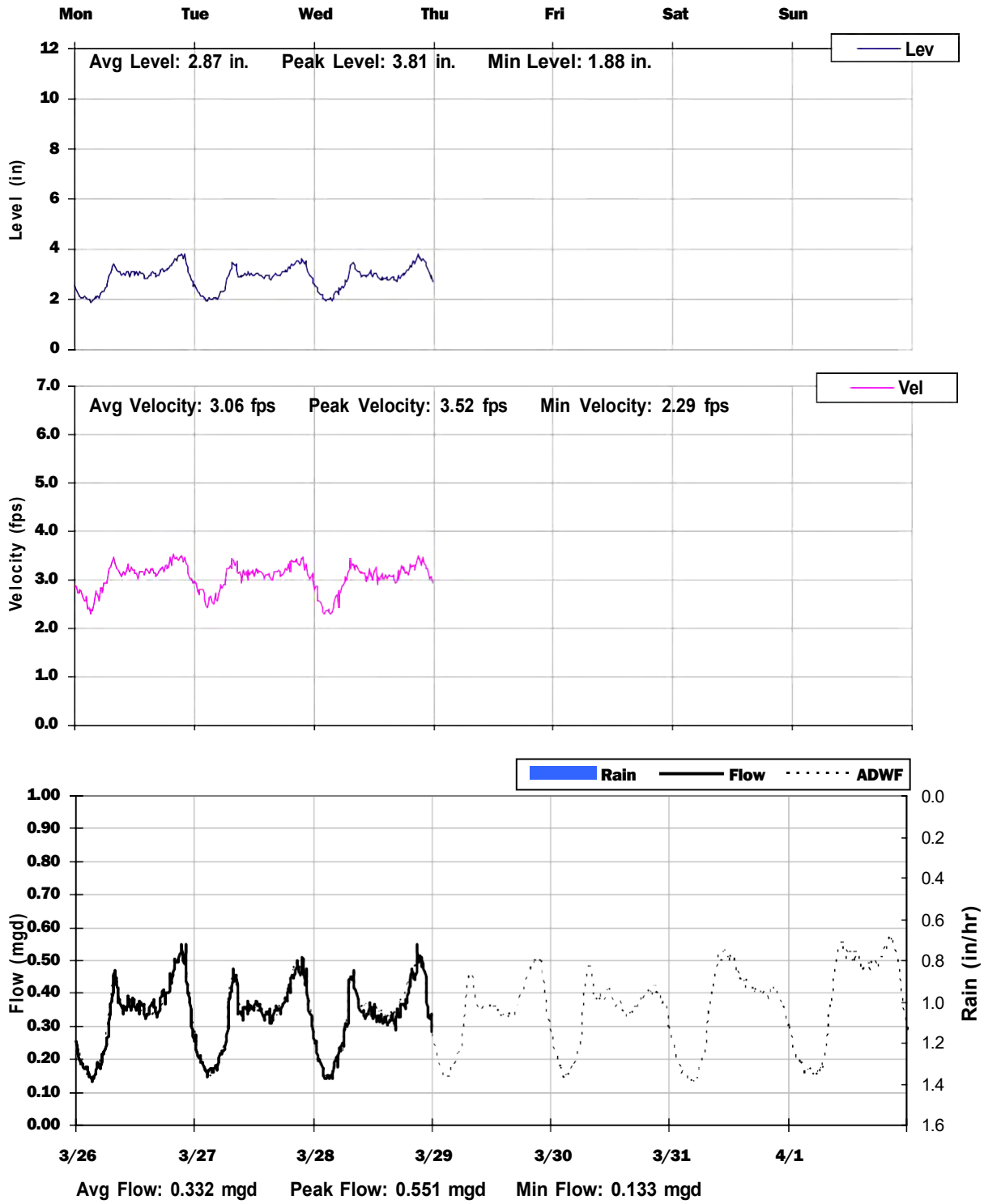
TC-11

Weekly Level, Velocity and Flow Hydrographs

3/19/2018 to 3/26/2018



TC-11
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



TC-11

City of Tracy, California

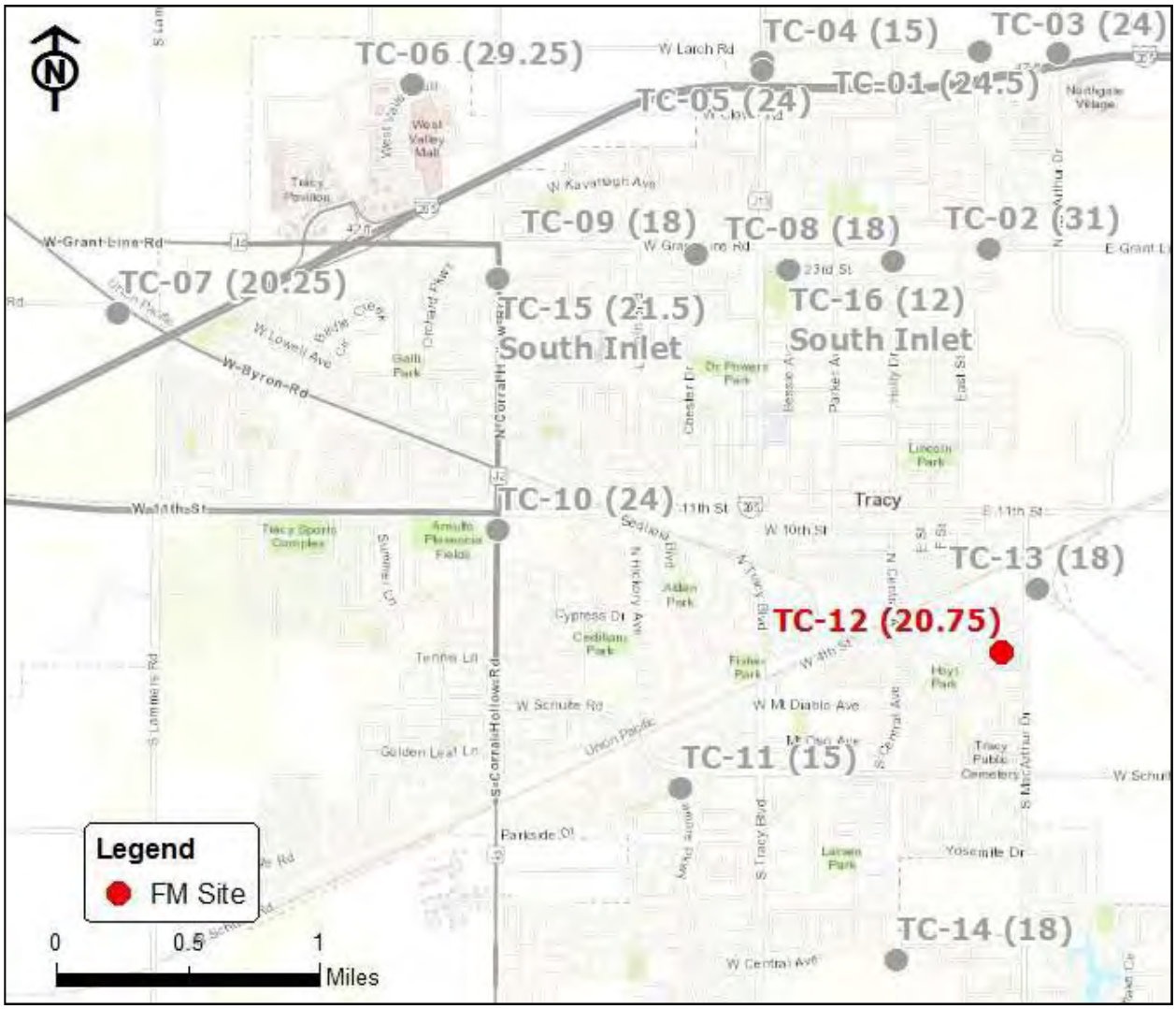
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-12**

Location: **483 Leamon Street, just west of Avila Street**

Data Summary Report



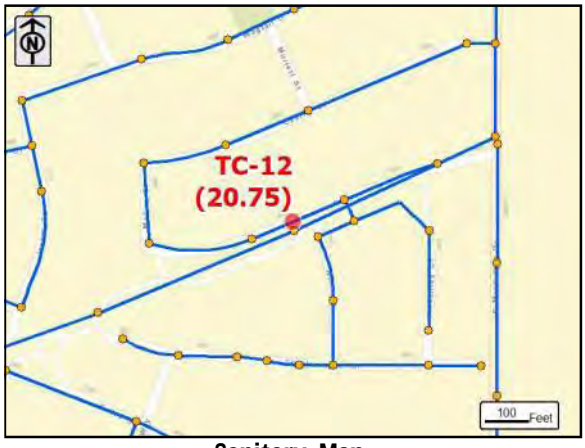
Vicinity Map: TC-12

TC-12

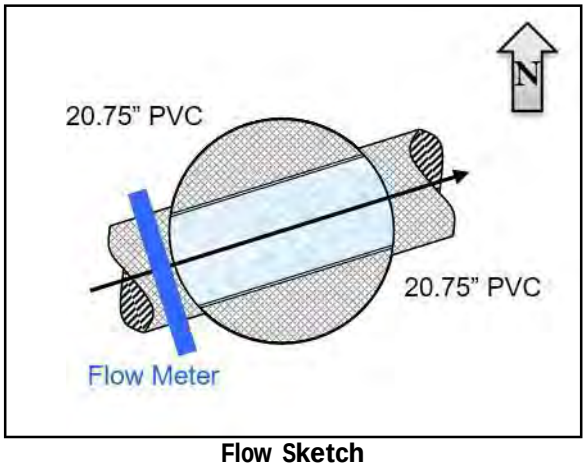
Site Information

Location:	**483 Leamon Street, just west of Avila Street**
City Manhole:	
Coordinates:	**121.4181° W, 37.7319° N**
Rim Elevation (Earth):	**61 feet**
Pipe Diameter:	**20.75 inches**
ADWF:	**1.086 mgd**
Peak Measured Flow:	**1.911 mgd**

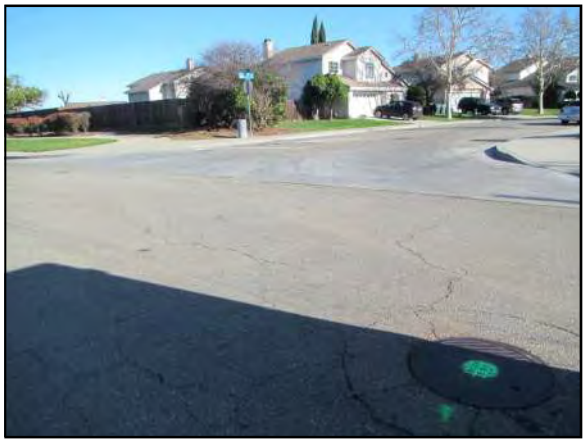
Satellite Map



Sanitary Map



Flow Sketch



Street View

Plan View

TC-12

Additional Site Photos

Effluent Pipe

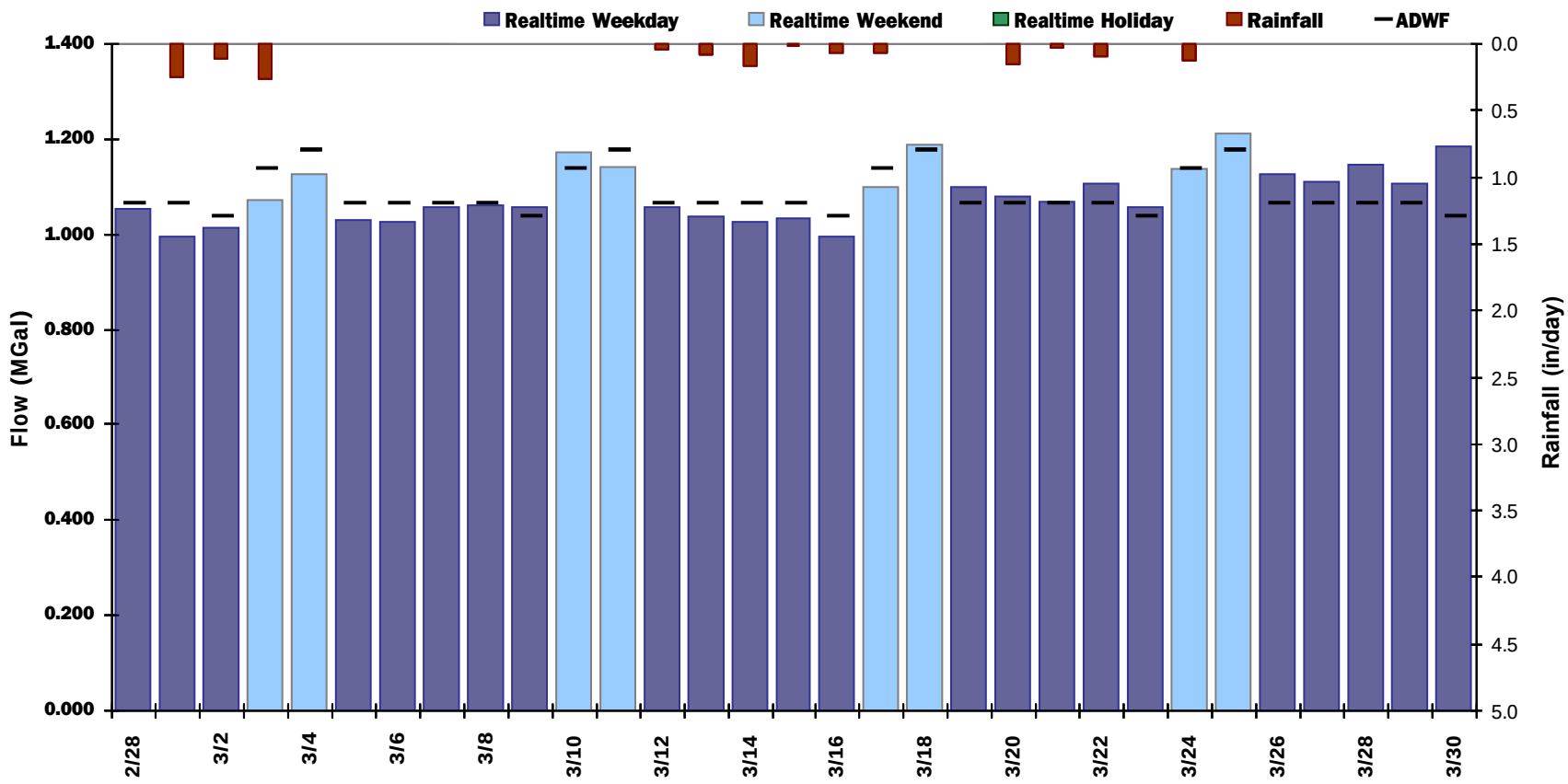
Monitored Influent Pipe

TC-12

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 1.087 MGal Peak Daily Flow: 1.211 MGal Min Daily Flow: 0.996 MGal

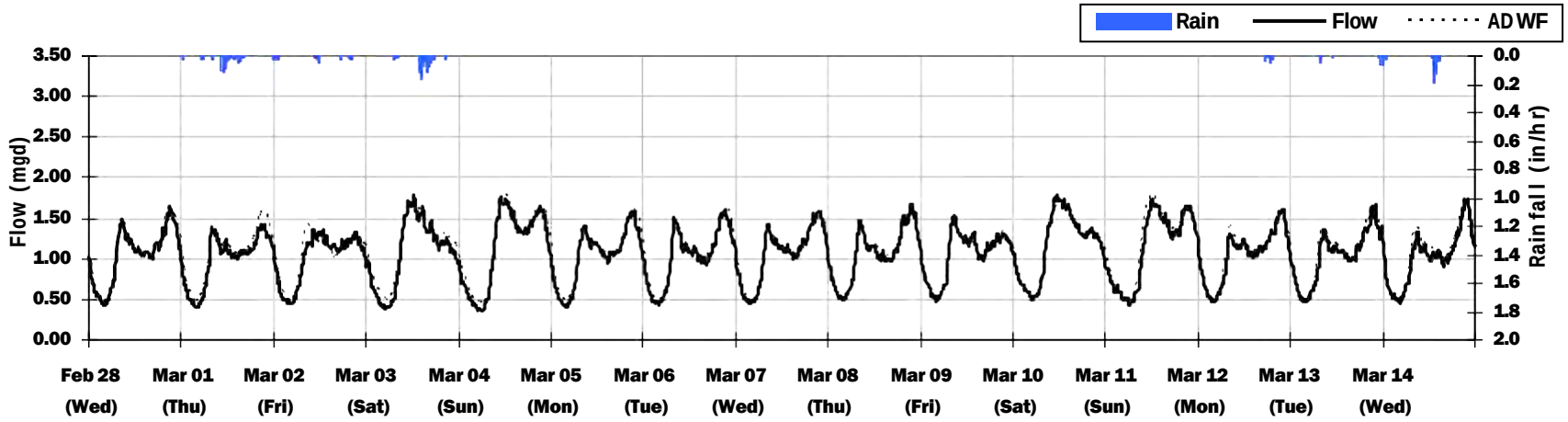
Total Period Rainfall: 1.43 inches

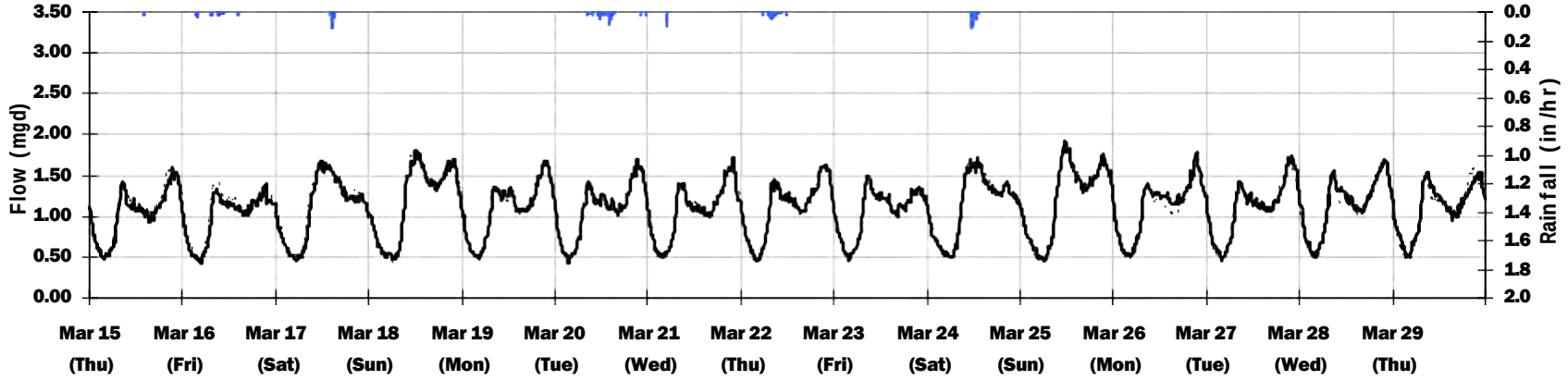


TC-12

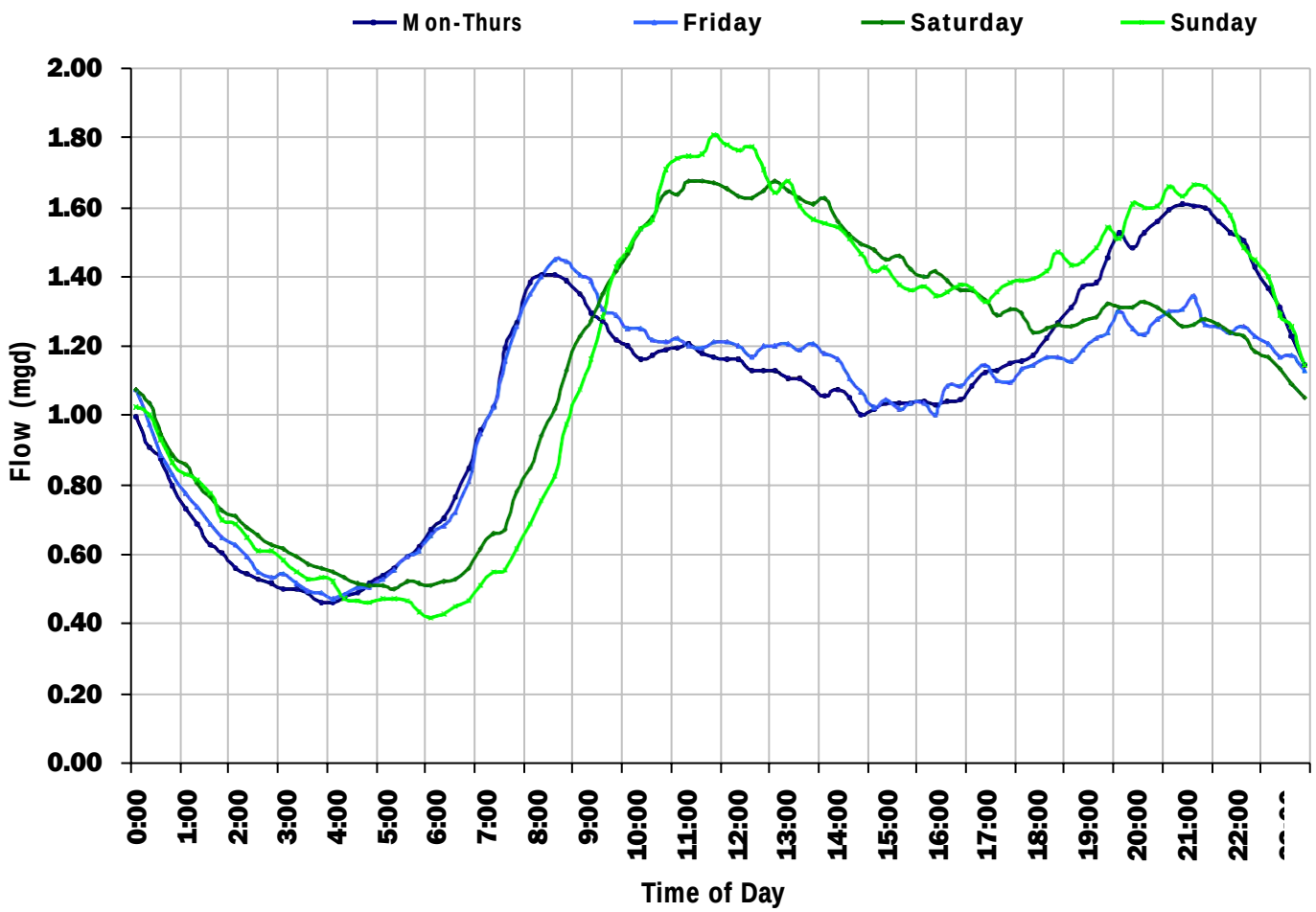
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 1.083 mgd Peak Flow: 1.911 mgd Min Flow: 0.358 mgd





TC-12
Average Dry Weather Flow Hydrographs

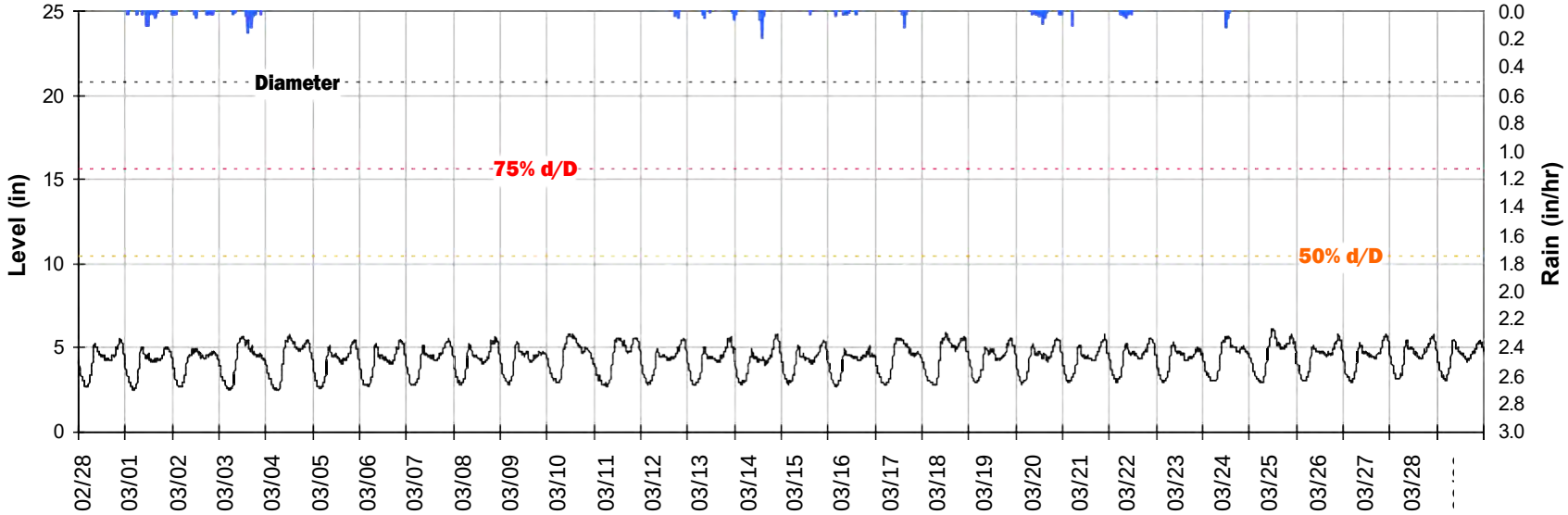


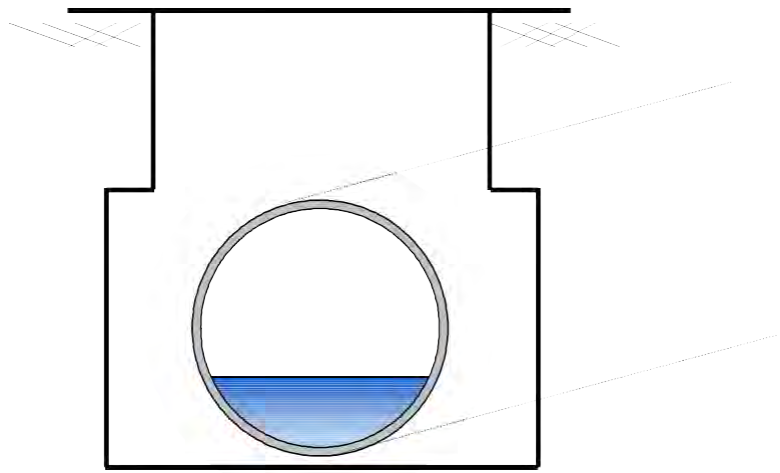
ADWF:

1.086 *mgd*

TC-12
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



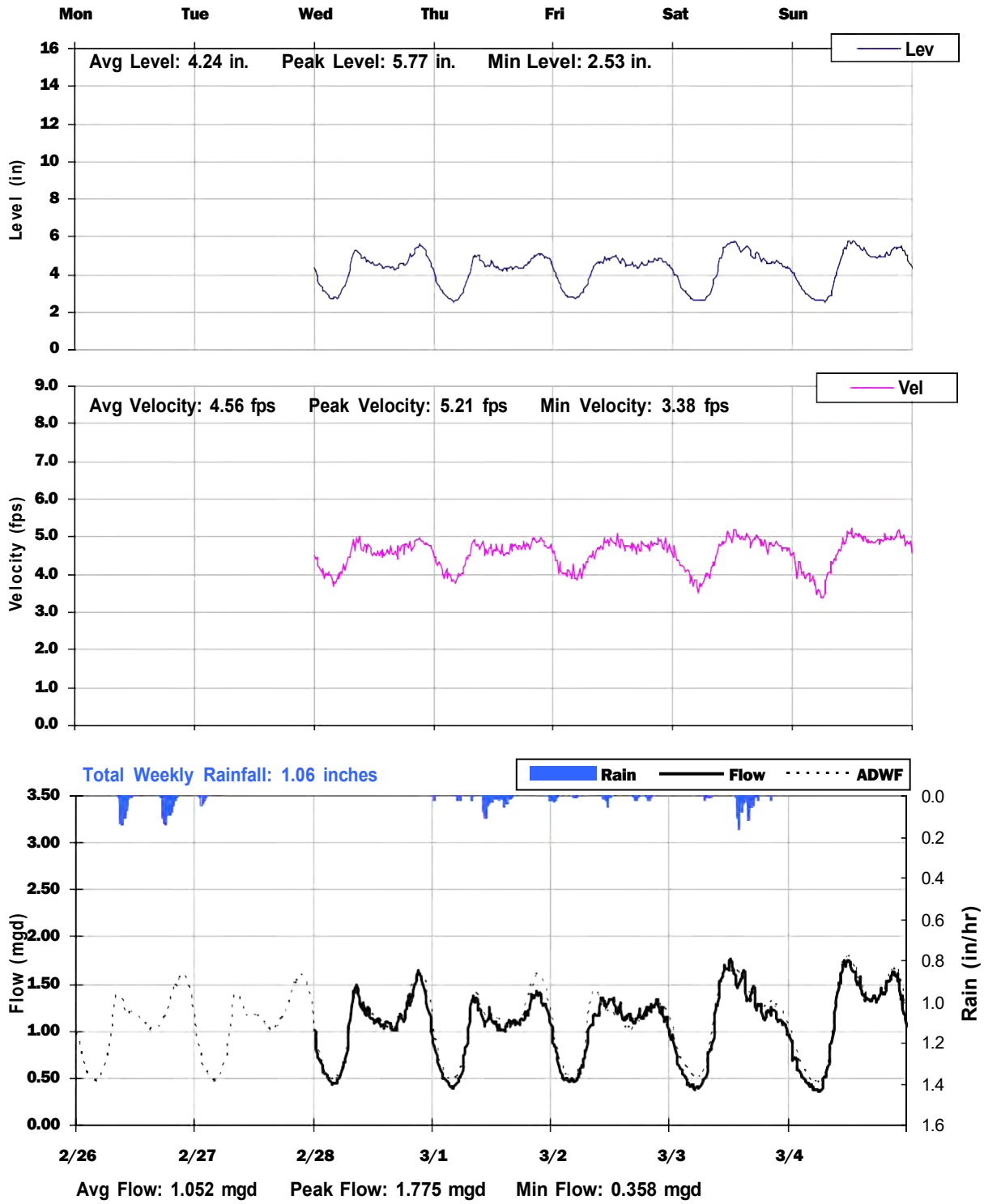


Pipe Diameter:	**20.8**	***inches***
Peak Measured Level:	**6.11**	***inches***
Peak d/D Ratio:	**0.29**	

TC-12

Weekly Level, Velocity and Flow Hydrographs

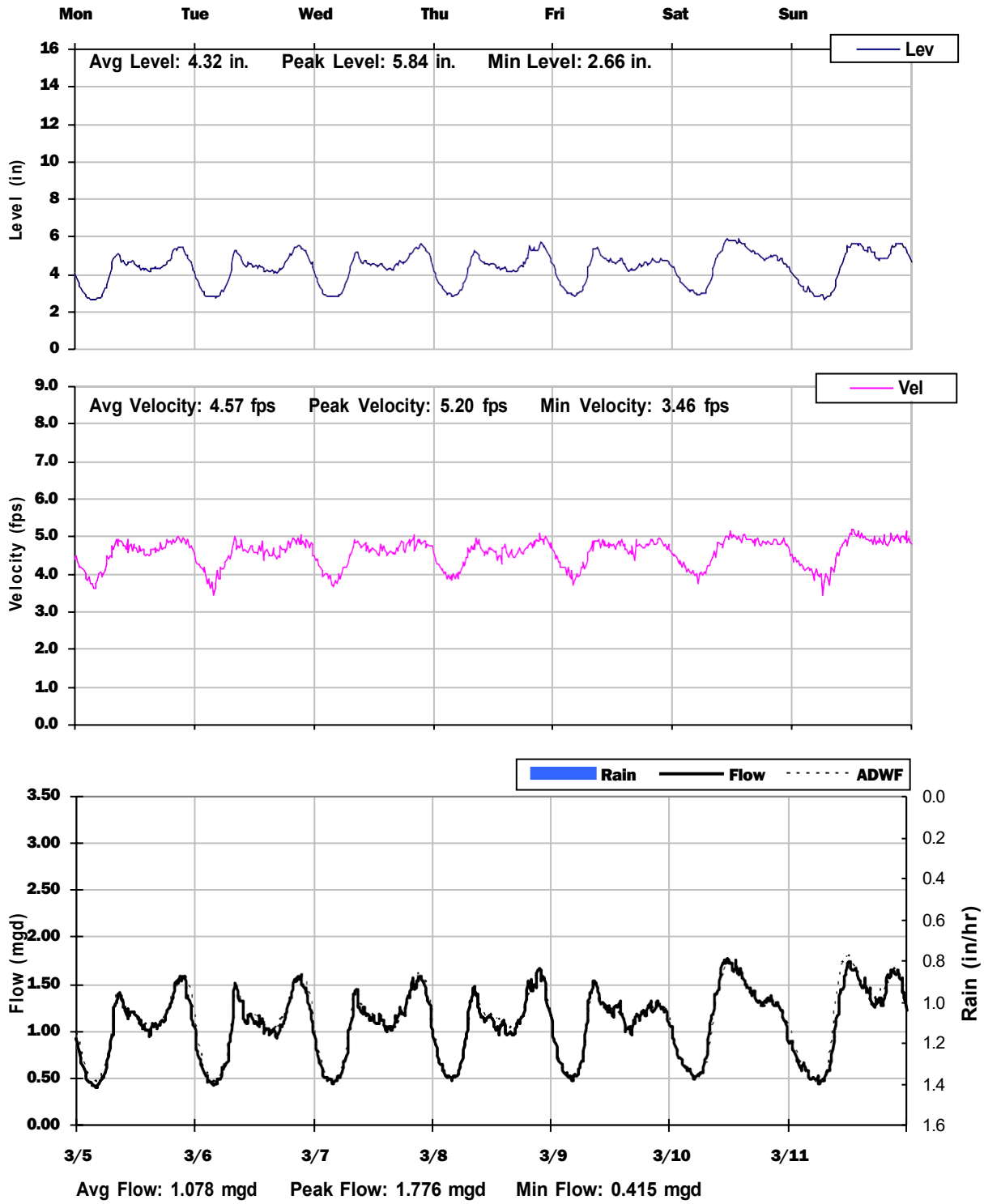
2/26/2018 to 3/5/2018



TC-12

Weekly Level, Velocity and Flow Hydrographs

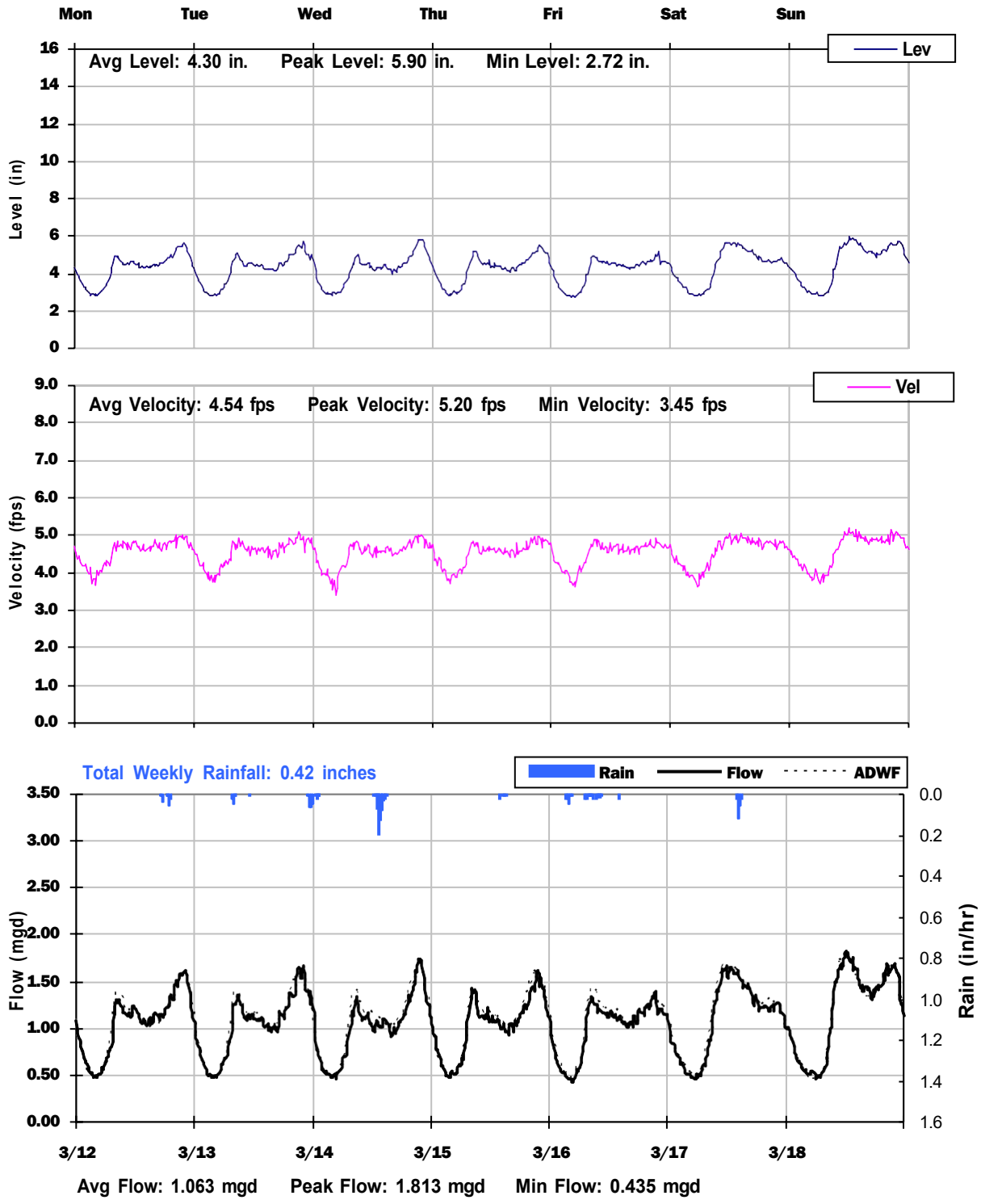
3/5/2018 to 3/12/2018



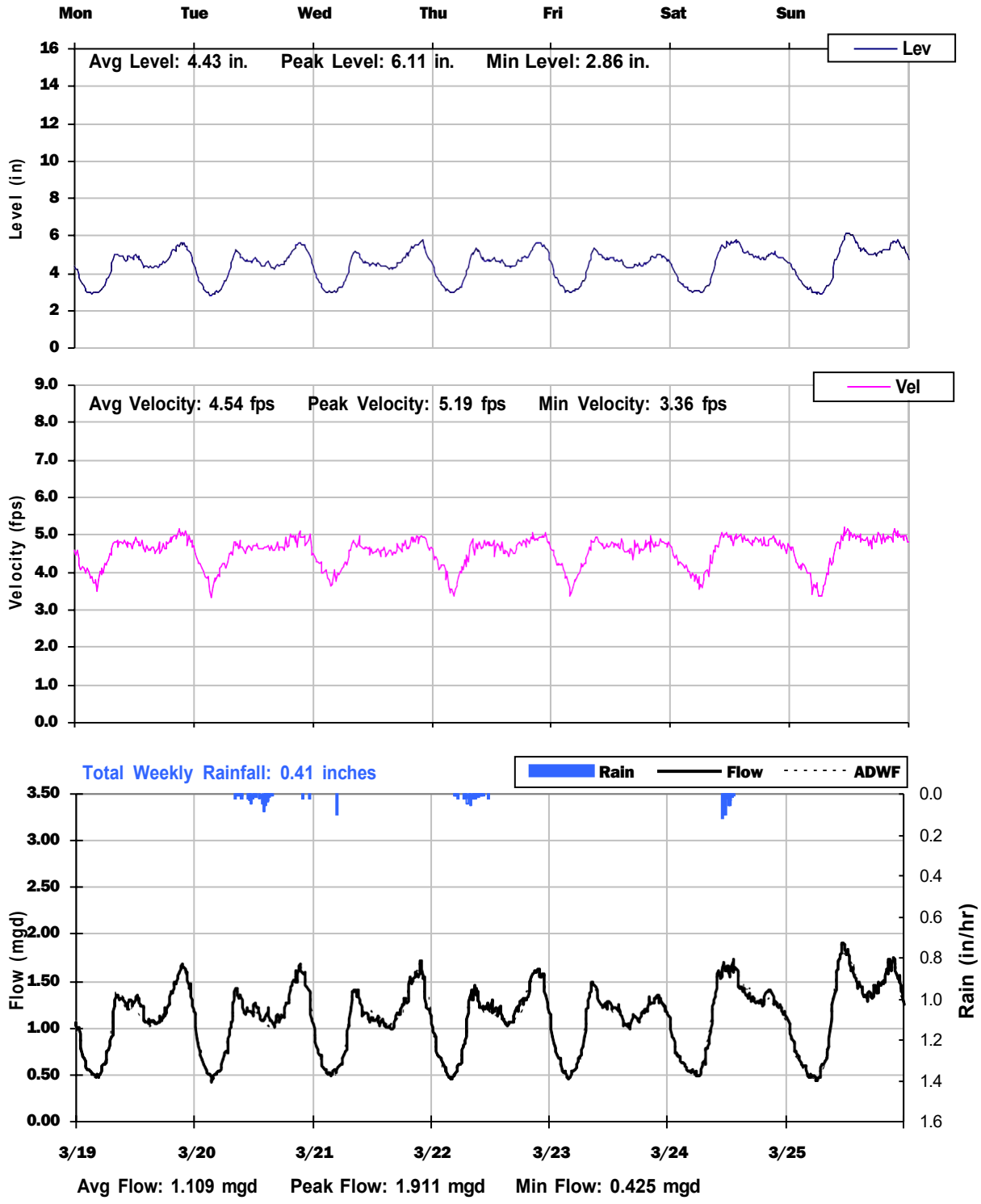
TC-12

Weekly Level, Velocity and Flow Hydrographs

3/12/2018 to 3/19/2018



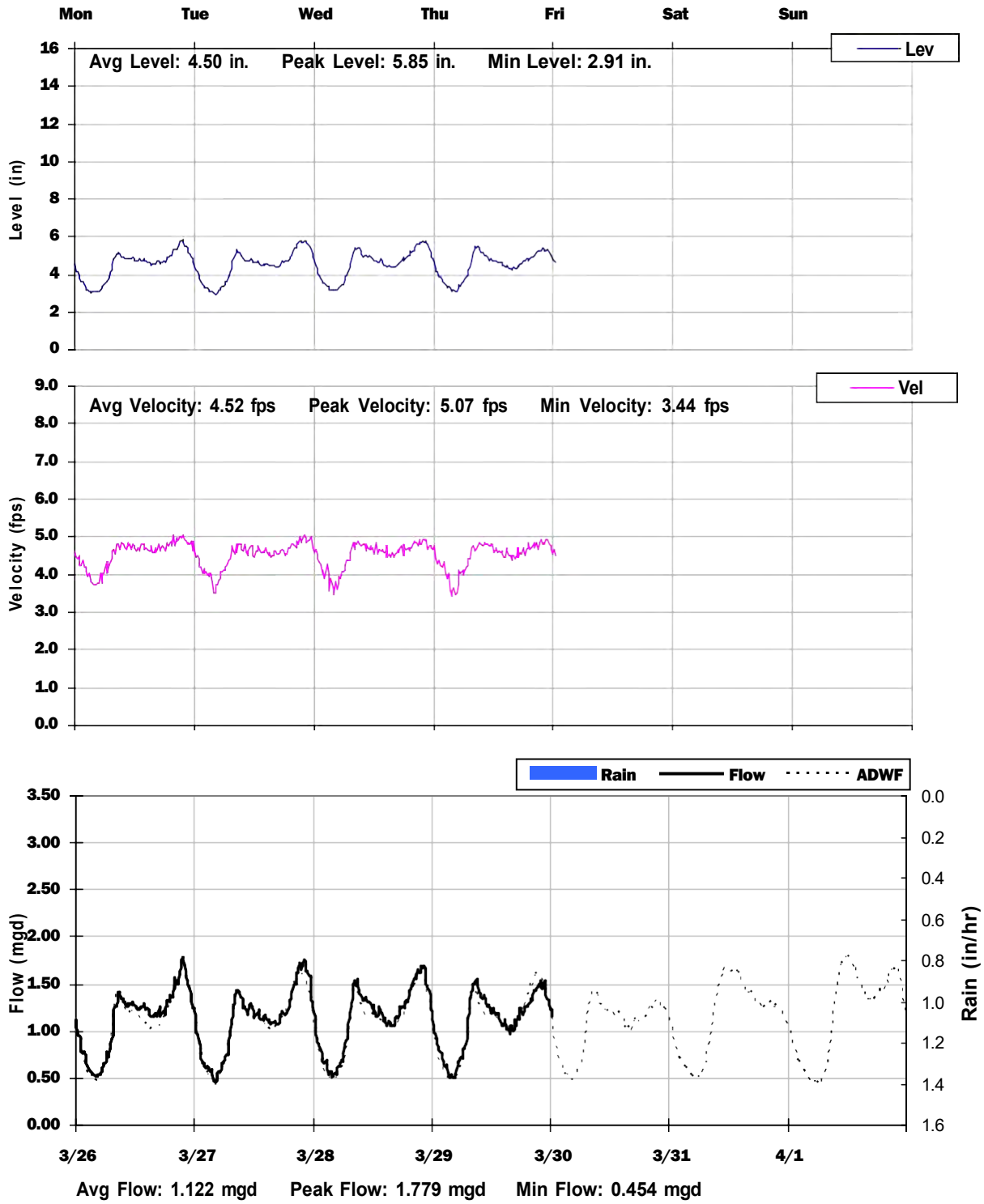
TC-12
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-12

Weekly Level, Velocity and Flow Hydrographs

3/26/2018 to 4/2/2018



City of Tracy, California

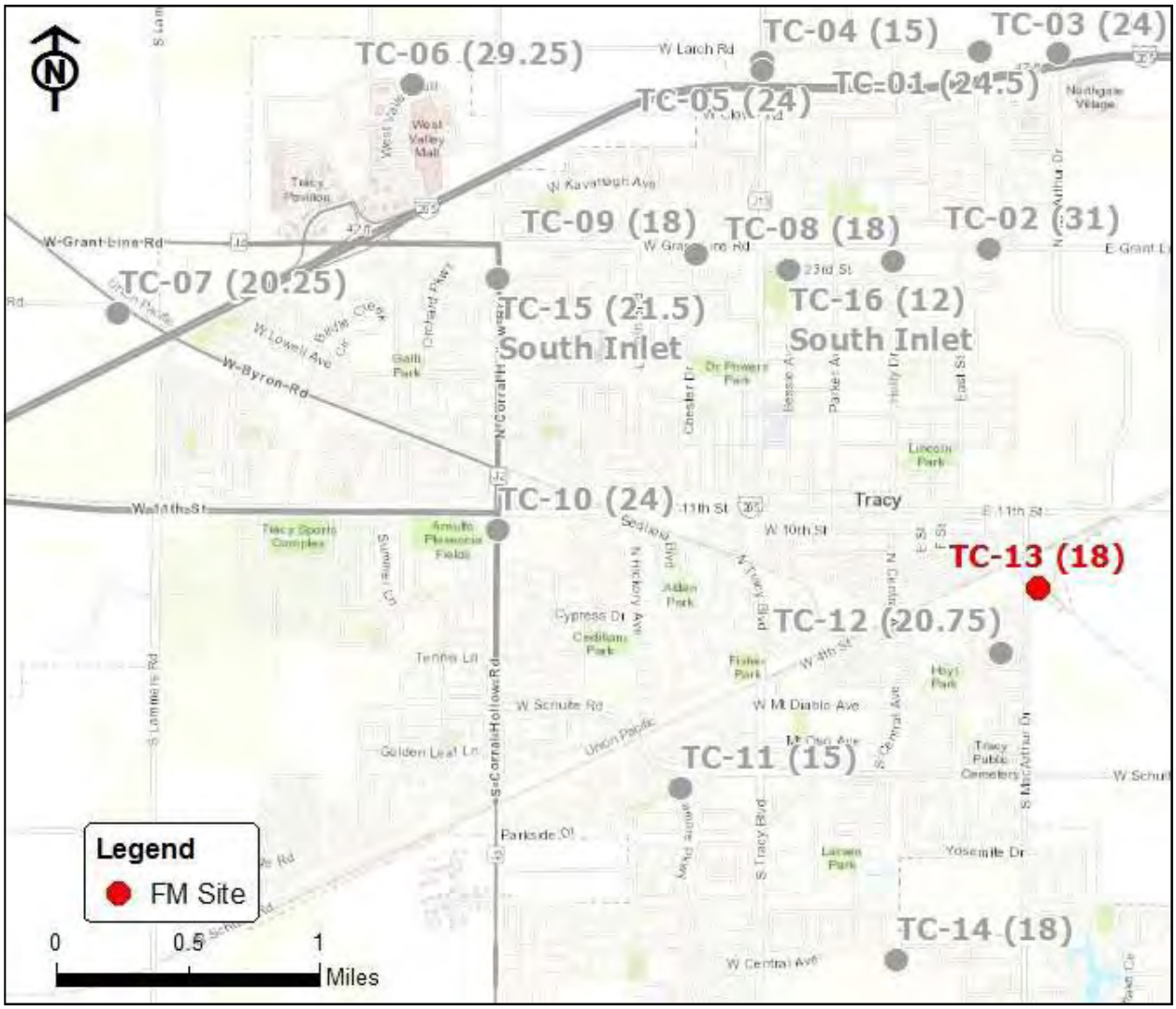
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-13**

Location: **On dirt roadway between railroad (north) and Ice House Industrial Park (south), approx 245 feet east of MacArthur Drive**

Data Summary Report



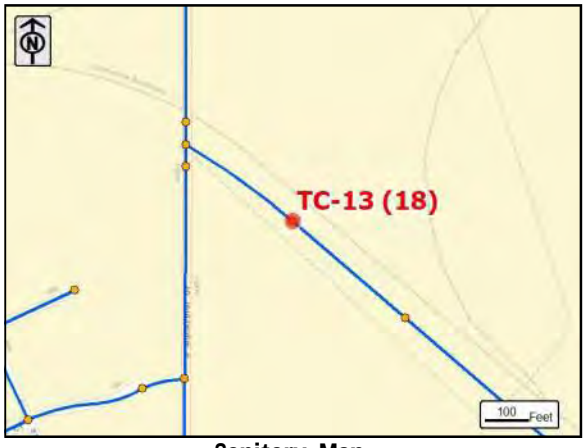
Vicinity Map: TC-13

TC-13

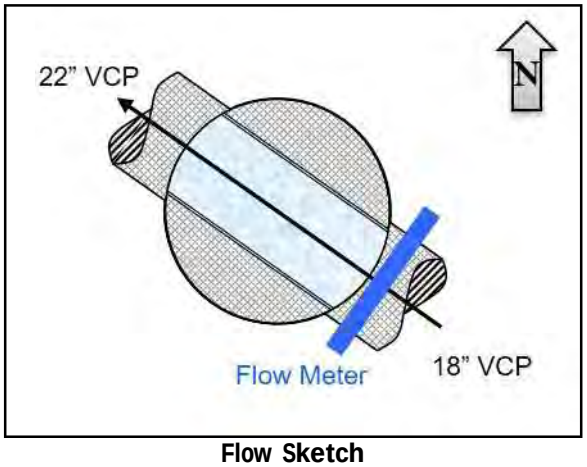
Site Information

Location:	**On dirt roadway between railroad (north) and Ice House Industrial Park (south), approx 245 feet east of MacArthur**
City Manhole:	
Coordinates:	**121.4157° W, 37.7355° N**
Rim Elevation (Earth):	**57 feet**
Pipe Diameter:	**18 inches**
ADWF:	**0.191 mgd**
Peak Measured Flow:	**0.456 mgd**

Satellite Map



Sanitary Map



Flow Sketch

Street View

Plan View

TC-13

Additional Site Photos

Effluent Pipe

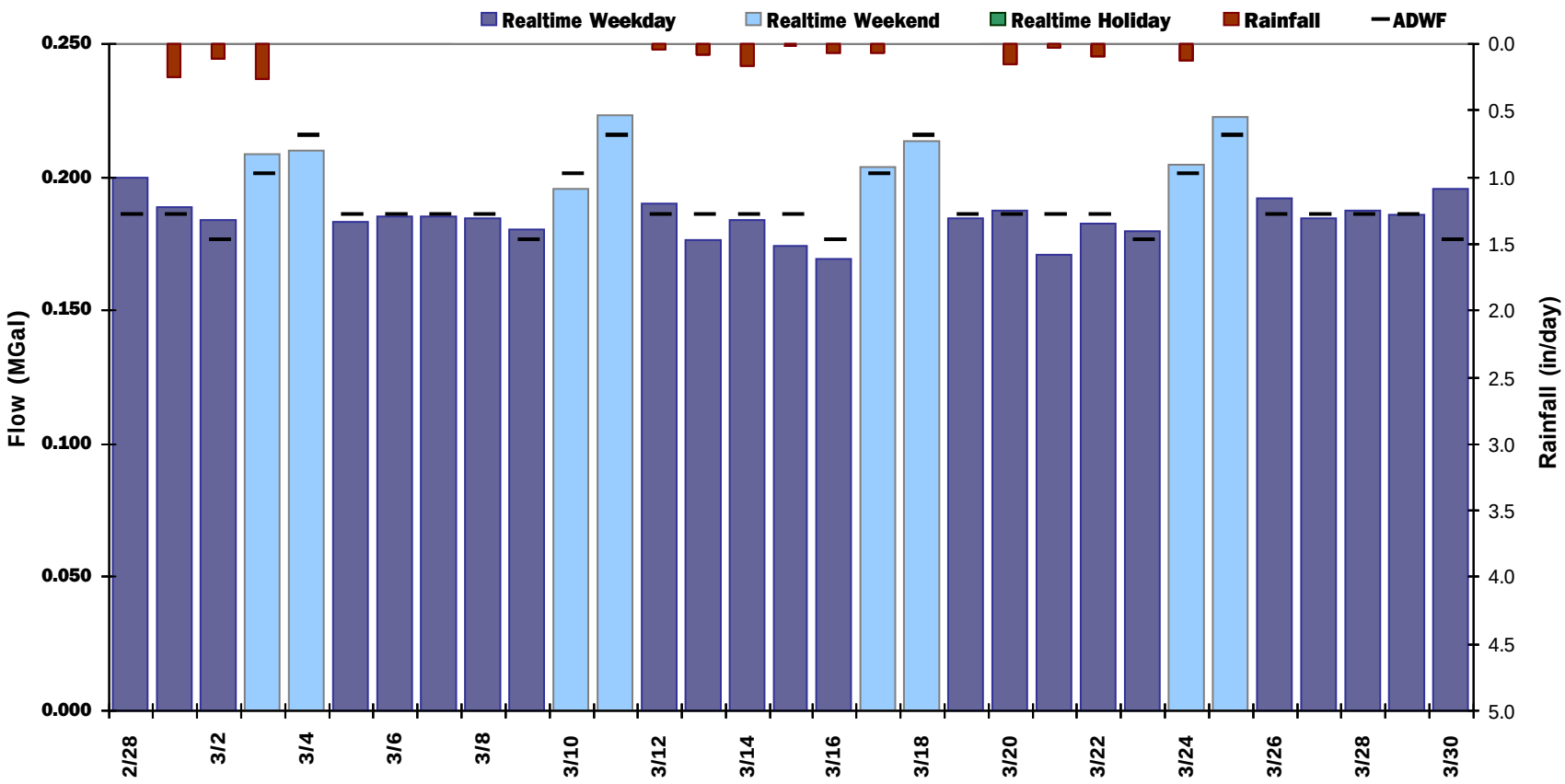
Monitored Influent Pipe

TC-13

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 0.191 MGal Peak Daily Flow: 0.223 MGal Min Daily Flow: 0.169 MGal

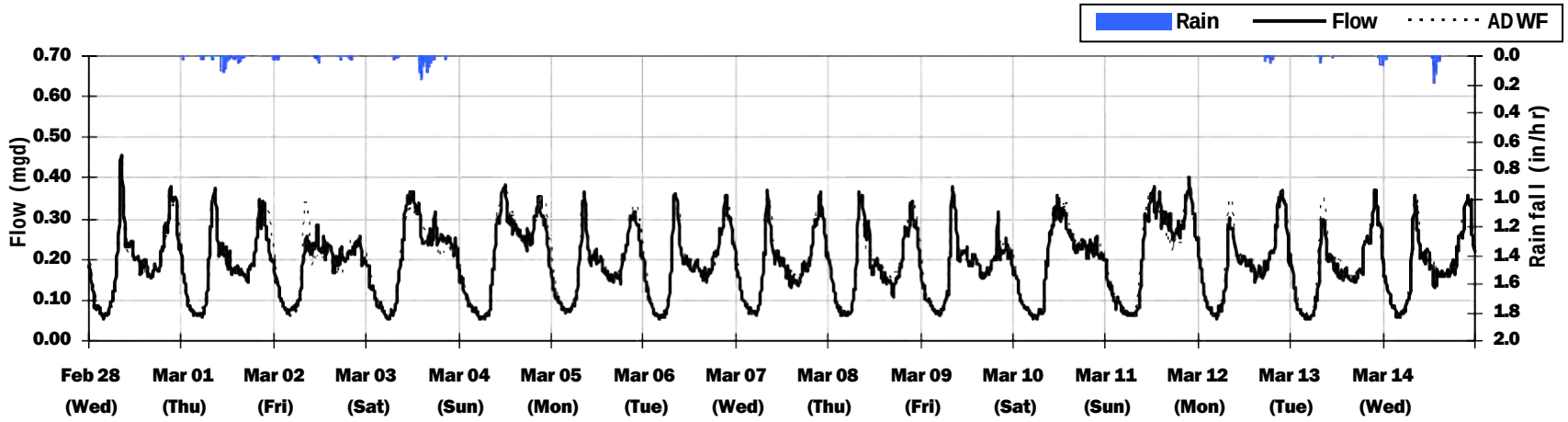
Total Period Rainfall: 1.43 inches

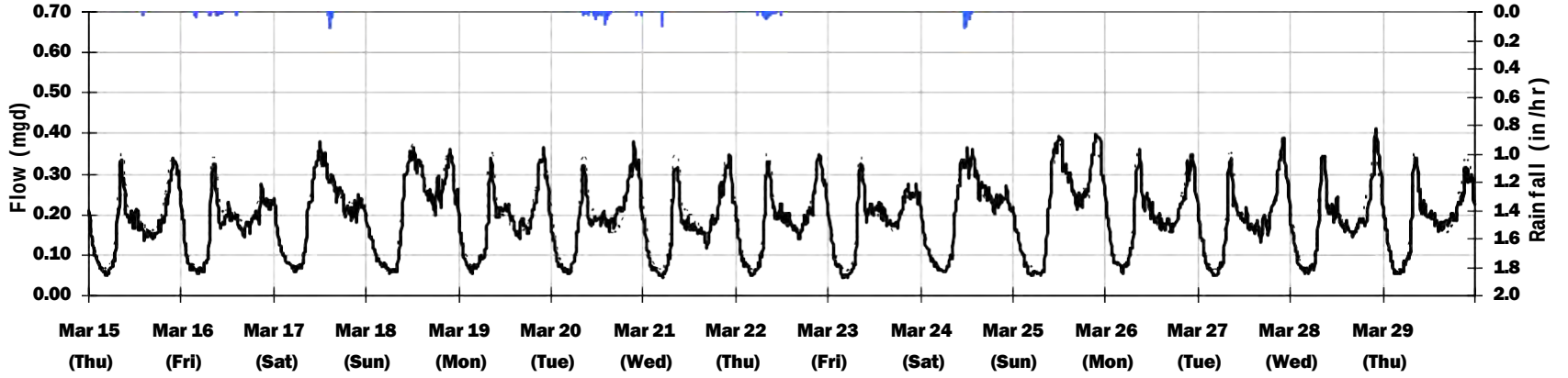


TC-13

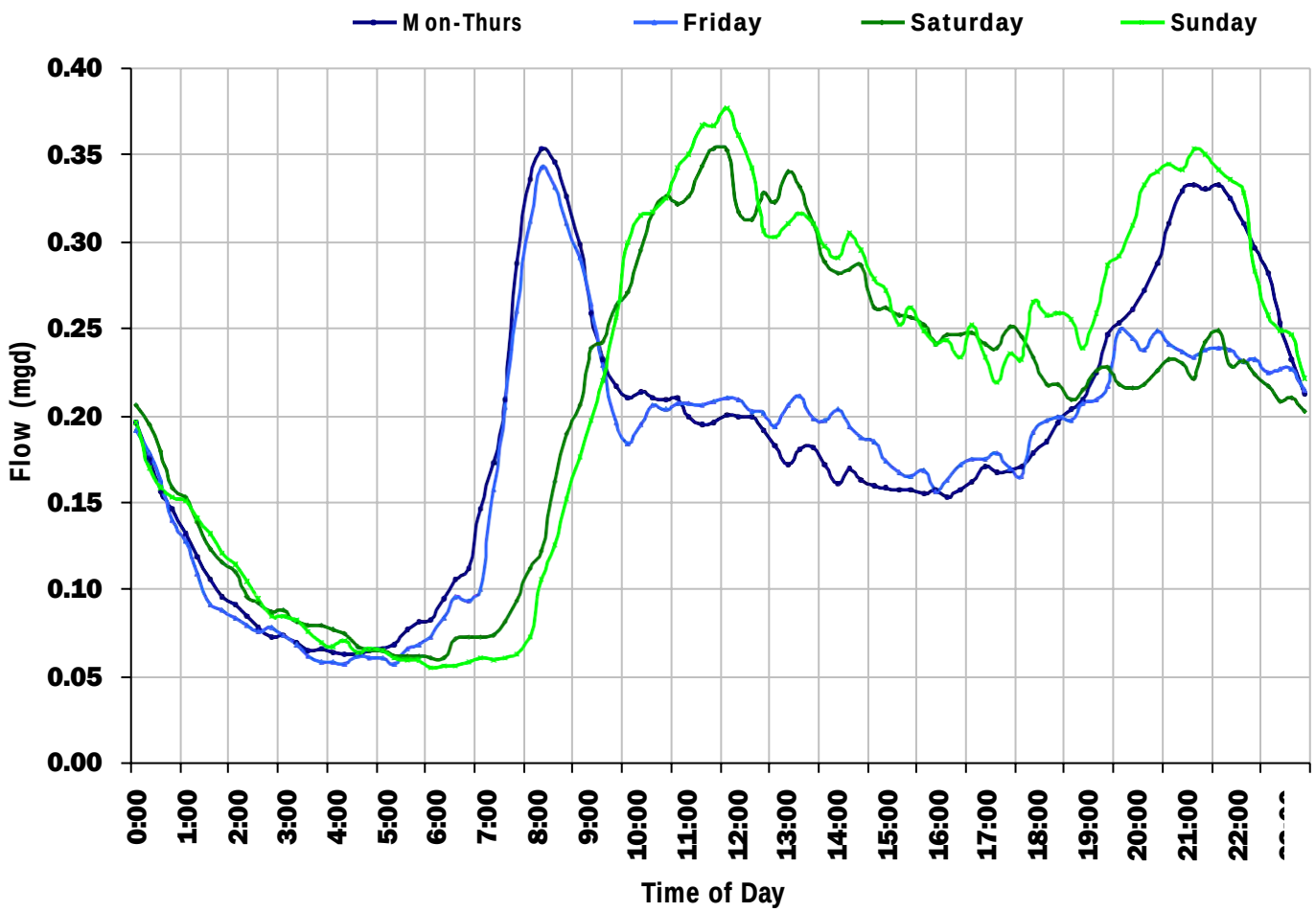
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 0.191 mgd Peak Flow: 0.456 mgd Min Flow: 0.044 mgd



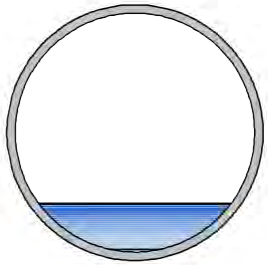


TC-13
Average Dry Weather Flow Hydrographs



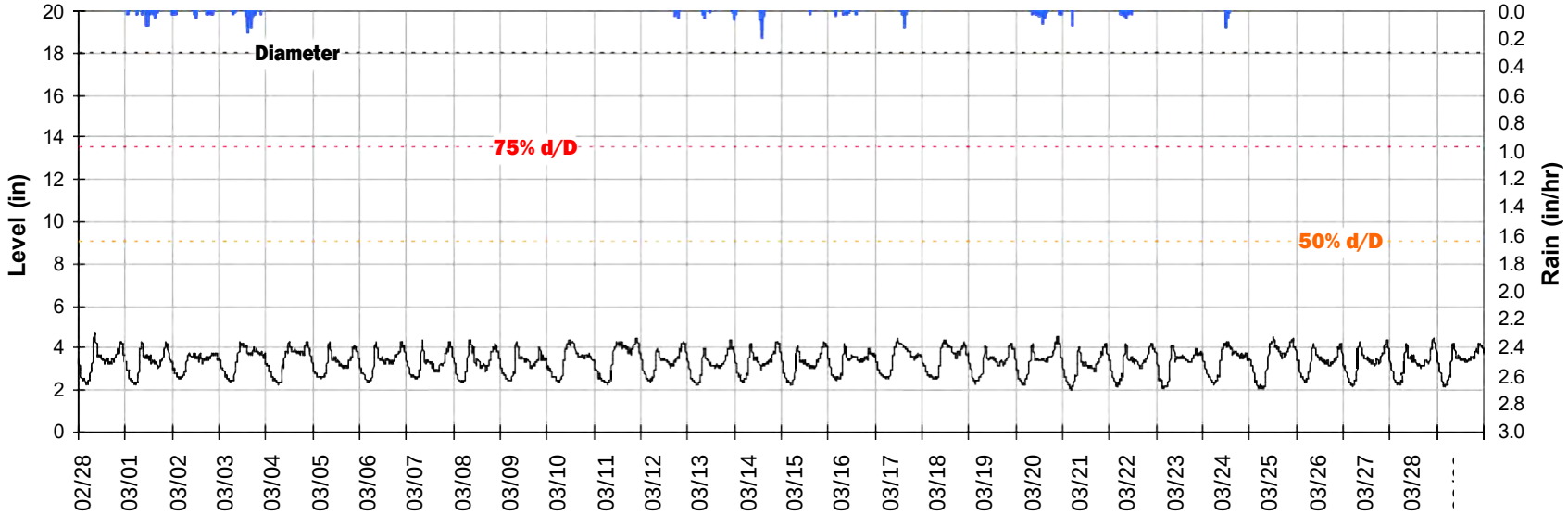
ADWF:

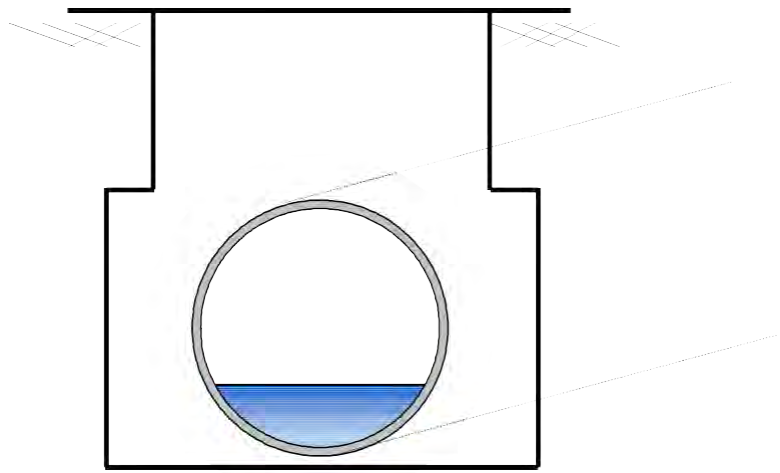
0.191 *mgd*



TC-13
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



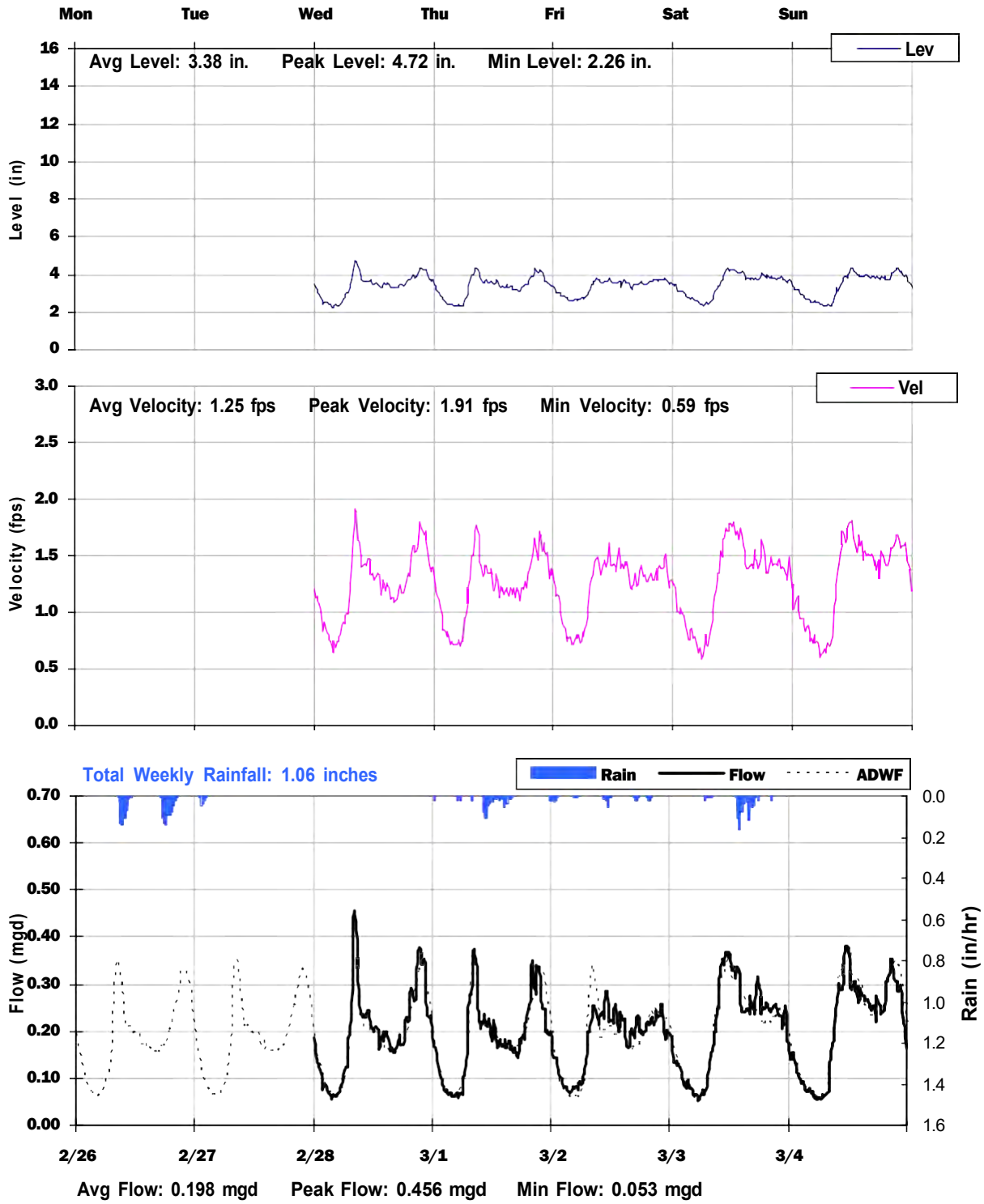


Pipe Diameter:	**18**	***inches***
Peak Measured Level:	**4.72**	***inches***
Peak d/D Ratio:	**0.26**	

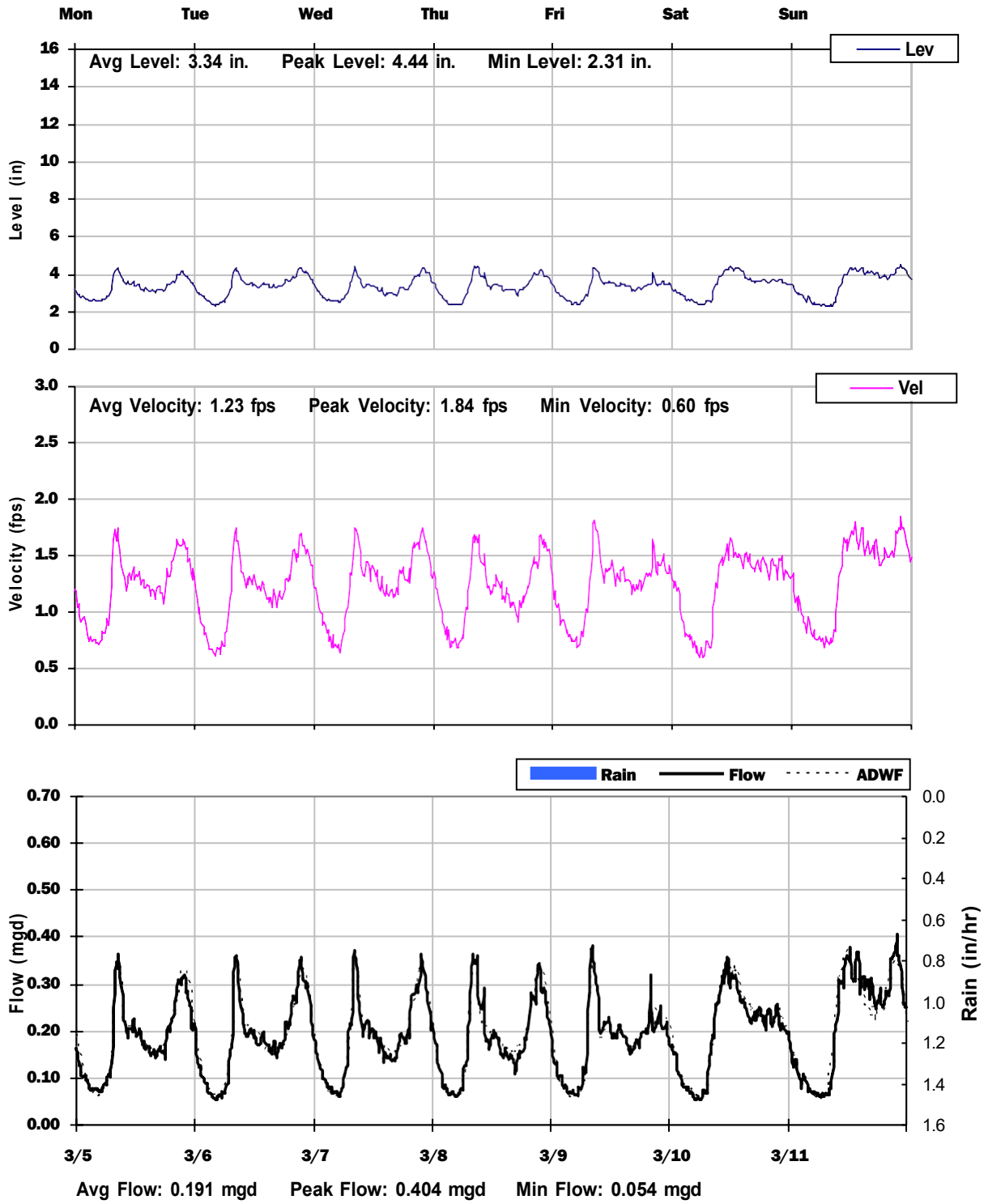
TC-13

Weekly Level, Velocity and Flow Hydrographs

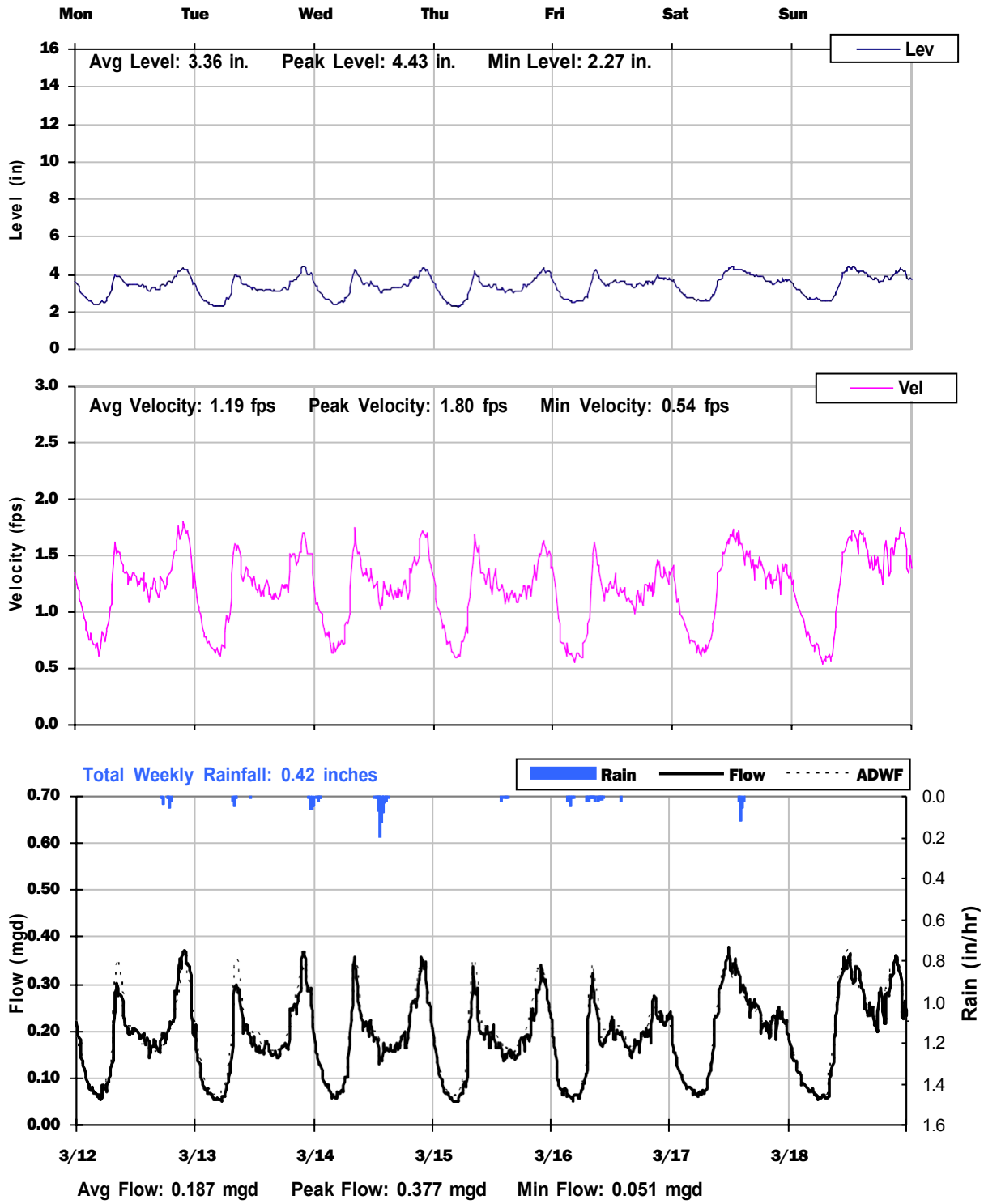
2/26/2018 to 3/5/2018



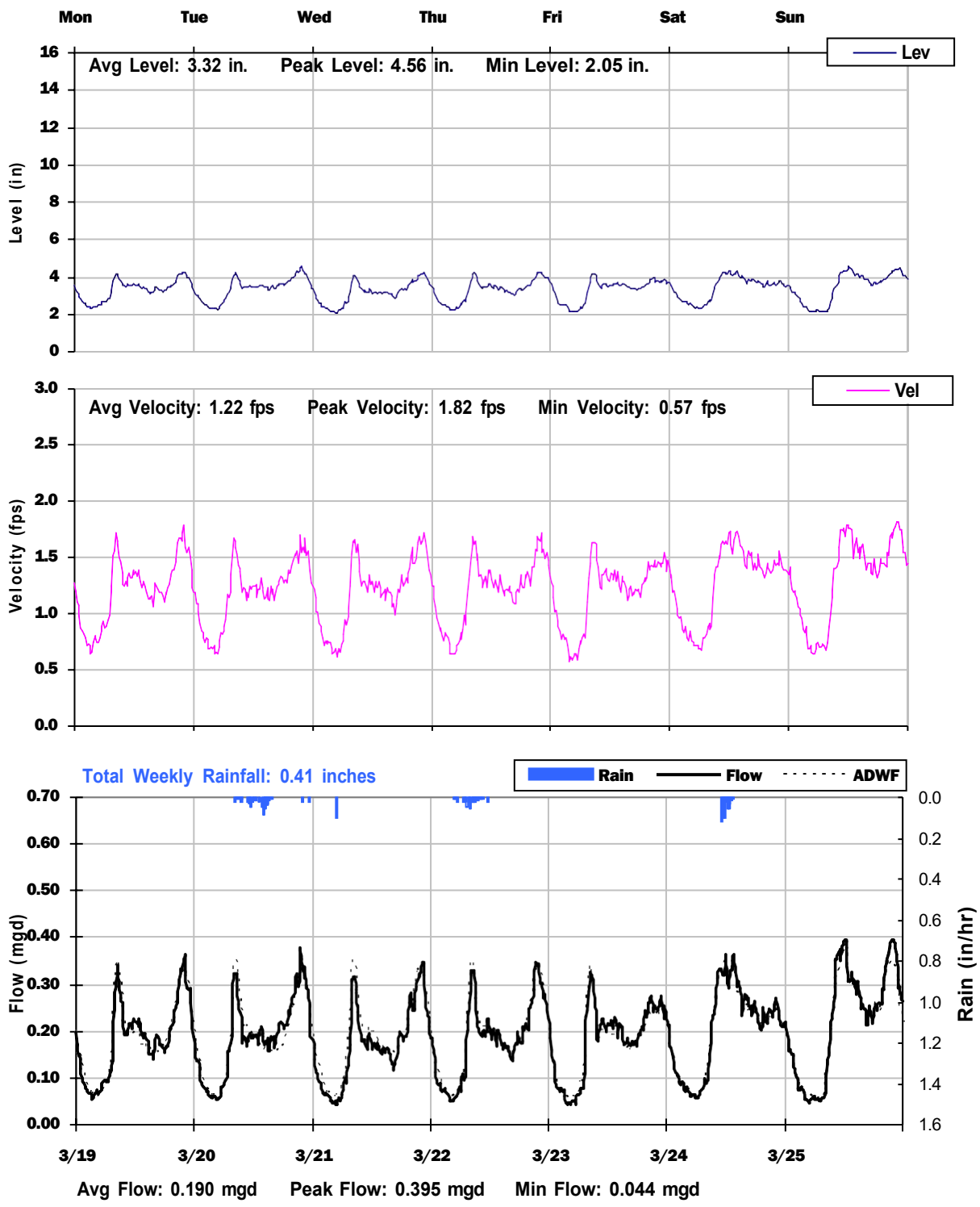
TC-13
Weekly Level, Velocity and Flow Hydrographs
3/5/2018 to 3/12/2018



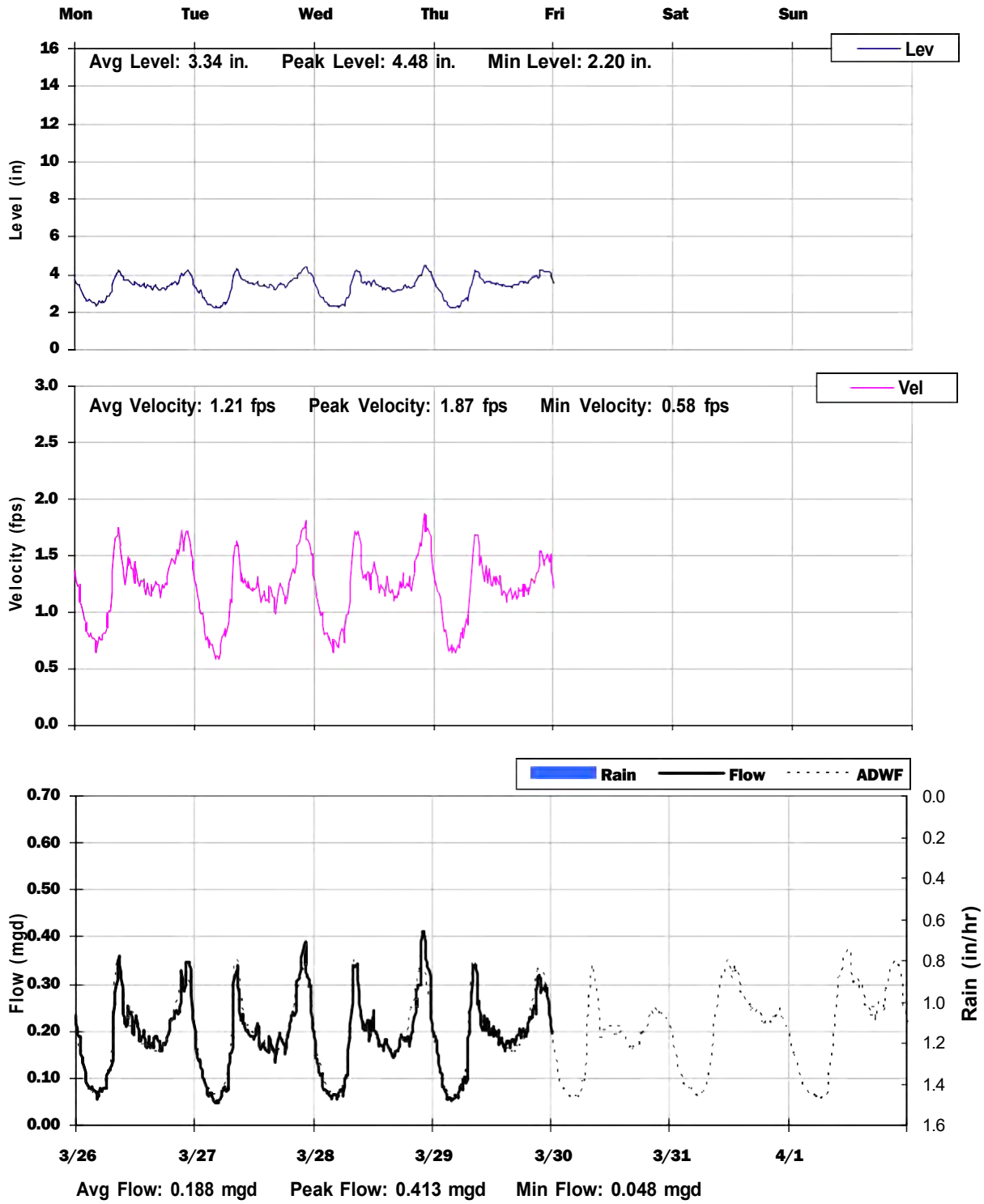
TC-13
Weekly Level, Velocity and Flow Hydrographs
3/12/2018 to 3/19/2018



TC-13
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-13
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



City of Tracy, California

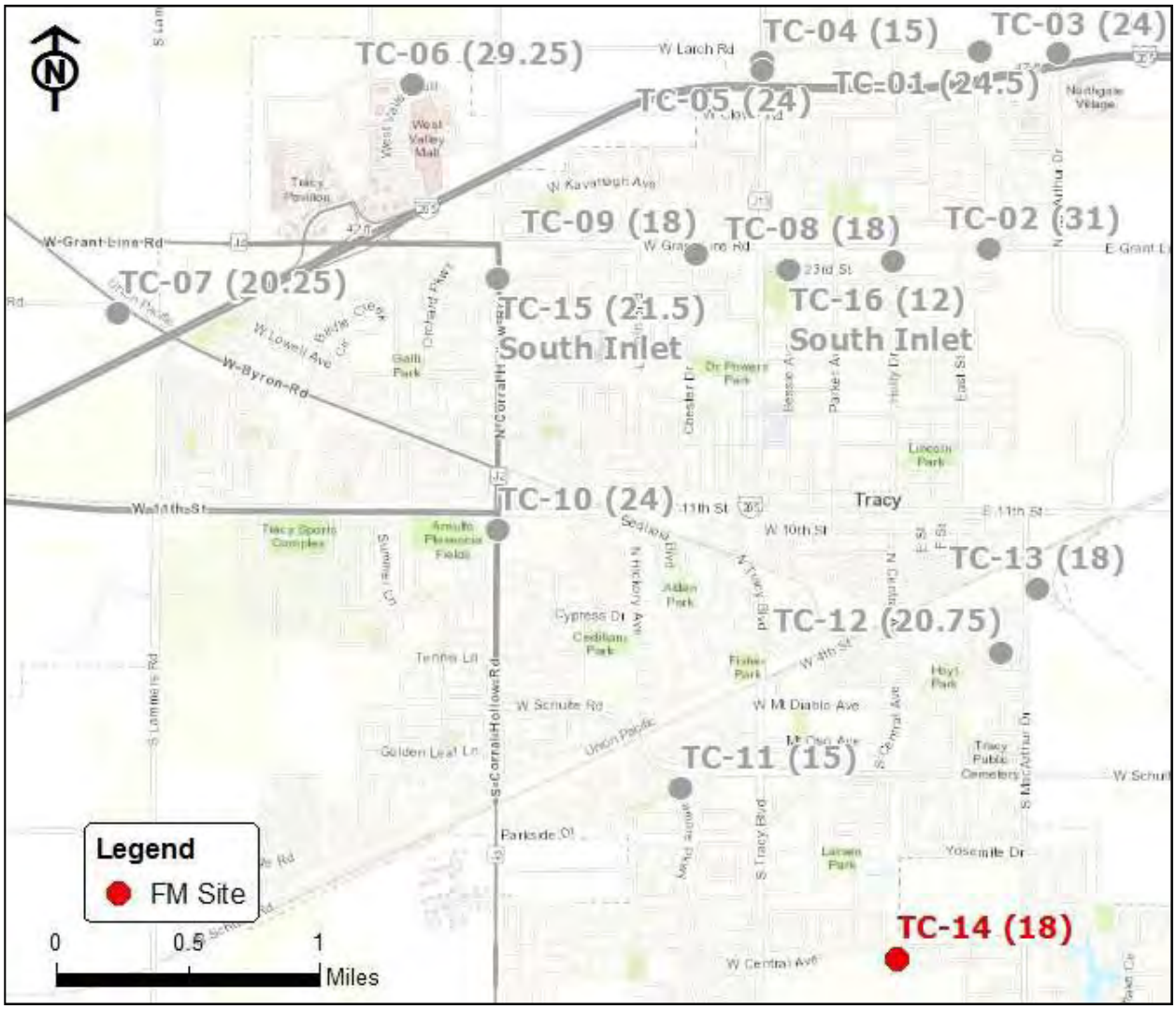
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-14**

Location: **In field behind property line for 121 Cairo Court, east of railroad.**

Data Summary Report



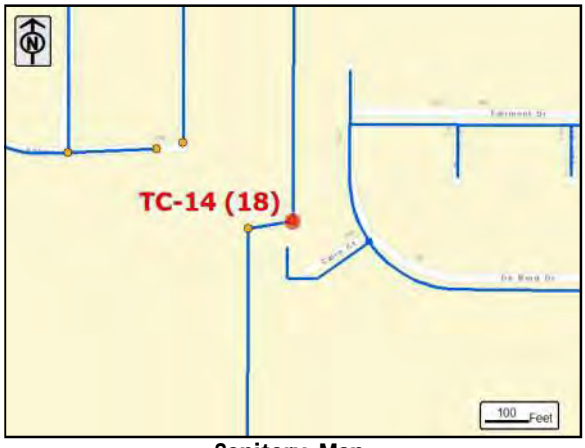
Vicinity Map: TC-14

TC-14

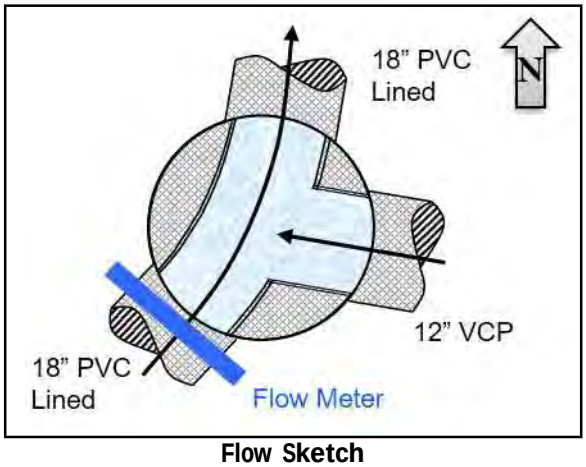
Site Information

Location:	**In field behind property line for 121 Cairo Court, east of railroad.**
City Manhole:	
Coordinates:	**121.4252° W, 37.7150° N**
Rim Elevation (Earth):	**101 feet**
Pipe Diameter:	**18 inches**
ADWF:	**0.632 mgd**
Peak Measured Flow:	**1.161 mgd**

Satellite Map

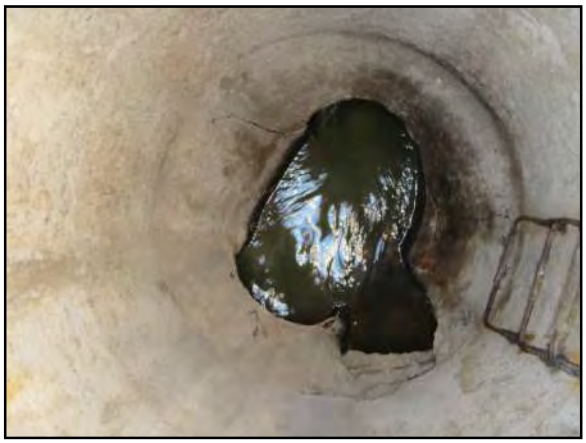


Sanitary Map



Flow Sketch

Street View



Plan View

TC-14

Additional Site Photos

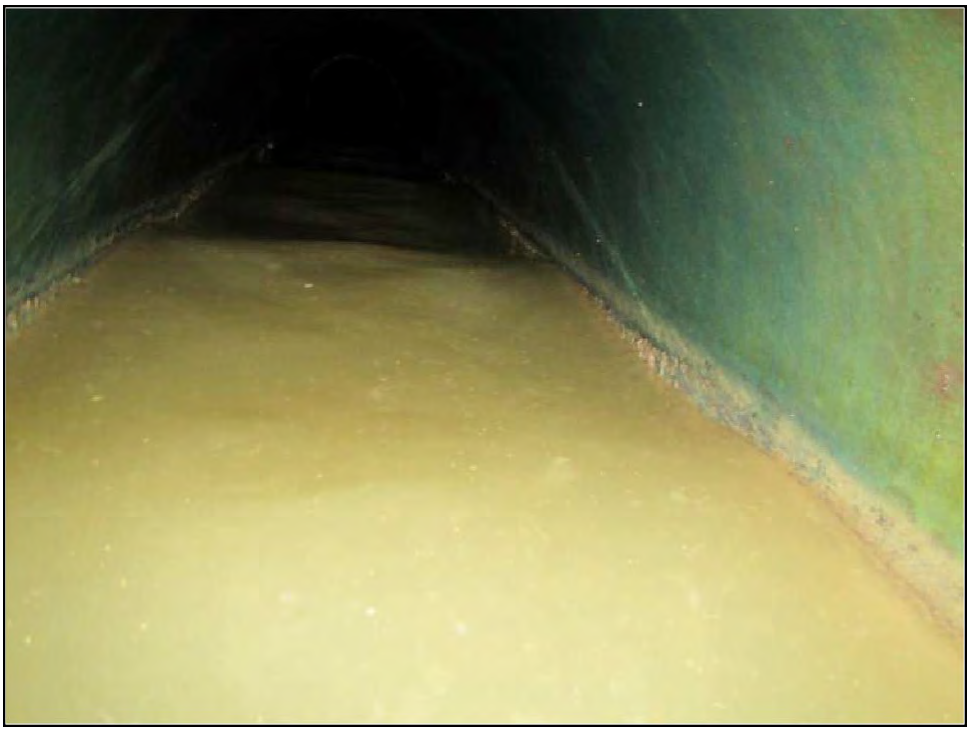
Effluent Pipe

Southeast Influent Pipe

TC-14

Additional Site Photos

South Influent Pipe



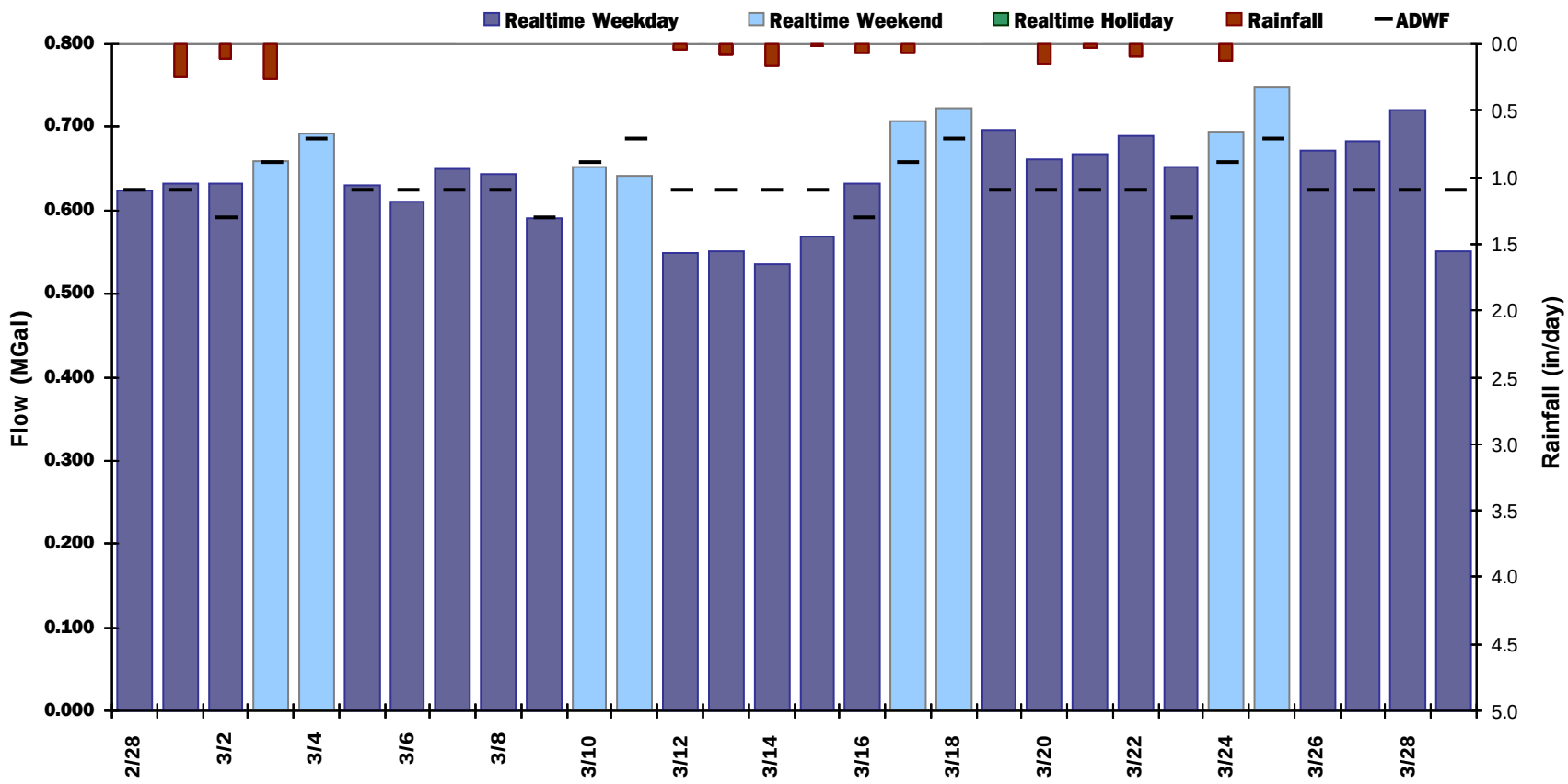
Southwest Influent Pipe

TC-14

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 0.646 MGal Peak Daily Flow: 0.747 MGal Min Daily Flow: 0.537 MGal

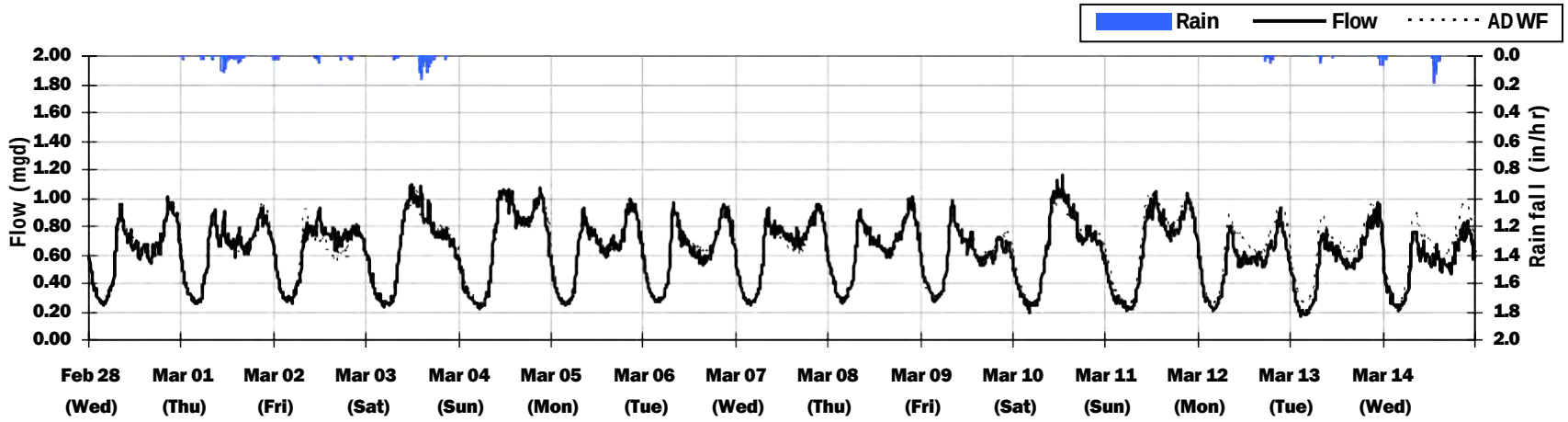
Total Period Rainfall: 1.43 inches

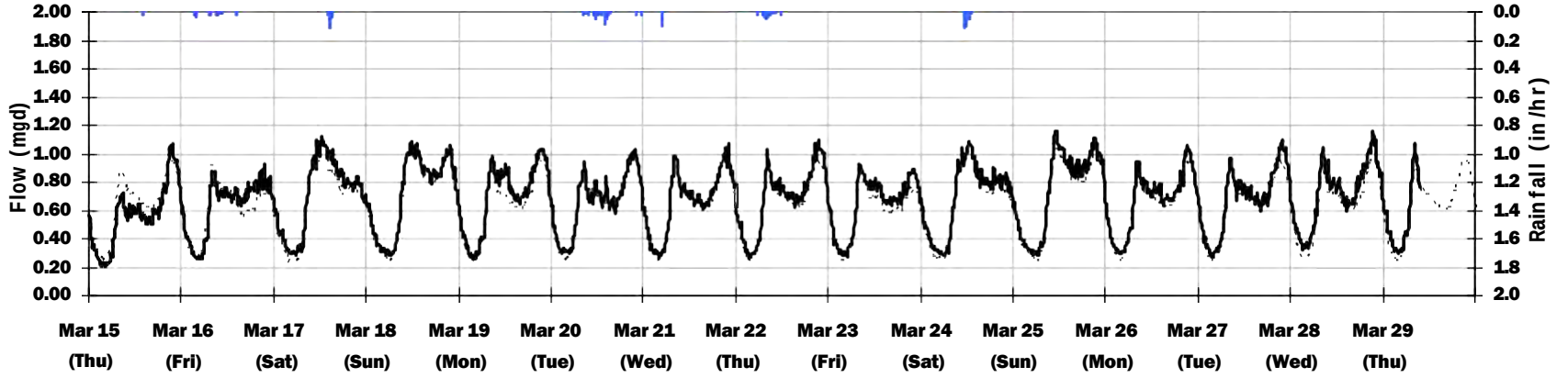


TC-14

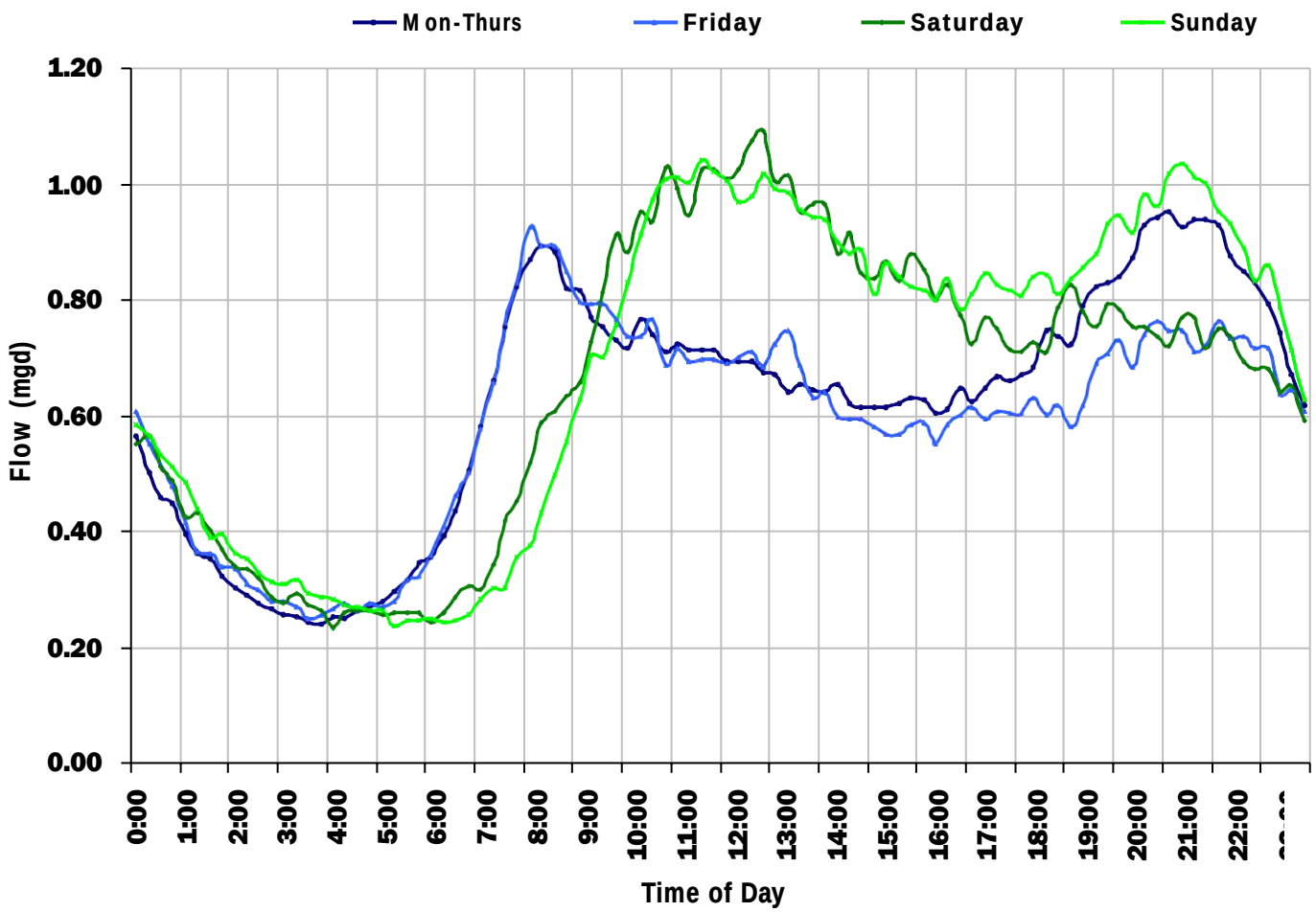
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 0.647 mgd Peak Flow: 1.161 mgd Min Flow: 0.164 mgd



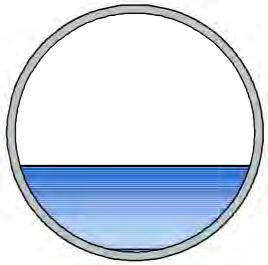


TC-14
Average Dry Weather Flow Hydrographs



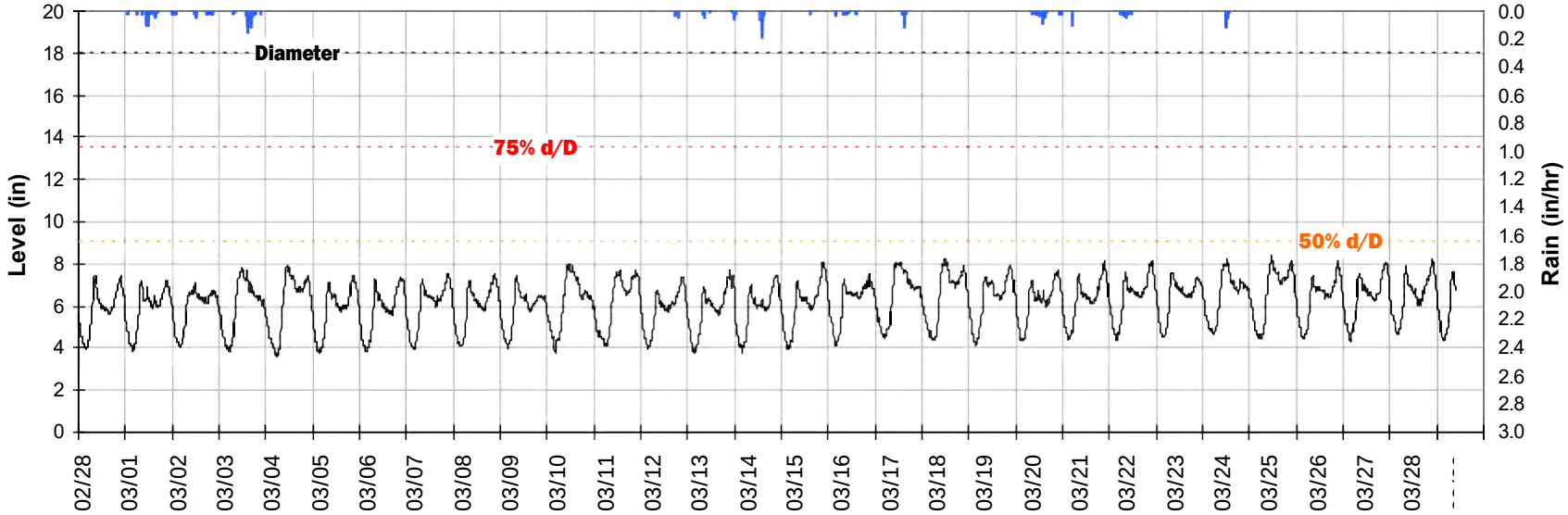
ADWF:

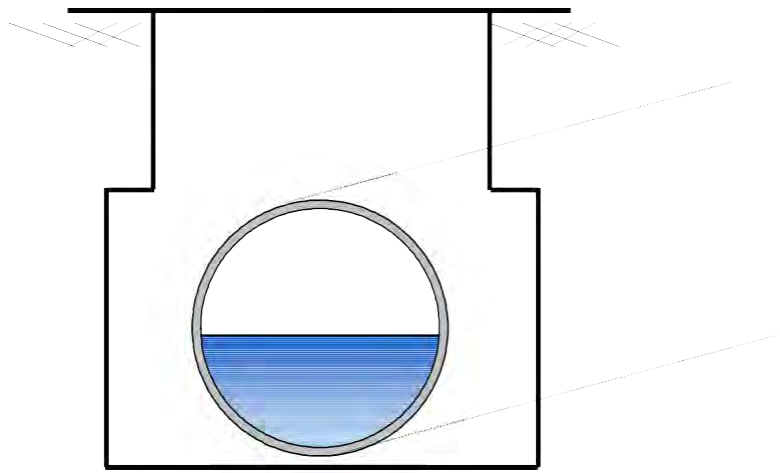
0.632 *mgd*



TC-14
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



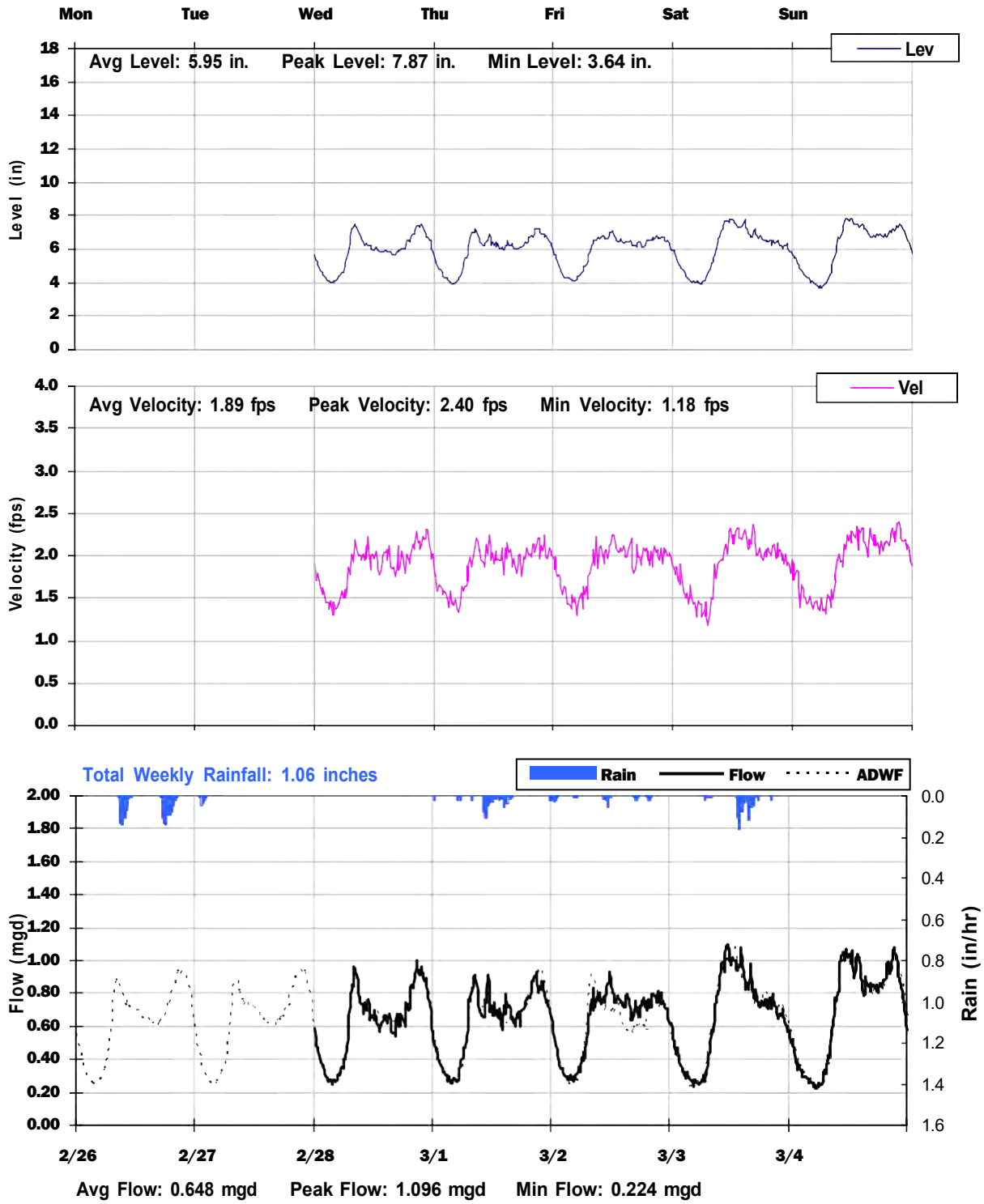


Pipe Diameter:	**18**	***inches***
Peak Measured Level:	**8.41**	***inches***
Peak d/D Ratio:	**0.47**	

TC-14

Weekly Level, Velocity and Flow Hydrographs

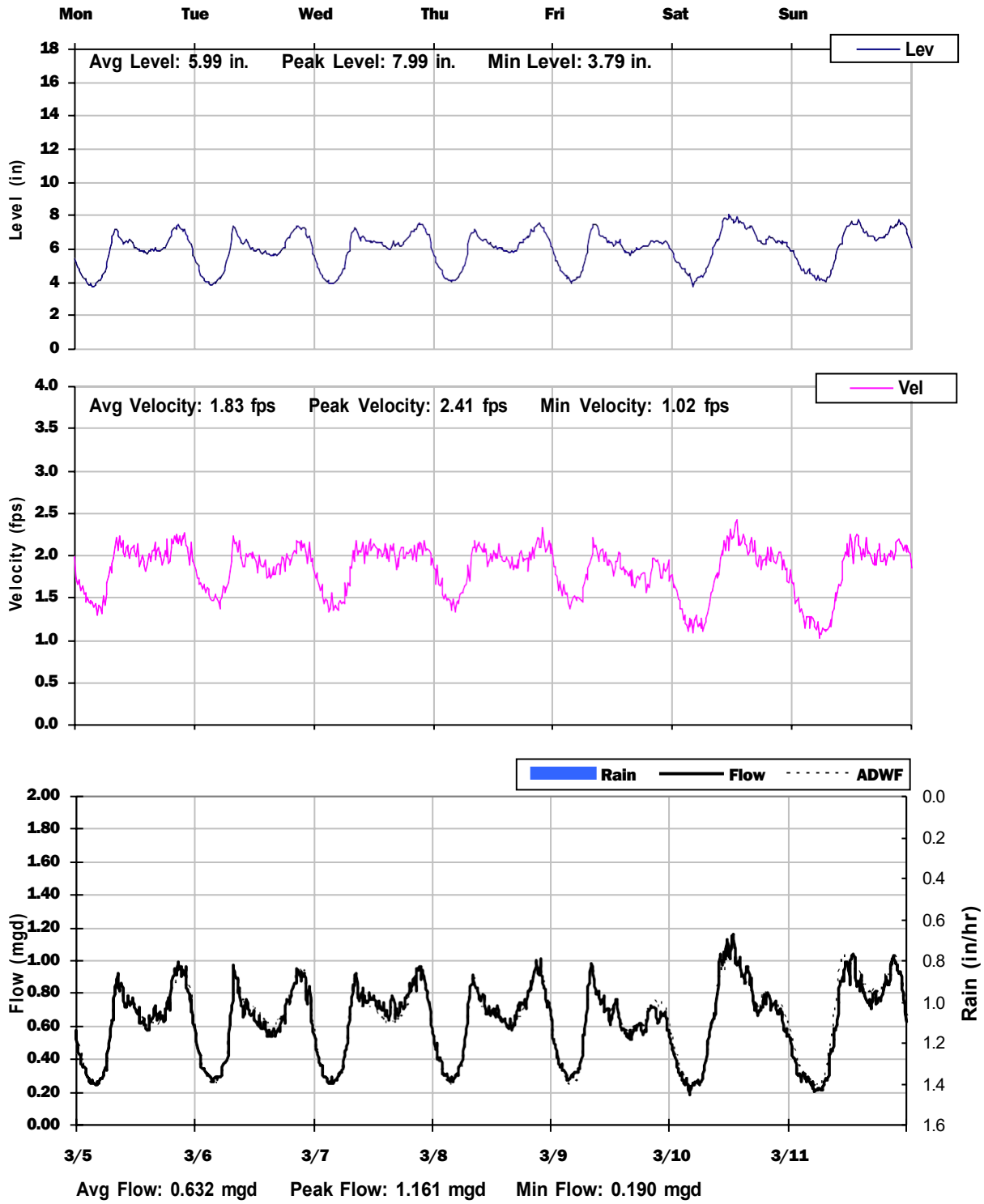
2/26/2018 to 3/5/2018



TC-14

Weekly Level, Velocity and Flow Hydrographs

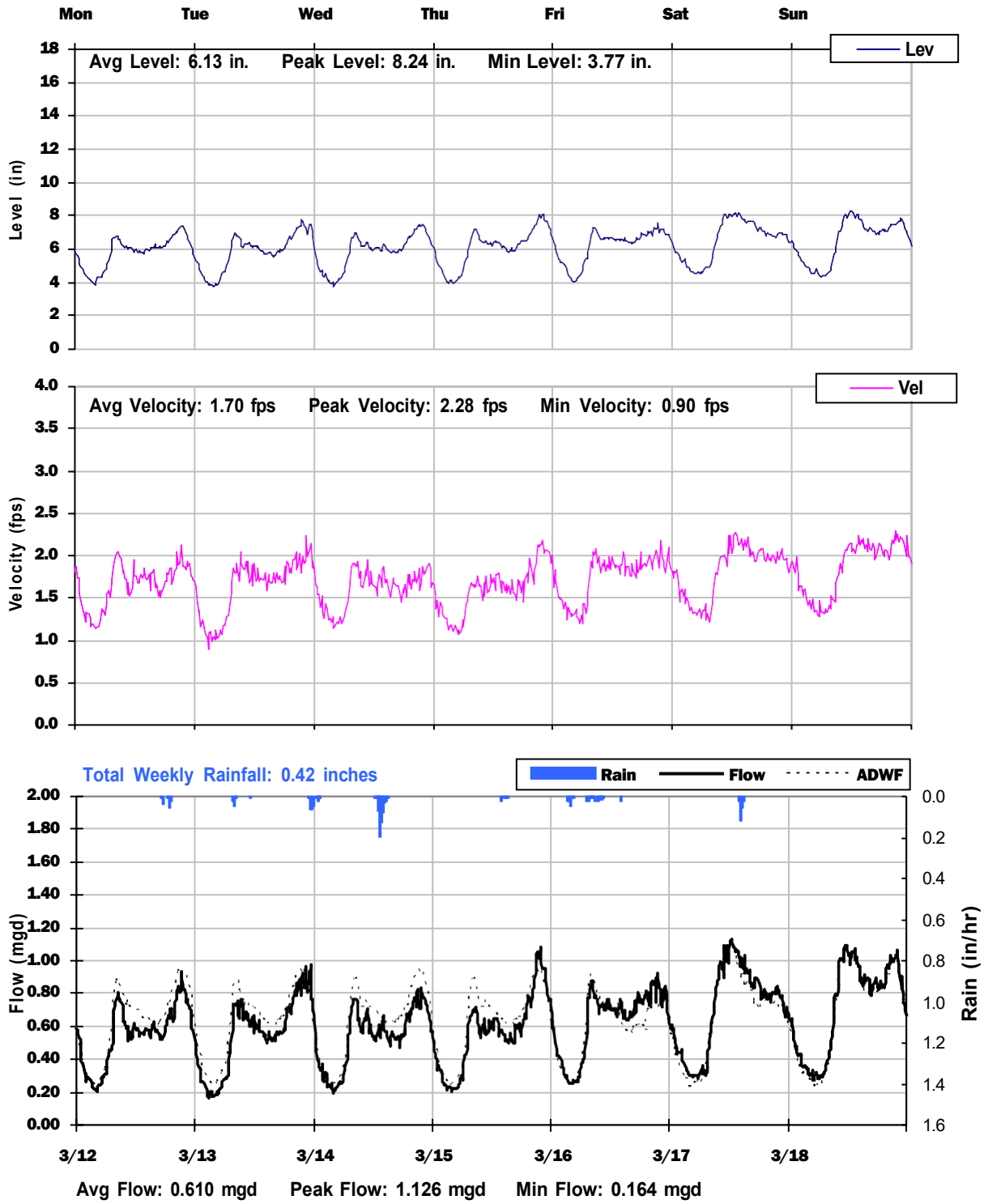
3/5/2018 to 3/12/2018



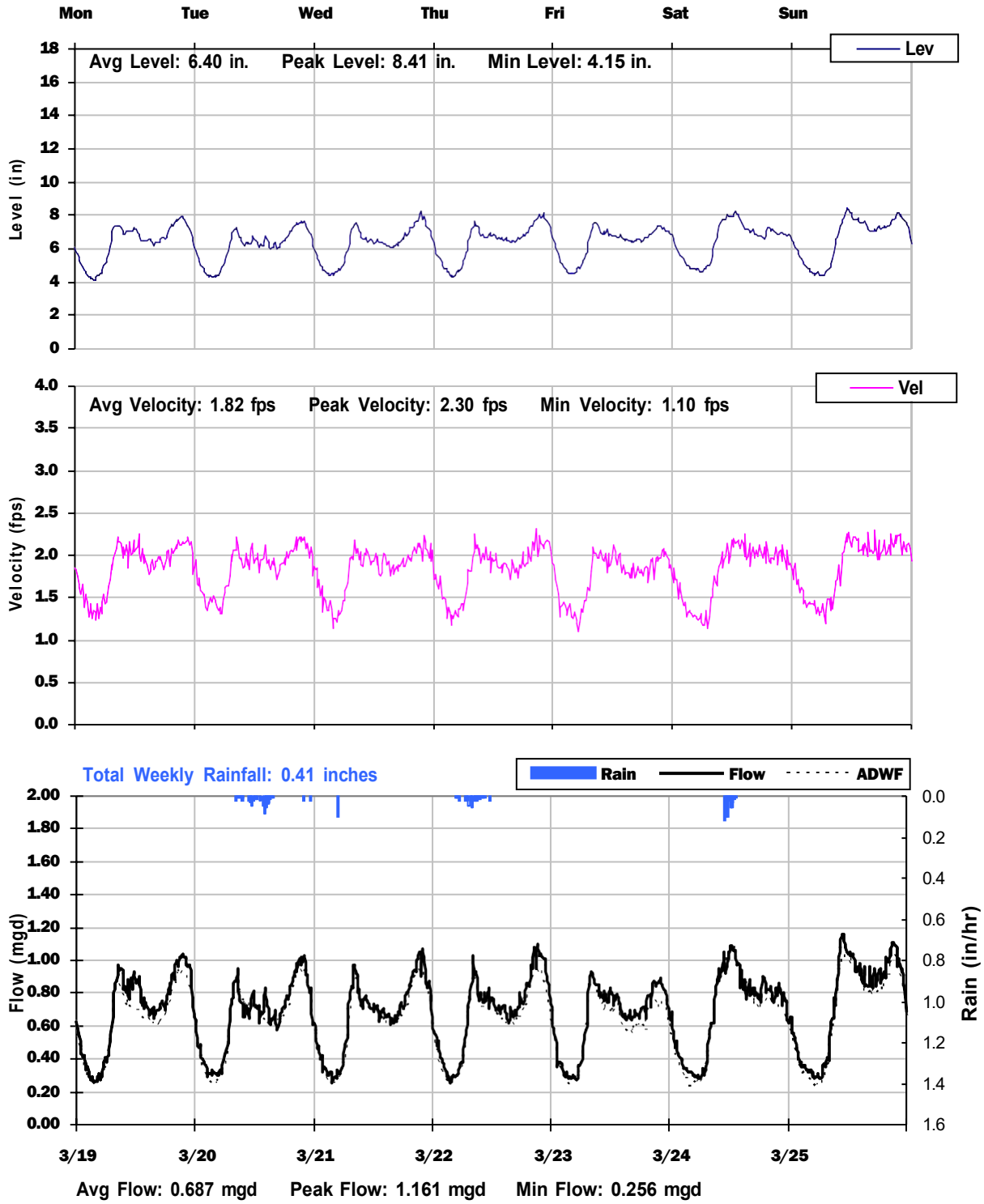
TC-14

Weekly Level, Velocity and Flow Hydrographs

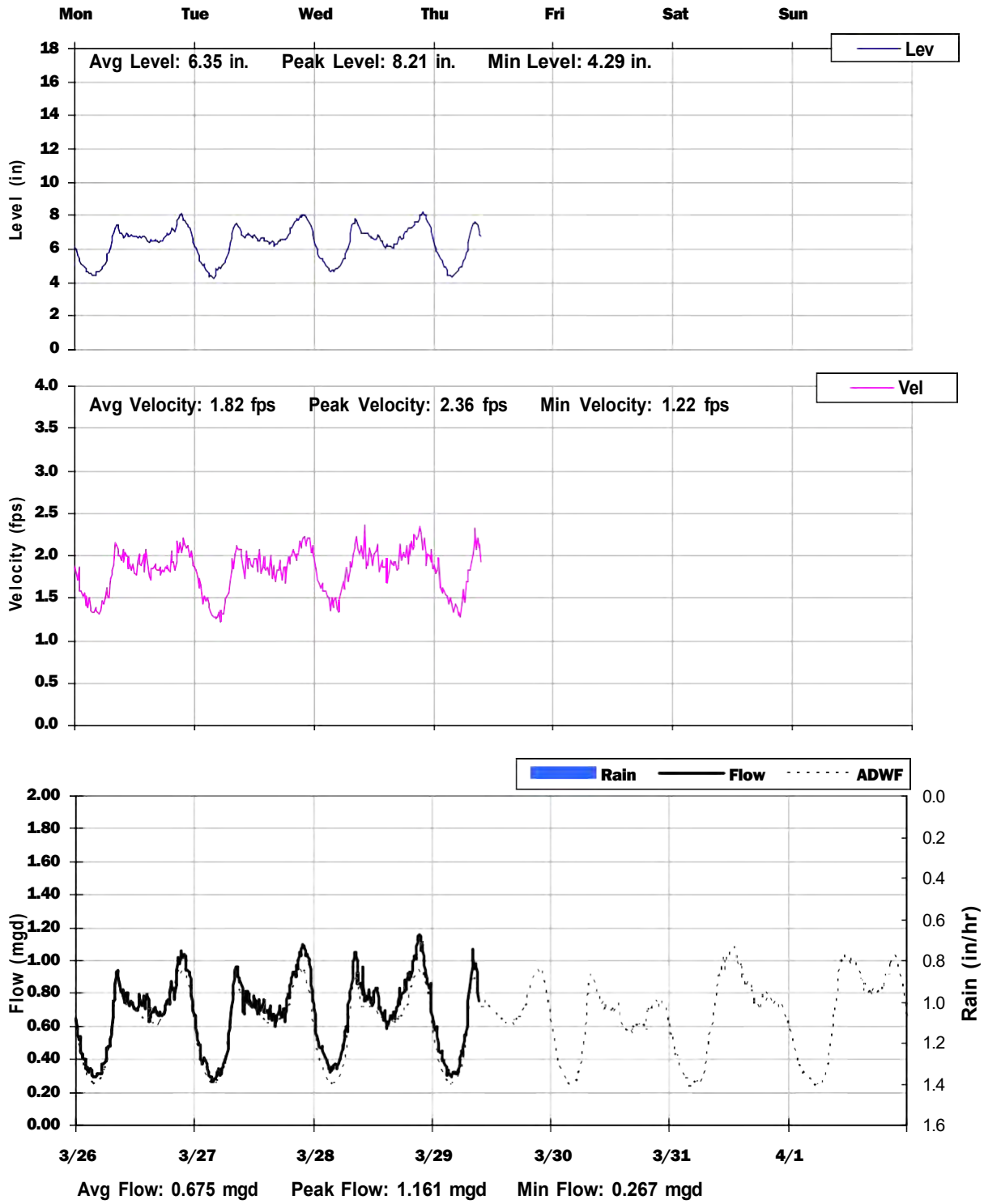
3/12/2018 to 3/19/2018



TC-14
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-14
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



TC-14

City of Tracy, California

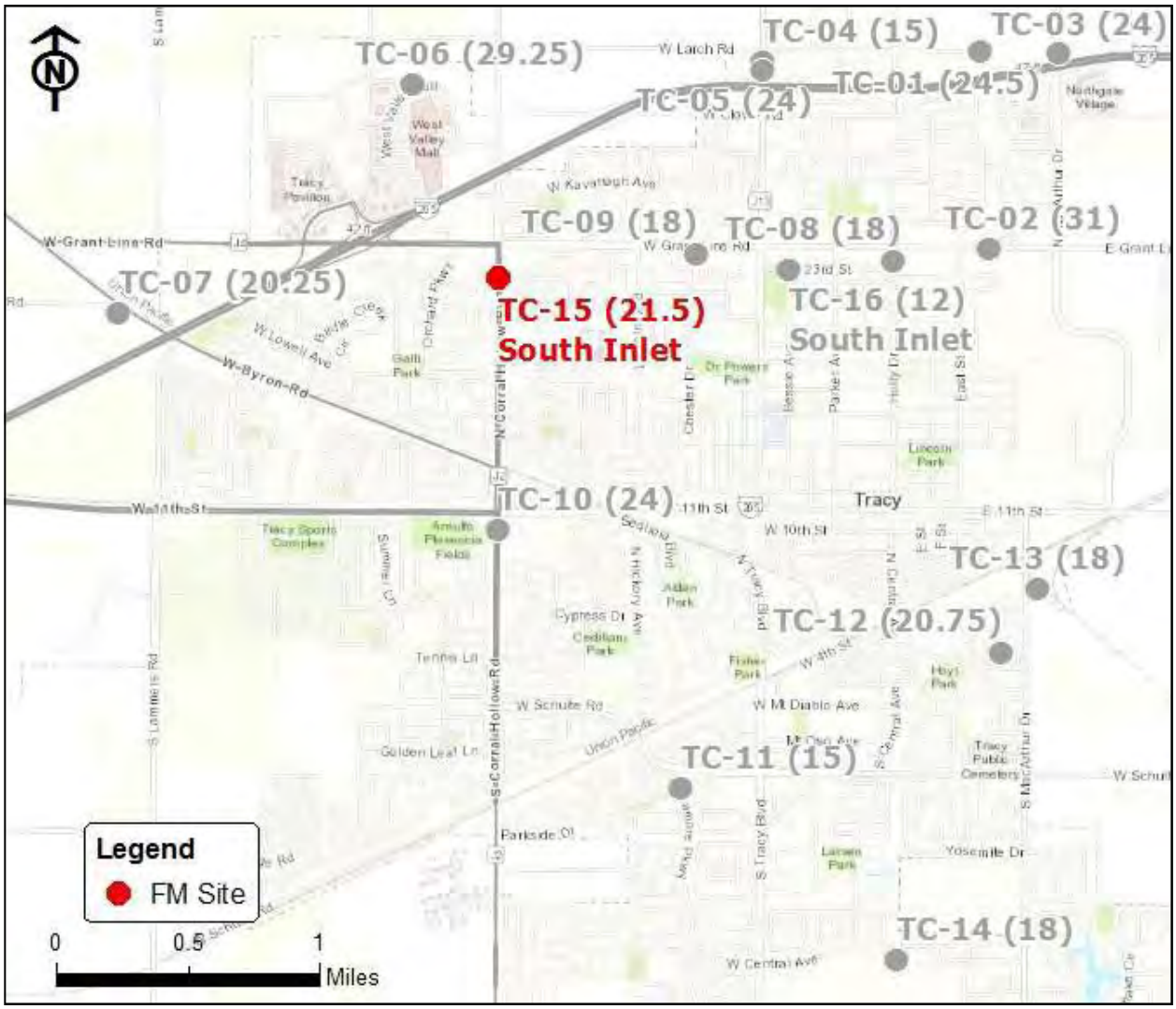
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-15**

Location: **Intersection of Corral Hollow Road and Alegre Drive**

Data Summary Report



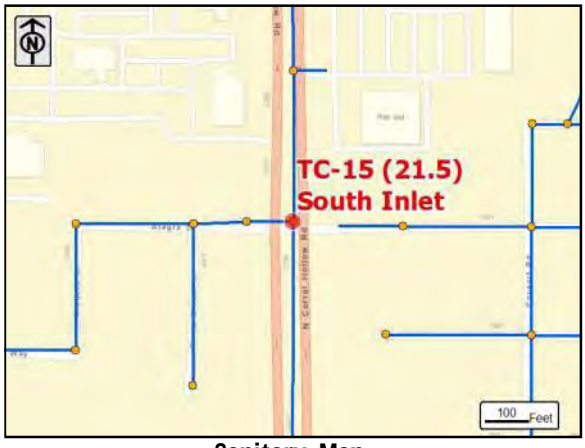
Vicinity Map: TC-15

TC-15

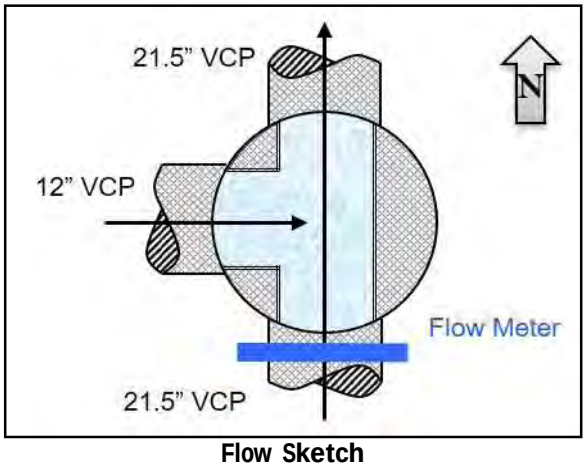
Site Information

Location:	**Intersection of Corral Hollow Road and Alegre Drive**
City Manhole:	
Coordinates:	**121.4532° W, 37.7523° N**
Rim Elevation (Earth):	**27 feet**
Pipe Diameter:	**21.5 inches**
ADWF:	**1.553 mgd**
Peak Measured Flow:	**2.702 mgd**

Satellite Map



Sanitary Map



Flow Sketch

Street View

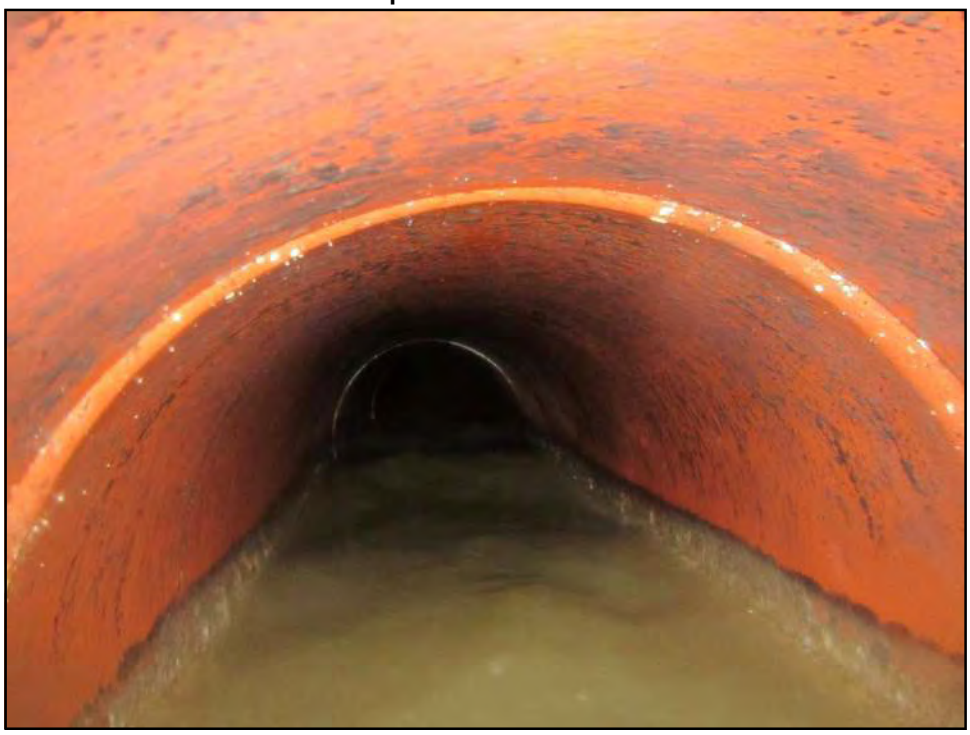
Plan View

TC-15

Additional Site Photos

Effluent Pipe

Monitored South Influent Pipe



TC-15

Additional Site Photos

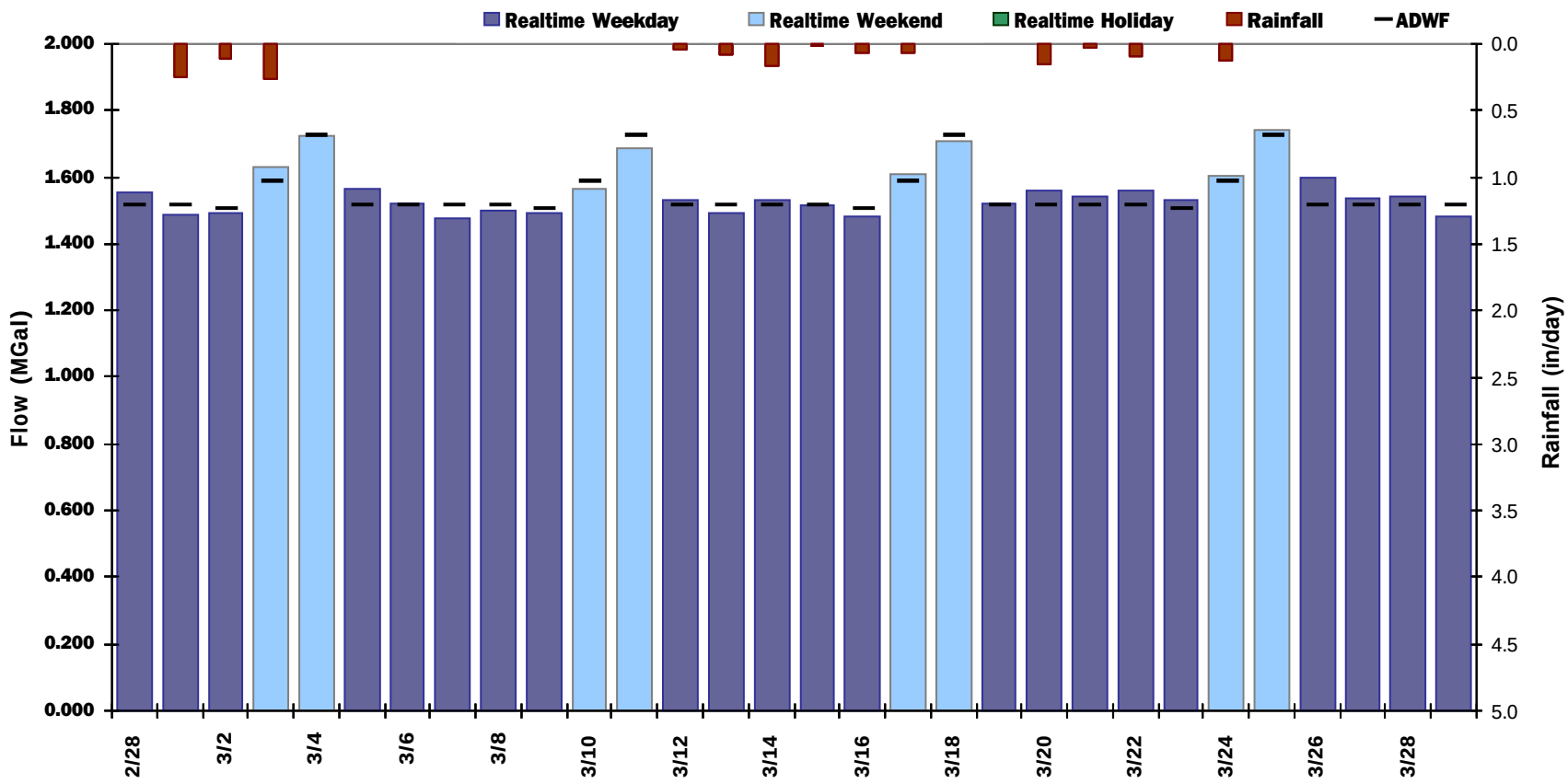
West Lateral

TC-15

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 1.559 MGal Peak Daily Flow: 1.740 MGal Min Daily Flow: 1.475 MGal

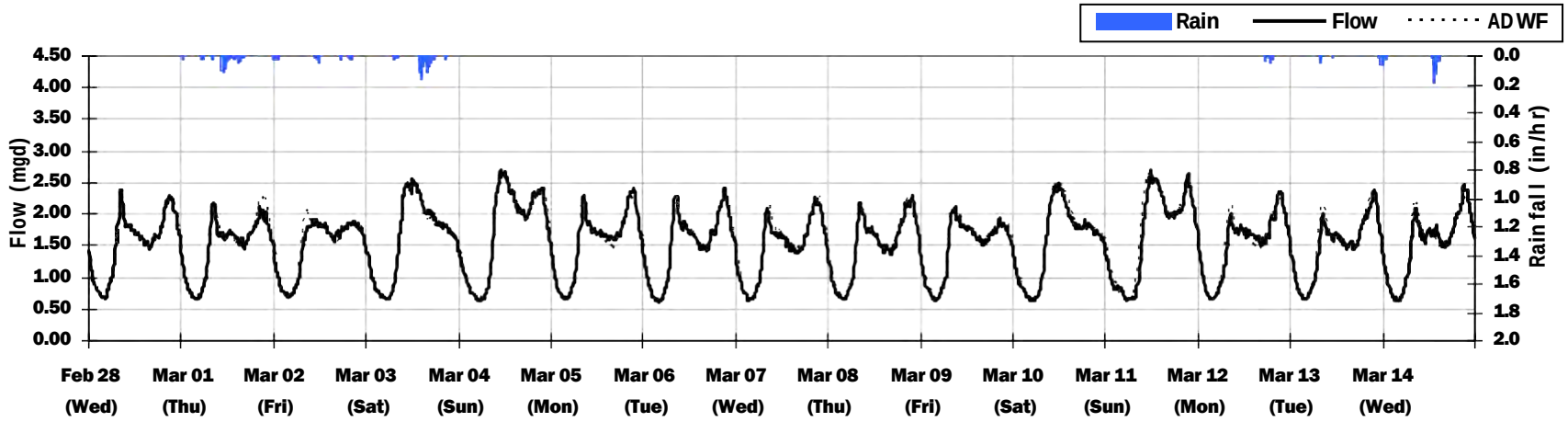
Total Period Rainfall: 1.43 inches

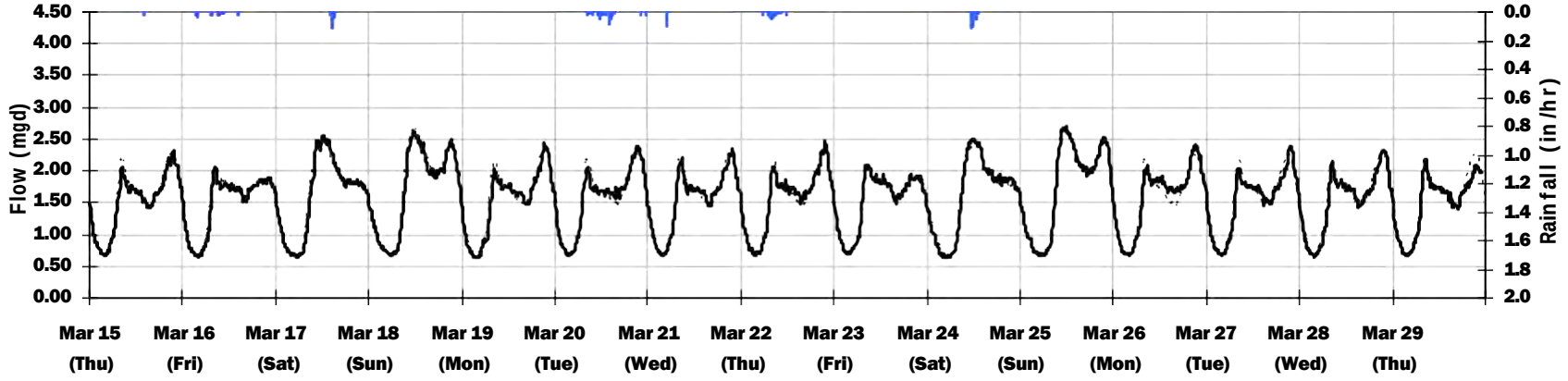


TC-15

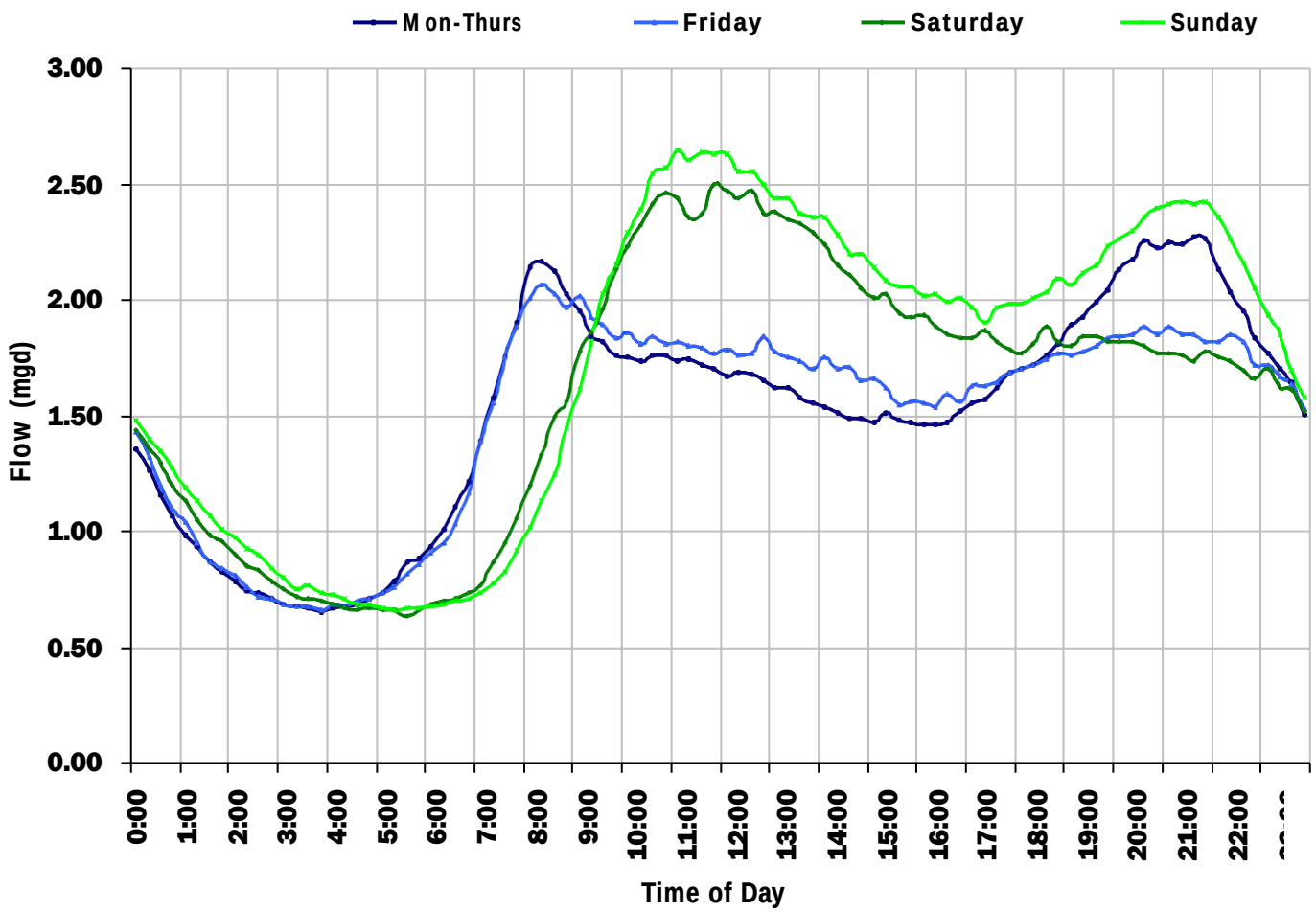
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.43 inches Avg Flow: 1.559 mgd Peak Flow: 2.702 mgd Min Flow: 0.602 mgd



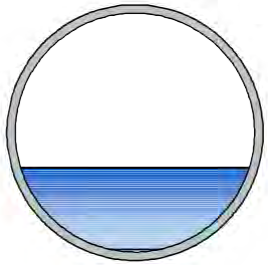


TC-15
Average Dry Weather Flow Hydrographs



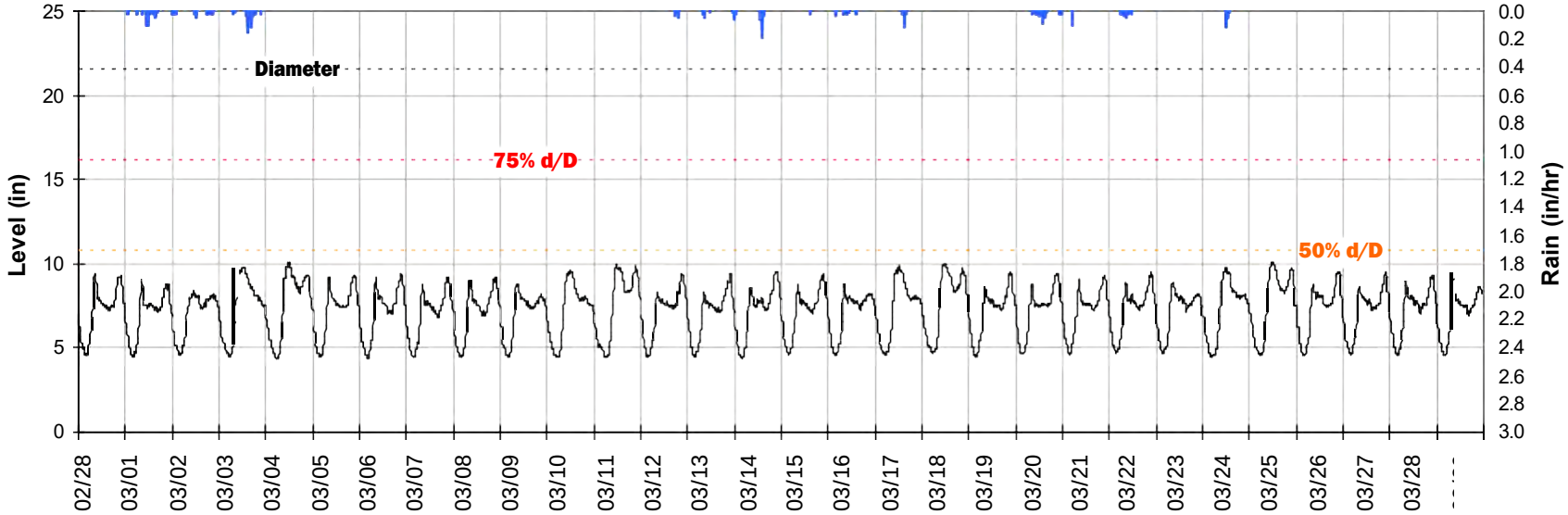
ADWF:

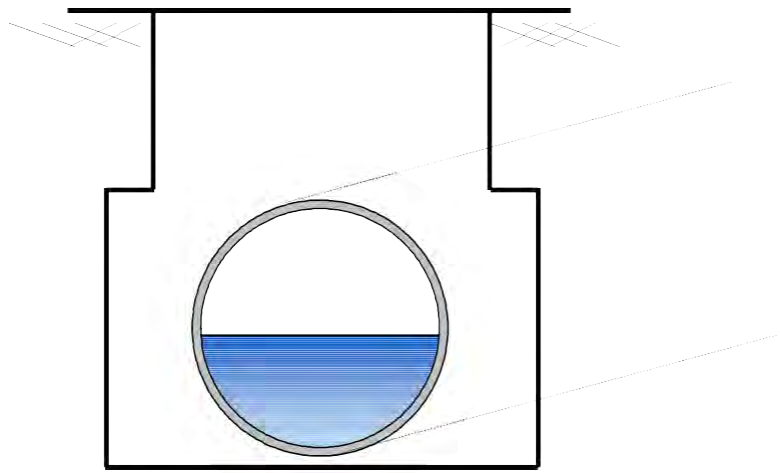
1.553 *mgd*



TC-15
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



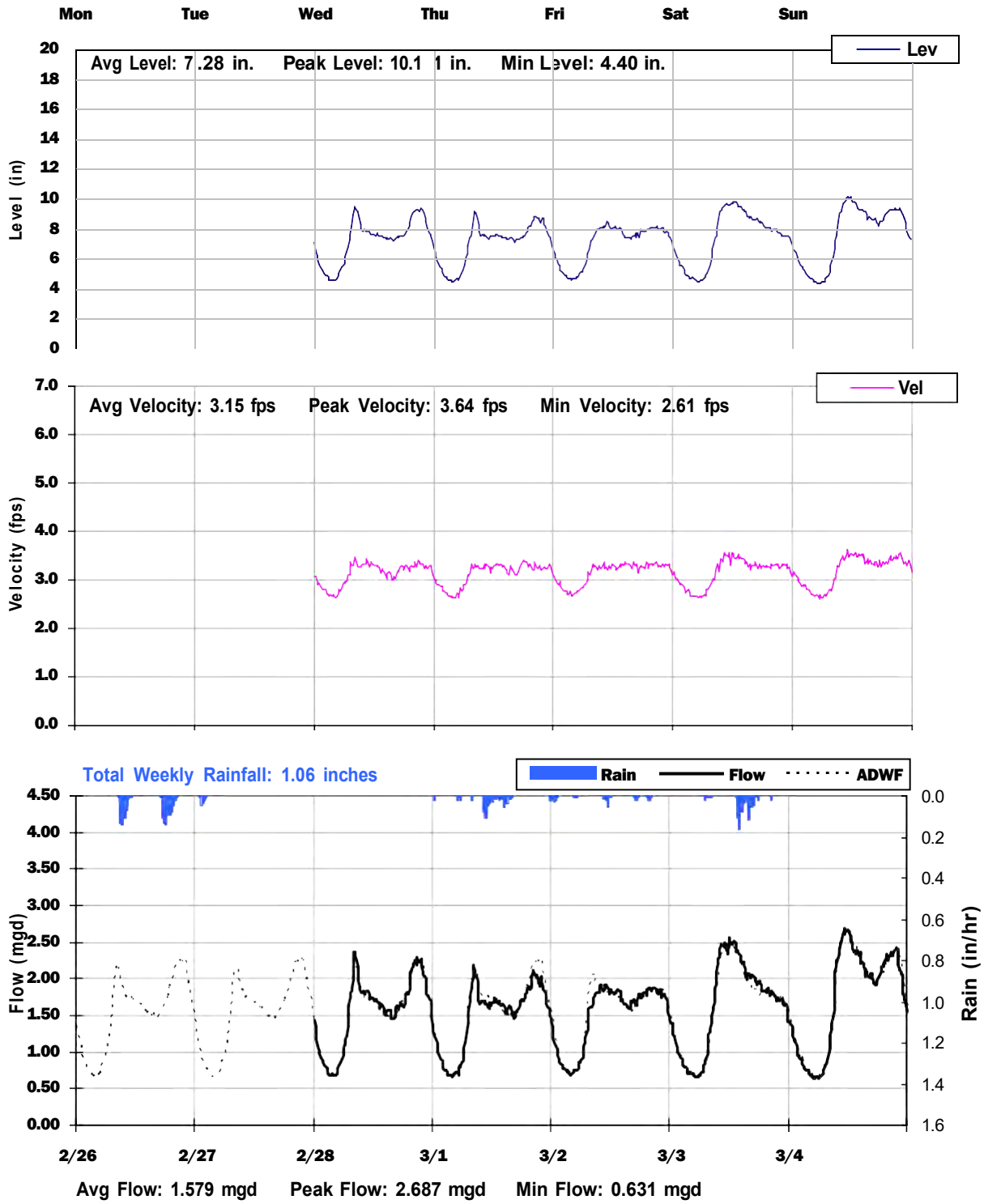


Pipe Diameter:	**21.5**	***inches***
Peak Measured Level:	**10.1**	***inches***
Peak d/D Ratio:	**0.47**	

TC-15

Weekly Level, Velocity and Flow Hydrographs

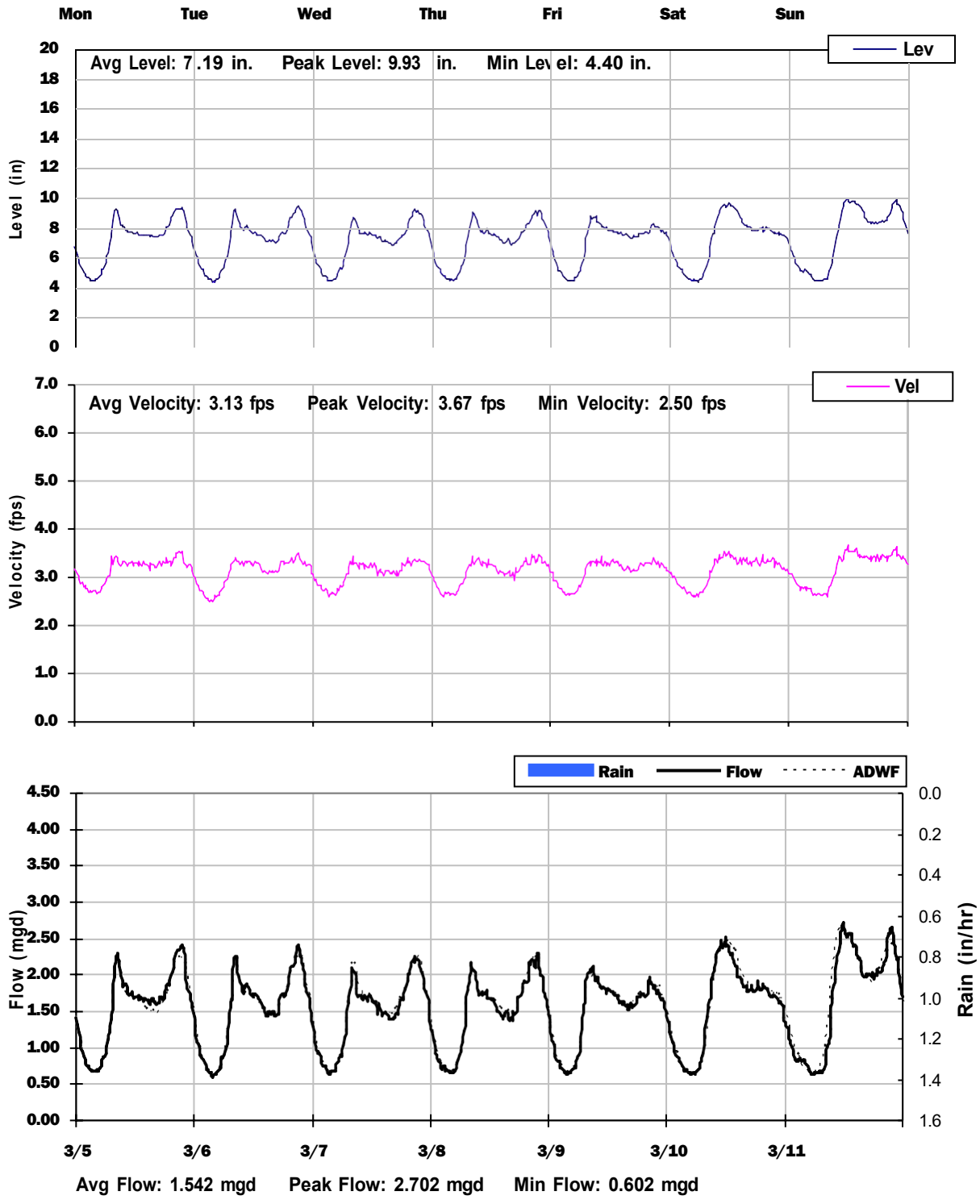
2/26/2018 to 3/5/2018



TC-15

Weekly Level, Velocity and Flow Hydrographs

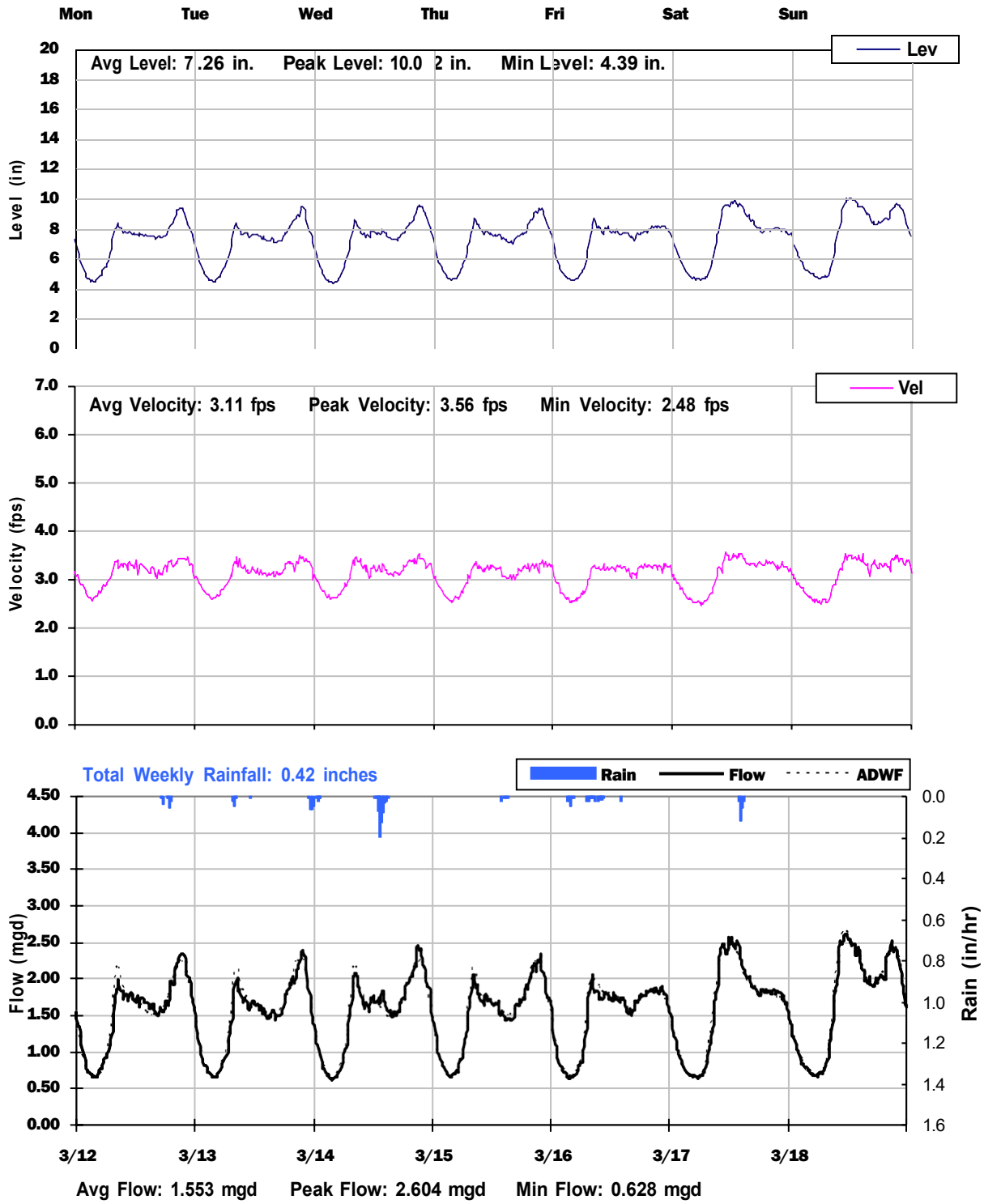
3/5/2018 to 3/12/2018



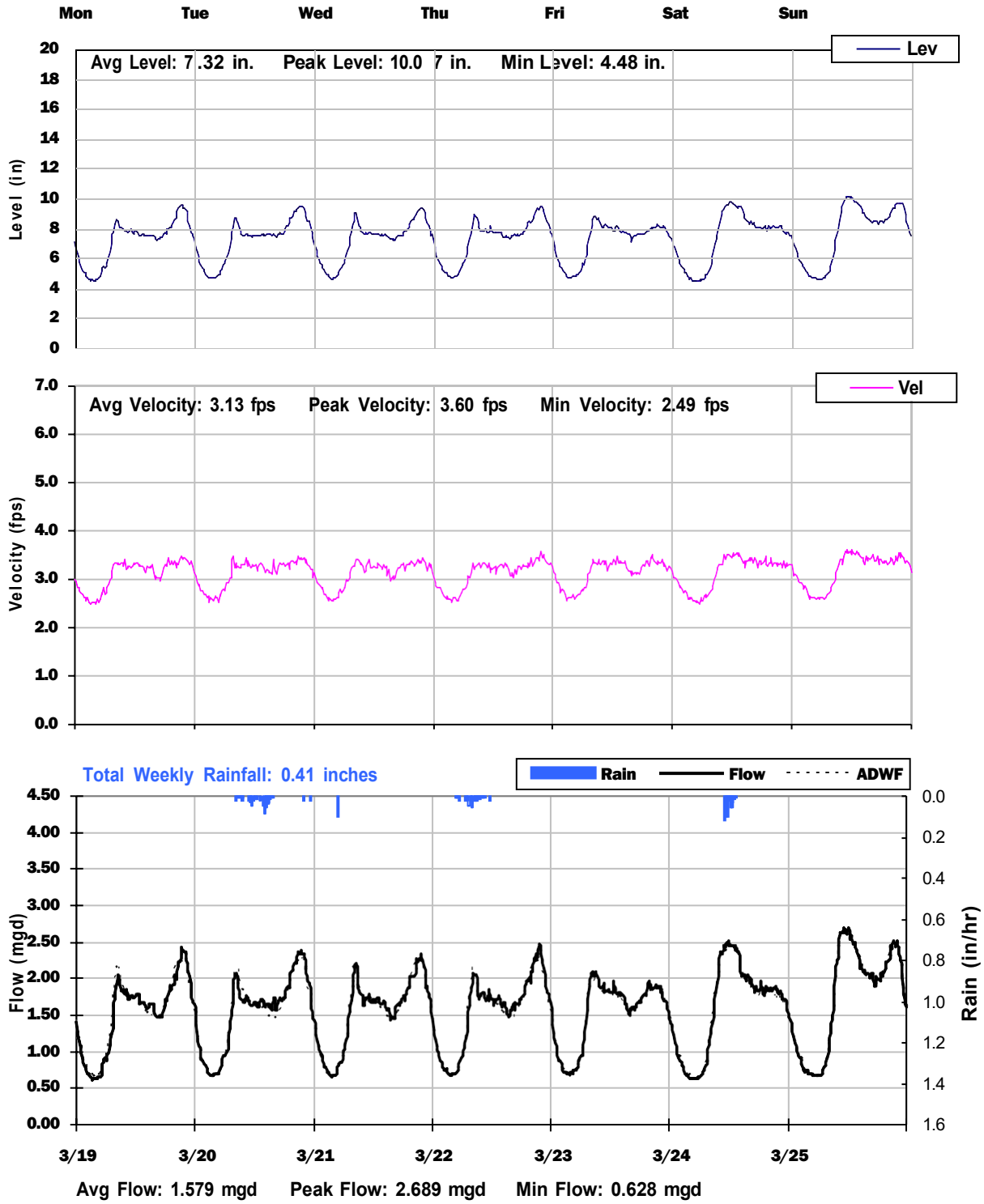
TC-15

Weekly Level, Velocity and Flow Hydrographs

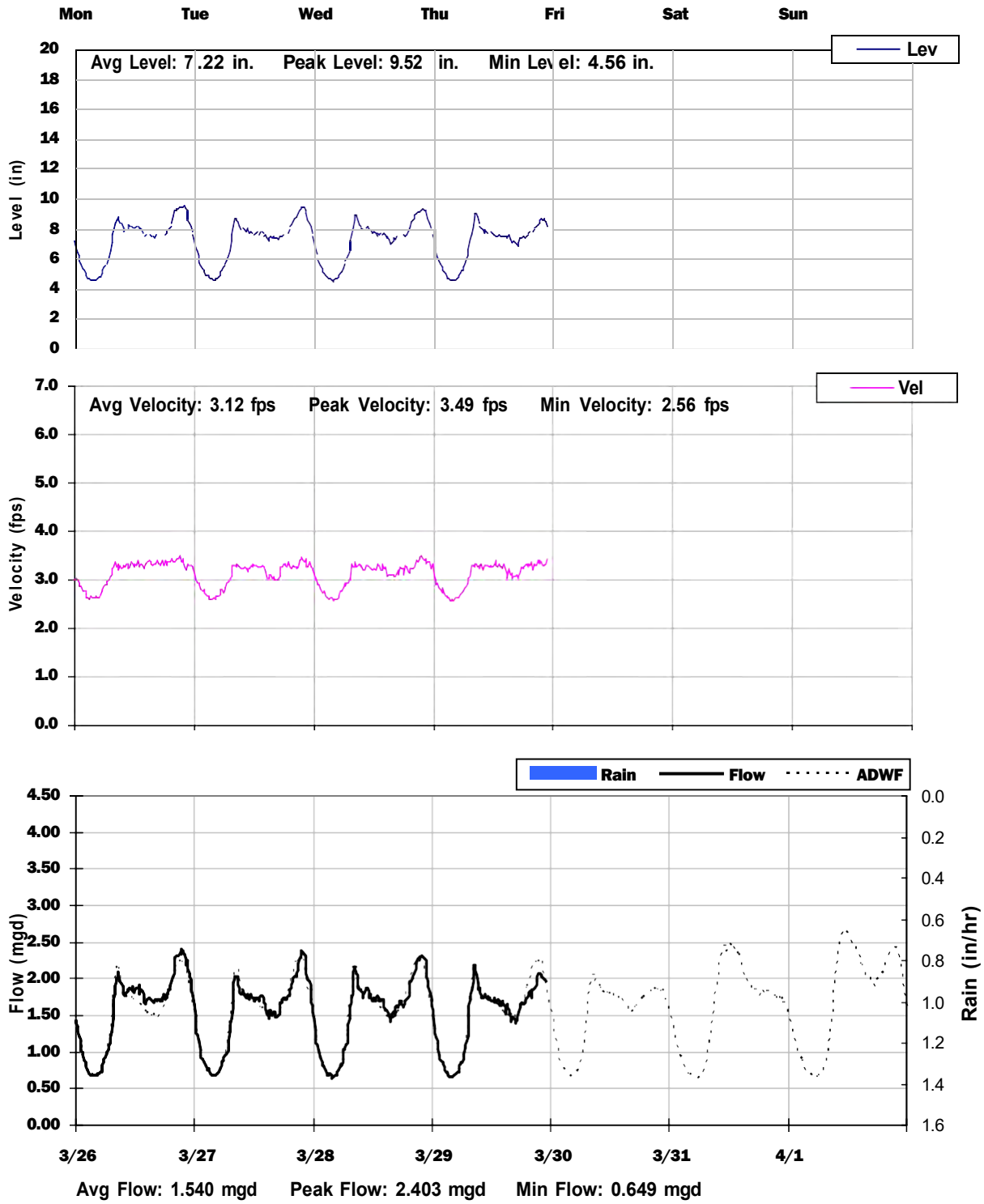
3/12/2018 to 3/19/2018



TC-15
Weekly Level, Velocity and Flow Hydrographs
3/19/2018 to 3/26/2018



TC-15
Weekly Level, Velocity and Flow Hydrographs
3/26/2018 to 4/2/2018



TC-15

City of Tracy, California

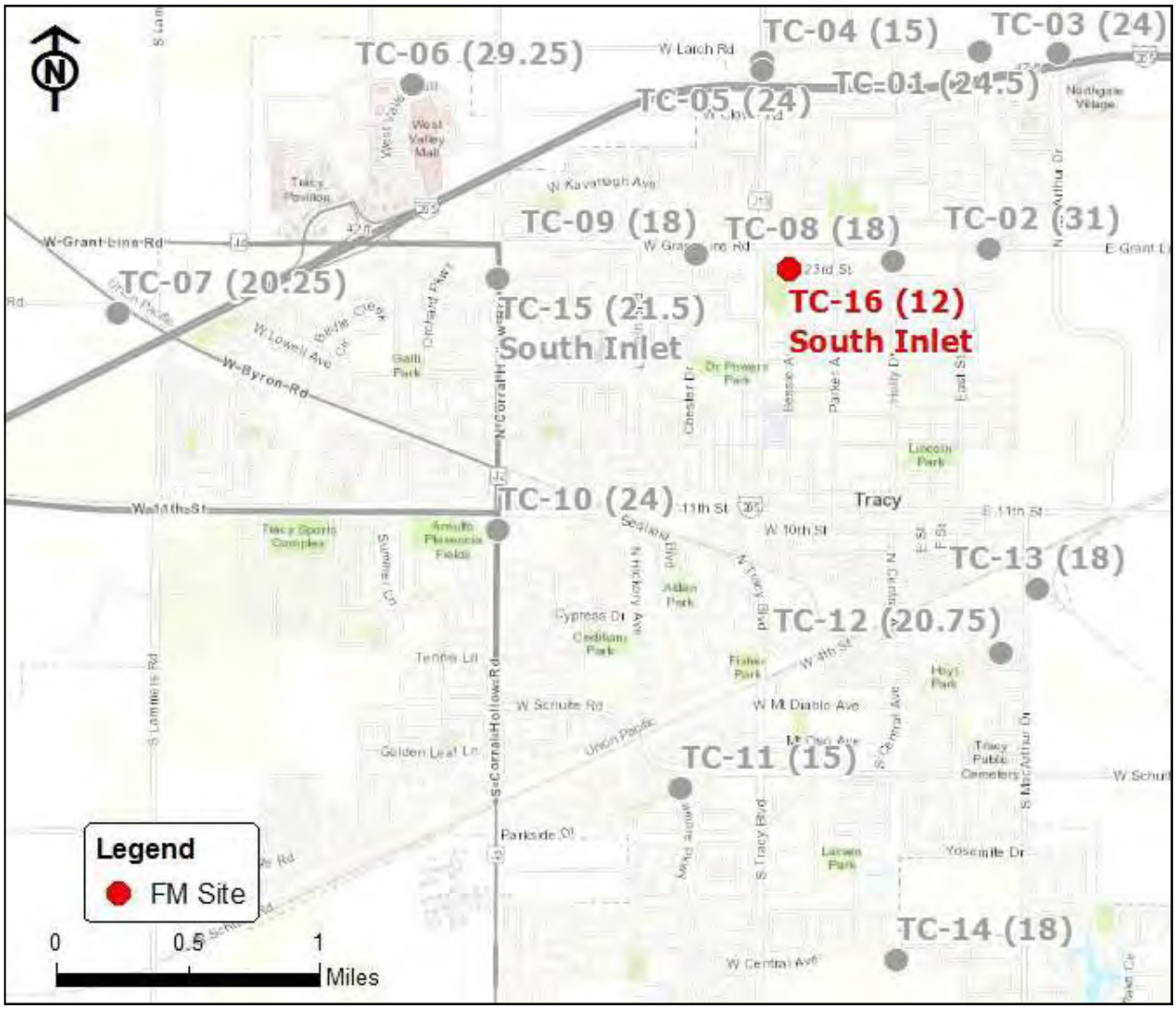
Sanitary Sewer Flow Monitoring

February 26 - April 08, 2020

Monitoring Site: **TC-16**

Location: **Intersection of West 23rd Street and Bessie Avenue**

Data Summary Report



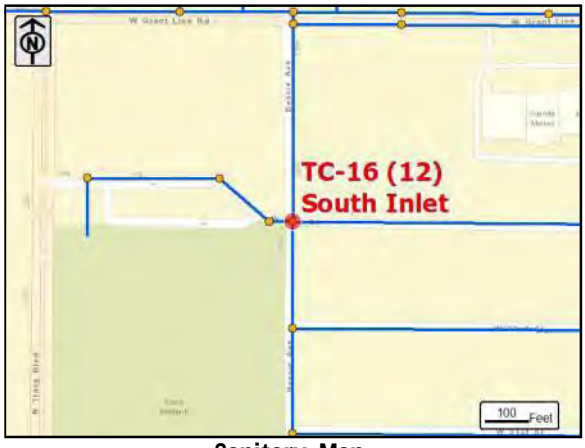
Vicinity Map: TC-16

TC-16

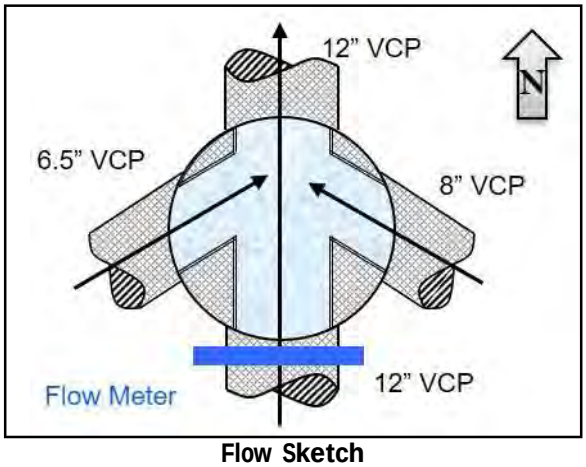
Site Information

Location:	**Intersection of West 23rd Street and Bessie Avenue**
City Manhole:	
Coordinates:	**121.4331° W, 37.7529° N**
Rim Elevation (Earth):	**30 feet**
Pipe Diameter:	**12 inches**
ADWF:	**0.214 mgd**
Peak Measured Flow:	**0.329 mgd**

Satellite Map



Sanitary Map



Flow Sketch

Street View

Plan View

TC-16

Additional Site Photos

Effluent Pipe

Monitored South Influent Pipe

TC-16

Additional Site Photos

East Lateral

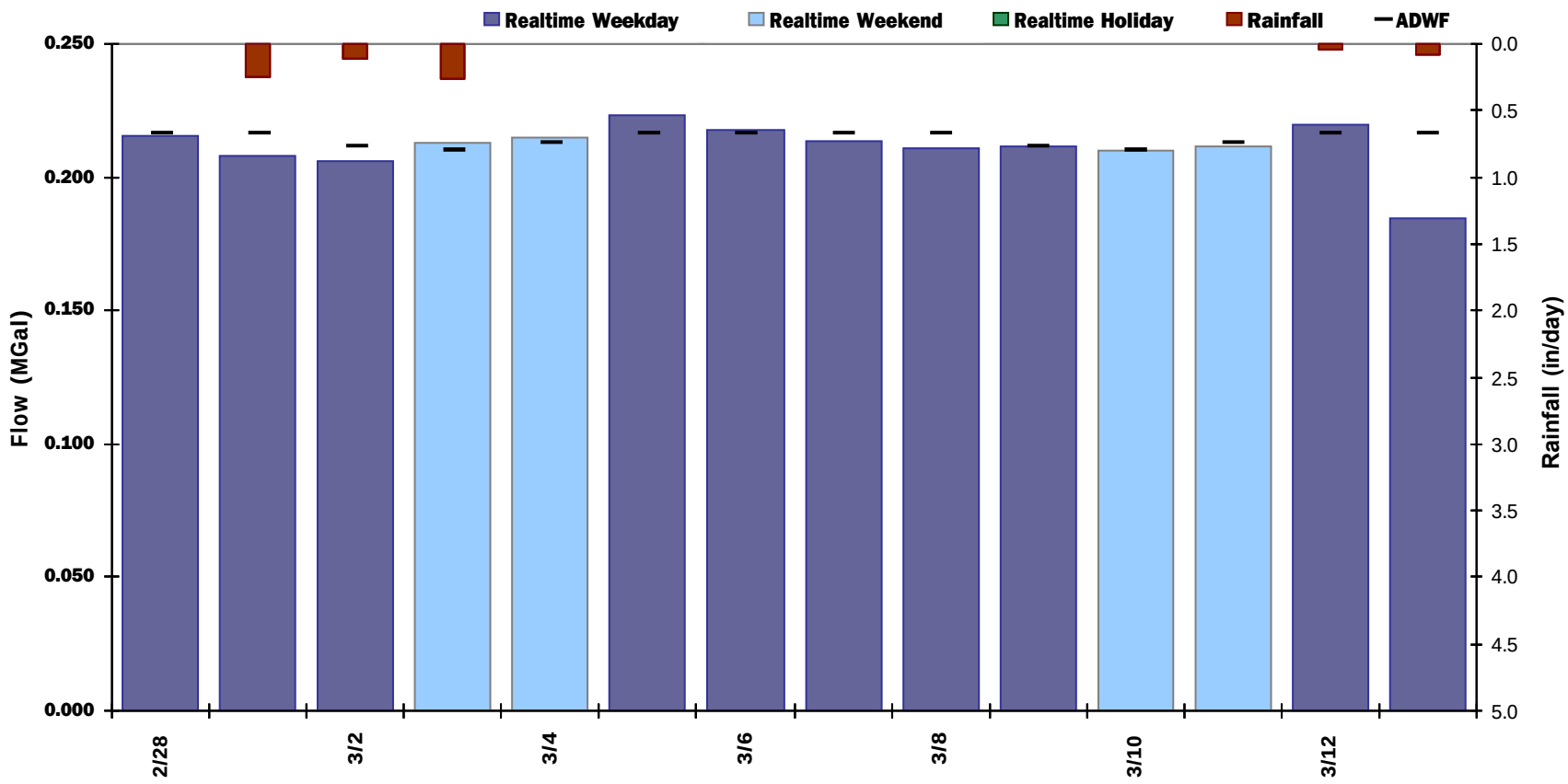
West Lateral

TC-16

Period Flow Summary: Daily Flow Totals

Avg Period Flow: 0.211 MGal Peak Daily Flow: 0.223 MGal Min Daily Flow: 0.184 MGal

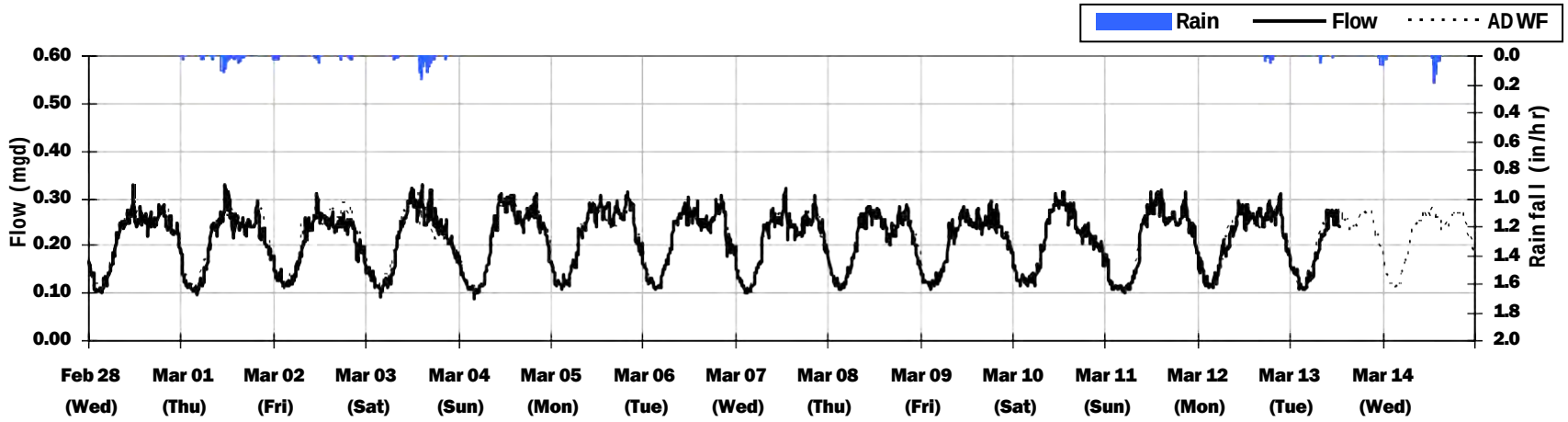
Total Period Rainfall: 0.66 inches

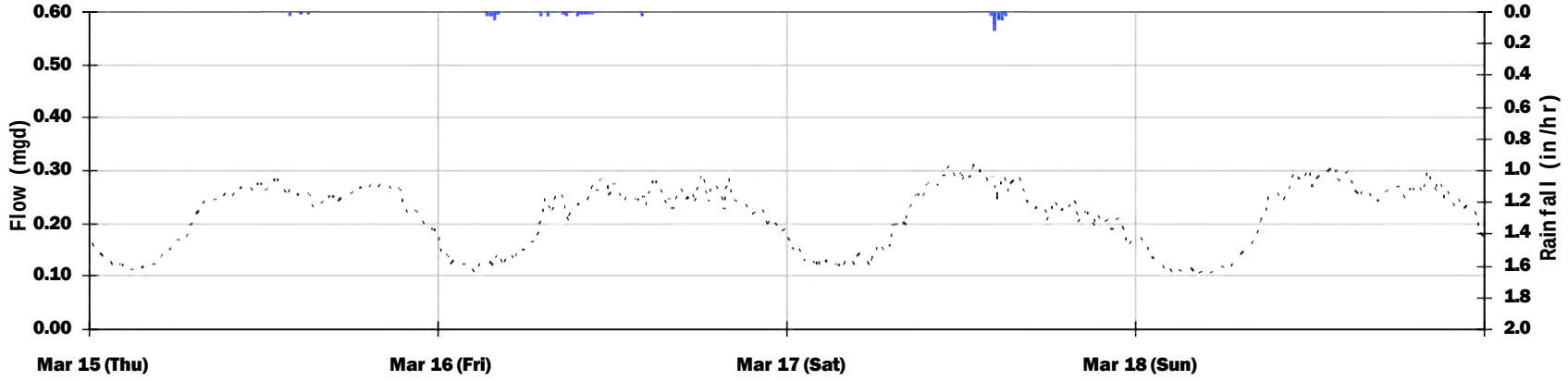


TC-16

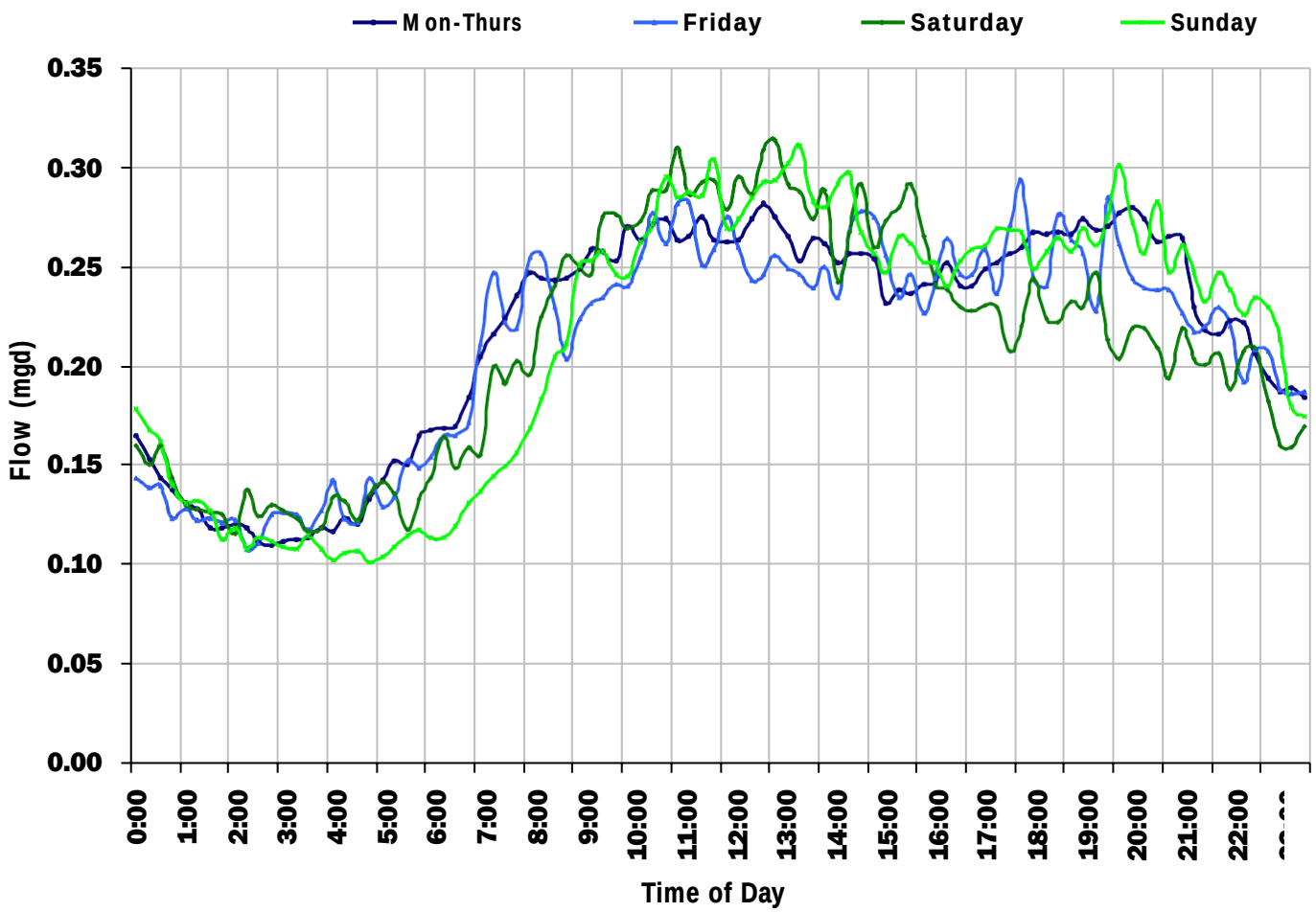
Flow Summary: 2/28/2018 to 3/29/2018

Total Period Rainfall: 1.02 inches Avg Flow: 0.212 mgd Peak Flow: 0.329 mgd Min Flow: 0.091 mgd



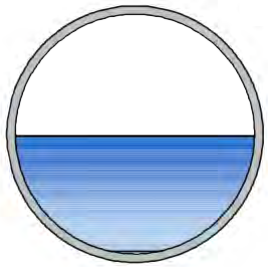


TC-16
Average Dry Weather Flow Hydrographs



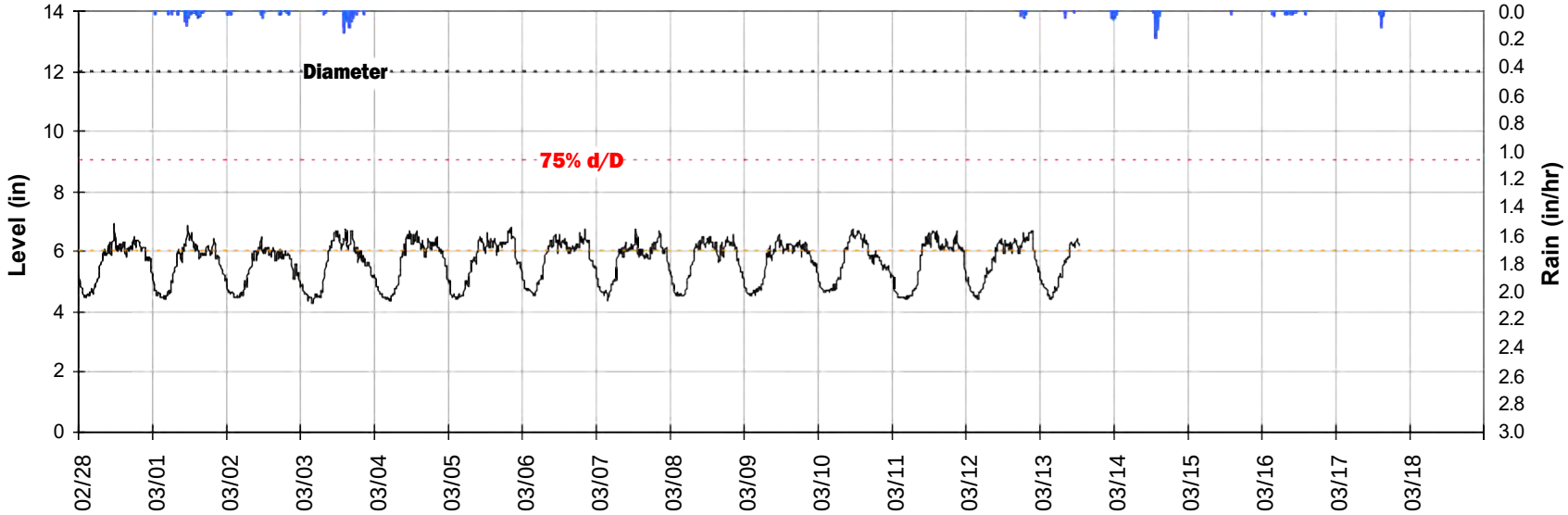
ADWF:

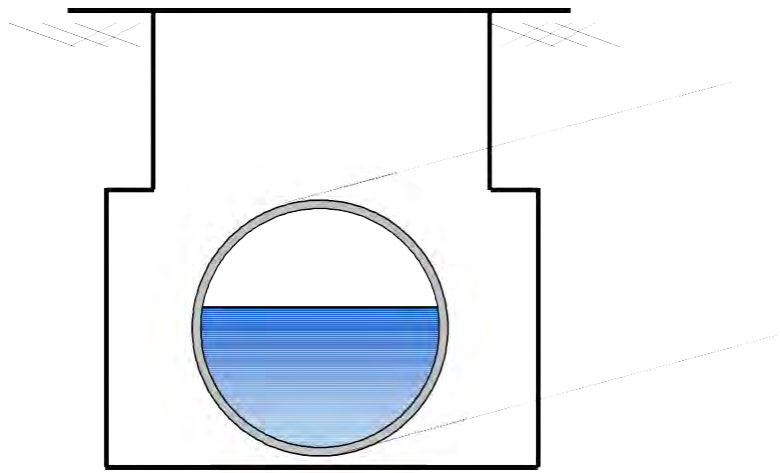
0.214 *mgd*



TC-16
Site Capacity and Surcharge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



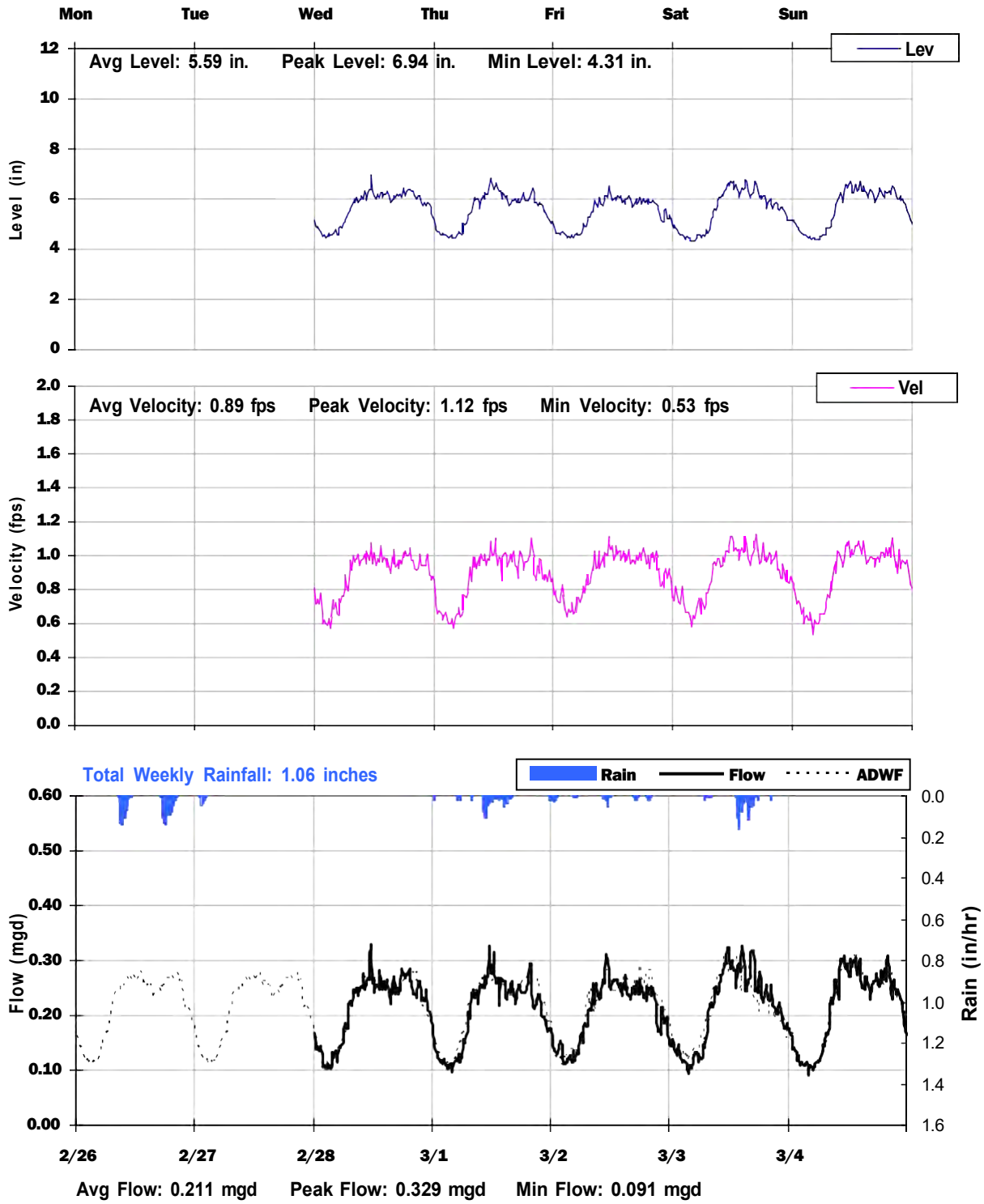


Pipe Diameter:	**12**	***inches***
Peak Measured Level:	**6.94**	***inches***
Peak d/D Ratio:	**0.58**	

TC-16

Weekly Level, Velocity and Flow Hydrographs

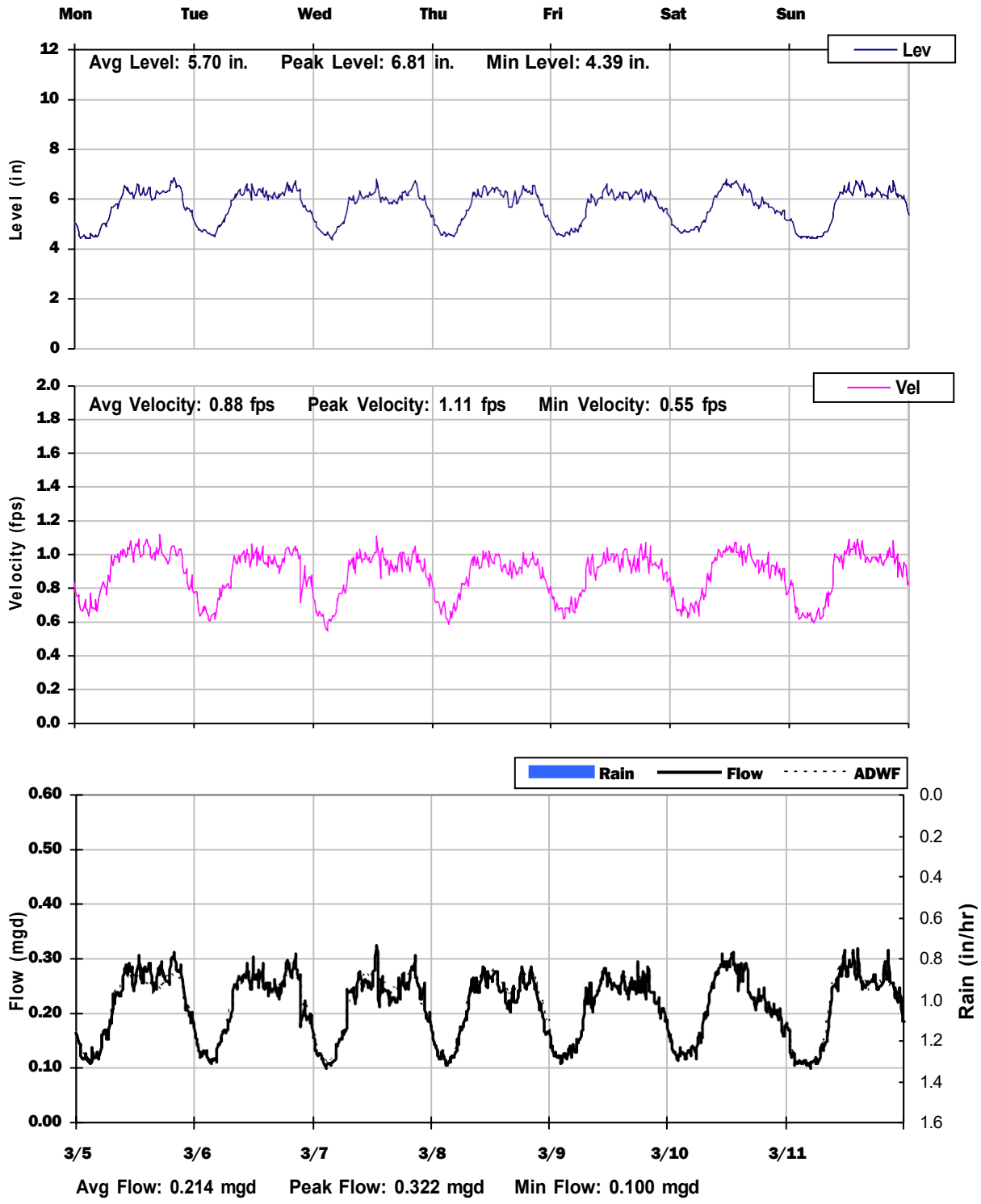
2/26/2018 to 3/5/2018



TC-16

Weekly Level, Velocity and Flow Hydrographs

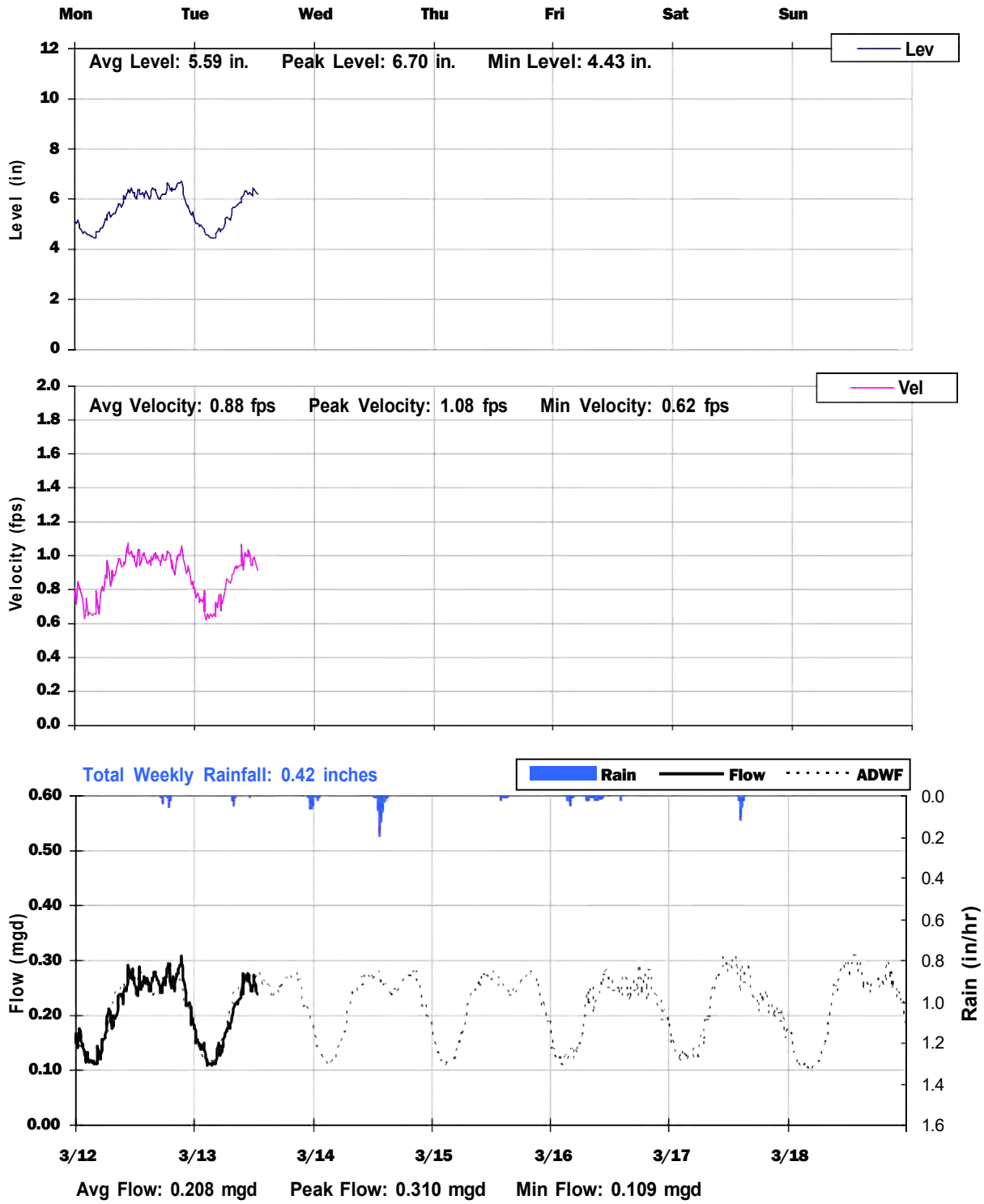
3/5/2018 to 3/12/2018



TC-16

Weekly Level, Velocity and Flow Hydrographs

3/12/2018 to 3/19/2018



Appendix C

DRY WEATHER FLOW CALIBRATION SHEETS

Flow Monitoring Site TC-01, Dry Weather Flow Calibration

Location: E Larch Rd. & Spurline RR
Pipeline Diameter: 24.5"
City Manhole ID: 2068
Model Pipe ID: 2198

Flow Monitor Location

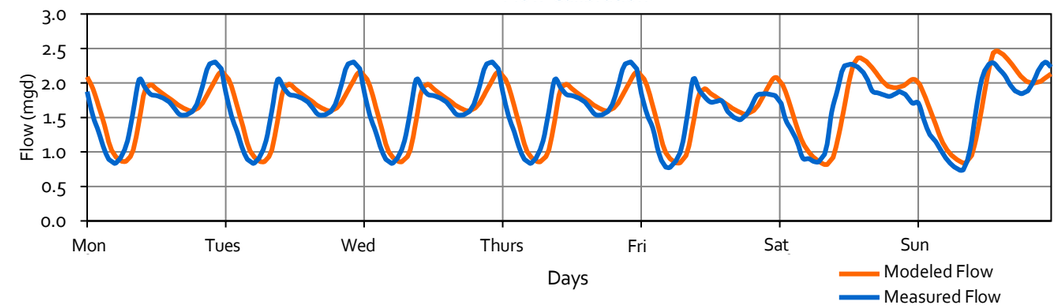
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	1.63	2.30	14.0	1.29	1.61	2.15	13.80	1.34	-0.9%	-6.6%	-1.4%	3.8%
Tues.	1.63	2.30	14.0	1.29	1.61	2.15	13.80	1.34	-0.9%	-6.6%	-1.4%	3.8%
Wed.	1.63	2.30	14.0	1.29	1.61	2.15	13.80	1.34	-0.9%	-6.6%	-1.4%	3.8%
Thur.	1.63	2.30	14.0	1.29	1.61	2.15	13.80	1.34	-0.9%	-6.6%	-1.4%	3.8%
Fri.	1.53	2.06	14.0	1.30	1.57	2.12	13.80	1.31	2.6%	3.0%	-1.6%	0.7%
Sat.	1.64	2.27	13.9	1.34	1.68	2.36	13.83	1.40	2.6%	4.2%	-0.5%	4.0%
Sun.	1.65	2.30	14.0	1.30	1.73	2.46	13.83	1.44	4.9%	6.7%	-1.3%	10.9%
Summary												
Weekday	1.61	--	14.0	1.30	1.60	--	13.8	1.34	-0.3%	--	-1.4%	3.1%
Weekend	1.65	--	14.0	1.32	1.71	--	13.8	1.42	3.7%	--	-0.9%	7.4%
ADWF[4]	1.62	--	14.0	1.30	1.63	--	13.8	1.36	0.9%	--	-1.3%	4.4%

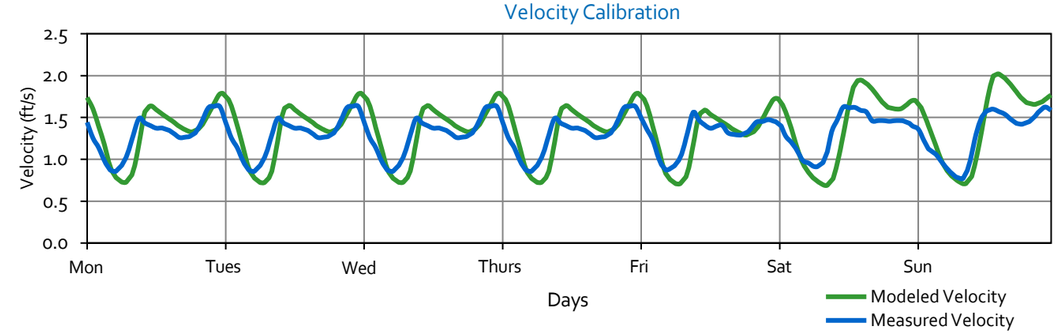
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

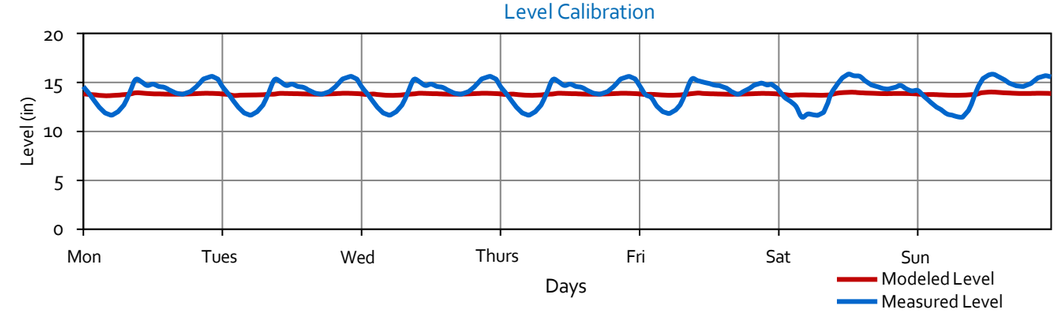
Flow Calibration



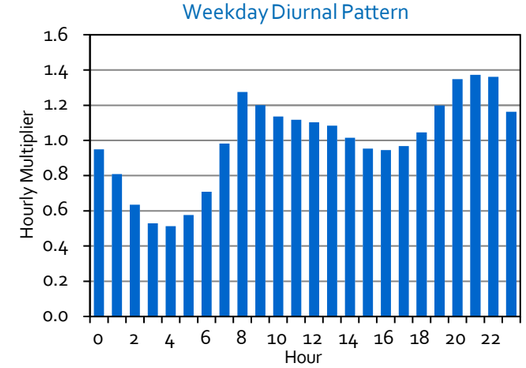
Velocity Calibration



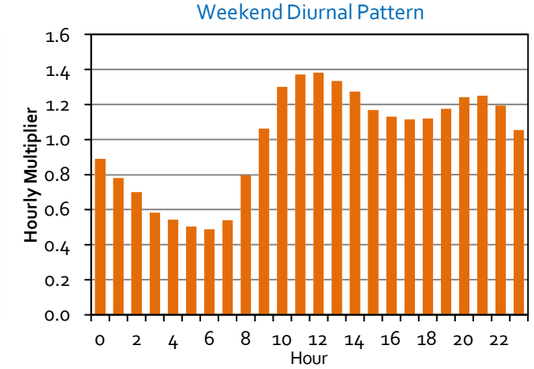
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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Flow Monitoring Site TC-02, Dry Weather Flow Calibration

Location: E Grant Line Rd. b/w Colony Dr. & Entrada Way
Pipeline Diameter: 29.75"
City Manhole ID: 777
Model Pipe ID: 470

Flow Monitor Location

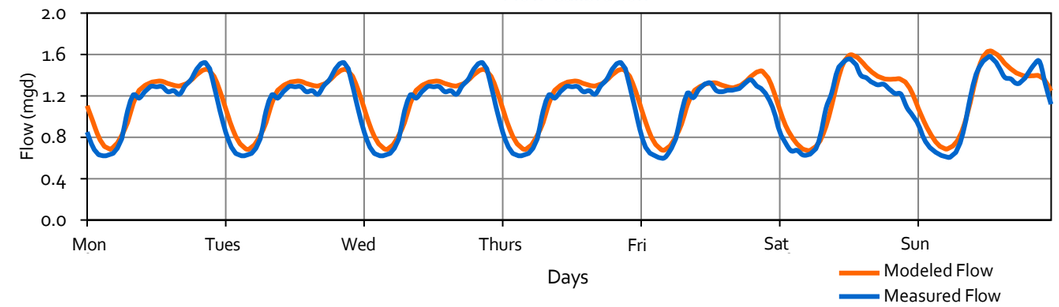
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	1.11	1.52	9.9	1.22	1.16	1.46	9.59	1.33	4.8%	-4.1%	-2.7%	8.9%
Tues.	1.11	1.52	9.9	1.22	1.16	1.46	9.59	1.33	4.8%	-4.1%	-2.7%	8.9%
Wed.	1.11	1.52	9.9	1.22	1.16	1.46	9.59	1.33	4.8%	-4.1%	-2.7%	8.9%
Thur.	1.11	1.52	9.9	1.22	1.16	1.46	9.59	1.33	4.8%	-4.1%	-2.7%	8.9%
Fri.	1.08	1.36	9.7	1.22	1.15	1.44	9.53	1.32	6.5%	6.1%	-1.3%	8.4%
Sat.	1.11	1.56	9.7	1.24	1.18	1.59	9.62	1.33	6.4%	2.2%	-1.0%	7.5%
Sun.	1.15	1.58	9.9	1.24	1.21	1.63	9.74	1.34	5.2%	3.2%	-2.1%	8.4%
Summary												
Weekday	1.10	--	9.8	1.22	1.16	--	9.6	1.33	5.1%	--	-2.4%	8.8%
Weekend	1.13	--	9.8	1.24	1.19	--	9.7	1.33	5.8%	--	-1.5%	8.0%
ADWF[4]	1.11	--	9.8	1.22	1.17	--	9.6	1.33	5.3%	--	-2.2%	8.6%

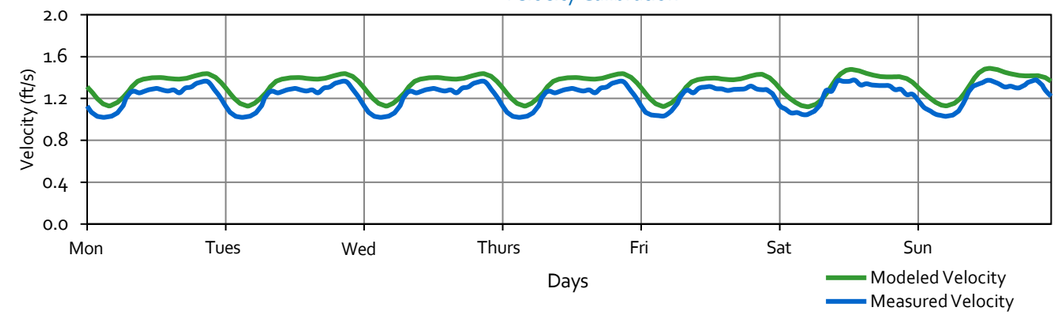
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

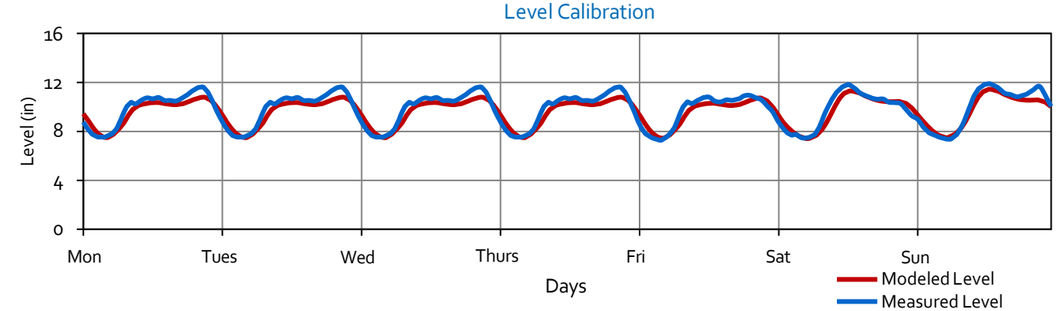
Flow Calibration



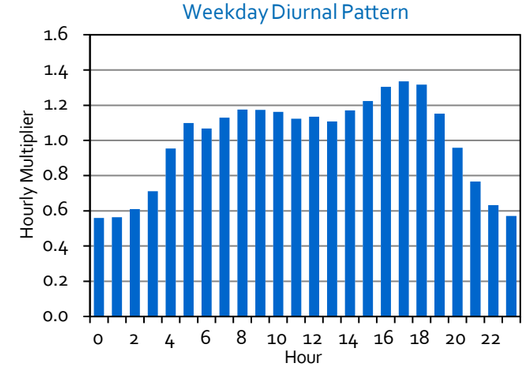
Velocity Calibration



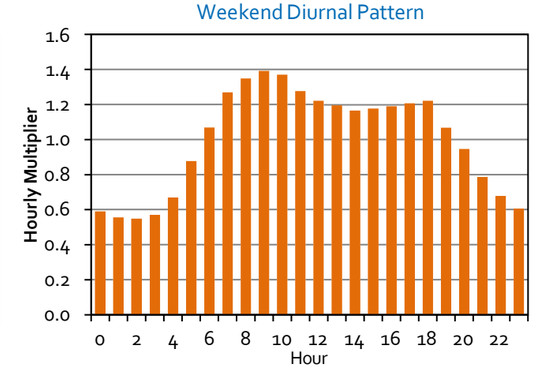
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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Flow Monitoring Site TC-03, Dry Weather Flow Calibration

Location: N MacArthur Dr. n/o Interstate 205
Pipeline Diameter: 24"
City Manhole ID:
Model Pipe ID: CDT-719

Flow Monitor Location

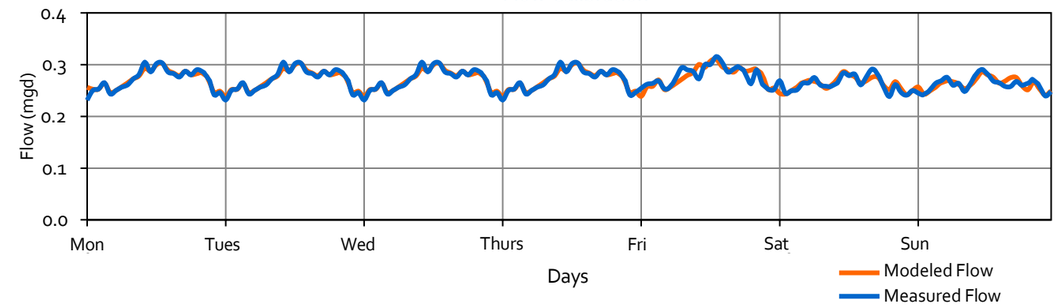
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	0.27	0.30	6.0	0.70	0.27	0.30	5.67	0.84	0.1%	-0.7%	-6.1%	21.0%
Tues.	0.27	0.30	6.0	0.70	0.27	0.30	5.67	0.84	0.1%	-0.7%	-6.1%	21.0%
Wed.	0.27	0.30	6.0	0.70	0.27	0.30	5.67	0.84	0.1%	-0.7%	-6.1%	21.0%
Thur.	0.27	0.30	6.0	0.70	0.27	0.30	5.67	0.84	0.1%	-0.7%	-6.1%	21.0%
Fri.	0.28	0.32	6.0	0.71	0.28	0.31	5.67	0.86	-0.1%	-1.7%	-6.1%	21.1%
Sat.	0.26	0.29	6.0	0.68	0.26	0.29	5.67	0.82	-0.1%	-1.7%	-5.3%	19.3%
Sun.	0.26	0.29	6.0	0.69	0.26	0.29	5.67	0.82	0.1%	-1.7%	-4.8%	18.7%
Summary												
Weekday	0.27	--	6.0	0.70	0.27	--	5.7	0.85	0.0%	--	-6.1%	*21.1%*
Weekend	0.26	--	6.0	0.69	0.26	--	5.7	0.82	0.0%	--	-5.0%	*19.0%*
ADWF[4]	0.27	--	6.0	0.70	0.27	--	5.7	0.84	0.0%	--	-5.8%	*20.5%*

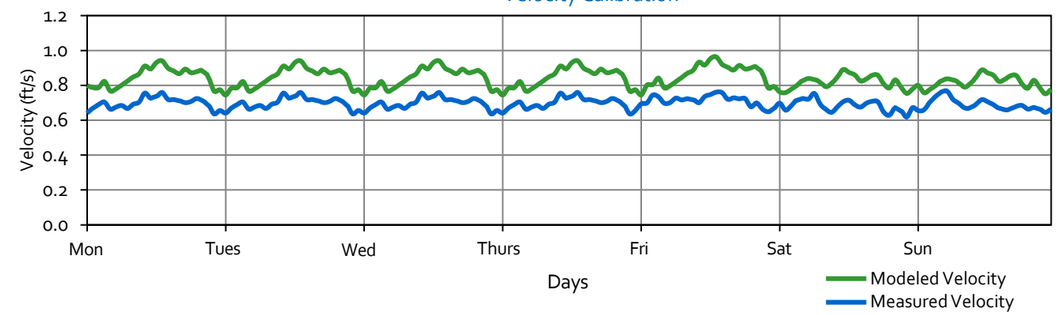
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

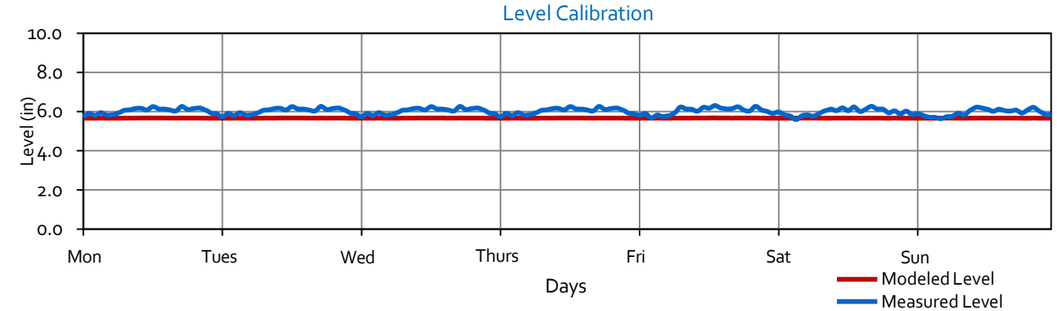
Flow Calibration



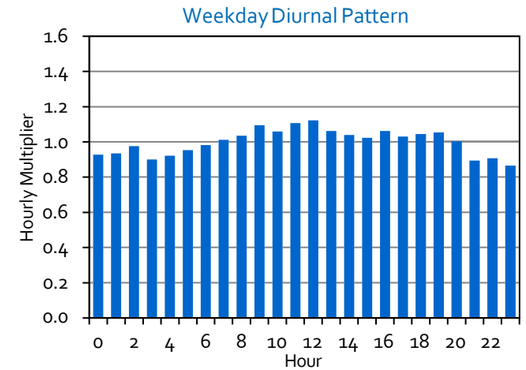
Velocity Calibration



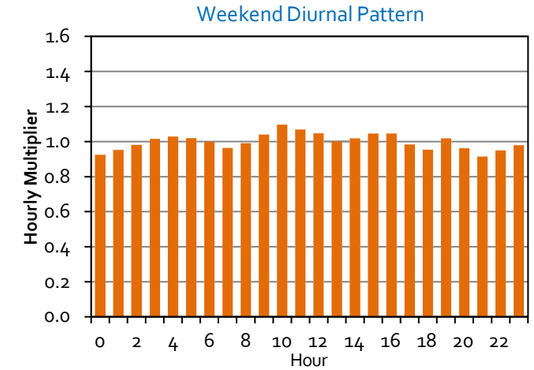
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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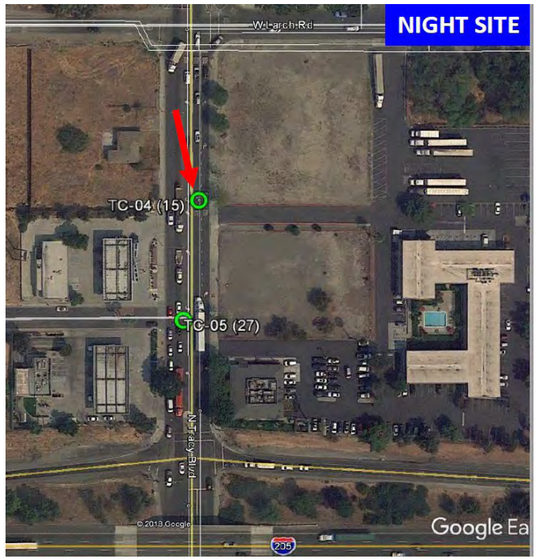
Flow Monitoring Site TC-04, Dry Weather Flow Calibration

Location: N Tracy Blvd. n/o Interstate 205
Pipeline Diameter: 15"
City Manhole ID: 1009
Model Pipe ID: 157

Flow Monitor Location



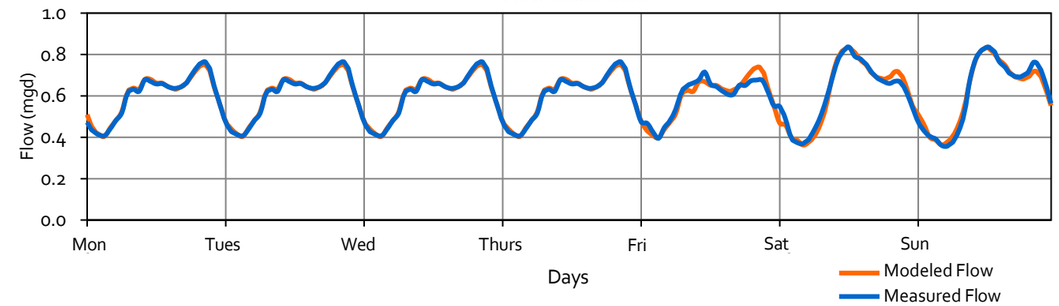
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	0.60	0.76	3.3	4.67	0.60	0.75	4.90	2.65	0.1%	-1.7%	49.9%	-43.3%
Tues.	0.60	0.76	3.3	4.67	0.60	0.75	4.90	2.65	0.1%	-1.7%	49.9%	-43.3%
Wed.	0.60	0.76	3.3	4.67	0.60	0.75	4.90	2.65	0.1%	-1.7%	49.9%	-43.3%
Thur.	0.60	0.76	3.3	4.67	0.60	0.75	4.90	2.65	0.1%	-1.7%	49.9%	-43.3%
Fri.	0.59	0.72	3.3	4.64	0.59	0.74	4.86	2.64	0.1%	3.2%	49.5%	-43.3%
Sat.	0.61	0.84	3.4	4.58	0.61	0.83	4.93	2.65	-0.3%	-0.3%	46.9%	-42.2%
Sun.	0.61	0.84	3.3	4.70	0.61	0.83	4.94	2.65	0.0%	-0.2%	50.8%	-43.6%
Summary												
Weekday	0.60	--	3.3	4.66	0.60	--	4.9	2.65	0.1%	--	49.8%	-43.3%
Weekend	0.61	--	3.3	4.64	0.61	--	4.9	2.65	-0.1%	--	48.8%	-42.9%
ADWF[4]	0.60	--	3.3	4.66	0.60	--	4.9	2.65	0.0%	--	49.5%	-43.2%

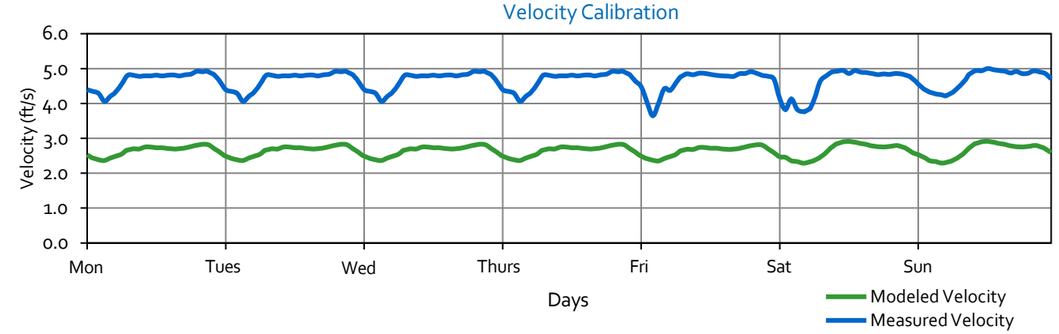
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

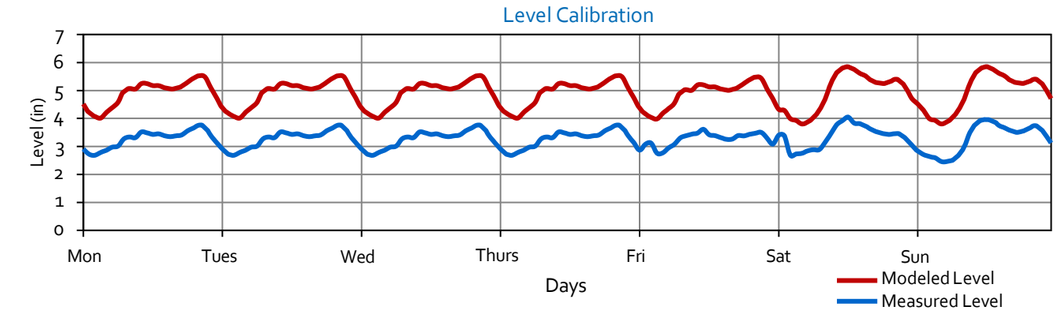
Flow Calibration



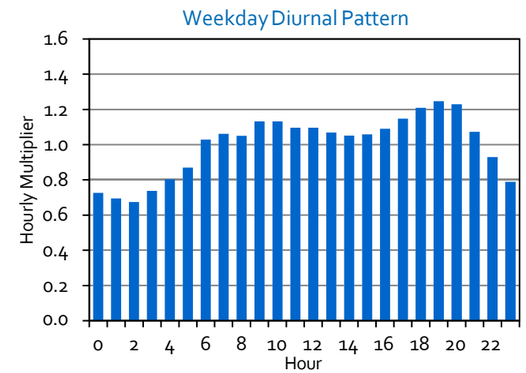
Velocity Calibration



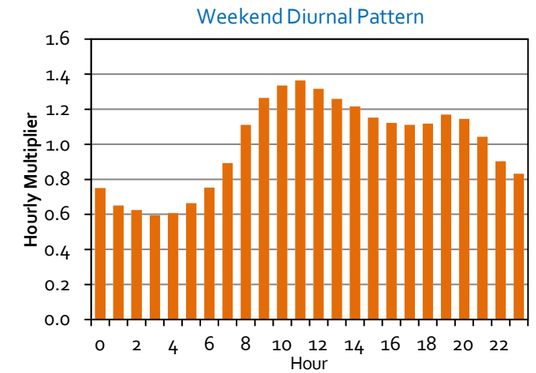
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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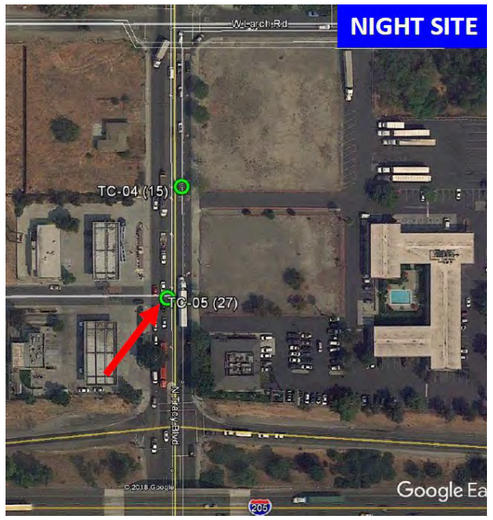
Flow Monitoring Site TC-05, Dry Weather Flow Calibration

Location: N Tracy Blvd. n/o Interstate 205
Pipeline Diameter: 24"
City Manhole ID: 1005
Model Pipe ID: 154

Flow Monitor Location



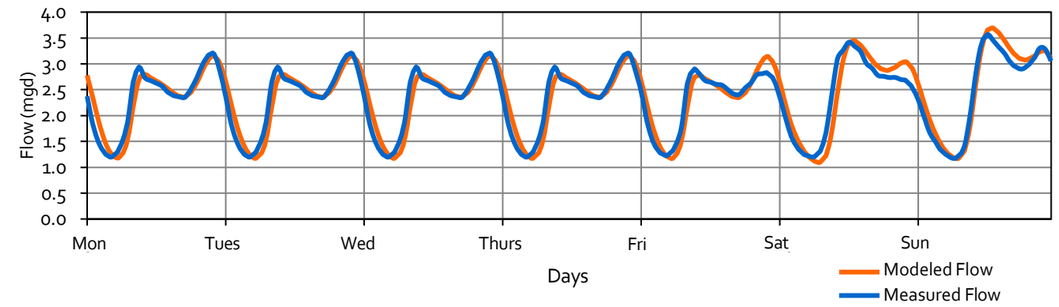
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	2.33	3.19	9.8	2.92	2.33	3.15	8.35	3.64	0.0%	-1.2%	-15.0%	24.7%
Tues.	2.33	3.19	9.8	2.92	2.33	3.15	8.35	3.64	0.0%	-1.2%	-15.0%	24.7%
Wed.	2.33	3.19	9.8	2.92	2.33	3.15	8.35	3.64	0.0%	-1.2%	-15.0%	24.7%
Thur.	2.33	3.19	9.8	2.92	2.33	3.15	8.35	3.64	0.0%	-1.2%	-15.0%	24.7%
Fri.	2.30	2.90	9.8	2.92	2.32	3.14	8.32	3.63	0.5%	8.3%	-14.8%	24.5%
Sat.	2.40	3.42	10.0	2.90	2.44	3.45	8.49	3.66	1.6%	0.8%	-15.3%	26.3%
Sun.	2.50	3.57	10.2	2.95	2.59	3.69	8.77	3.73	3.5%	3.4%	-14.1%	26.6%
Summary												
Weekday	2.33	--	9.8	2.92	2.33	--	8.3	3.64	0.1%	--	-15.0%	24.6%
Weekend	2.45	--	10.1	2.93	2.51	--	8.6	3.70	2.6%	--	-14.7%	26.4%
ADWF[4]	2.36	--	9.9	2.92	2.38	--	8.4	3.66	0.8%	--	-14.9%	25.2%

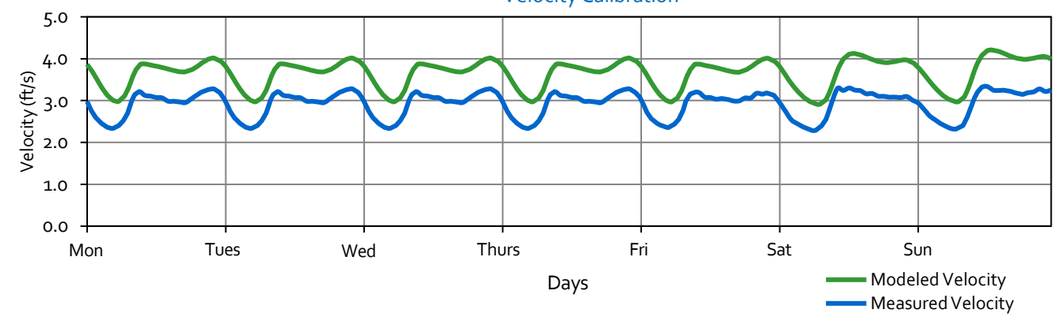
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

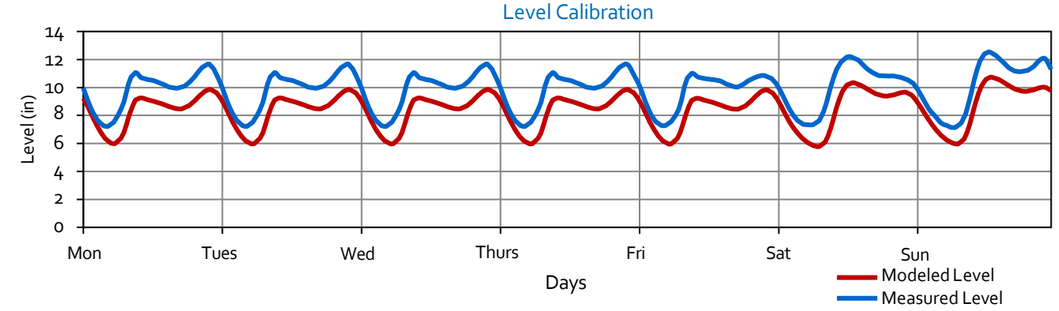
Flow Calibration



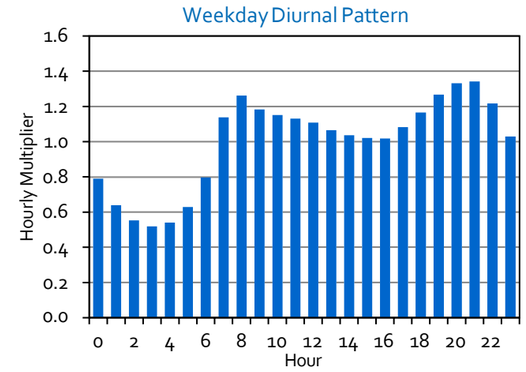
Velocity Calibration



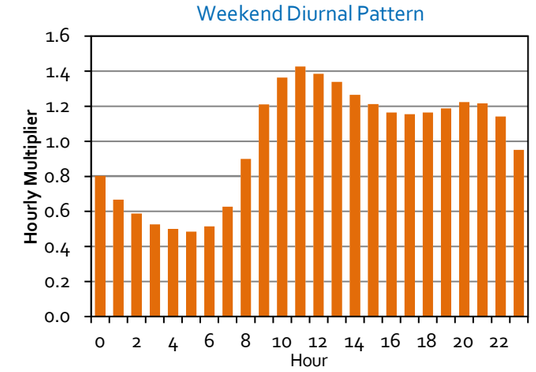
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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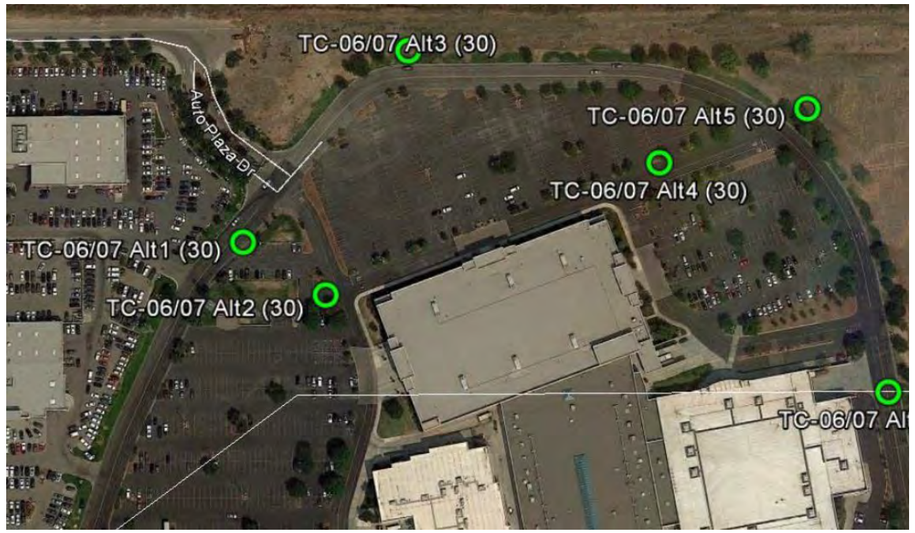
Flow Monitoring Site TC-06, Dry Weather Flow Calibration

Location: West Valley Mall n/o Auto Plaza Dr.
Pipeline Diameter: 29.25"
City Manhole ID: 3378
Model Pipe ID: CDT-263

Flow Monitor Location



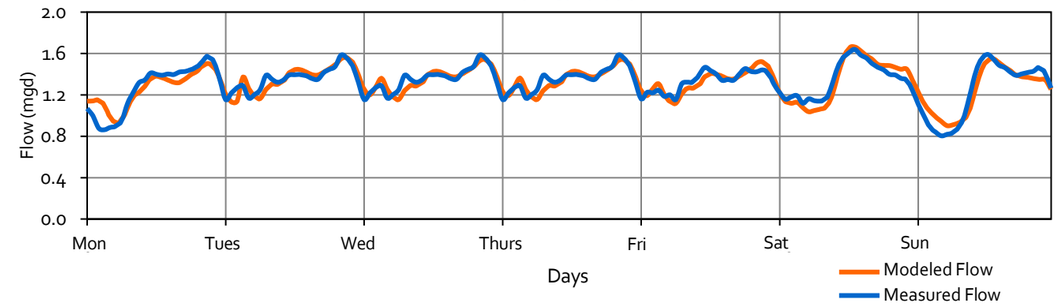
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	1.26	1.58	7.8	1.93	1.26	1.50	7.44	2.04	0.0%	-4.7%	-4.7%	5.9%
Tues.	1.35	1.59	8.6	2.01	1.35	1.56	7.71	2.09	-0.1%	-1.5%	-9.8%	4.0%
Wed.	1.35	1.59	8.6	2.01	1.35	1.56	7.71	2.09	-0.1%	-1.5%	-9.8%	4.0%
Thur.	1.35	1.59	8.6	2.01	1.35	1.56	7.71	2.09	-0.1%	-1.5%	-9.8%	4.0%
Fri.	1.33	1.47	8.0	1.98	1.33	1.52	7.64	2.08	-0.2%	3.7%	-4.6%	5.0%
Sat.	1.35	1.64	8.0	1.99	1.34	1.66	7.67	2.08	-0.2%	1.5%	-4.6%	4.8%
Sun.	1.24	1.59	7.7	1.92	1.24	1.55	7.37	2.03	0.4%	-2.7%	-4.3%	6.0%
Summary												
Weekday	1.33	--	8.3	1.99	1.33	--	7.6	2.08	-0.1%	--	-7.8%	4.6%
Weekend	1.29	--	7.9	1.95	1.29	--	7.5	2.06	0.1%	--	-4.5%	5.4%
ADWF[4]	1.32	--	8.2	1.98	1.32	--	7.6	2.07	0.0%	--	-6.9%	4.8%

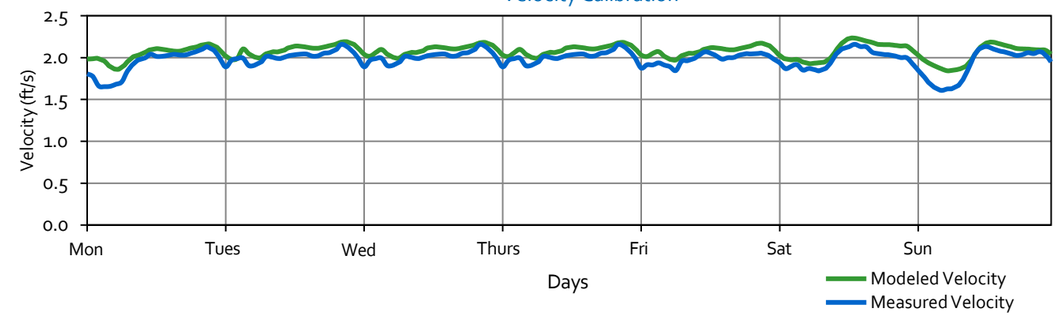
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

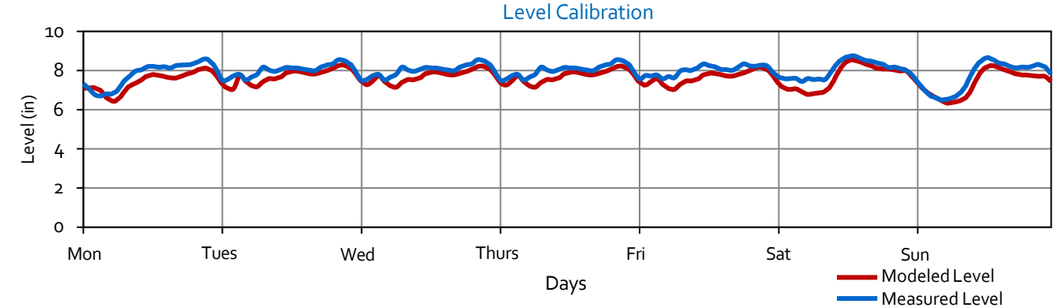
Flow Calibration



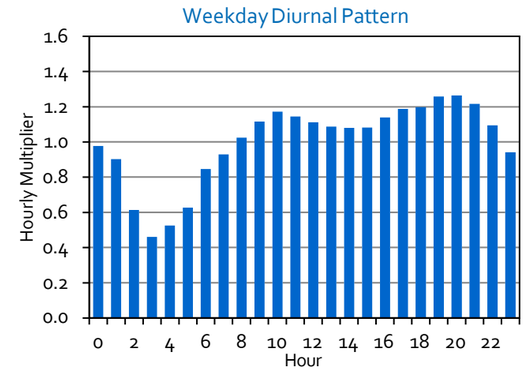
Velocity Calibration



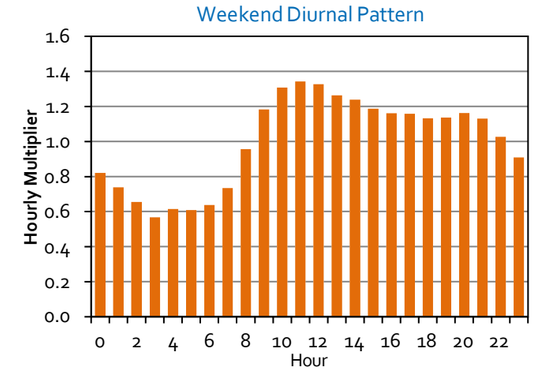
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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Flow Monitoring Site TC-07, Dry Weather Flow Calibration

Location: W Byrin Rd. e/o Von Sosten Rd.
Pipeline Diameter: 20.25"
City Manhole ID: 3362
Model Pipe ID: CDT-231

Flow Monitor Location

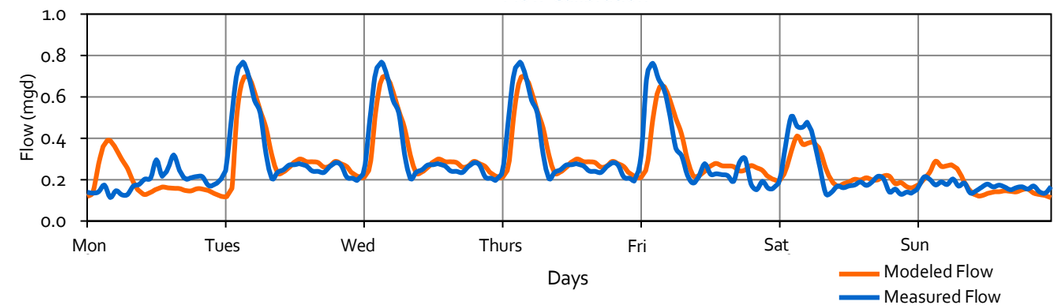
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	0.19	0.32	7.7	0.37	0.19	0.39	4.52	0.76	0.6%	21.9%	-41.6%	105.7%
Tues.	0.34	0.77	8.6	0.62	0.34	0.70	5.23	1.08	-0.9%	-9.2%	-39.0%	76.0%
Wed.	0.34	0.77	8.6	0.62	0.34	0.70	5.23	1.08	-0.9%	-9.2%	-39.0%	76.0%
Thur.	0.34	0.77	8.6	0.62	0.34	0.70	5.23	1.08	-0.9%	-9.2%	-39.0%	76.0%
Fri.	0.32	0.76	7.9	0.61	0.32	0.65	5.14	1.06	0.5%	-14.8%	-34.7%	73.2%
Sat.	0.24	0.51	7.9	0.46	0.24	0.41	4.83	0.88	1.3%	-18.8%	-38.4%	91.0%
Sun.	0.17	0.21	7.1	0.38	0.17	0.29	4.42	0.73	3.4%	35.8%	-37.6%	89.5%
Summary												
Weekday	0.31	--	8.3	0.57	0.31	--	5.1	1.01	-0.4%	--	*-38.6%*	*79.2%*
Weekend	0.20	--	7.5	0.42	0.21	--	4.6	0.80	2.1%	--	*-38.0%*	*90.4%*
ADWF[4]	0.28	--	8.0	0.52	0.28	--	4.9	0.95	0.1%	--	*-38.5%*	*81.8%*

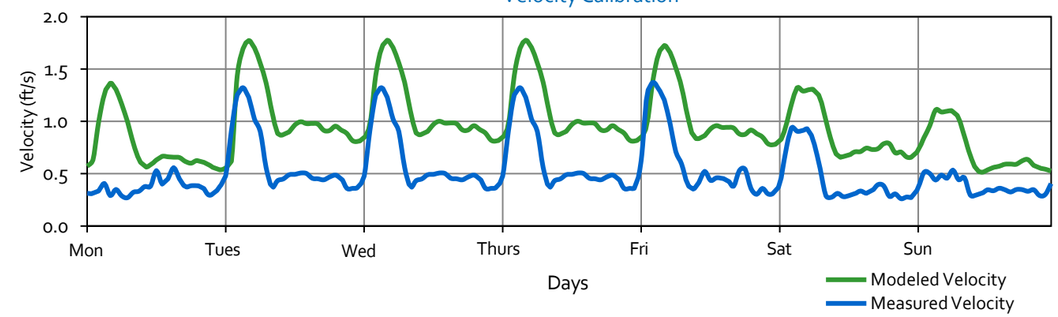
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

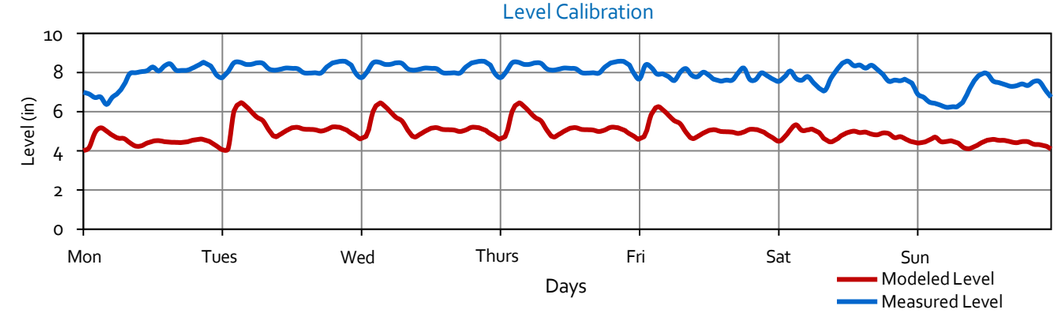
Flow Calibration



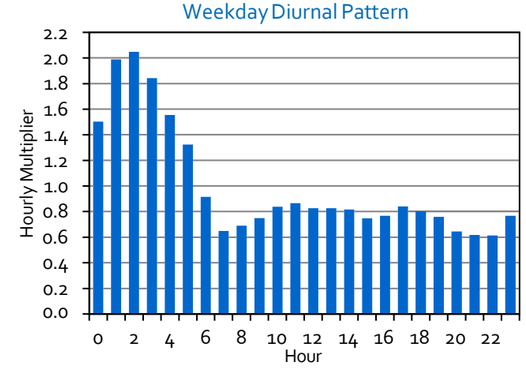
Velocity Calibration



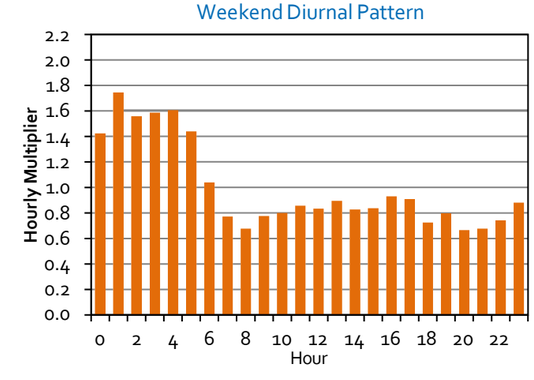
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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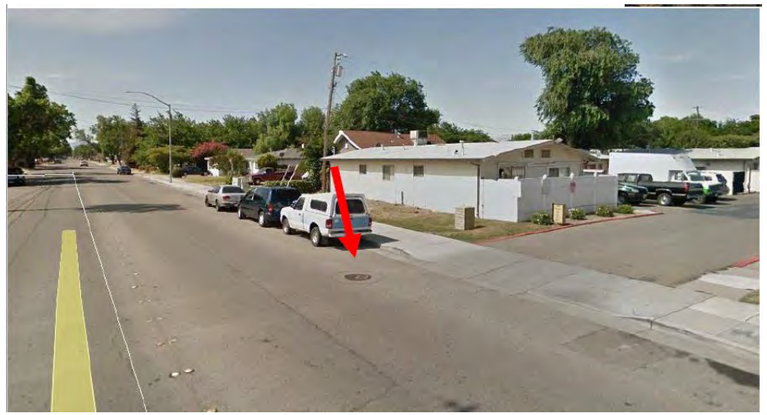
Flow Monitoring Site TC-08, Dry Weather Flow Calibration

Location: Holly Dr. b/w E 22nd St. & W Grant Line Rd.
Pipeline Diameter: 18"
City Manhole ID: 752
Model Pipe ID: 450

Flow Monitor Location



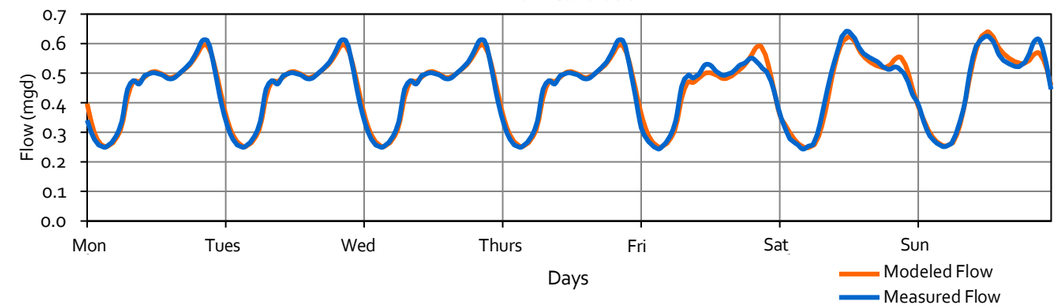
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	0.44	0.61	4.7	2.24	0.44	0.59	4.49	2.33	0.1%	-3.0%	-5.0%	3.9%
Tues.	0.44	0.61	4.7	2.24	0.44	0.59	4.49	2.33	0.1%	-3.0%	-5.0%	3.9%
Wed.	0.44	0.61	4.7	2.24	0.44	0.59	4.49	2.33	0.1%	-3.0%	-5.0%	3.9%
Thur.	0.44	0.61	4.7	2.24	0.44	0.59	4.49	2.33	0.1%	-3.0%	-5.0%	3.9%
Fri.	0.44	0.55	4.6	2.20	0.44	0.59	4.47	2.32	0.0%	6.8%	-3.1%	5.3%
Sat.	0.45	0.64	4.7	2.20	0.45	0.62	4.51	2.33	-0.4%	-2.5%	-3.7%	5.8%
Sun.	0.47	0.63	4.7	2.22	0.46	0.64	4.56	2.35	-0.1%	2.4%	-3.7%	6.1%
Summary												
Weekday	0.44	--	4.7	2.23	0.44	--	4.5	2.32	0.1%	--	-4.6%	4.2%
Weekend	0.46	--	4.7	2.21	0.46	--	4.5	2.34	-0.3%	--	-3.7%	6.0%
ADWF[4]	0.45	--	4.7	2.23	0.45	--	4.5	2.33	0.0%	--	-4.4%	4.7%

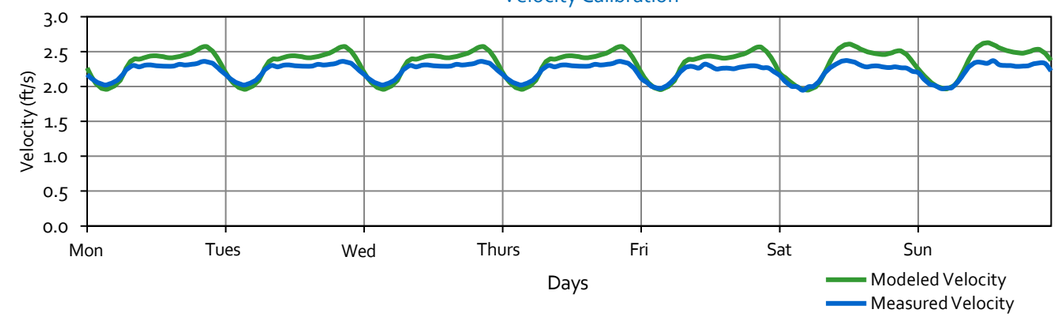
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

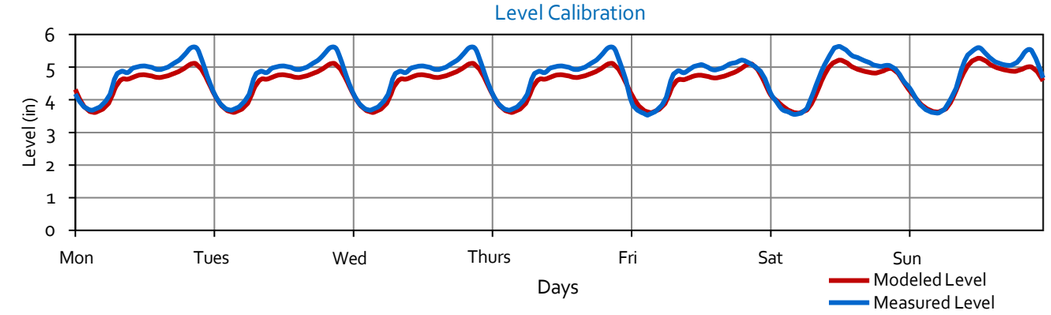
Flow Calibration



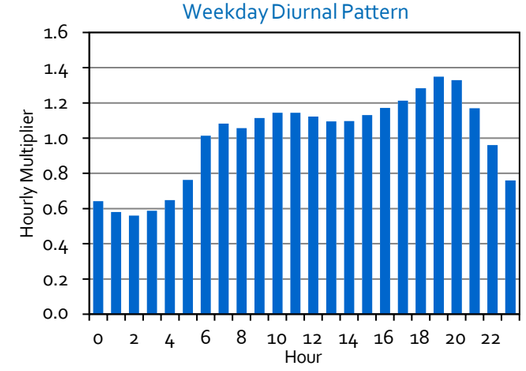
Velocity Calibration



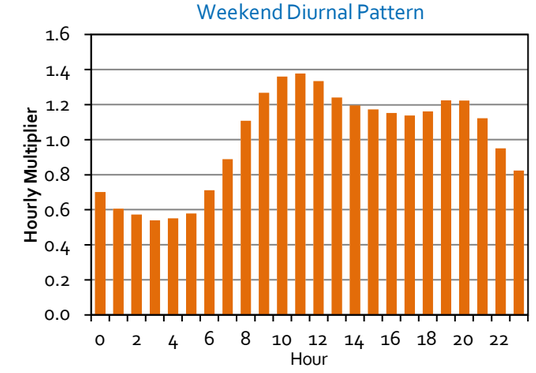
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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Flow Monitoring Site TC-09, Dry Weather Flow Calibration

Location: Summergate Dr. & Westbury Ct.
Pipeline Diameter: 18"
City Manhole ID: 951
Model Pipe ID: 237

Flow Monitor Location

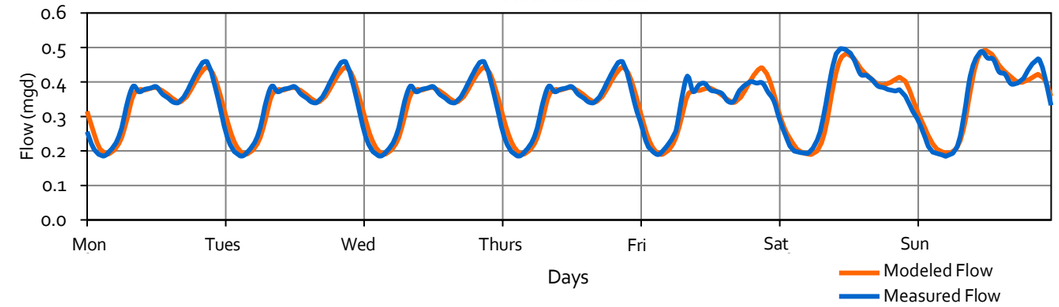
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	0.33	0.46	5.3	1.19	0.33	0.44	5.51	1.11	0.0%	-3.0%	4.6%	-6.9%
Tues.	0.33	0.46	5.3	1.19	0.33	0.44	5.51	1.11	0.0%	-3.0%	4.6%	-6.9%
Wed.	0.33	0.46	5.3	1.19	0.33	0.44	5.51	1.11	0.0%	-3.0%	4.6%	-6.9%
Thur.	0.33	0.46	5.3	1.19	0.33	0.44	5.51	1.11	0.0%	-3.0%	4.6%	-6.9%
Fri.	0.33	0.42	5.2	1.20	0.33	0.44	5.49	1.11	-0.1%	5.6%	4.9%	-7.6%
Sat.	0.35	0.50	5.3	1.21	0.35	0.48	5.58	1.12	-0.1%	-3.2%	4.7%	-7.3%
Sun.	0.35	0.49	5.4	1.19	0.35	0.49	5.64	1.13	0.0%	0.1%	3.7%	-5.5%
Summary												
Weekday	0.33	--	5.3	1.19	0.33	--	5.5	1.11	0.0%	--	4.7%	-7.0%
Weekend	0.35	--	5.4	1.20	0.35	--	5.6	1.12	-0.1%	--	4.2%	-6.4%
ADWF[4]	0.34	--	5.3	1.19	0.34	--	5.5	1.11	-0.1%	--	4.5%	-6.8%

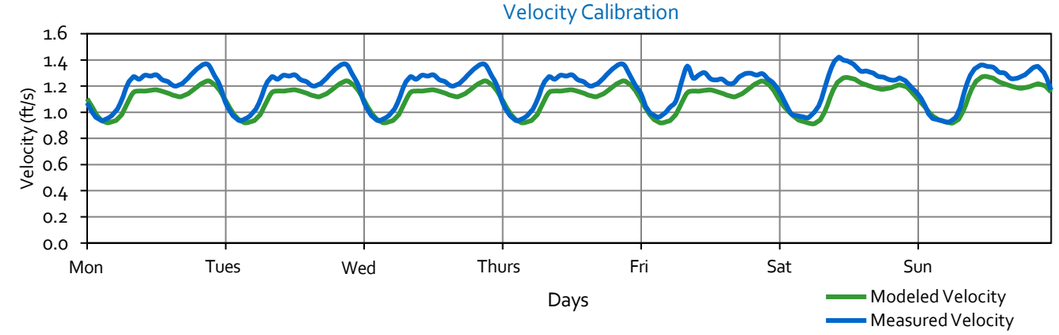
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

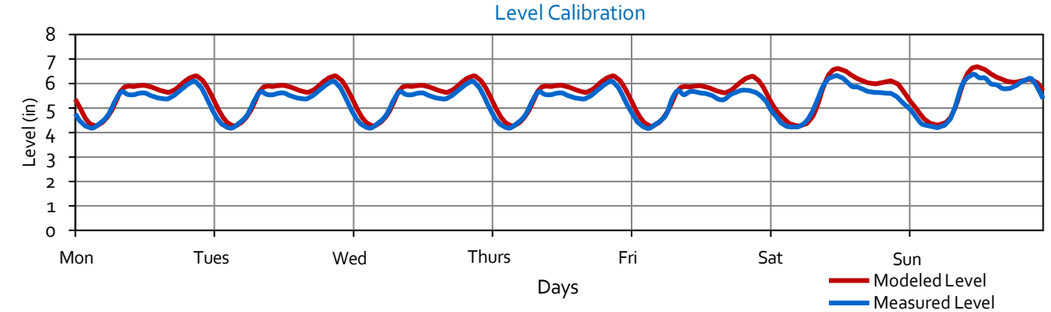
Flow Calibration



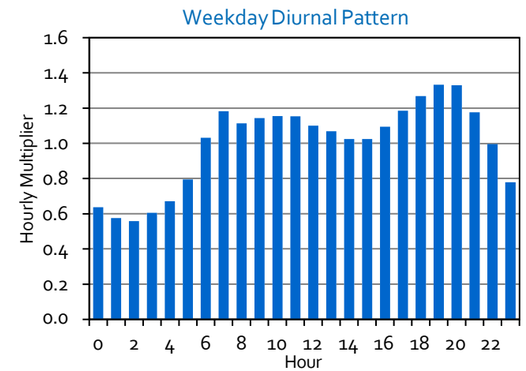
Velocity Calibration



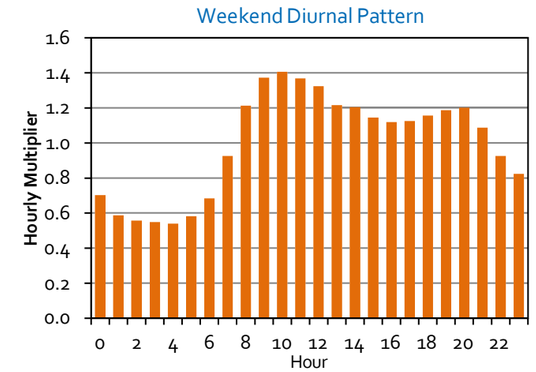
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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Flow Monitoring Site TC-10, Dry Weather Flow Calibration

Location: N Corral Hollow Rd. b/w Crohn Rd. & W 11th St.
Pipeline Diameter: 24"
City Manhole ID: 1819
Model Pipe ID: 861

Flow Monitor Location

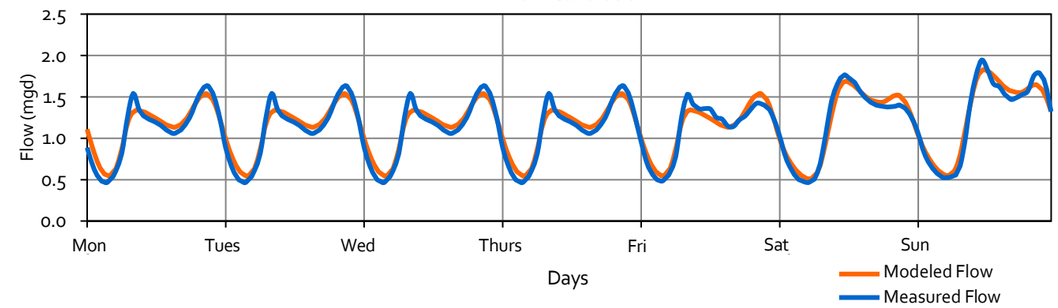
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	1.10	1.63	8.5	1.64	1.13	1.53	8.00	1.87	2.3%	-6.2%	-5.8%	13.6%
Tues.	1.10	1.63	8.5	1.64	1.13	1.53	8.00	1.87	2.3%	-6.2%	-5.8%	13.6%
Wed.	1.10	1.63	8.5	1.64	1.13	1.53	8.00	1.87	2.3%	-6.2%	-5.8%	13.6%
Thur.	1.10	1.63	8.5	1.64	1.13	1.53	8.00	1.87	2.3%	-6.2%	-5.8%	13.6%
Fri.	1.12	1.53	8.6	1.64	1.13	1.53	8.00	1.87	0.8%	-0.1%	-7.0%	13.6%
Sat.	1.18	1.77	8.8	1.65	1.19	1.68	8.16	1.89	1.0%	-4.9%	-7.4%	14.2%
Sun.	1.27	1.95	9.2	1.67	1.29	1.82	8.48	1.94	1.2%	-6.4%	-8.1%	15.7%
Summary												
Weekday	1.11	--	8.5	1.64	1.13	--	8.0	1.87	2.0%	--	-6.0%	*13.6%*
Weekend	1.23	--	9.0	1.66	1.24	--	8.3	1.91	1.1%	--	-7.8%	*15.0%*
ADWF[4]	1.14	--	8.7	1.65	1.16	--	8.1	1.88	1.7%	--	-6.6%	*14.0%*

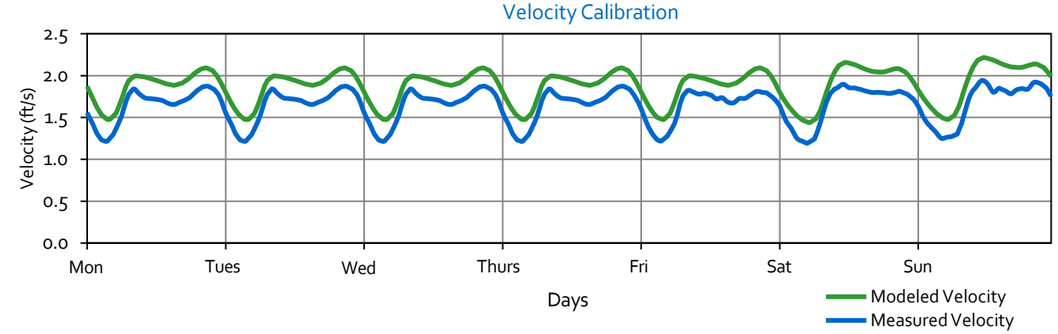
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

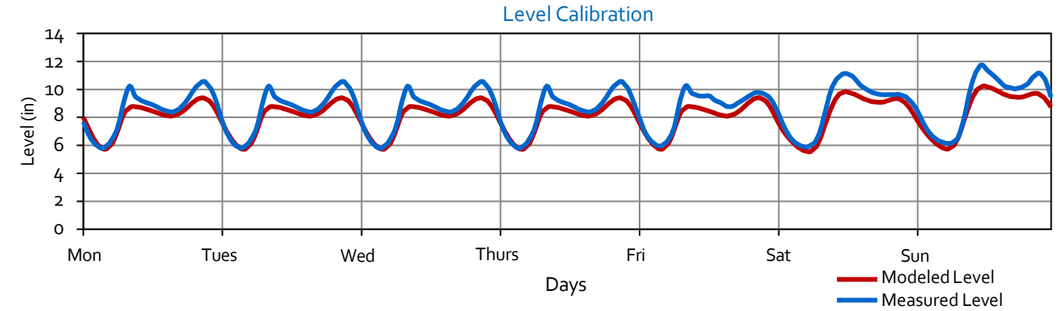
Flow Calibration



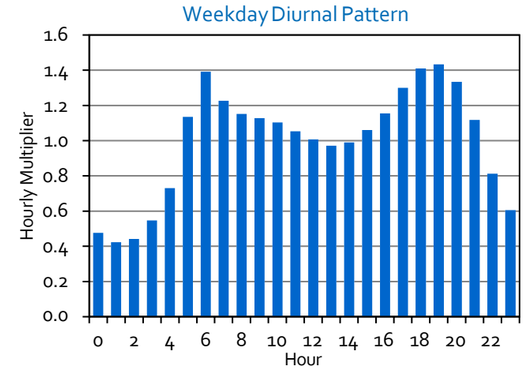
Velocity Calibration



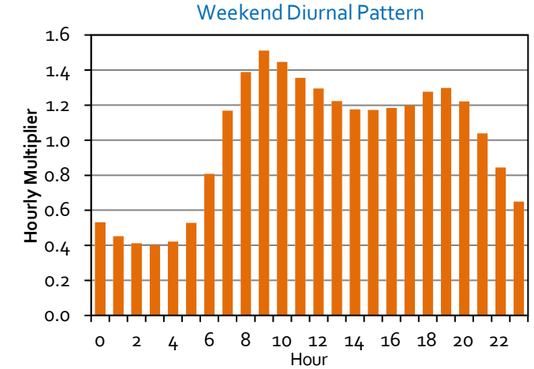
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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Flow Monitoring Site TC-11, Dry Weather Flow Calibration

Location: Sienna Park Dr. & Sycamore Pkwy.
Pipeline Diameter: 15"
City Manhole ID: 2955
Model Pipe ID: 3029

Flow Monitor Location

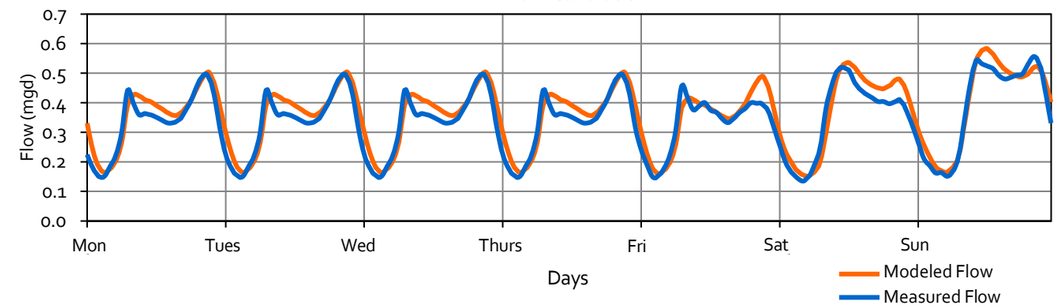
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	0.33	0.49	2.9	3.06	0.36	0.50	3.16	2.85	6.6%	2.5%	10.0%	-6.6%
Tues.	0.33	0.49	2.9	3.06	0.36	0.50	3.16	2.85	6.6%	2.5%	10.0%	-6.6%
Wed.	0.33	0.49	2.9	3.06	0.36	0.50	3.16	2.85	6.6%	2.5%	10.0%	-6.6%
Thur.	0.33	0.49	2.9	3.06	0.36	0.50	3.16	2.85	6.6%	2.5%	10.0%	-6.6%
Fri.	0.33	0.46	2.9	3.03	0.35	0.49	3.11	2.83	5.2%	7.3%	8.7%	-6.6%
Sat.	0.35	0.52	2.9	3.08	0.37	0.54	3.20	2.87	6.6%	3.1%	9.8%	-6.8%
Sun.	0.39	0.56	3.1	3.14	0.40	0.58	3.33	2.94	4.1%	4.7%	8.3%	-6.6%
Summary												
Weekday	0.33	--	2.9	3.05	0.35	--	3.1	2.85	6.3%	--	9.7%	-6.6%
Weekend	0.37	--	3.0	3.11	0.39	--	3.3	2.90	5.3%	--	9.0%	-6.7%
ADWF[4]	0.34	--	2.9	3.07	0.36	--	3.2	2.86	6.0%	--	9.5%	-6.6%

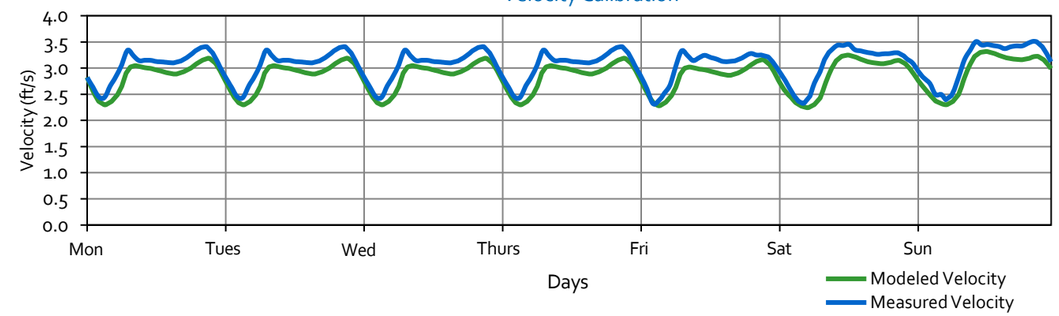
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

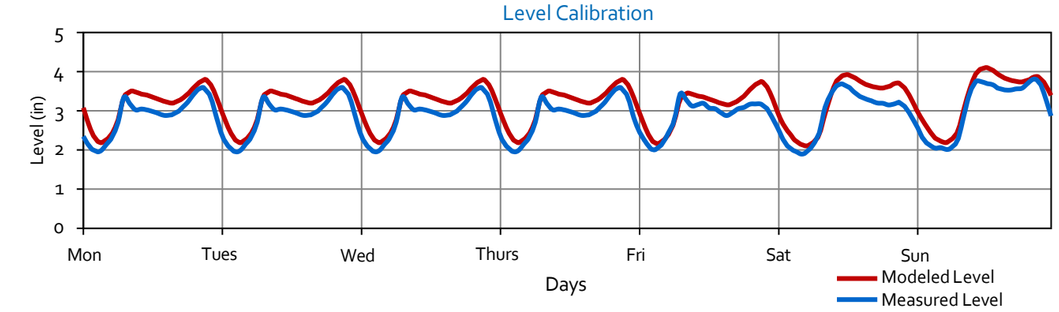
Flow Calibration



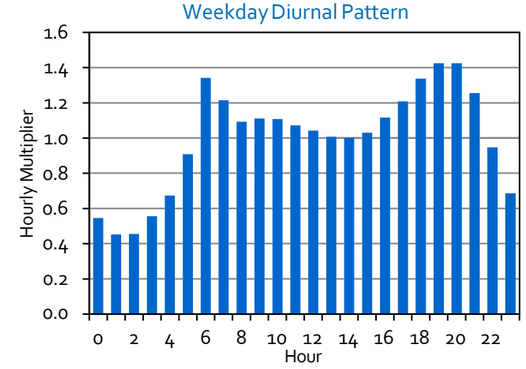
Velocity Calibration



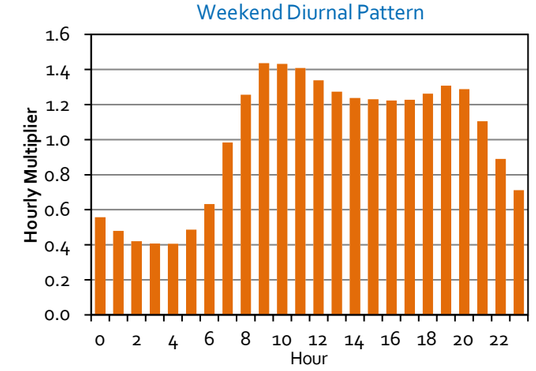
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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Flow Monitoring Site TC-12, Dry Weather Flow Calibration

Location: Leamon St. & Avila St.
Pipeline Diameter: 20.75"
City Manhole ID: 2382
Model Pipe ID: 2324

Flow Monitor Location

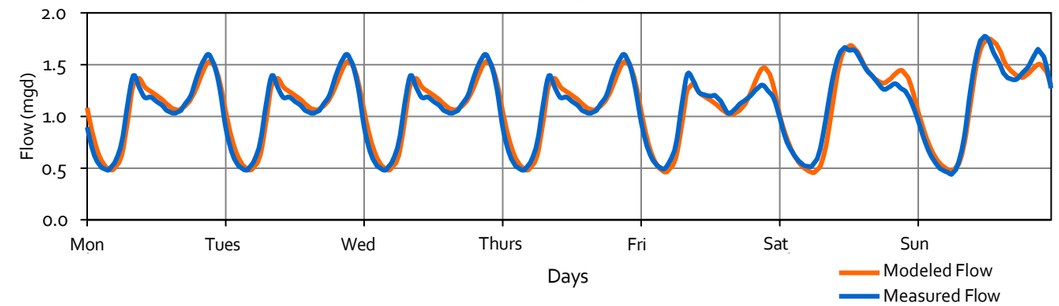
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	1.06	1.60	4.3	4.54	1.07	1.53	5.57	3.16	0.8%	-4.4%	29.2%	-30.4%
Tues.	1.06	1.60	4.3	4.54	1.07	1.53	5.57	3.16	0.8%	-4.4%	29.2%	-30.4%
Wed.	1.06	1.60	4.3	4.54	1.07	1.53	5.57	3.16	0.8%	-4.4%	29.2%	-30.4%
Thur.	1.06	1.60	4.3	4.54	1.07	1.53	5.57	3.16	0.8%	-4.4%	29.2%	-30.4%
Fri.	1.04	1.41	4.2	4.54	1.03	1.47	5.46	3.12	-0.6%	4.1%	28.5%	-31.2%
Sat.	1.14	1.66	4.5	4.59	1.13	1.68	5.69	3.18	-0.5%	1.1%	27.4%	-30.6%
Sun.	1.17	1.76	4.5	4.58	1.18	1.75	5.81	3.22	0.2%	-0.9%	28.3%	-29.7%
Summary												
Weekday	1.06	--	4.3	4.54	1.06	--	5.5	3.15	0.5%	--	*29.1%*	*-30.5%*
Weekend	1.16	--	4.5	4.59	1.15	--	5.7	3.20	-0.2%	--	*27.9%*	*-30.2%*
ADWF[4]	1.09	--	4.4	4.55	1.09	--	5.6	3.17	0.3%	--	*28.7%*	*-30.4%*

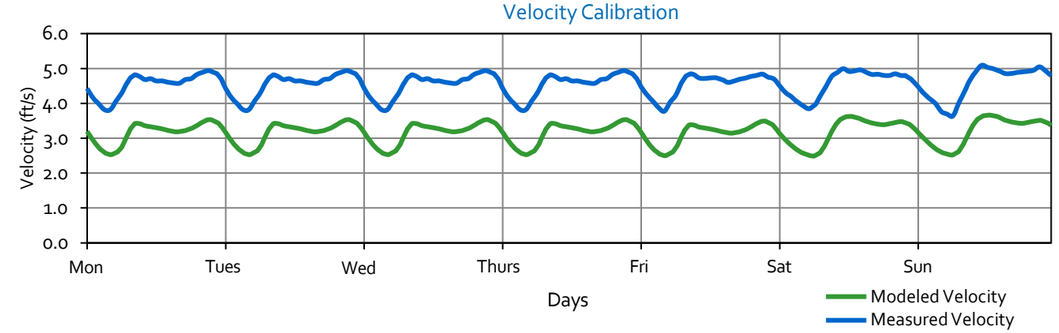
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

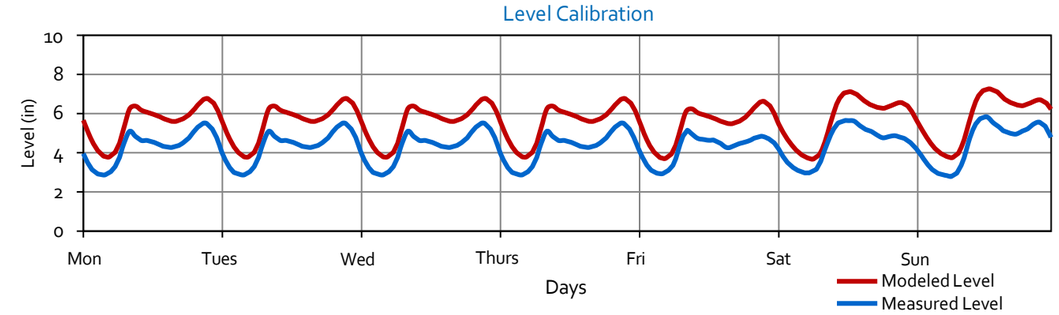
Flow Calibration



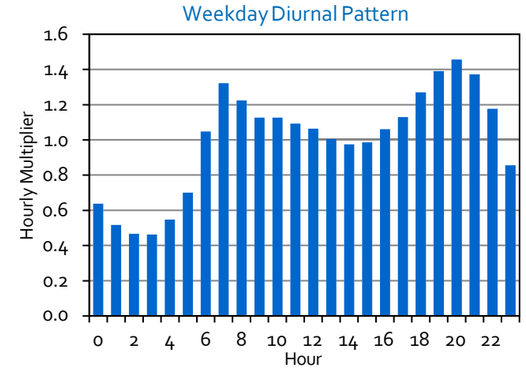
Velocity Calibration



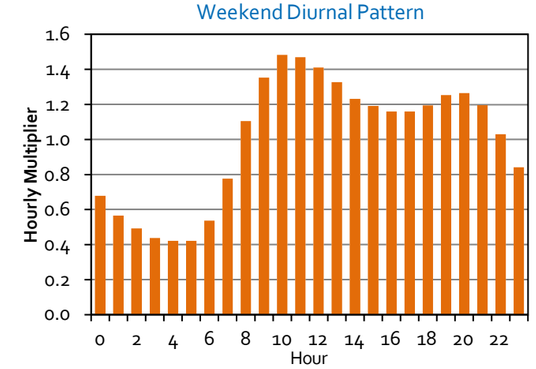
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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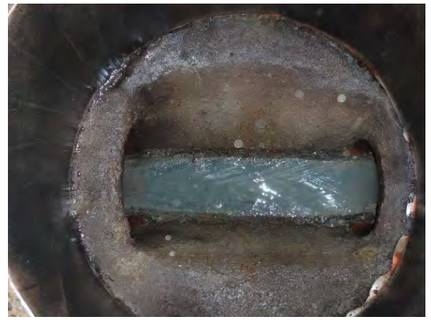
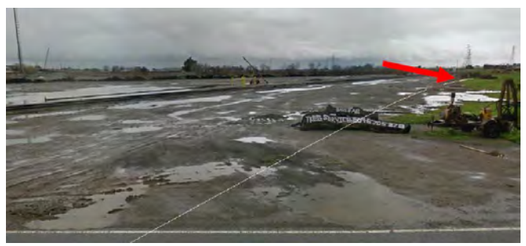
Flow Monitoring Site TC-13, Dry Weather Flow Calibration

Location: Along UPRR, e/o N MacArthur Dr & Krider Ct.
Pipeline Diameter: 18"
City Manhole ID: 1306
Model Pipe ID: 993

Flow Monitor Location





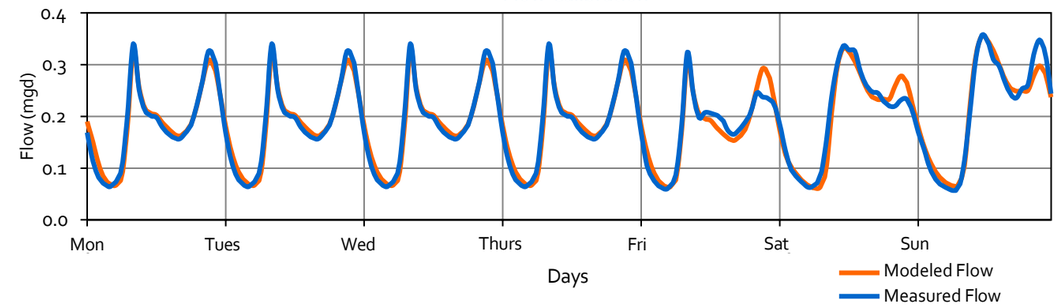
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	0.19	0.34	3.3	1.21	0.19	0.33	3.20	1.30	0.6%	-3.8%	-3.7%	7.1%
Tues.	0.19	0.34	3.3	1.21	0.19	0.33	3.20	1.30	0.6%	-3.8%	-3.7%	7.1%
Wed.	0.19	0.34	3.3	1.21	0.19	0.33	3.20	1.30	0.6%	-3.8%	-3.7%	7.1%
Thur.	0.19	0.34	3.3	1.21	0.19	0.33	3.20	1.30	0.6%	-3.8%	-3.7%	7.1%
Fri.	0.18	0.32	3.3	1.17	0.18	0.31	3.13	1.27	0.8%	-4.1%	-5.1%	9.0%
Sat.	0.20	0.34	3.4	1.24	0.20	0.33	3.26	1.32	-0.5%	-1.1%	-5.2%	6.6%
Sun.	0.22	0.36	3.5	1.29	0.21	0.36	3.36	1.36	-0.3%	-0.3%	-2.9%	5.4%
Summary												
Weekday	0.18	--	3.3	1.20	0.19	--	3.2	1.29	0.6%	--	-4.0%	7.5%
Weekend	0.21	--	3.4	1.26	0.21	--	3.3	1.34	-0.4%	--	-4.0%	6.0%
ADWF[4]	0.19	--	3.4	1.22	0.19	--	3.2	1.31	0.3%	--	-4.0%	7.0%

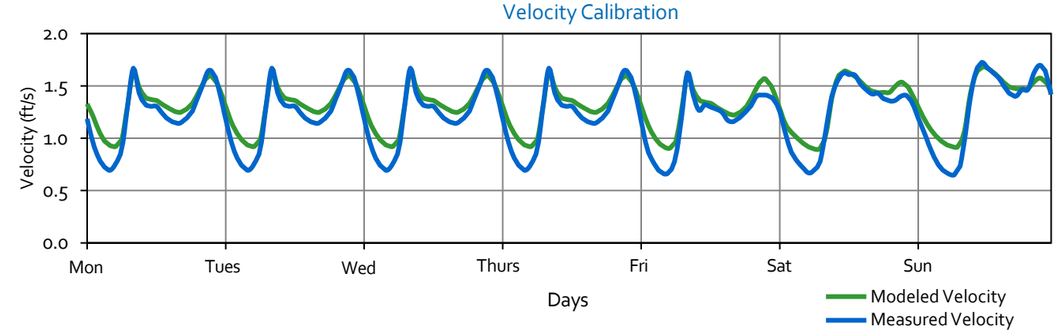
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

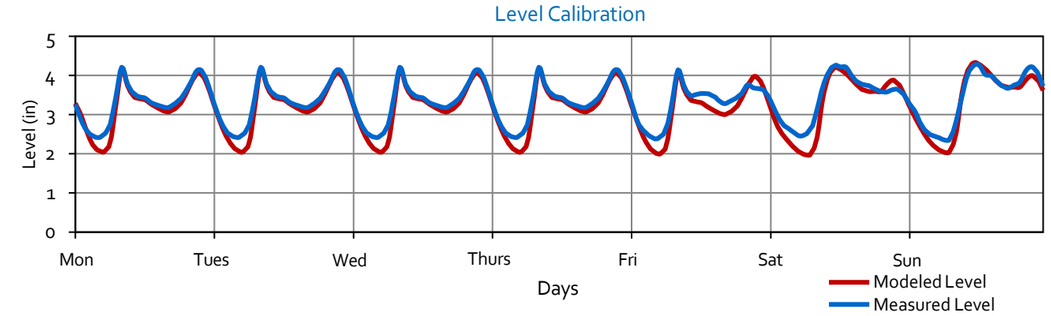
Flow Calibration



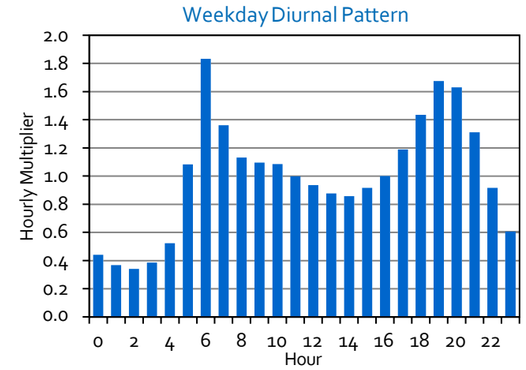
Velocity Calibration



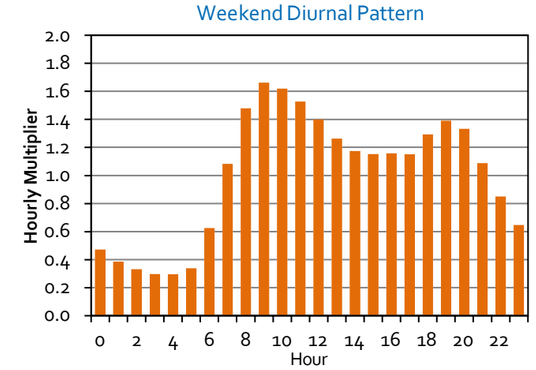
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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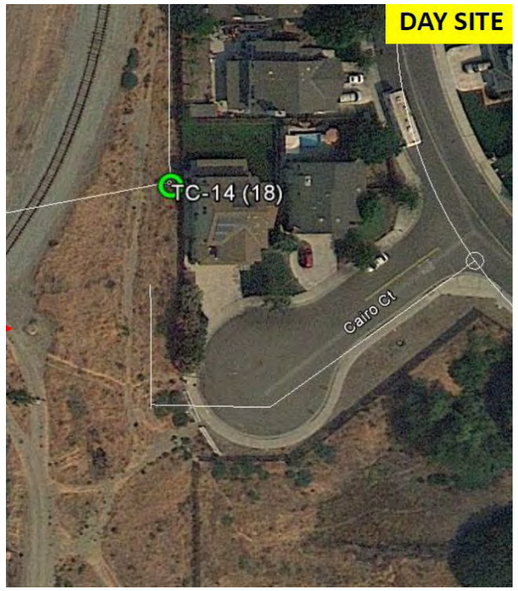
Flow Monitoring Site TC-14, Dry Weather Flow Calibration

Location: e/o De Bord Dr. & Cairo Ct.
Pipeline Diameter: 18"
City Manhole ID: 805
Model Pipe ID: 1630

Flow Monitor Location



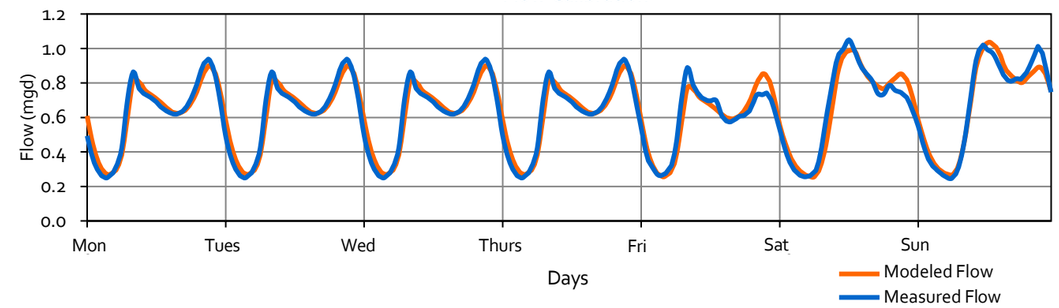
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	0.62	0.94	6.0	1.86	0.63	0.90	5.68	1.97	0.6%	-4.2%	-5.9%	5.7%
Tues.	0.62	0.94	6.0	1.86	0.63	0.90	5.68	1.97	0.6%	-4.2%	-5.9%	5.7%
Wed.	0.62	0.94	6.0	1.86	0.63	0.90	5.68	1.97	0.6%	-4.2%	-5.9%	5.7%
Thur.	0.62	0.94	6.0	1.86	0.63	0.90	5.68	1.97	0.6%	-4.2%	-5.9%	5.7%
Fri.	0.59	0.89	6.1	1.76	0.60	0.85	5.54	1.94	0.8%	-4.2%	-9.7%	10.0%
Sat.	0.66	1.05	6.4	1.78	0.66	0.99	5.78	1.98	0.2%	-5.9%	-9.0%	11.1%
Sun.	0.69	1.02	6.4	1.85	0.69	1.03	5.92	2.01	0.3%	1.5%	-6.8%	8.7%
Summary												
Weekday	0.62	--	6.1	1.84	0.62	--	5.7	1.96	0.7%	--	-6.7%	6.5%
Weekend	0.67	--	6.4	1.81	0.67	--	5.9	1.99	0.2%	--	-7.9%	9.9%
ADWF[4]	0.63	--	6.1	1.84	0.64	--	5.7	1.97	0.5%	--	-7.1%	7.5%

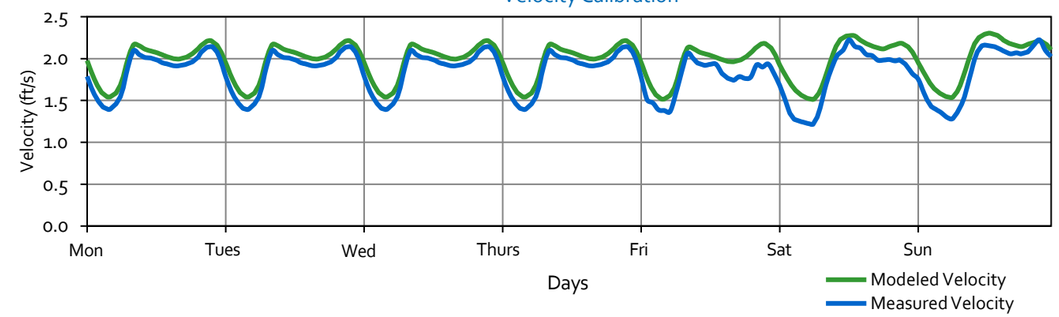
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

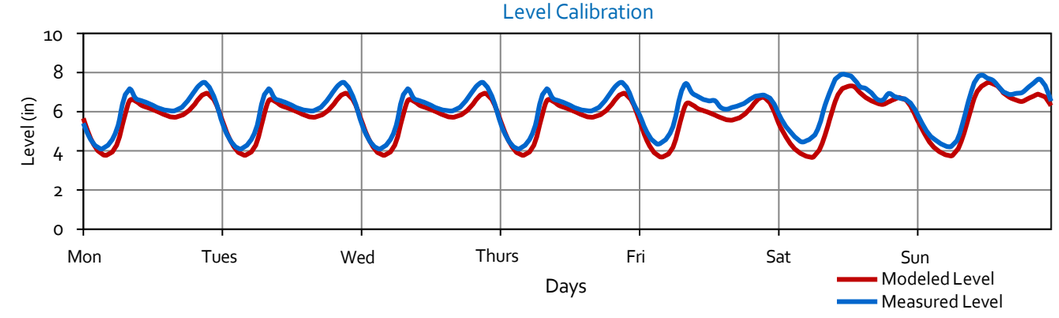
Flow Calibration



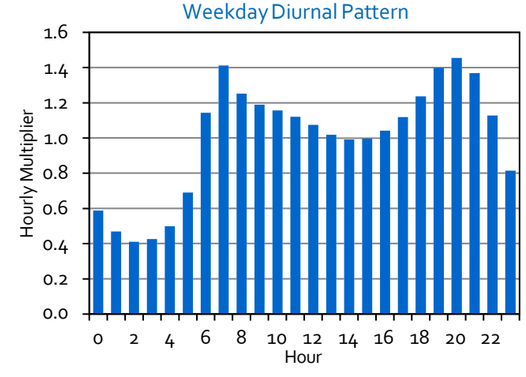
Velocity Calibration



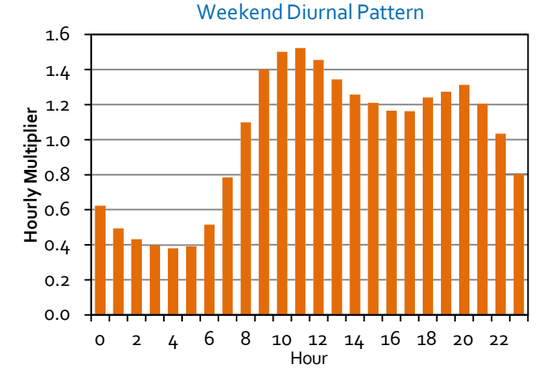
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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Flow Monitoring Site TC-15, Dry Weather Flow Calibration

Location: N Corral Hollow Rd. & Alegre Dr.
Pipeline Diameter: 21.5"
City Manhole ID: 2838
Model Pipe ID: 3608

Flow Monitor Location

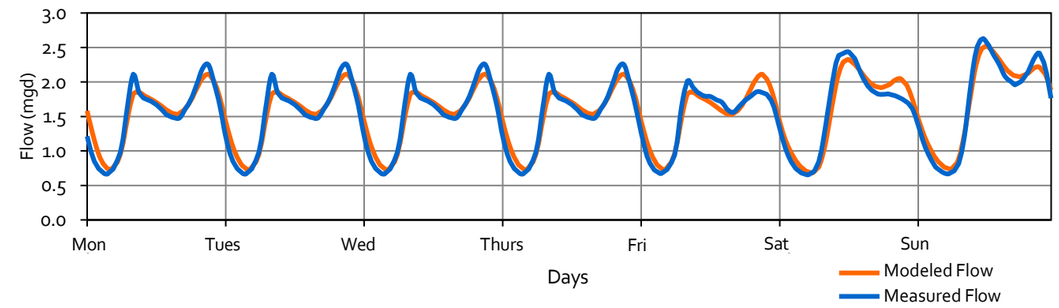
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	1.51	2.25	7.1	3.11	1.53	2.11	7.83	2.84	1.2%	-6.3%	9.5%	-8.9%
Tues.	1.51	2.25	7.1	3.11	1.53	2.11	7.83	2.84	1.2%	-6.3%	9.5%	-8.9%
Wed.	1.51	2.25	7.1	3.11	1.53	2.11	7.83	2.84	1.2%	-6.3%	9.5%	-8.9%
Thur.	1.51	2.25	7.1	3.11	1.53	2.11	7.83	2.84	1.2%	-6.3%	9.5%	-8.9%
Fri.	1.50	2.02	7.1	3.12	1.53	2.11	7.81	2.83	1.6%	4.7%	9.9%	-9.0%
Sat.	1.59	2.44	7.3	3.13	1.61	2.32	8.00	2.86	1.6%	-4.6%	9.4%	-8.6%
Sun.	1.72	2.63	7.7	3.17	1.74	2.52	8.33	2.93	1.1%	-4.2%	8.6%	-7.6%
Summary												
Weekday	1.51	--	7.1	3.11	1.53	--	7.8	2.84	1.3%	--	9.6%	-8.9%
Weekend	1.66	--	7.5	3.15	1.68	--	8.2	2.89	1.4%	--	9.0%	-8.1%
ADWF[4]	1.55	--	7.2	3.12	1.57	--	7.9	2.85	1.3%	--	9.4%	-8.7%

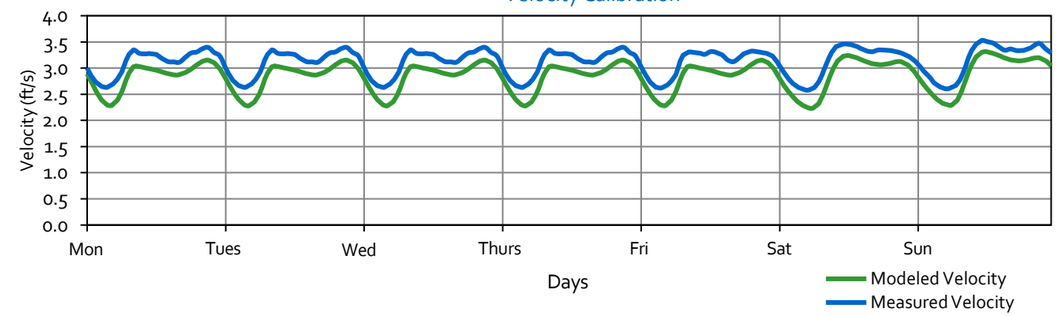
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

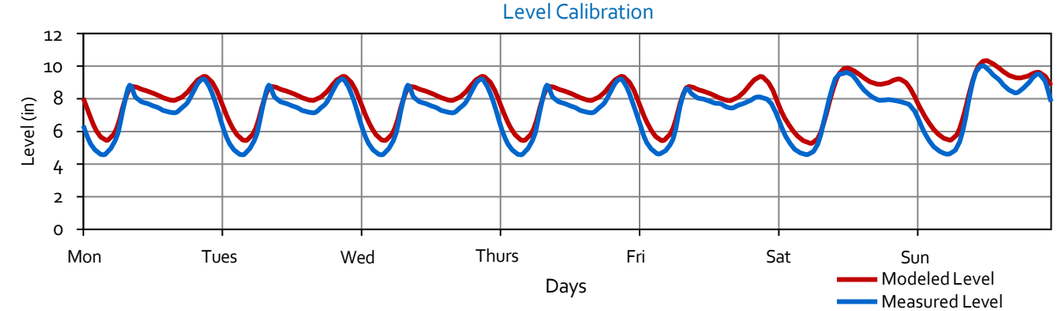
Flow Calibration



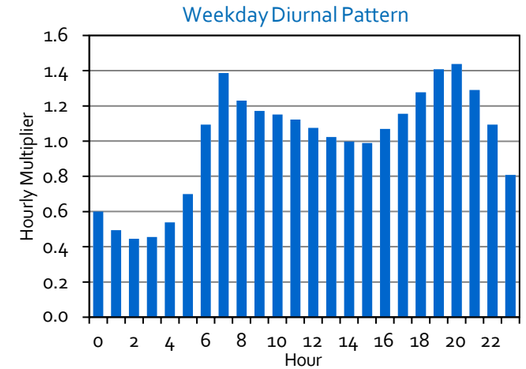
Velocity Calibration



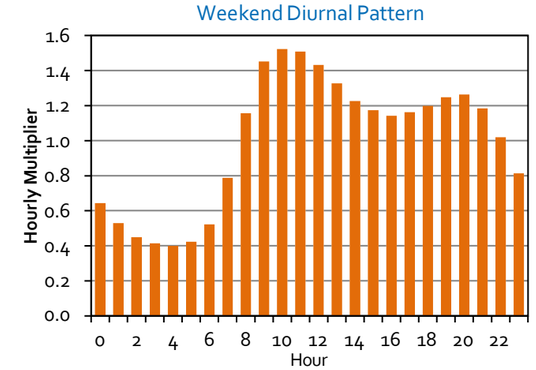
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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Flow Monitoring Site TC-16, Dry Weather Flow Calibration

Location: W 23rd St. & Bessie Ave.
Pipeline Diameter: 12"
City Manhole ID: 1023
Model Pipe ID: 2062

Flow Monitor Location

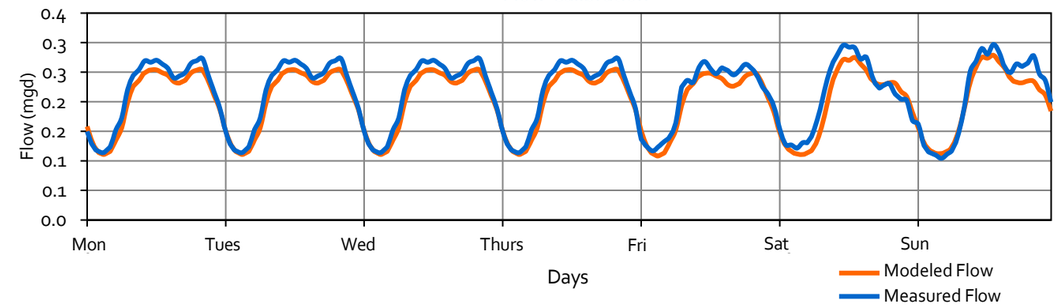
Model Calibration Summary

Day	Measured Data[1] Avg. Flow (mgd)	Measured Data[1] Peak Flow[2] (mgd)	Measured Data[1] Avg. Level (in)	Measured Data[1] Avg. Vel. (ft/s)	Modeled Data Avg. Flow (mgd)	Modeled Data Peak Flow[2] (mgd)	Modeled Data Avg. Level (in)	Modeled Data Avg. Vel. (ft/s)	Percent Error[3] Avg. Flow (%)	Percent Error[3] Peak Flow (%)	Percent Error[3] Avg. Level (%)	Percent Error[3] Avg. Vel. (%)
Mon.	0.22	0.27	5.7	0.89	0.20	0.25	5.80	0.83	-5.3%	-7.0%	1.3%	-6.4%
Tues.	0.22	0.27	5.7	0.89	0.20	0.25	5.80	0.83	-5.3%	-7.0%	1.3%	-6.4%
Wed.	0.22	0.27	5.7	0.89	0.20	0.25	5.80	0.83	-5.3%	-7.0%	1.3%	-6.4%
Thur.	0.22	0.27	5.7	0.89	0.20	0.25	5.80	0.83	-5.3%	-7.0%	1.3%	-6.4%
Fri.	0.21	0.27	5.7	0.88	0.20	0.25	5.72	0.83	-5.3%	-7.6%	0.9%	-6.2%
Sat.	0.21	0.30	5.6	0.88	0.20	0.28	5.69	0.82	-5.5%	-6.9%	0.9%	-6.6%
Sun.	0.21	0.30	5.6	0.88	0.20	0.28	5.74	0.82	-5.3%	-6.1%	1.7%	-6.4%
Summary												
Weekday	0.22	--	5.7	0.88	0.20	--	5.8	0.83	-5.3%	--	1.2%	-6.3%
Weekend	0.21	--	5.6	0.88	0.20	--	5.7	0.82	-5.4%	--	1.3%	-6.5%
ADWF[4]	0.21	--	5.7	0.88	0.20	--	5.8	0.83	-5.3%	--	1.2%	-6.4%

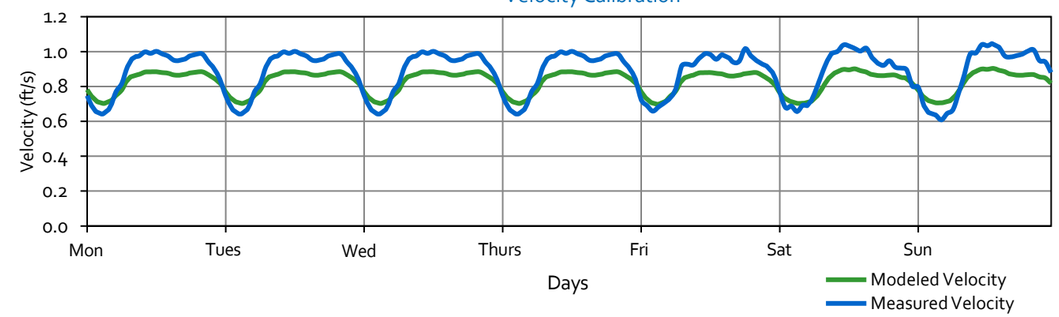
Notes:

1. Source: V&A Temporary Flow Monitoring Program
2. Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
3. Percent Error = (Modeled - Measured) /Measured x 100
4. ADWF = (5xWeekday Average + 2xWeekend Average)/7

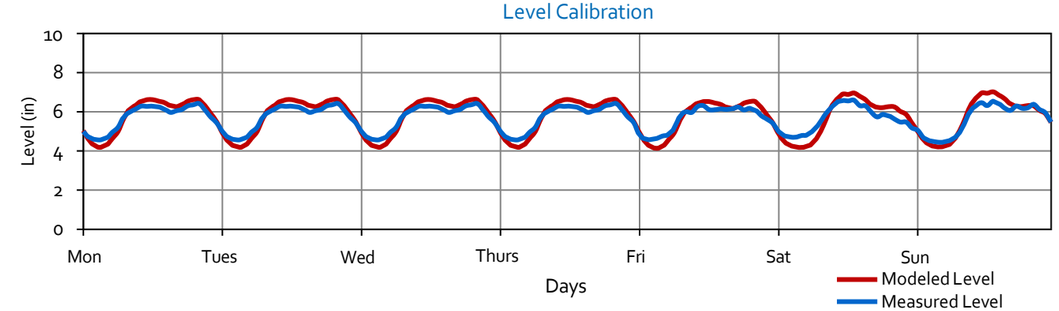
Flow Calibration



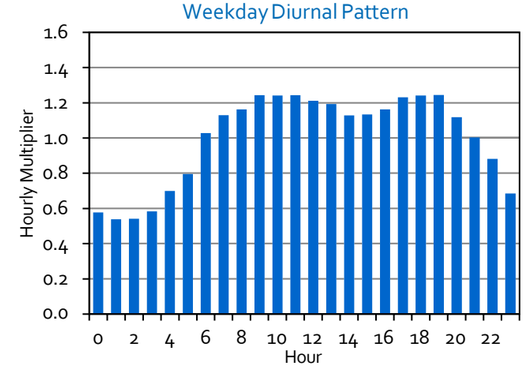
Velocity Calibration



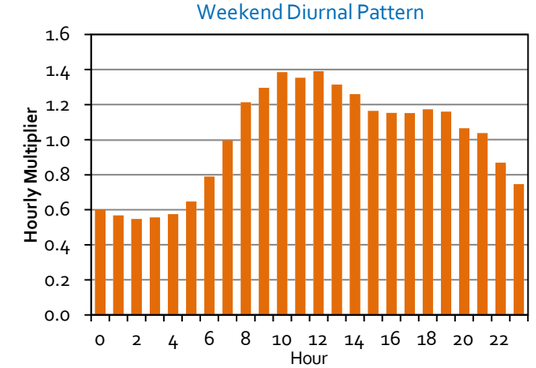
Level Calibration



Weekday Diurnal Pattern



Weekend Diurnal Pattern



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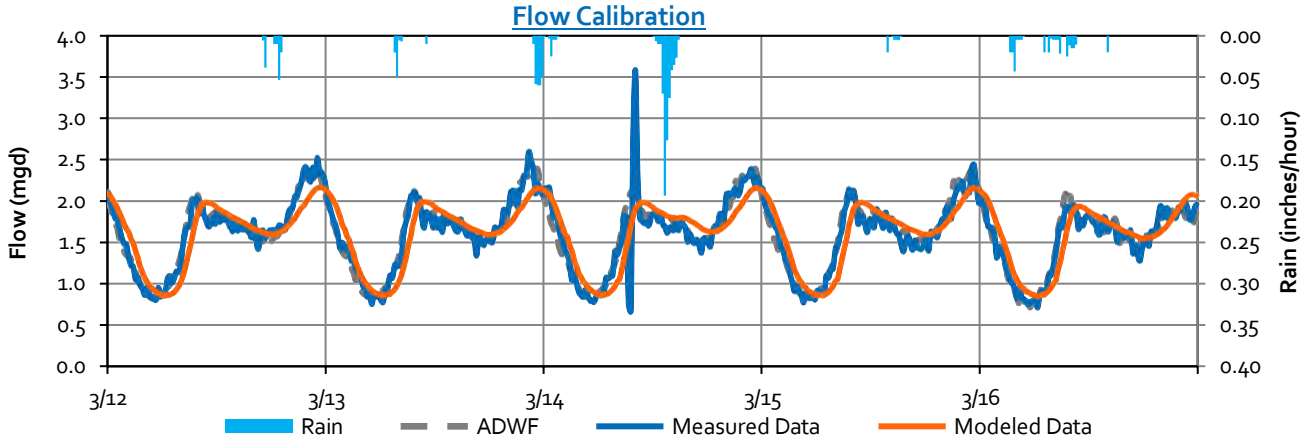
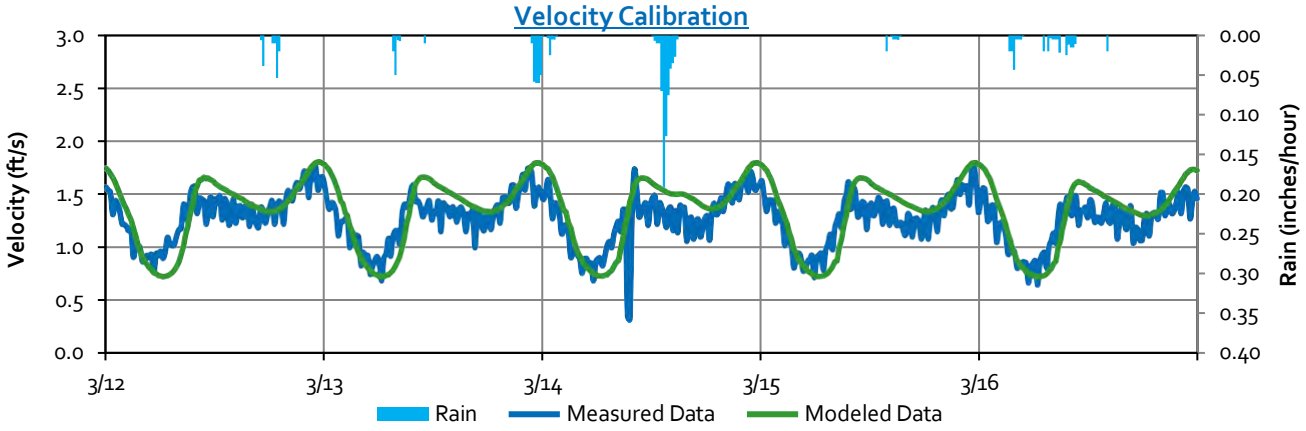
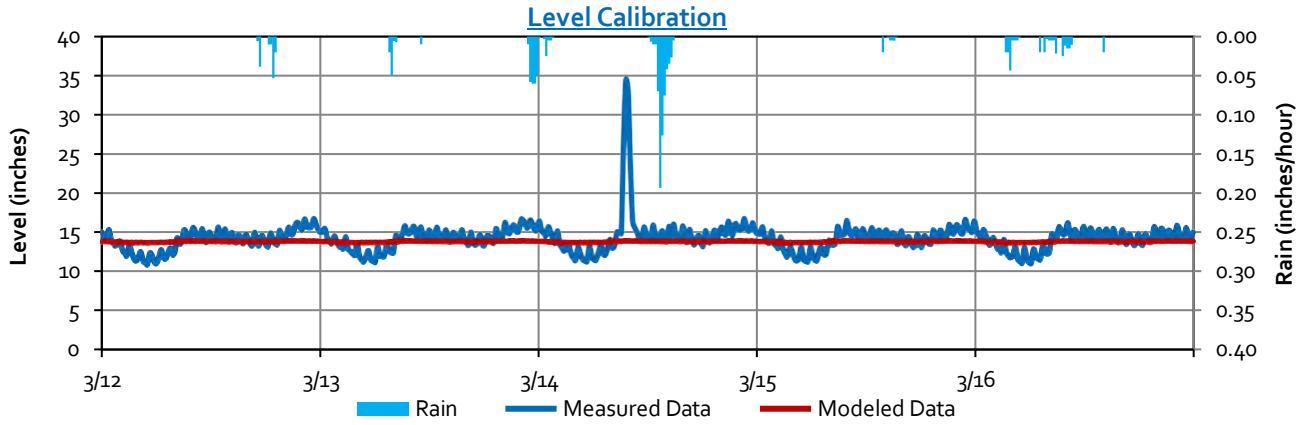
Appendix D

WET WEATHER FLOW CALIBRATION SHEETS

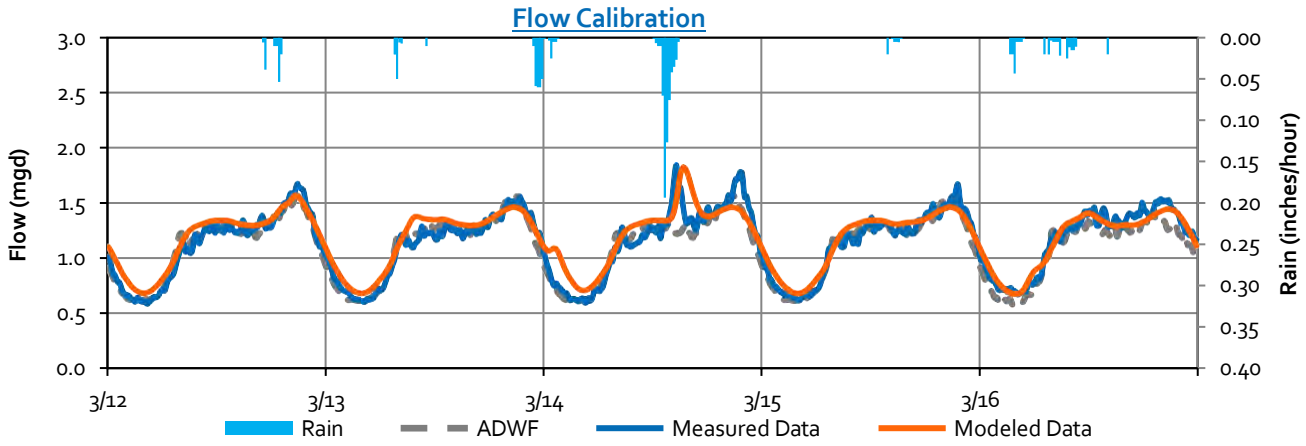
Flow Monitoring Site TC-01 Wet Weather Calibration
Location: E Larch Rd. & Spurline RR
Pipeline diameter: 24.5"
City Manhole ID: 2068
Model Pipe ID: 2198
Silt Level at Site: 0.5"

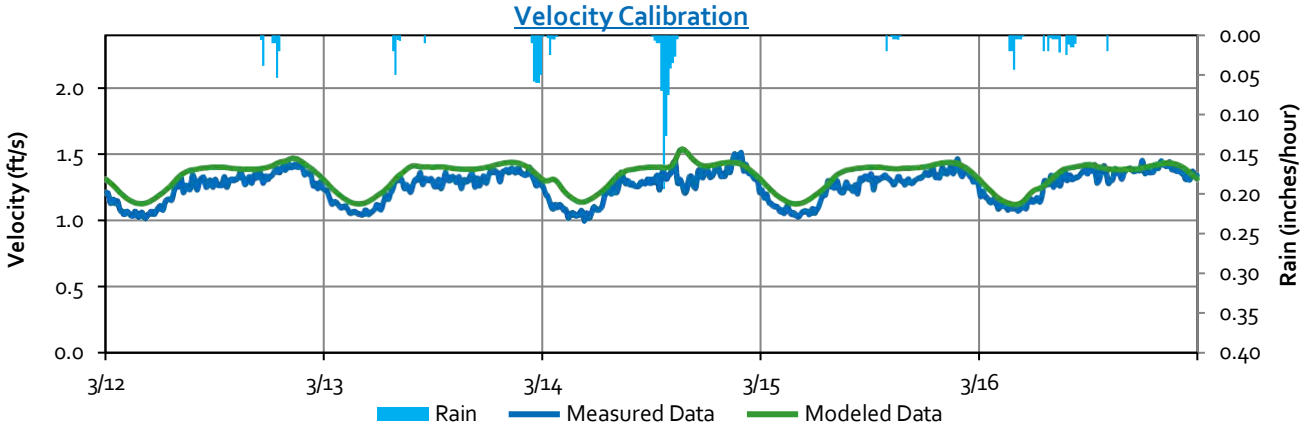


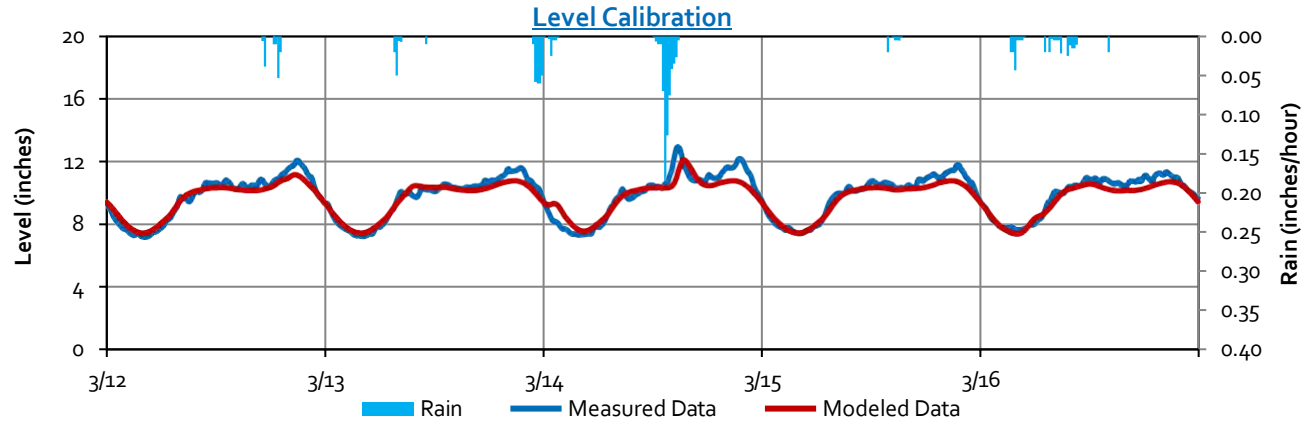




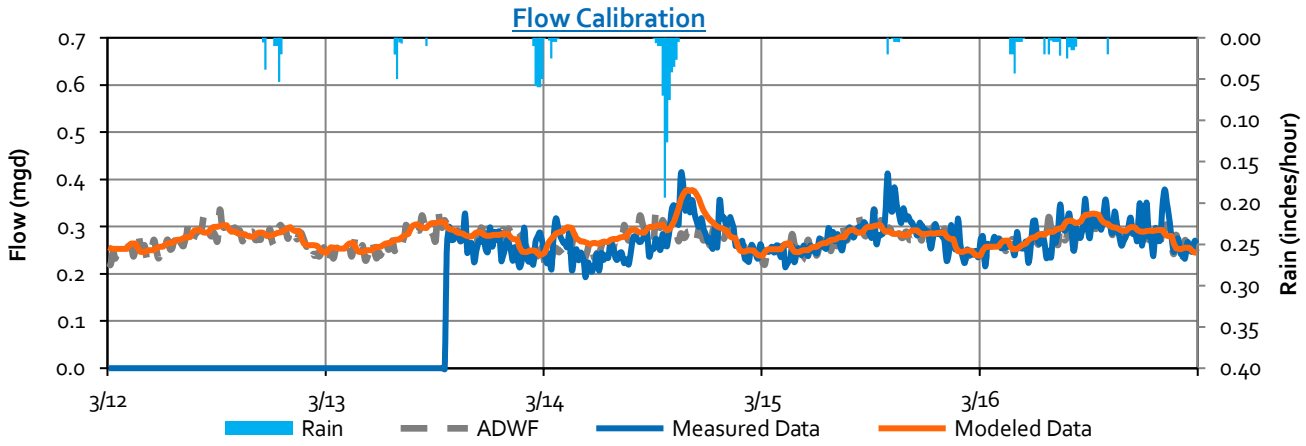
Flow Monitoring Site TC-02 Wet Weather Calibration
Location: E Grant Line Rd. b/w Colony Dr. & Entrada Way
Pipeline diameter: 29.75"
City Manhole ID: 777
Model Pipe ID: 470
Silt Level at Site: 0.5"

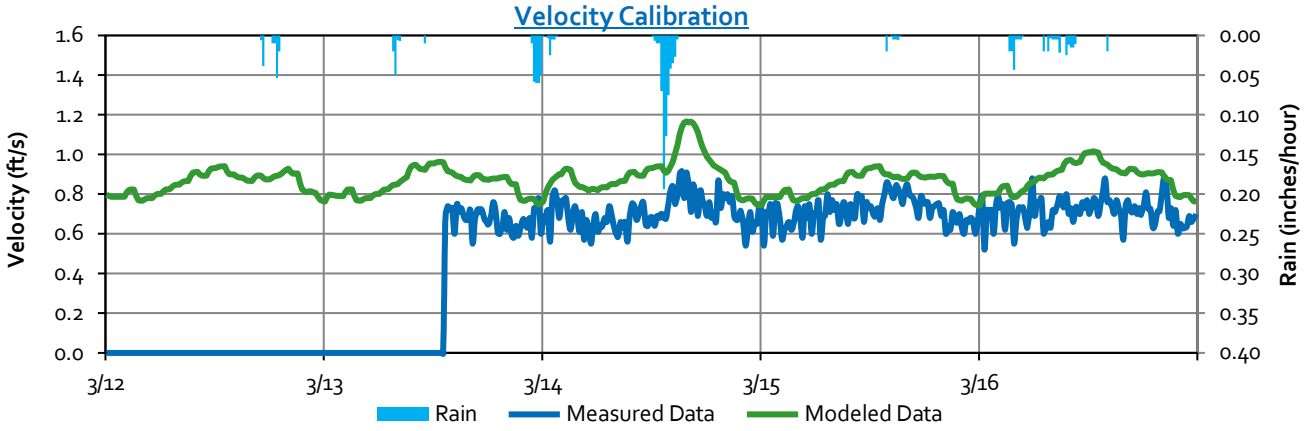


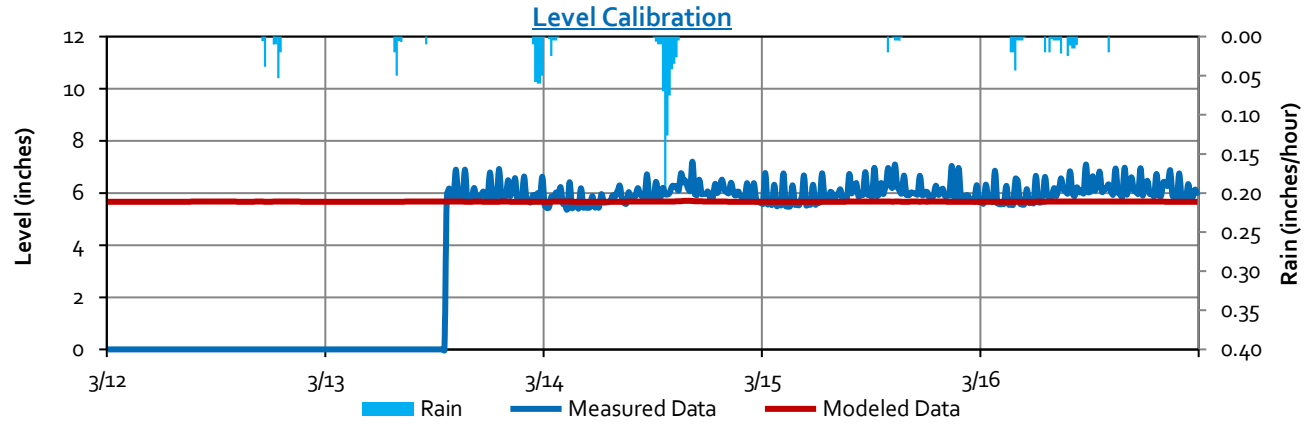




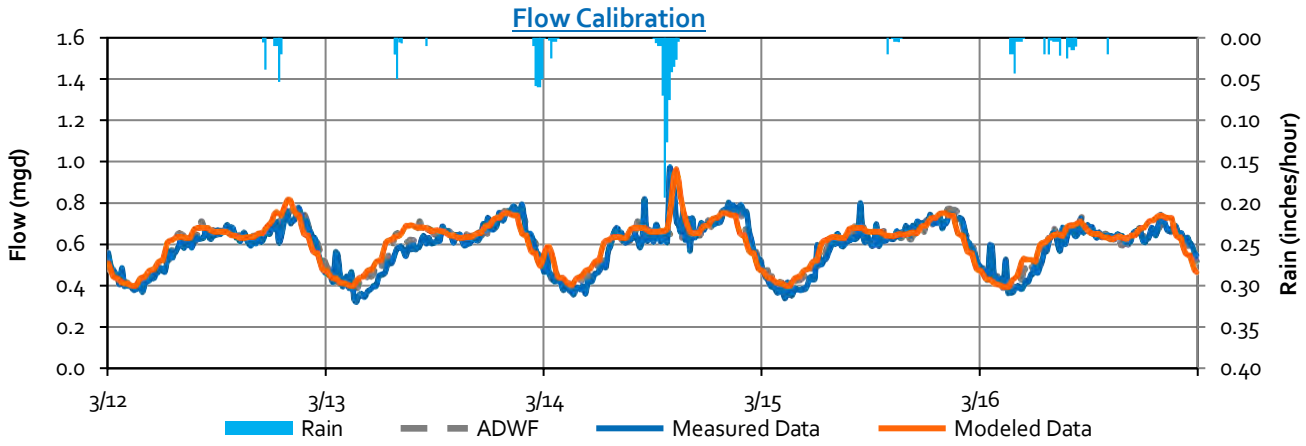
Flow Monitoring Site TC-03 Wet Weather Calibration
Location: N MacArthur Dr. n/o Interstate 205
Pipeline diameter: 24"
City Manhole ID:
Model Pipe ID: CDT-719
Silt Level at Site: 0.5"

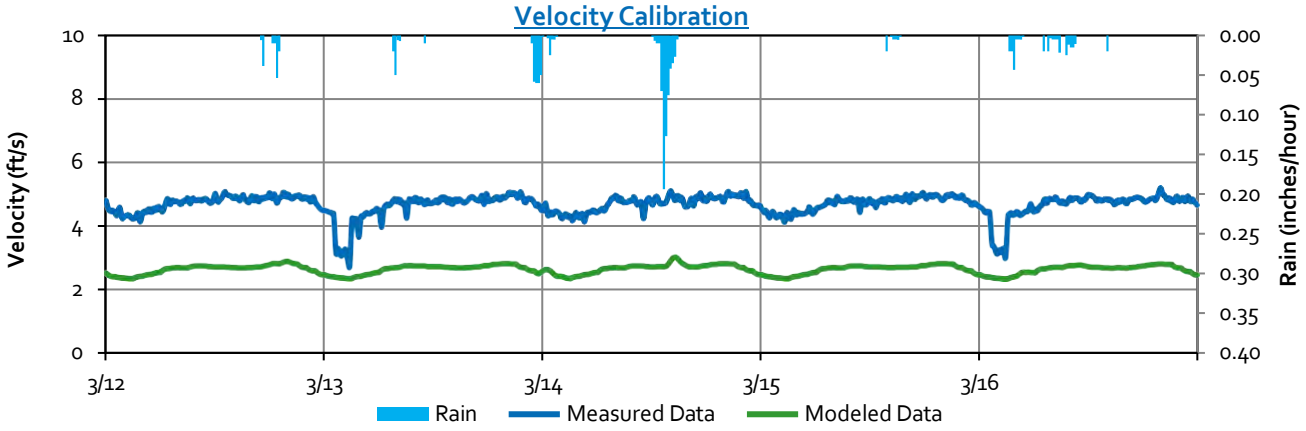


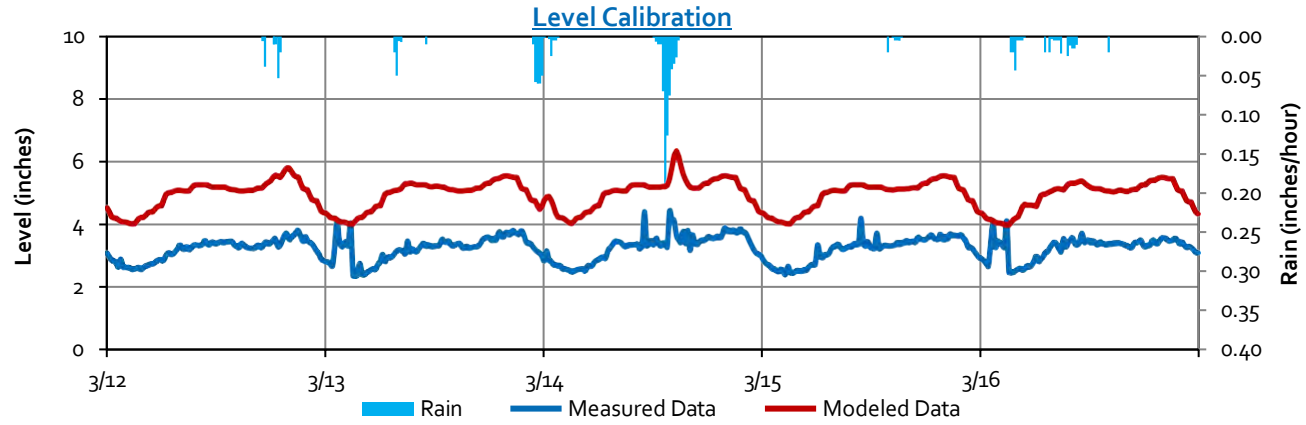




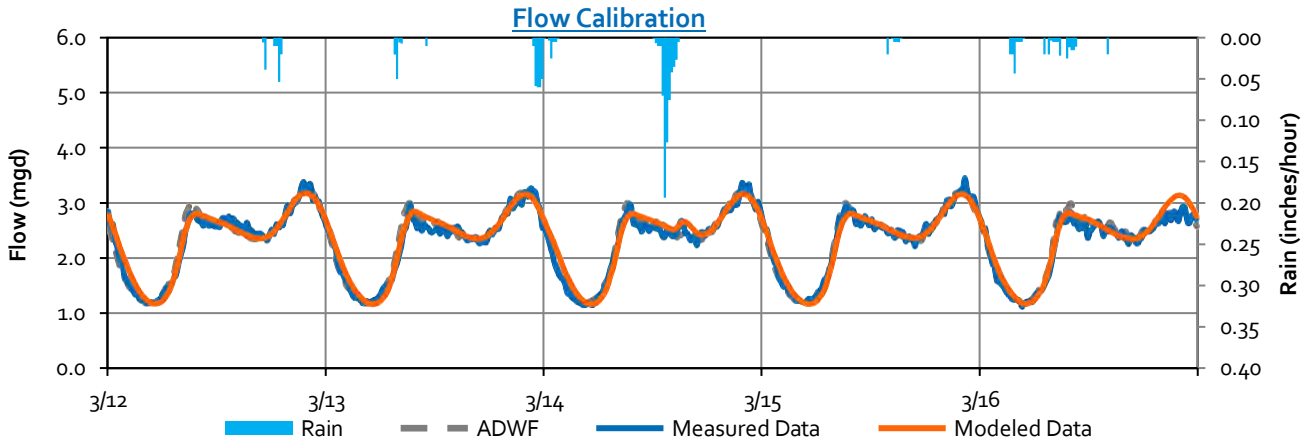
Flow Monitoring Site TC-04 Wet Weather Calibration
Location: N Tracy Blvd. n/o Interstate 205
Pipeline diameter: 15"
City Manhole ID: 1009
Model Pipe ID: 157
Silt Level at Site: none"

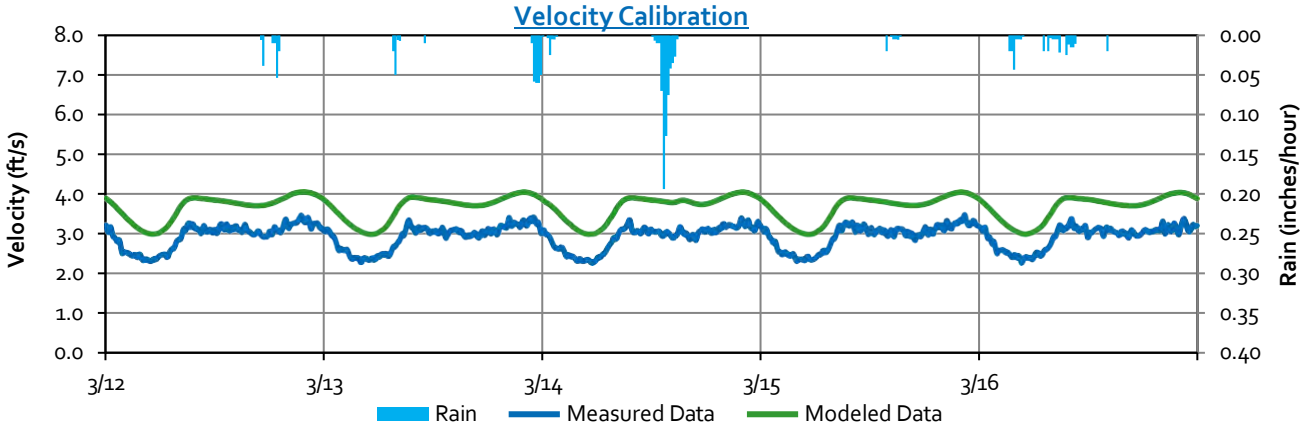


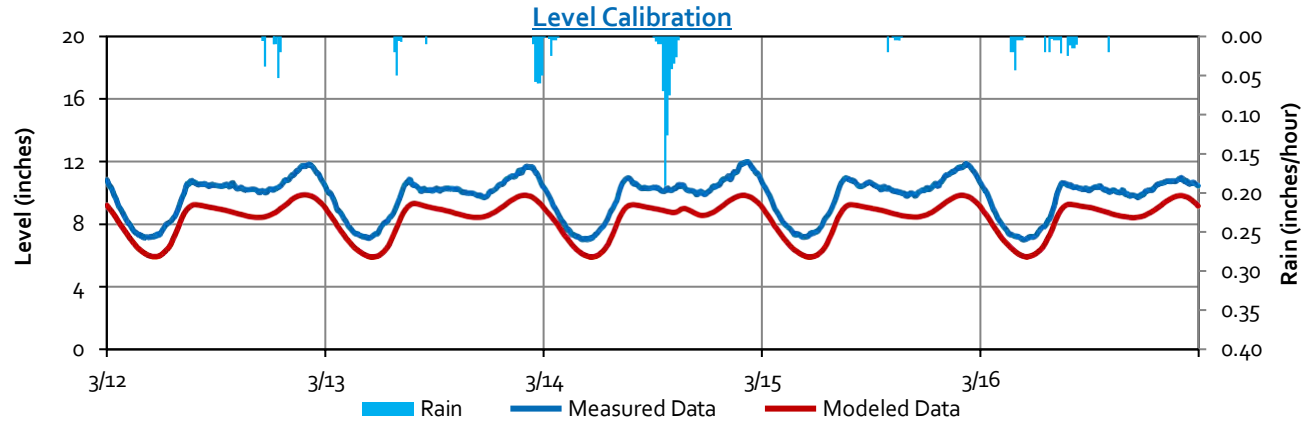




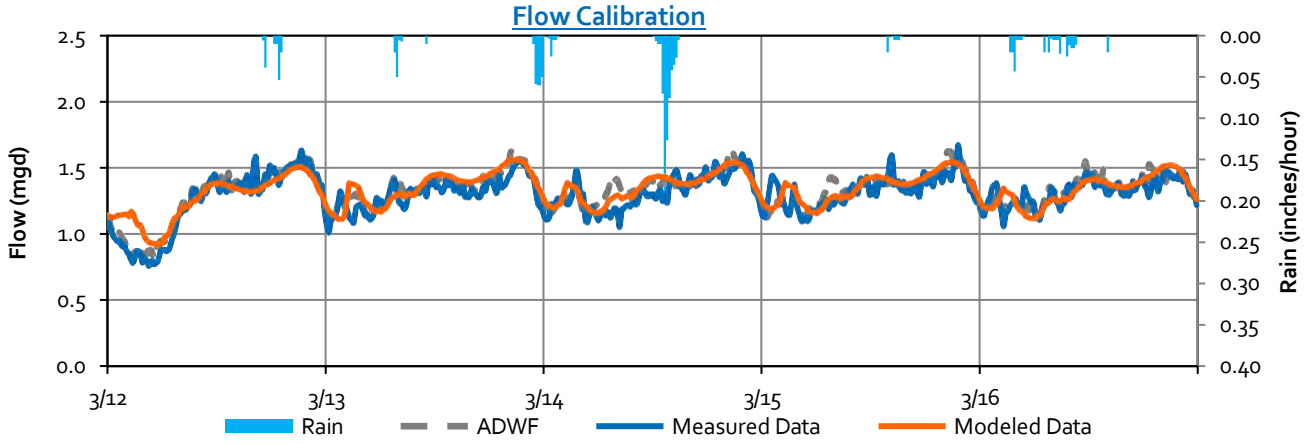
Flow Monitoring Site TC-05 Wet Weather Calibration
Location: N Tracy Blvd. n/o Interstate 205
Pipeline diameter: 24"
City Manhole ID: 1005
Model Pipe ID: 154
Silt Level at Site: none"

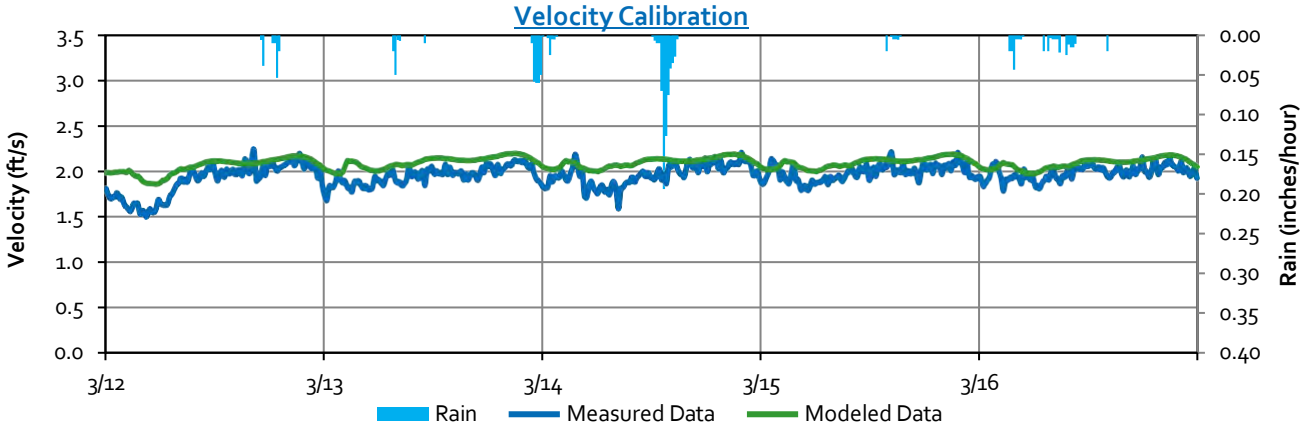


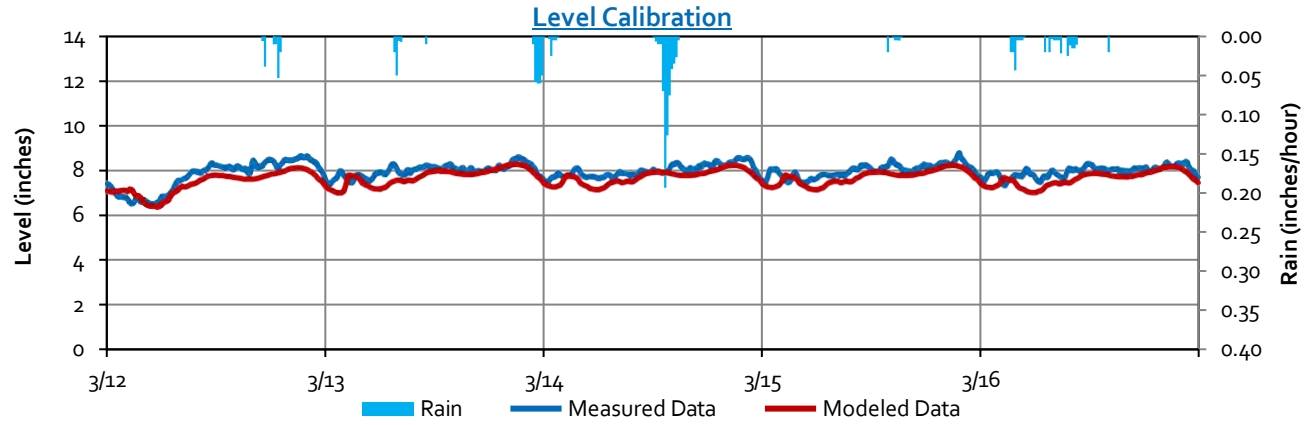




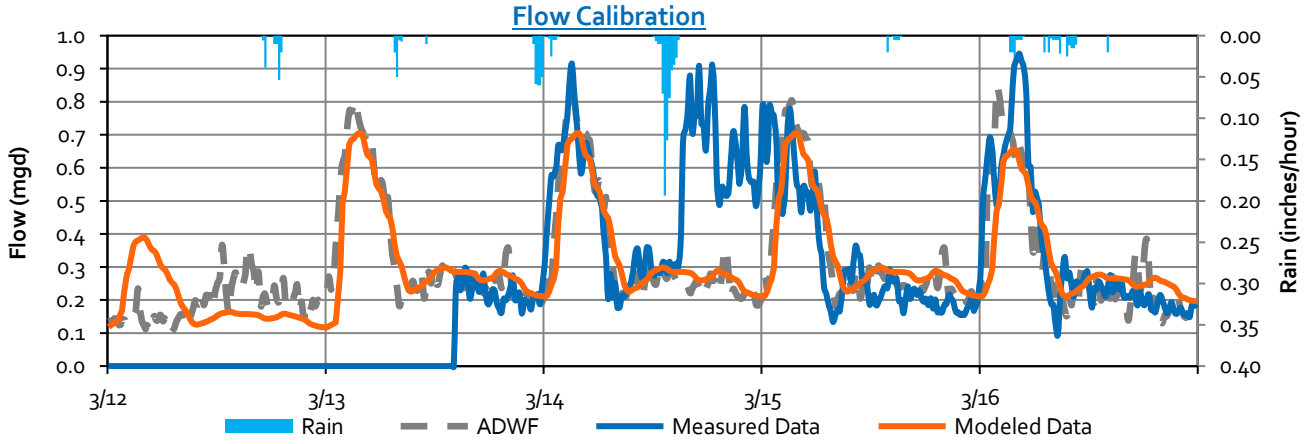
Flow Monitoring Site TC-06 Wet Weather Calibration
Location: West Valley Mall n/o Auto Plaza Dr.
Pipeline diameter: 29.25"
City Manhole ID: 3378
Model Pipe ID: CDT-263
Silt Level at Site: none"

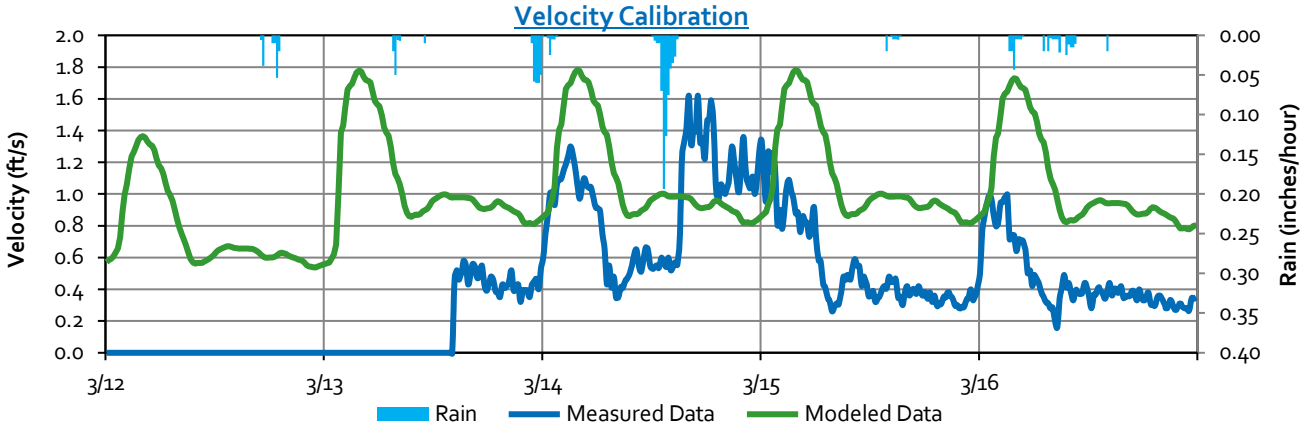


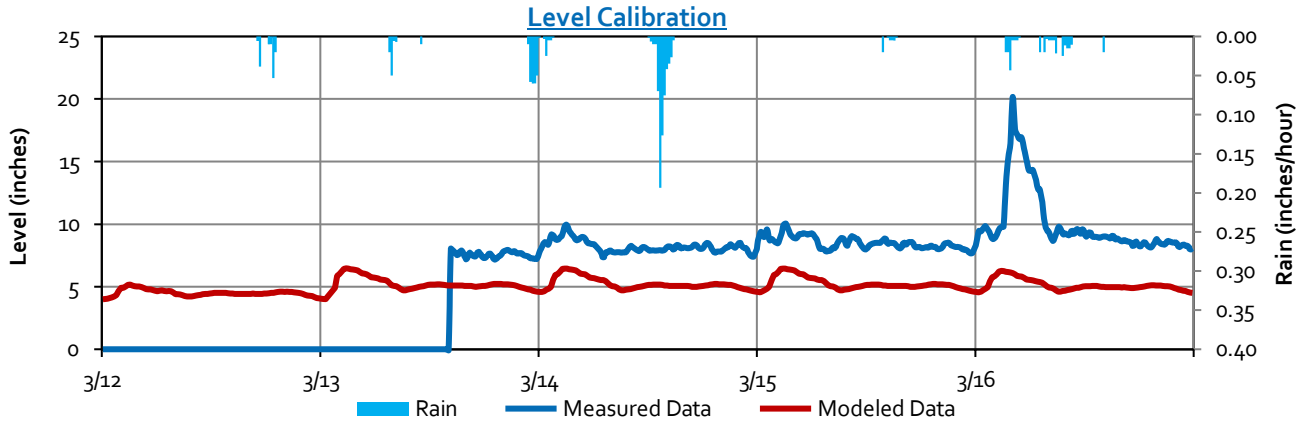




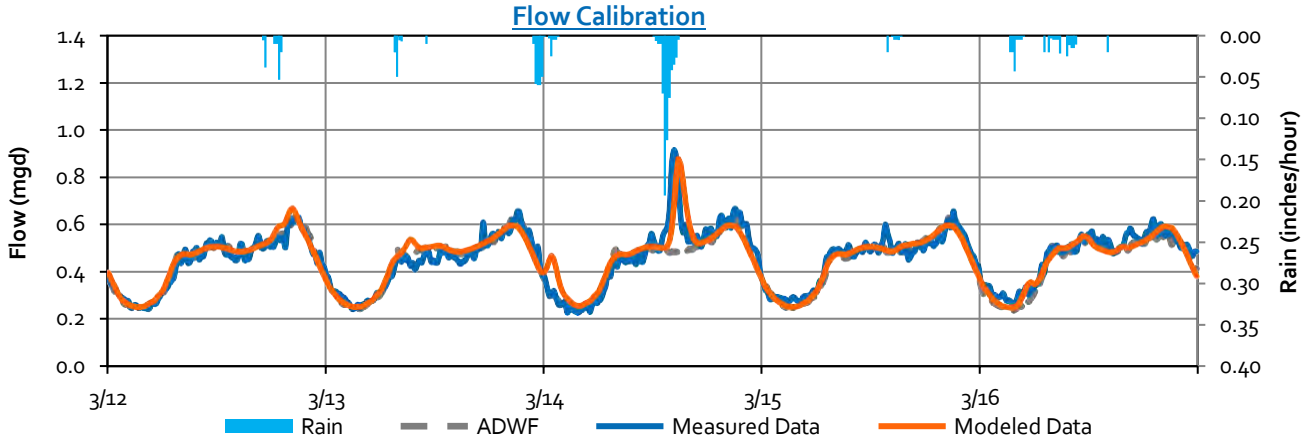
Flow Monitoring Site TC-07 Wet Weather Calibration
Location: W Byrin Rd. e/o Von Sosten Rd.
Pipeline diameter: 20.25"
City Manhole ID: 3362
Model Pipe ID: CDT-231
Silt Level at Site: none"

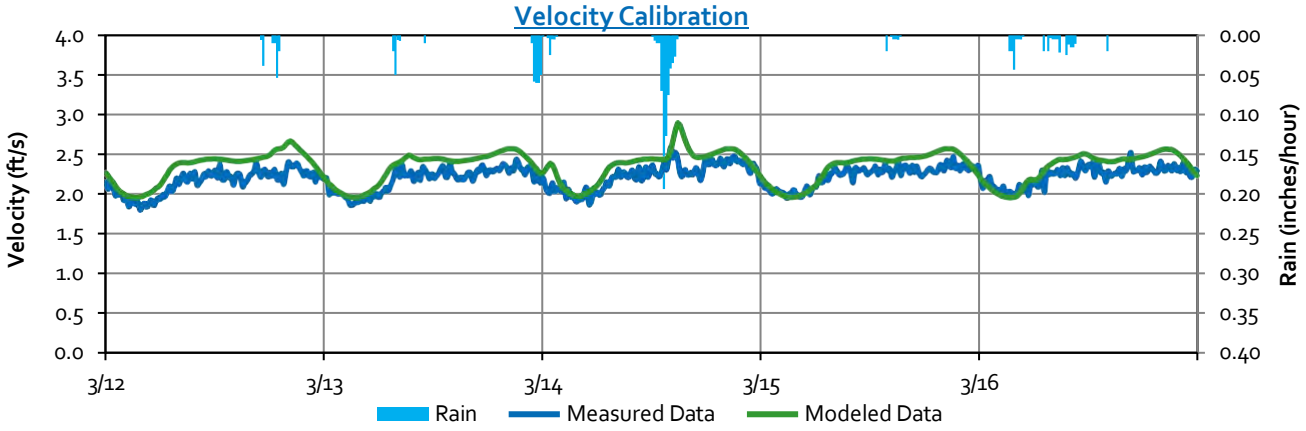


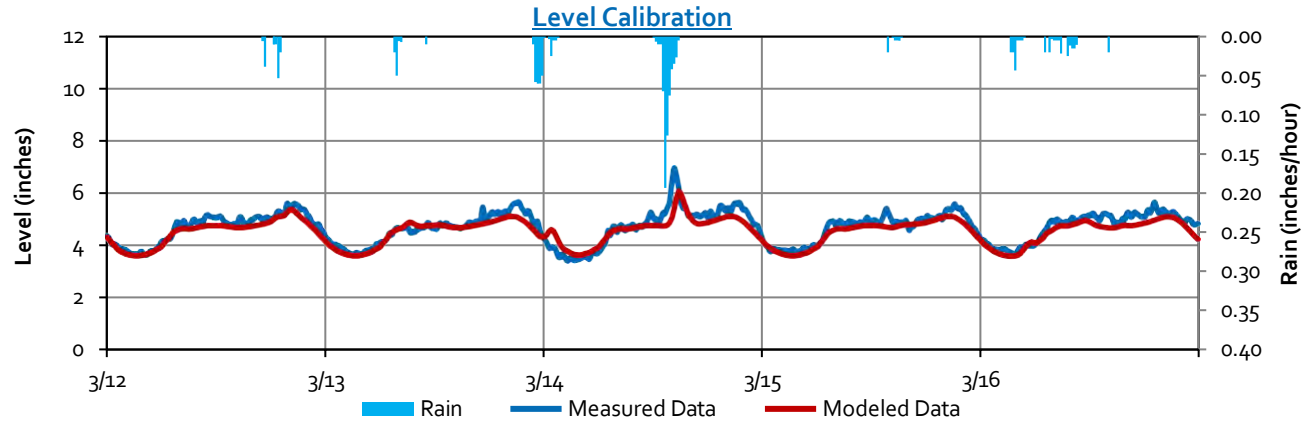




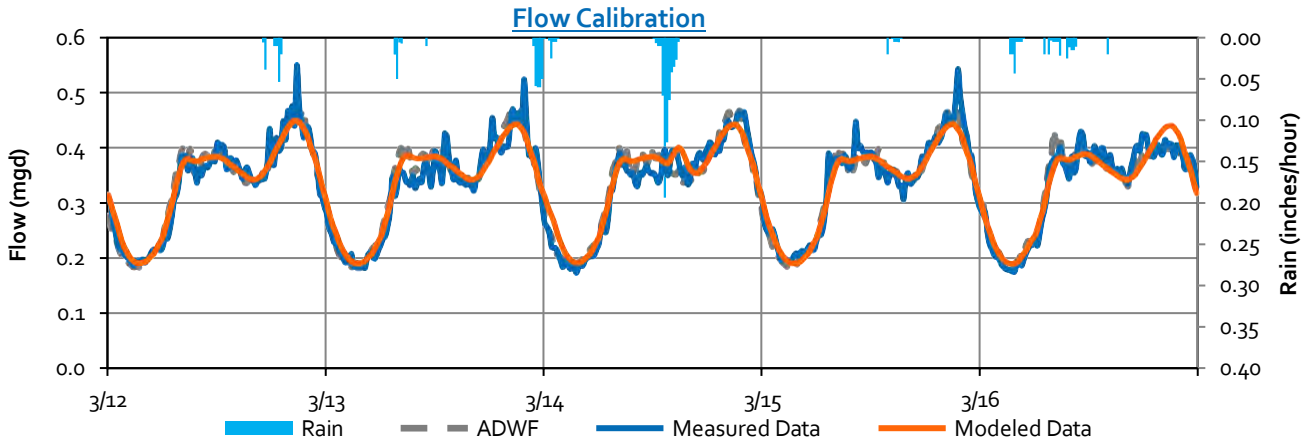
Flow Monitoring Site TC-08 Wet Weather Calibration
Location: Holly Dr. b/w E 22nd St. & W Grant Line Rd.
Pipeline diameter: 18"
City Manhole ID: 752
Model Pipe ID: 450
Silt Level at Site: 1.25"

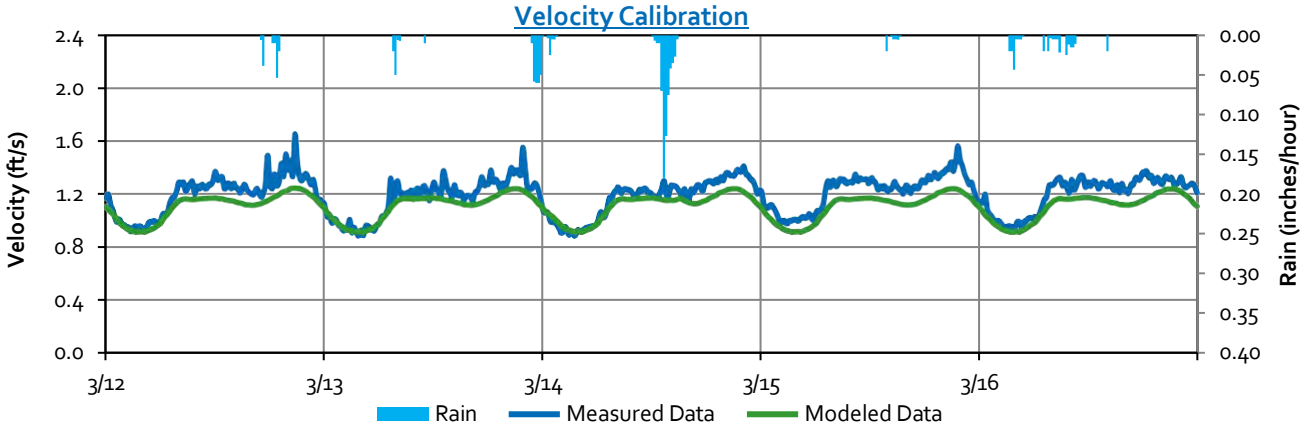


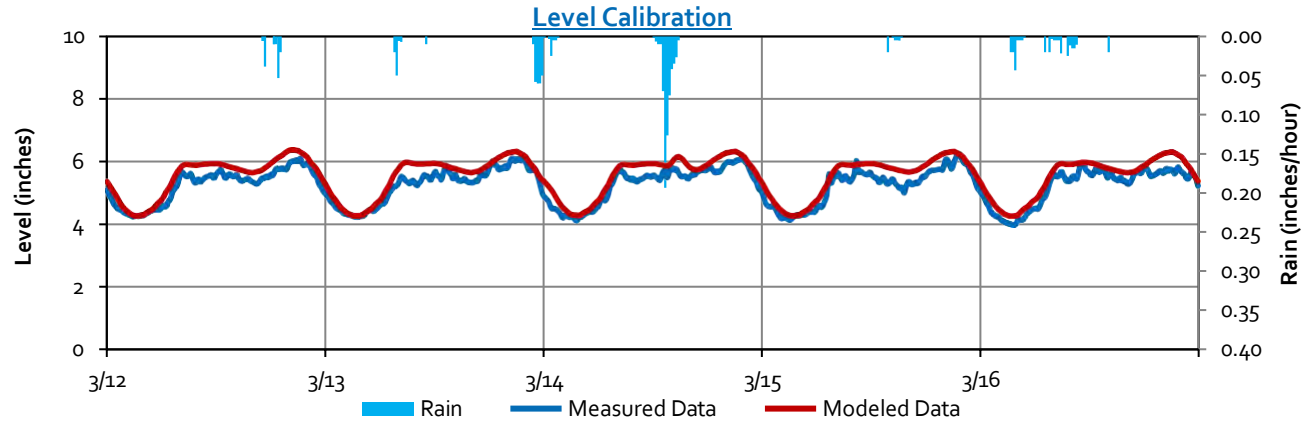




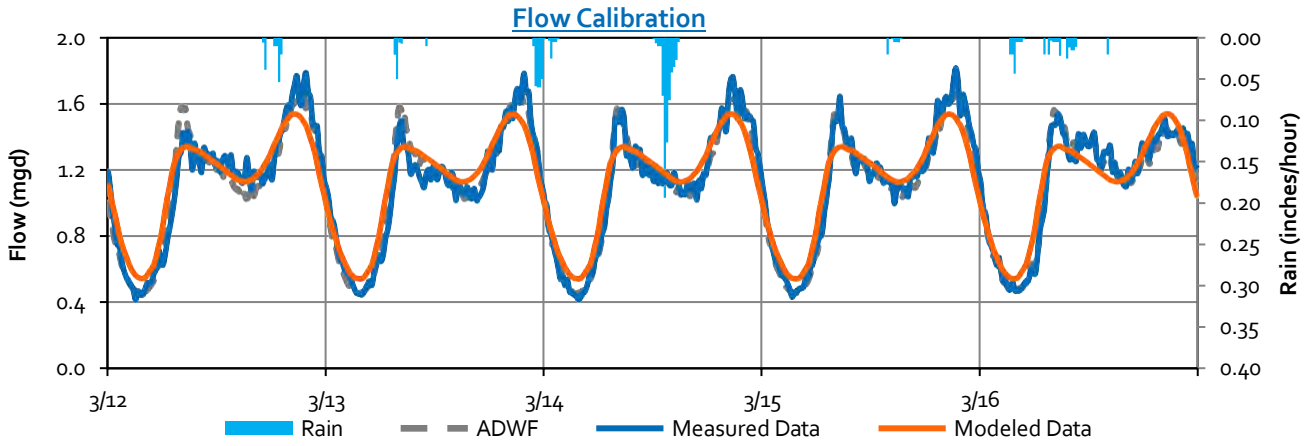
Flow Monitoring Site TC-09 Wet Weather Calibration
Location: Summergate Dr. & Westbury Ct.
Pipeline diameter: 18"
City Manhole ID: 951
Model Pipe ID: 237
Silt Level at Site: none"

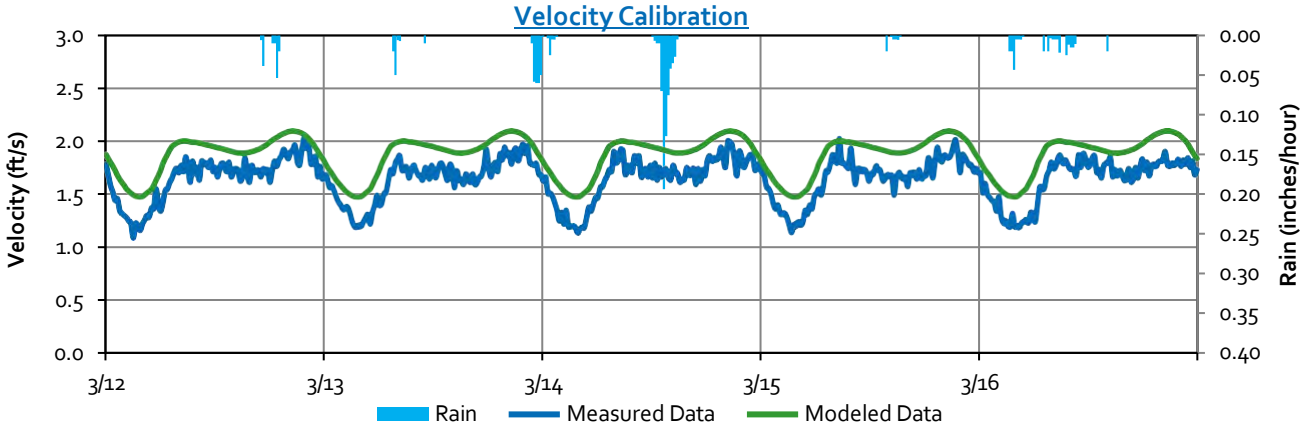


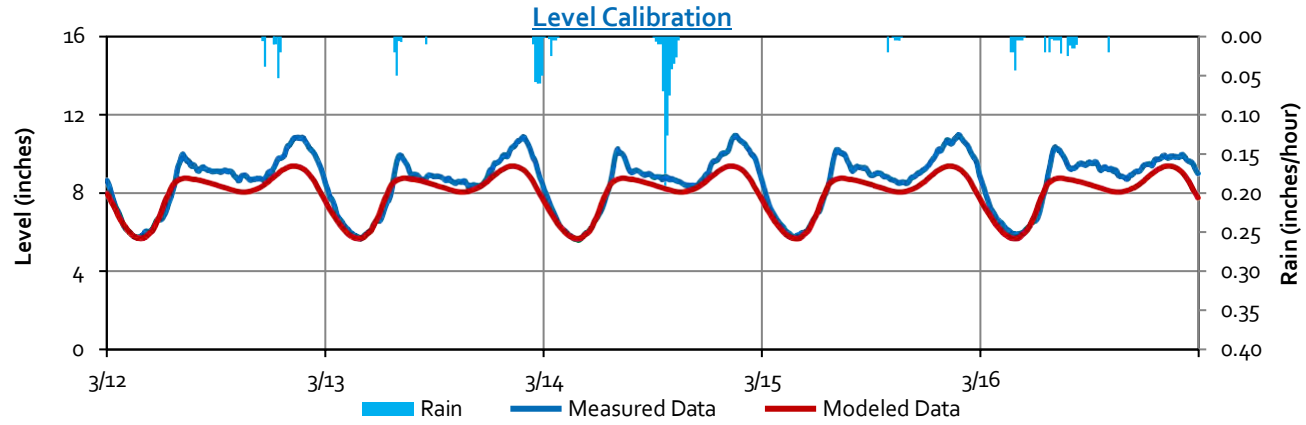




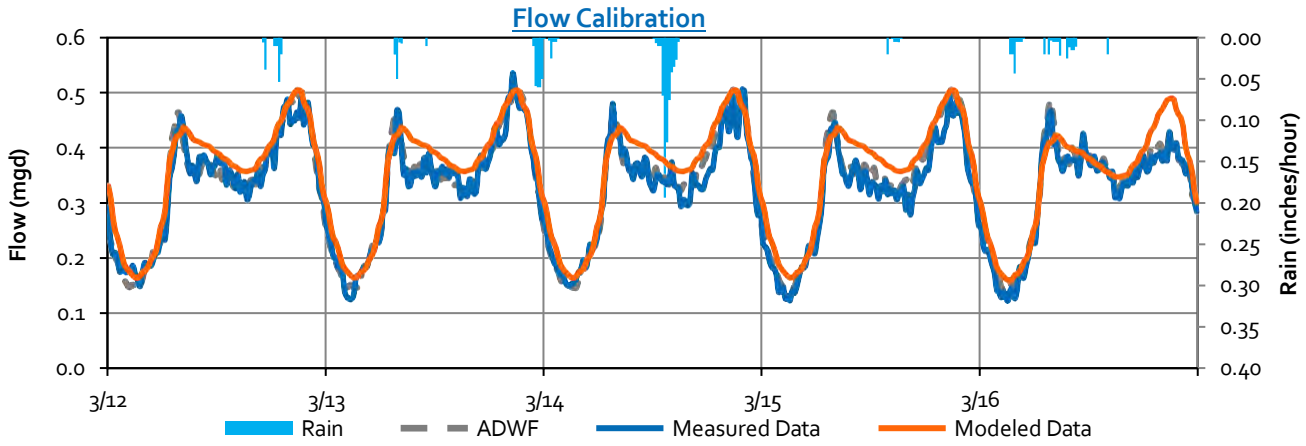
Flow Monitoring Site TC-10 Wet Weather Calibration
Location: N Corral Hollow Rd. b/w Crohn Rd. & W 11th St.
Pipeline diameter: 24"
City Manhole ID: 1819
Model Pipe ID: 861
Silt Level at Site: none"

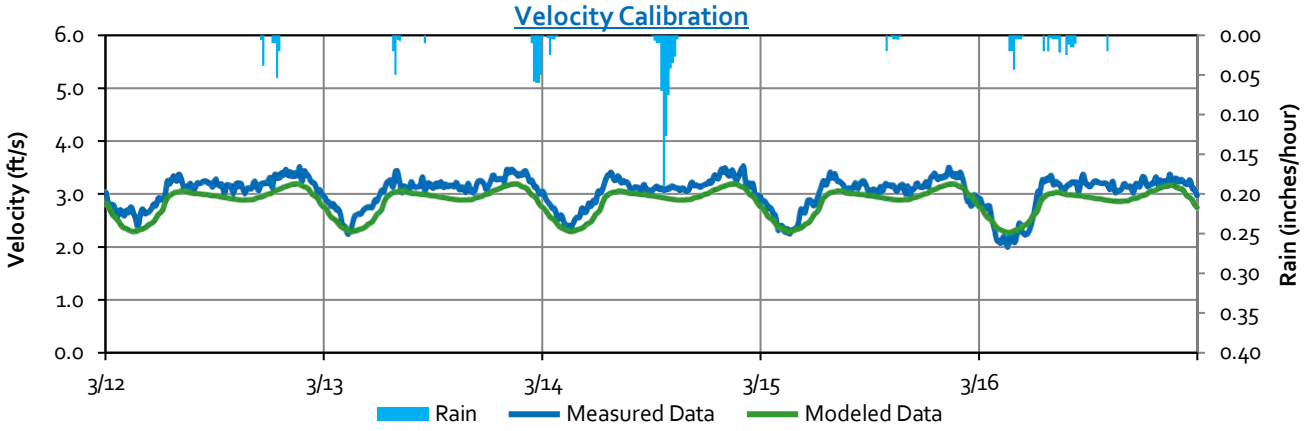


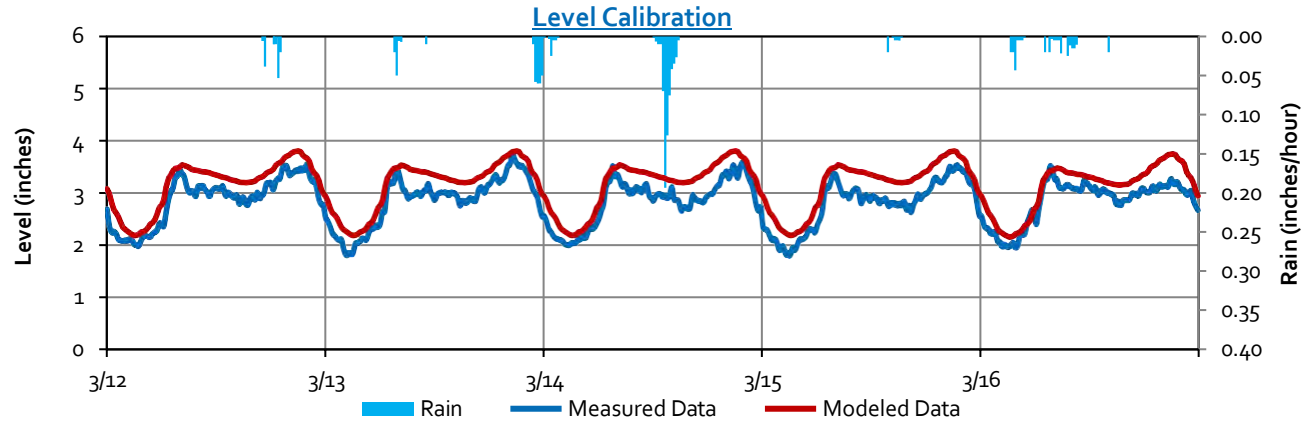




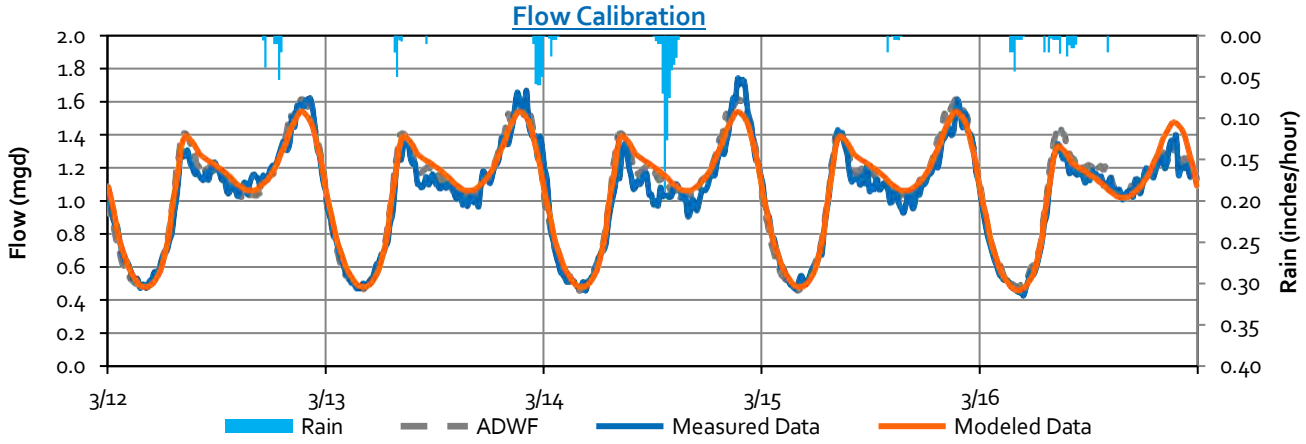
Flow Monitoring Site TC-11 Wet Weather Calibration
Location: Sienna Park Dr. & Sycamore Pkwy.
Pipeline diameter: 15"
City Manhole ID: 2955
Model Pipe ID: 3029
Silt Level at Site: none"

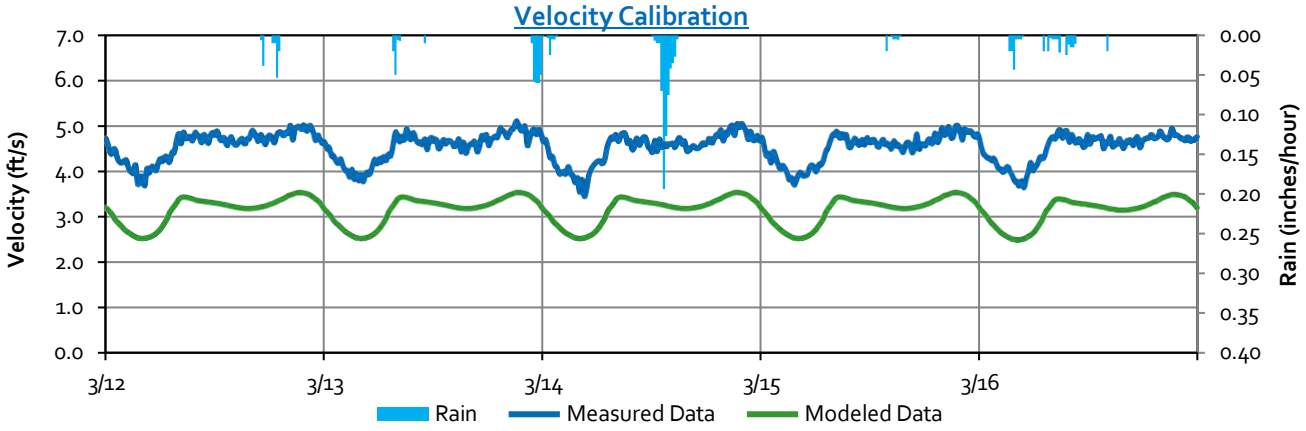


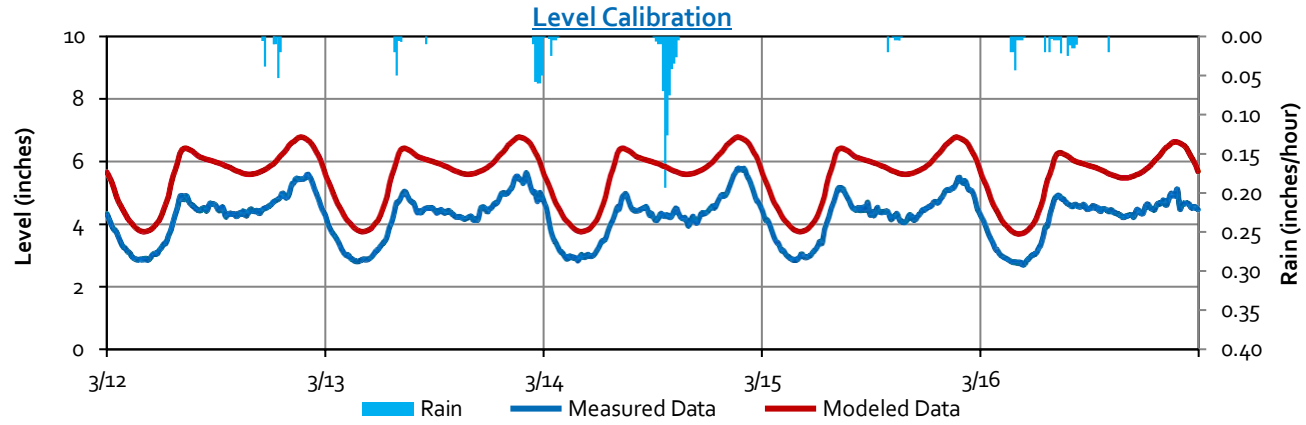




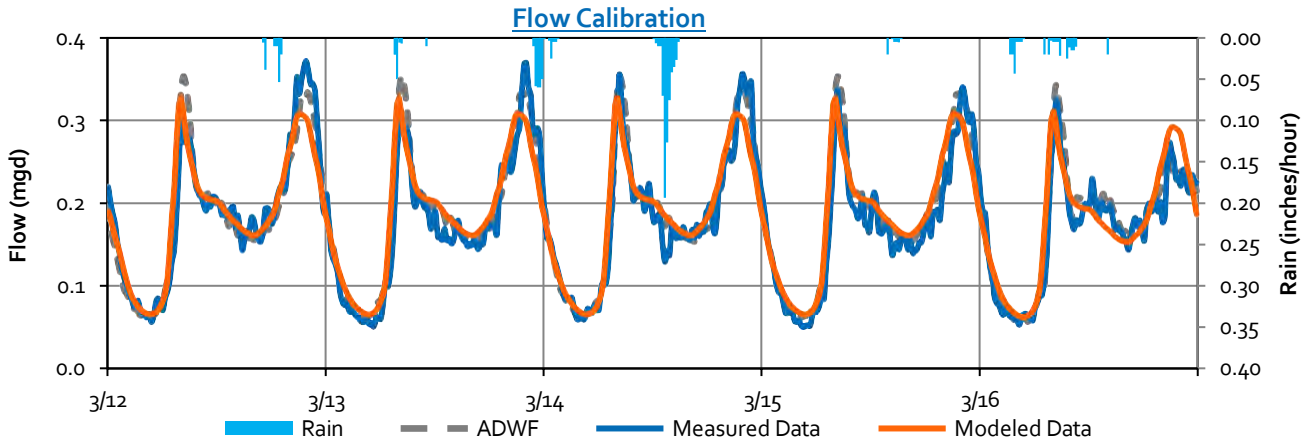
Flow Monitoring Site TC-12 Wet Weather Calibration
Location: Leamon St. & Avila St.
Pipeline diameter: 20.75"
City Manhole ID: 2382
Model Pipe ID: 2324
Silt Level at Site: none"

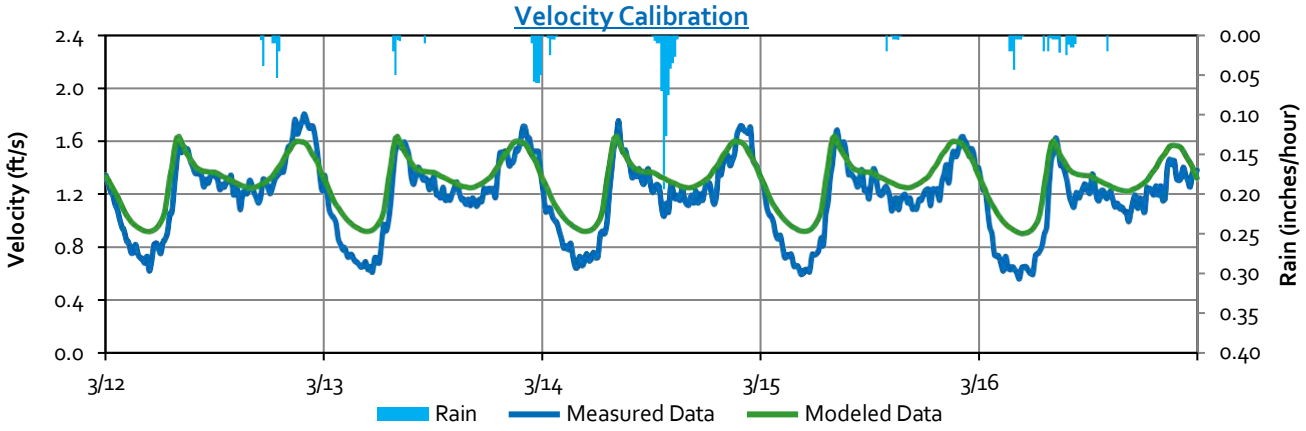


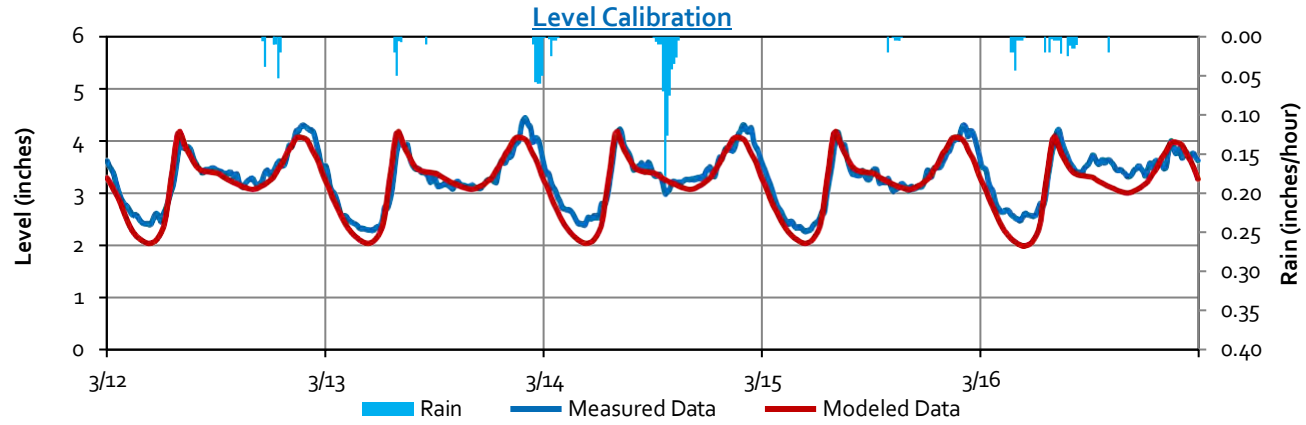




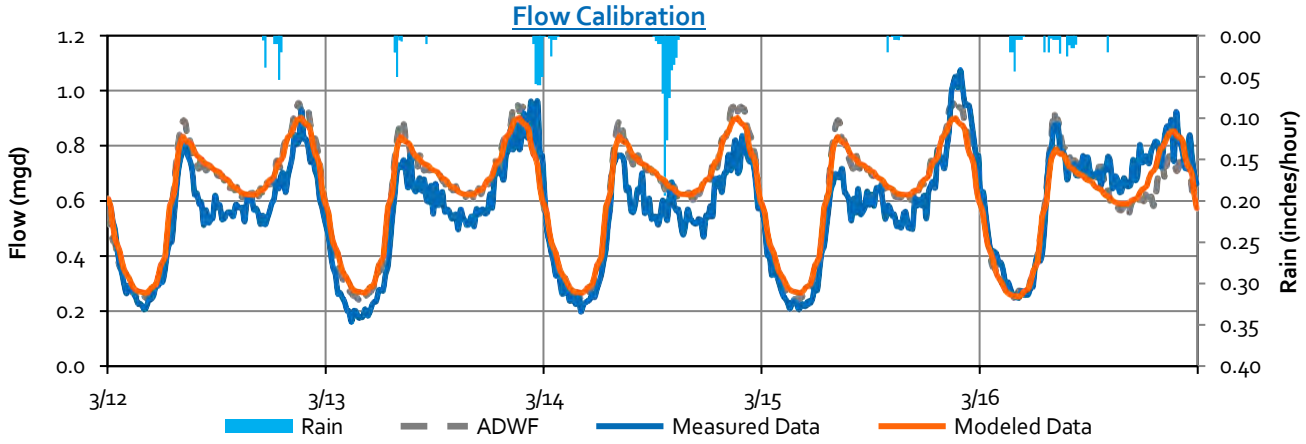
Flow Monitoring Site TC-13 Wet Weather Calibration
Location: Along UPRR, e/o N MacArthur Dr & Krider Ct.
Pipeline diameter: 18"
City Manhole ID: 1306
Model Pipe ID: 993
Silt Level at Site: none"

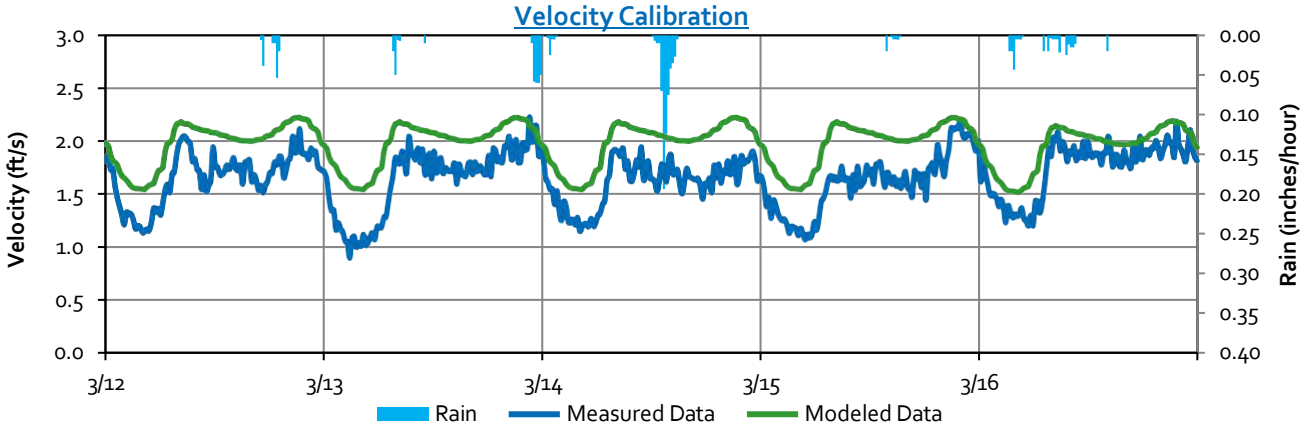


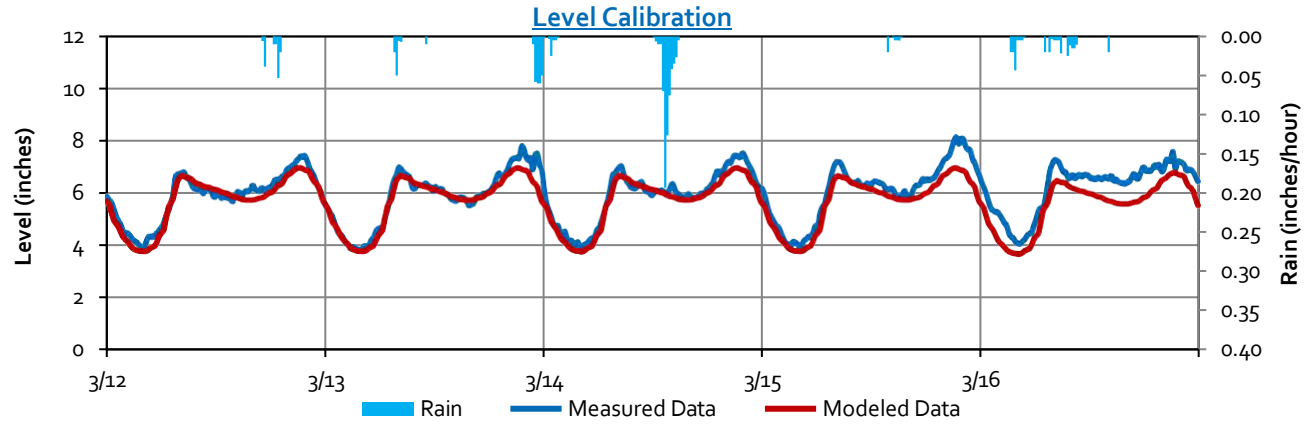




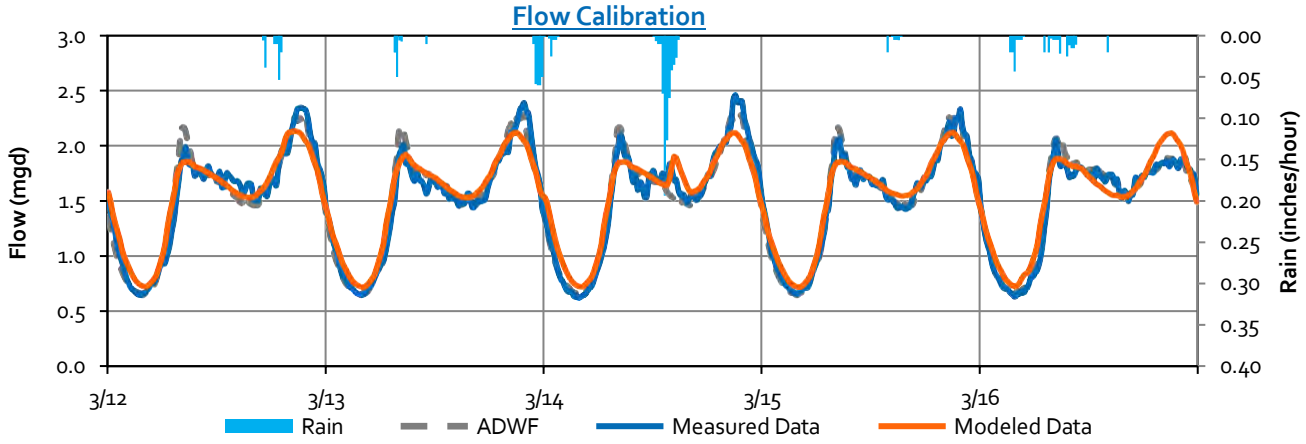
Flow Monitoring Site TC-14 Wet Weather Calibration
Location: e/o De Bord Dr. & Cairo Ct.
Pipeline diameter: 18"
City Manhole ID: 805
Model Pipe ID: 1630
Silt Level at Site: none"

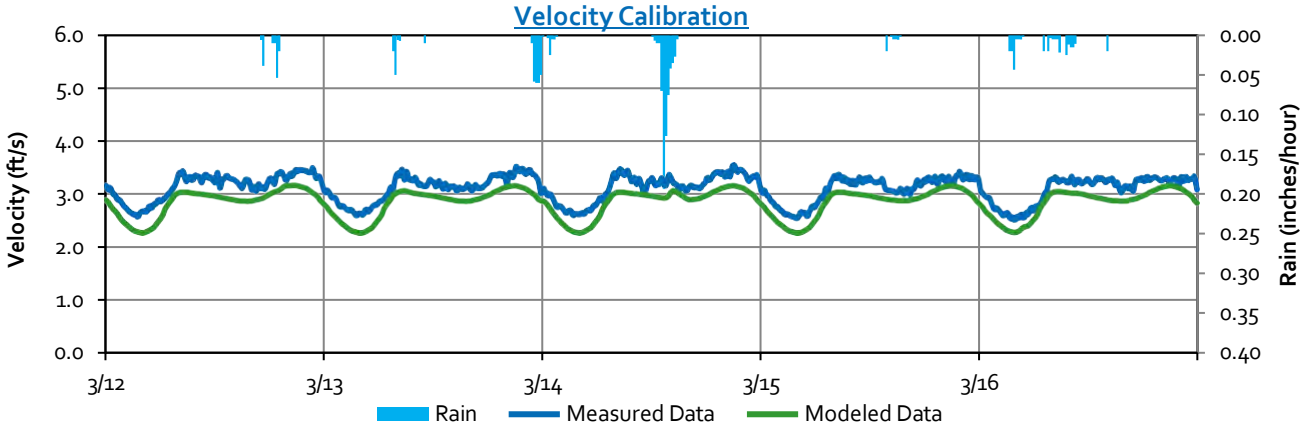


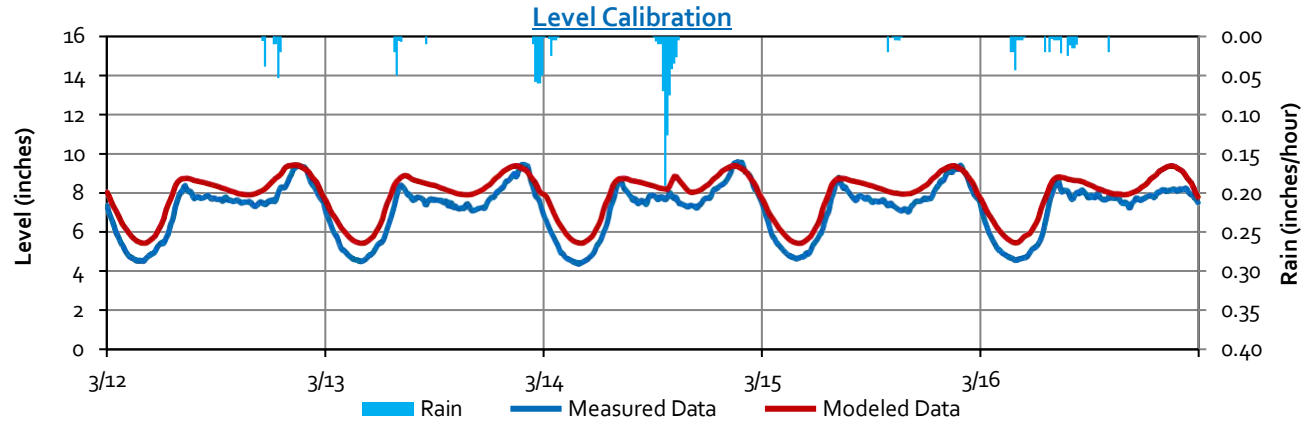




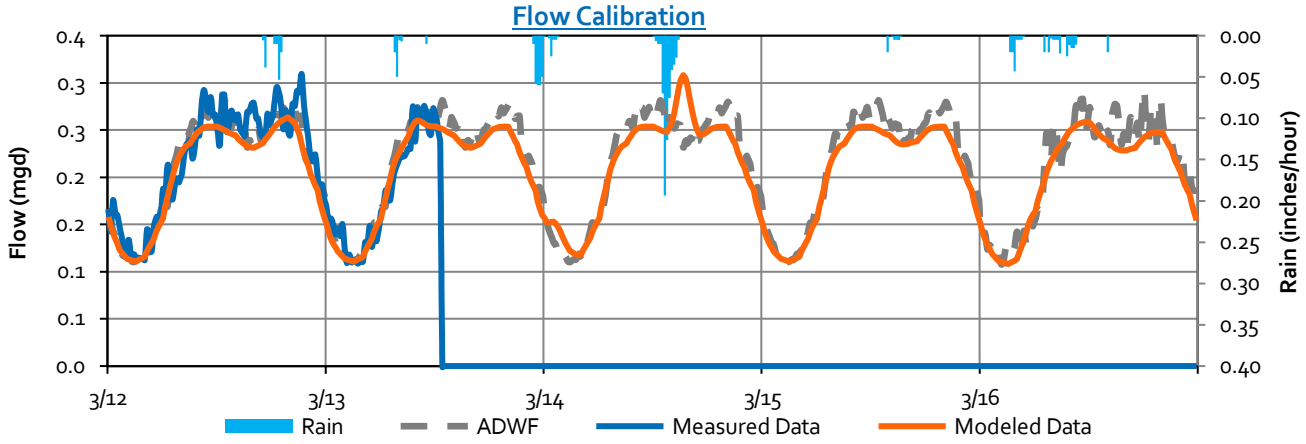
Flow Monitoring Site TC-15 Wet Weather Calibration
Location: N Corral Hollow Rd. & Alegre Dr.
Pipeline diameter: 21.5"
City Manhole ID: 2838
Model Pipe ID: 3608
Silt Level at Site: none"

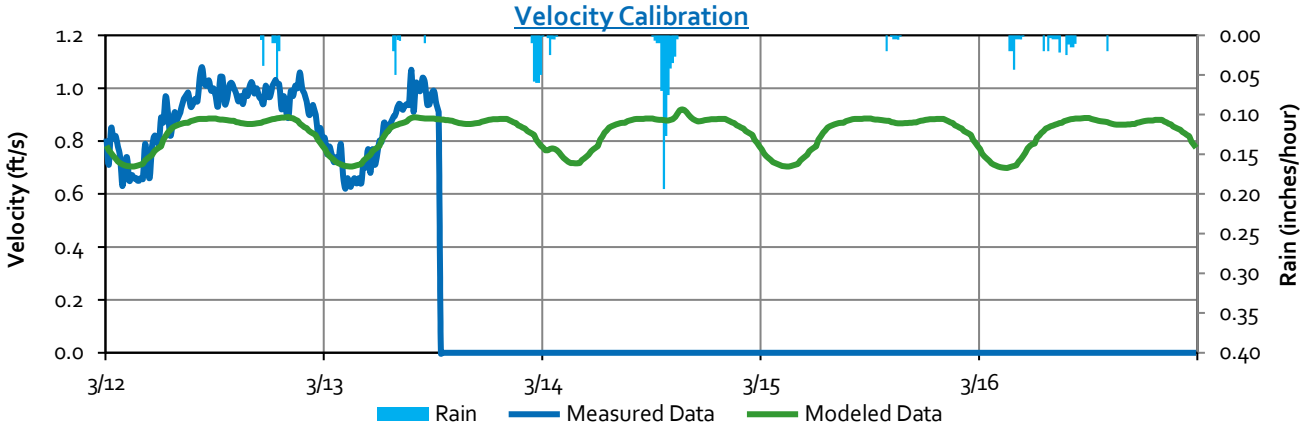


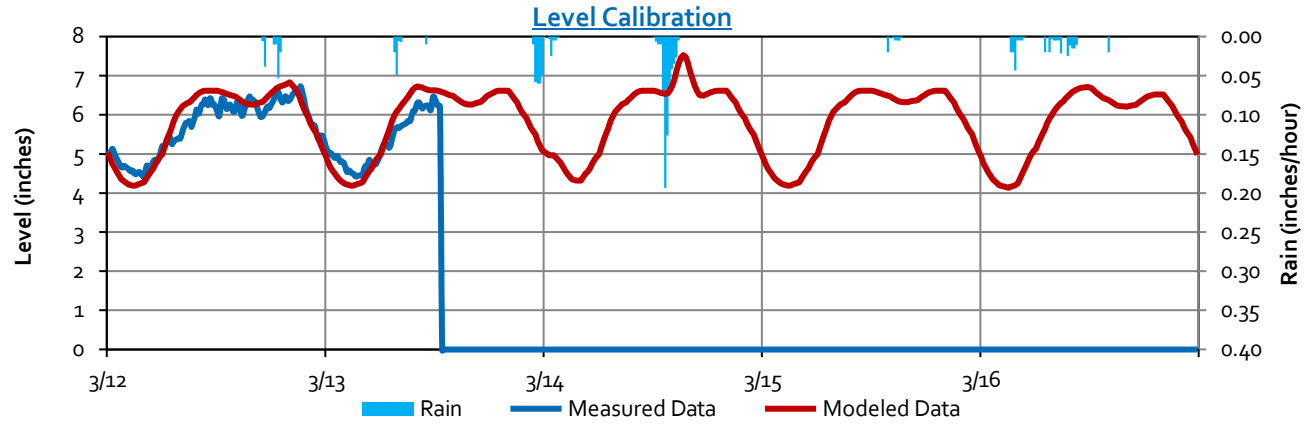




Flow Monitoring Site TC-16 Wet Weather Calibration
Location: W 23rd St. & Bessie Ave.
Pipeline diameter: 12"
City Manhole ID: 1023
Model Pipe ID: 2062
Silt Level at Site: none"







Appendix E

WASTEWATER IMPROVEMENT DETAIL SHEETS

Project Number: WWGM-1
Project Name: Gravity Main along Bessie Avenue
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of approximately 440 feet of 8-inch diameter gravity main along Bessie Avenue, between Whittier Avenue and 20th Street. To mitigate capacity deficiencies under existing PWWF conditions, it is recommended that the existing 8-inch diameter gravity main be replaced with a 12-inch diameter gravity main.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	8	12	Replace	440	$ 285	$ 125,000	$ 169,000	2023

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

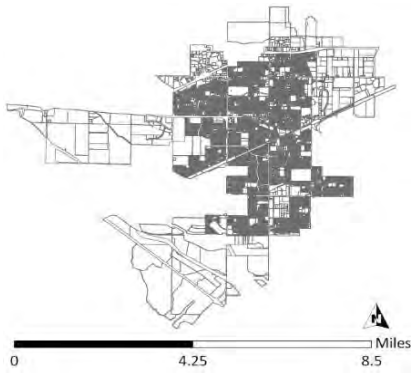
Reimbursement Category	Percent	Cost ($)
Existing Users	100%	$ 169,000
Future Users	0%	-
Total	100%	$ 169,000

Notes on Cost Estimation:

As an existing deficiency, existing users are assigned 100-percent of the project's cost.

Project Detail:

Project Number: WWGM-2
Project Name: Gravity Main along Bessie Avenue
System Type: Wastewater Collection System



Project Description:

This project includes the replacement of approximately 510 feet of 10-inch diameter gravity main along Bessie Avenue, between 23rd Street and West Grant Line Road. To mitigate capacity deficiencies under existing PWWF conditions, it is recommended that the existing 10-inch diameter gravity main be replaced with a 12-inch diameter gravity main.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost[1] ($)	Capital Improvement Cost[2] ($)	Project Schedule
Gravity Main	10	12	Replace	510	$ 285	$ 145,000	$ 196,000	2024

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

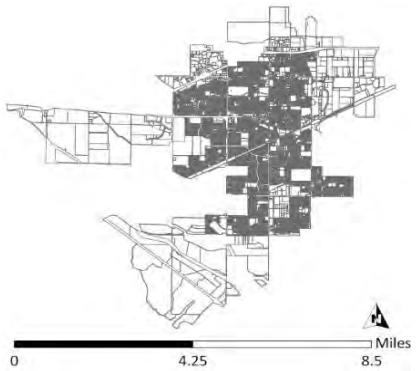
Reimbursement Category	Percent	Cost ($)
Existing Users	100%	$ 196,000
Future Users	0%	$ -
Total	100%	$ 196,000

Notes on Cost Estimation:

As an existing deficiency, existing users are assigned 100-percent of the project's cost.

Project Detail:

Project Number: WWGM-3
Project Name: Gravity Main along North Central Avenue
System Type: Wastewater Collection System



Project Description:

This project includes the replacement of approximately 450 feet of 8-inch and 12-inch diameter gravity main along North Central Avenue, 10th Street and 11th Street. To mitigate capacity deficiencies under existing PWWF conditions, it is recommended that the existing 8-inch and 12-inch diameter gravity mains be replaced with a 15-inch diameter gravity main.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	8	15	Replace	450	$ 305	$ 137,000	$ 185,000	2025

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

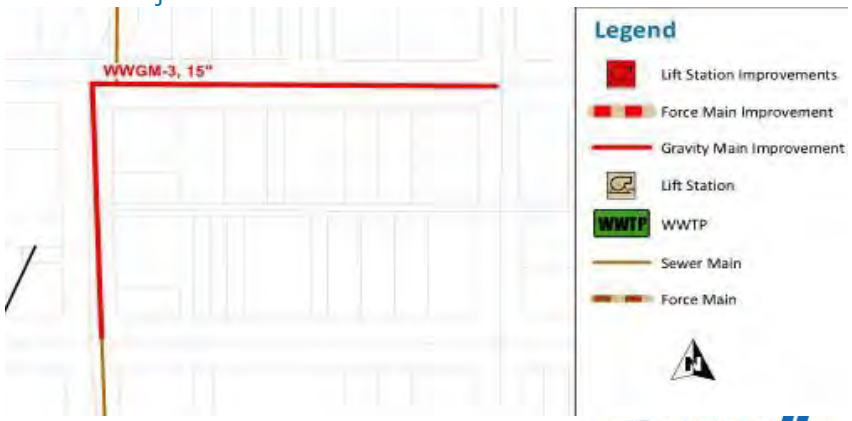
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	100%	$ 185,000
Future Users	0%	$ -
Total	100%	$ 185,000

Notes on Cost Estimation:

As an existing deficiency, existing users are assigned 100-percent of the project's cost.

Project Detail:



Project Number: Phase 2
Project Name: Corral Hollow Phase 2
System Type: Wastewater Collection System

Project Description:

This project includes the addition of a parallel gravity main along Corral Hallow Road between Parkside Drive and Fieldview Drive. This project will compromise of approximately 8,450 feet of 18-inch diameter gravity main.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	-	18	New	8,450	$ 330	$ 2,789,000	$ 3,765,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

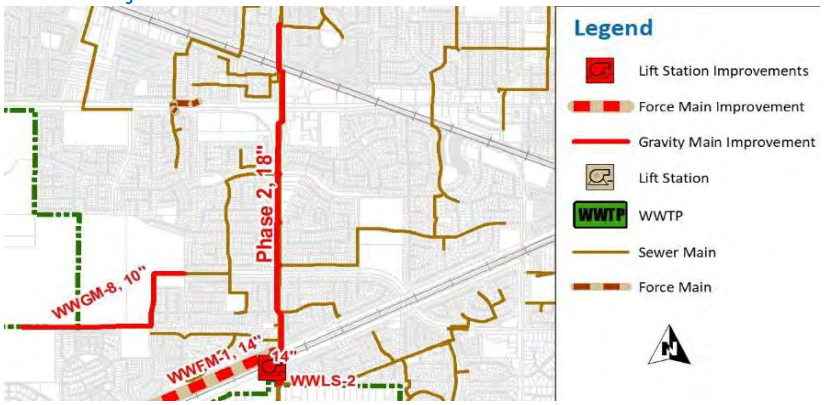
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 3,765,000
Total	100%	$ 3,765,000

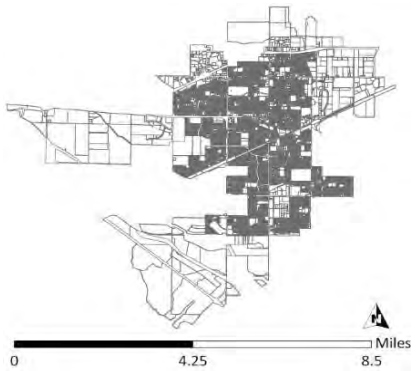
Notes on Cost Estimation:

As a future deficiency, future users are assigned 100-percent of the project's cost.

Project Detail:



Project Number: WWGM-4
Project Name: Gravity Main along MacArthur Drive
System Type: Wastewater Collection System



Project Description:

This project includes the replacement of approximately 600 feet of 12-inch diameter gravity main along MacArthur Drive, south of East Grant Line Road. To mitigate capacity deficiencies under 2040 PWWF conditions, it is recommended that the existing 12-inch diameter gravity main be replaced with a 21-inch diameter gravity main.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	12	21	Replace	600	$ 420	$ 252,000	$ 340,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

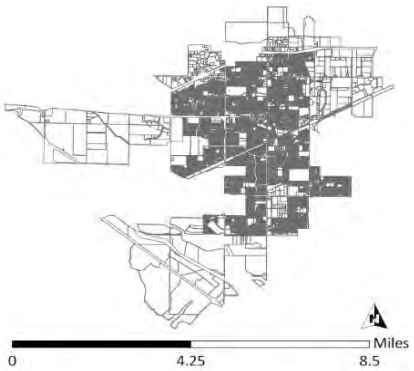
Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 340,000
Total	100%	$ 340,000

Notes on Cost Estimation:

As a future deficiency, future users are assigned 100-percent of the project's cost.

Project Detail:

Project Number: WWGM-5
Project Name: Gravity Main along Lammers Road
System Type: Wastewater Collection System



Project Description:

This project includes the addition of approximately 3,310 feet of 18-inch diameter gravity main along Lammers Road, north of West Schulte Road. To mitigate capacity deficiencies under 2040 PWWF conditions, it is recommended that this gravity main is implemented convey flow from Corral Hollow Road to Lammers Road. ***This project is needed to convey from the new force main and lift station projects (WWFM-1 and WWLS-2)***

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	--	18	New	3,310	$ 330	$ 1,092,000	$ 1,474,000	2027

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 1,474,000
Total	100%	$ 1,474,000

Notes on Cost Estimation:

As a future deficiency, future users are assigned 100-percent of the project's cost.

Project Detail:

Project Number: WWGM-6
Project Name: Gravity Main to Serve Holly Sugar Industrial
System Type: Wastewater Collection System

Project Description:

This project includes the addition of approximately 1,520 feet of 12-inch diameter gravity main west of MacArthur drive and south of Arbor Avenue. To anticipate development in this area (Holly Sugar Industrial) by 2040, it is recommended that these 12-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	--	12	New	1,520	$ 285	$ 433,000	$ 585,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

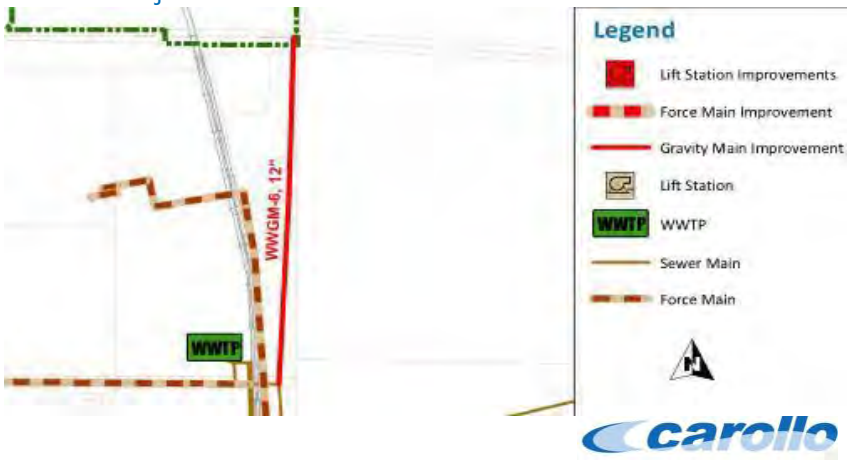
(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

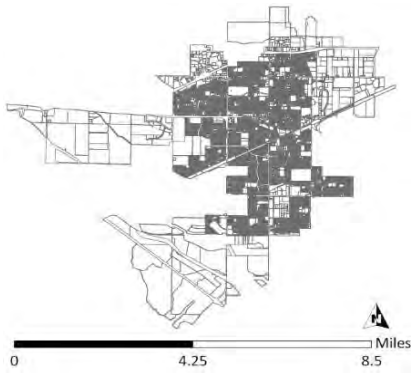
Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 585,000
Total	100%	$ 585,000

Notes on Cost Estimation:

Project Detail:



Project Number: WWGM-7
Project Name: Gravity Main to Serve Ellis
System Type: Wastewater Collection System



Project Description:

This project includes the addition of approximately 1,760 feet of 12-inch diameter gravity main along Ellis Town Drive, between Corral Hollow Road and Middlefield Drive. To anticipate development in this area (Ellis) by 2040, it is recommended that these 12-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	--	12	New	1,760	$ 285	$ 502,000	$ 678,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

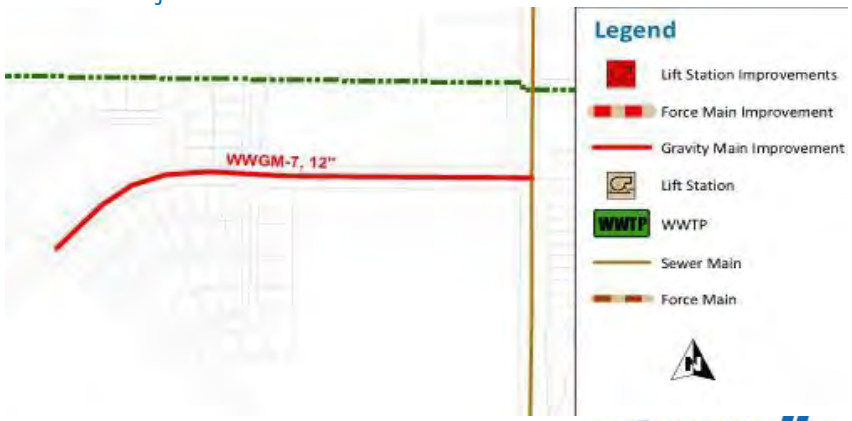
(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 678,000
Total	100%	$ 678,000

Notes on Cost Estimation:

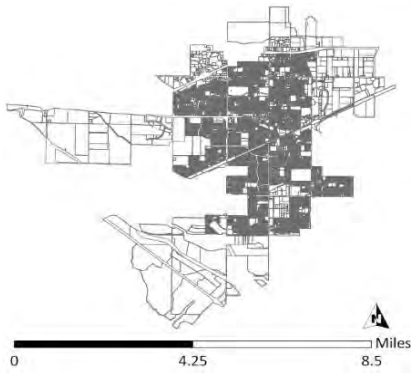
Project Detail:



Project Number: WWGM-8

Project Name: Gravity Main to Serve Rocking Horse and UR7 Bright/Castro

System Type: Wastewater Collection System



Project Description:

This project includes the addition of approximately 4,700 feet of 12-inch diameter gravity main along Schulte Road and Mabel Josephine Drive. To anticipate development in this area (Rocking Horse and UR7 Bright/Castro) by 2040, it is recommended that these 12-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	--	12	New	4,700	$ 285	$ 1,340,000	$ 1,809,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

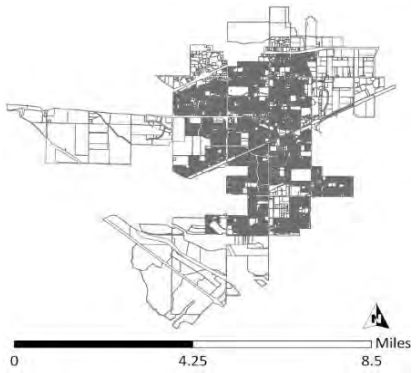
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 1,809,000
Total	100%	$ 1,809,000

Notes on Cost Estimation:

Project Detail:

Project Number: WWGM-9
Project Name: Gravity Main to Serve Avenues and SWC Valpico & Corral Hollow
System Type: Wastewater Collection System



Project Description:

This project includes the addition of approximately 2,650 feet of 12-inch diameter gravity main along Valpico Road, west of Corral Hollow Road. To anticipate development in this area (Avenues and SWC Valpico & Corral Hollow) by 2040, it is recommended that these 12-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	--	12	New	2,650	$ 285	$ 755,000	$ 1,019,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

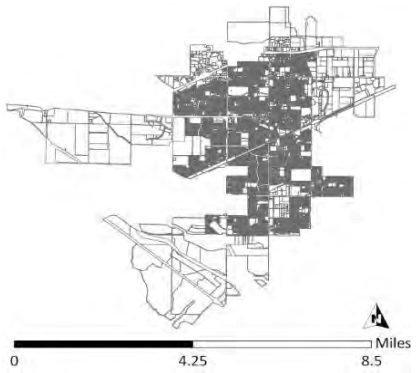
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 1,019,000
Total	100%	$ 1,019,000

Notes on Cost Estimation:

Project Detail:

Project Number: WWGM-10
Project Name: Gravity Main to Serve Tracy Village
System Type: Wastewater Collection System



Project Description:

This project includes the addition of approximately 1,720 feet of 12-inch diameter gravity main along Valpico Road, east of Corral Hollow Road. To anticipate development in this area (Tracy Village) by 2040, it is recommended that these 12-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	--	12	New	1,720	$ 285	$ 490,000	$ 662,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

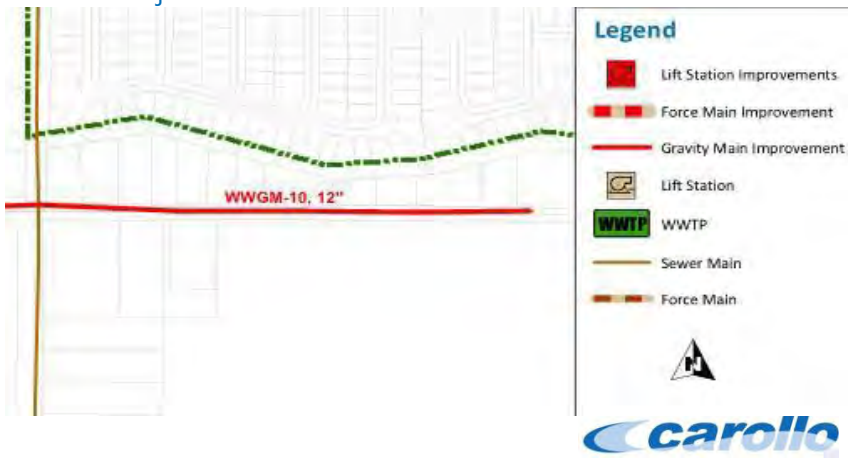
(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

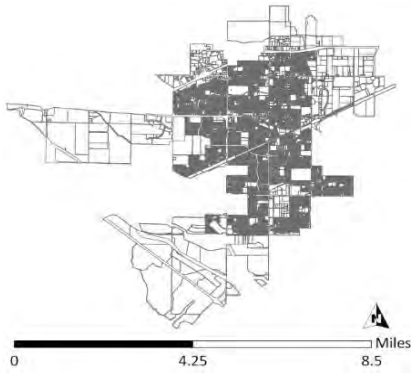
Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 662,000
Total	100%	$ 662,000

Notes on Cost Estimation:

Project Detail:



Project Number: WWGM-11
Project Name: Gravity Main along Lammers Road and Byron Road
System Type: Wastewater Collection System



Project Description:

This project includes the replacement of approximately 2,710 feet of 21-inch diameter gravity main along Lammers Road, south of Byron Road, and along Byron Road, west of Lammers Road. To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended that the existing 21-inch diameter gravity main be replaced with a 27-inch diameter gravity main.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost[1] ($)	Capital Improvement Cost[2] ($)	Project Schedule
Gravity Main	21	27	Replace	2,710	$ 520	$ 1,409,000	$ 1,902,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

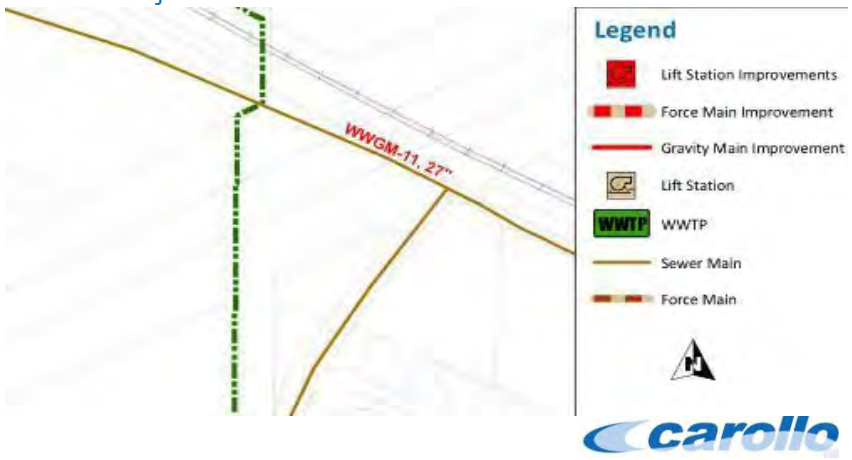
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 1,902,000
Total	100%	$ 1,902,000

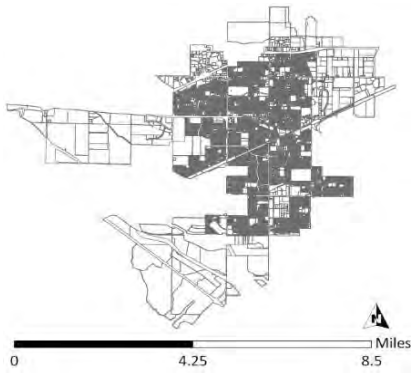
Notes on Cost Estimation:

As a future deficiency, future users are assigned 100-percent of the project's cost.

Project Detail:



Project Number: WWGM-12
Project Name: Gravity Main along Corral Hollow Road
System Type: Wastewater Collection System



Project Description:

This project includes the replacement of approximately 380 feet of 18-inch gravity main along Corral Hollow Road, between Parkside Drive and project WWLS-2.To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended that the existing 18-inch diameter gravity main be replaced with a 24-inch diameter gravity main.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	18	24	Replace	380	$ 460	$ 175,000	$ 236,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 236,000
Total	100%	$ 236,000

Notes on Cost Estimation:

As a future deficiency, future users are assigned 100-percent of the project's cost.

Project Detail:

Project Number: WWGM-13
Project Name: Gravity Main to Serve Chrisman
System Type: Wastewater Collection System

Project Description:

This project includes the addition of approximately 5,750 feet of 12-inch diameter gravity main along Paradise Road, south of West Grant Line and along Chrisman Road, south of Paradise Road. To anticipate development in this area (Chrisman Road) by 2040, it is recommended that these 12-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	--	12	New	5,750	$ 285	$ 1,639,000	$ 2,213,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

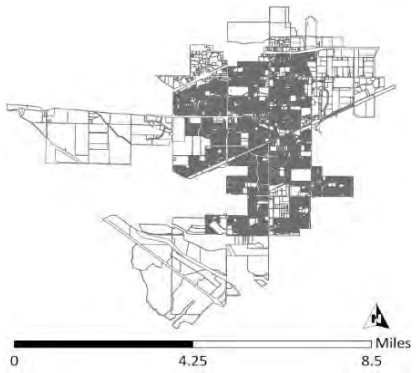
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 2,213,000
Total	100%	$ 2,213,000

Notes on Cost Estimation:

Project Detail:

Project Number: WWGM-14
Project Name: Gravity Main to Serve Rocha
System Type: Wastewater Collection System



Project Description:

This project includes the addition of approximately 1,420 feet of 12-inch diameter gravity main east of Spur Line Railroad and south of Yosemite Drive. To anticipate development in this area (Rocha) by 2040, it is recommended that these 12-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	--	12	New	1,420	$ 285	$ 405,000	$ 547,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

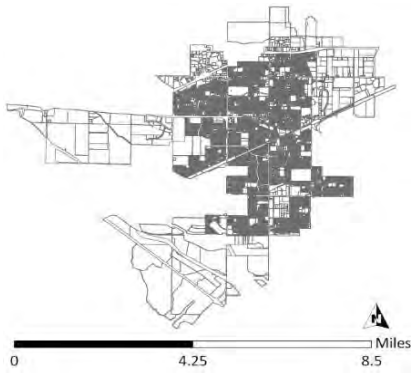
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 547,000
Total	100%	$ 547,000

Project Detail:

Notes on Cost Estimation:

Project Number: WWGM-15
Project Name: Gravity Main to Serve Acacia Street and Franklin Avenue
System Type: Wastewater Collection System



Project Description:

This project includes the addition of approximately 750 feet of 18-inch diameter gravity main east of the intersection of Acacia Street and Franklin Avenue . To anticipate development in this area by 2040, it is recommended that these 21-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	18	21	Replace	750	$ 420	$ 315,000	$ 425,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

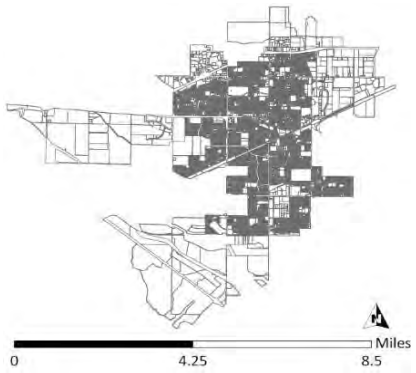
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	71%	$ 302,000
Future Users	29%	$ 123,000
Total	100%	$ 425,000

Project Detail:

Notes on Cost Estimation:

Project Number: WWGM-16
Project Name: Gravity Main Along Macarthur Drive
System Type: Wastewater Collection System



Project Description:

This project includes the addition of approximately 1500 feet of 21-inch diameter gravity main Along Macarthur Drive between UP Railroad and Eleventh Street. To anticipate development in this area by 2040, it is recommended that these 24-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	21	24	Replace	1,500	$ 460	$ 690,000	$ 932,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

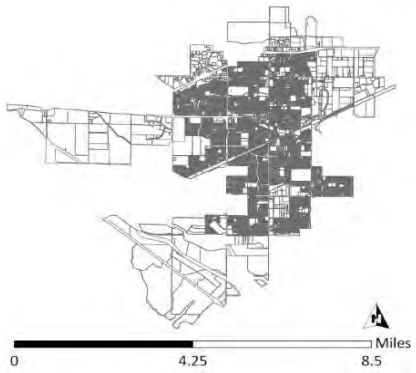
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	71%	$ 662,000
Future Users	29%	$ 270,000
Total	100%	$ 932,000

Project Detail:

Notes on Cost Estimation:

Project Number: WWGM-17
Project Name: Gravity Main to Serve Chrisman Road
System Type: Wastewater Collection System



Project Description:

This project includes the addition of approximately 2700 feet of 12-15 inch diameter gravity main West of Chrisman Road between Tulloch Drive and Schulte Road. To anticipate development in this area by 2040, it is recommended that these 18-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	12	18	Replace	2,700	$ 330	$ 891,000	$ 1,203,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	46%	$ 553,000
Future Users	54%	$ 650,000
Total	100%	$ 1,203,000

Project Detail:

Notes on Cost Estimation:

Project Number: Cordes Ranch
Project Name: Gravity Mains to Serve Cordes Ranch
System Type: Wastewater Collection System

Project Description:

This project includes the addition of approximately 1,420 feet of 12-inch diameter gravity main east of Spur Line Railroad and south of Yosemite Drive. To anticipate development in this area (Rocha) by 2040, it is recommended that these 12-inch diameter pipelines be added.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Gravity Main	--	8	New	45,440	$ 260	$ 11,814,000	$ 15,949,000	2041 & beyond
Gravity Main	--	10	New	6,160	$ 270	$ 1,663,000	$ 2,245,000	2041 & beyond
Gravity Main	--	12	New	6,370	$ 285	$ 1,815,000	$ 2,450,000	2041 & beyond
Gravity Main	--	15	New	8,640	$ 305	$ 2,635,000	$ 3,557,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

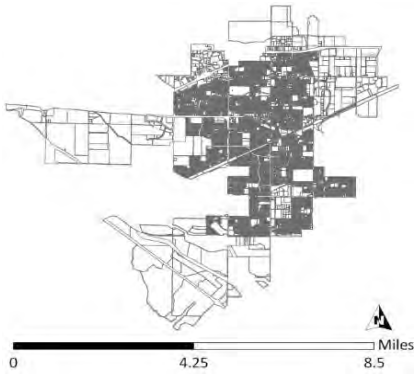
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$24,201,000
Total	100%	$24,201,000

Project Detail:

Notes on Cost Estimation:

Project Number: WWLS-1
Project Name: Hansen Lift Station
System Type: Wastewater Collection System



Project Description:

This project includes the expansion of Hansen Lift Station. The firm capacity is not adequate to convey the buildout PWWF. It is recommended that the lift station capacity be upgraded from 9.01 mgd to 10.8 mgd to accommodate future flows.

Project Details:

Project Element	Existing Total Capacity (mgd)	Proposed Total Capacity (mgd)	Replace/ New	No. of Pumps (Units)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Lift Station	9.01	10.42 mgd	Replace	TBD	--	$ 5,210,000	$ 7,034,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

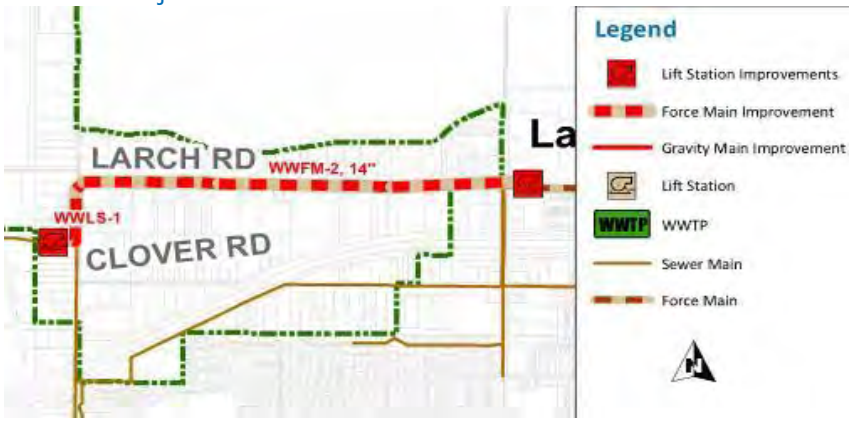
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 7,034,000
Total	100%	$ 7,034,000

Notes on Cost Estimation:

As a future deficiency, future users are assigned 100-percent of the project's cost.

Project Detail:



Project Number: WWLS-2
Project Name: Lammers Lift Station
System Type: Wastewater Collection System

Project Description:

This project includes the construction of a new lift station to serve future growth and existing users in the southern area of the City. To relieve the high flows conveyed along Corral Hollow Road, this project is recommended to convey flows along Schulte Road, west of Corral Hollow Road. This project will have a firm capacity of 4.36 mgd.

Project Details:

Project Element	Existing Total Capacity (mgd)	Proposed Total Capacity (mgd)	Replace/ New	No. of Pumps (Units)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Lift Station	-	4.36 mgd	New	TBD	--	$ 2,180,000	$ 2,943,000	2027
Land Acquisition							$ 125,000	2027

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

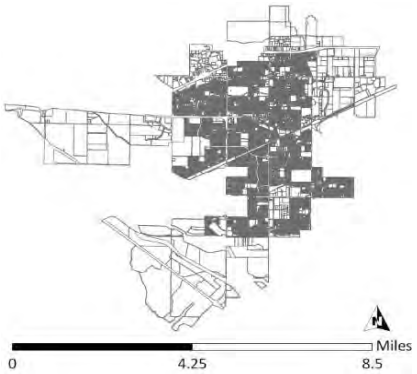
Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 3,068,000
Total	100%	$ 3,068,000

Notes on Cost Estimation:

As a future deficiency, future users are assigned 100-percent of the project's cost.

Project Detail:

Project Number: WWLS-3
Project Name: Larch Lift Station
System Type: Wastewater Collection System



Project Description:

This project includes the expansion of Larch Lift Station. The firm capacity is not adequate to convey the 2040 and buildout PWWFs. It is recommended that the lift station capacity be upgraded from 12.96 mgd to 17.5 mgd to accommodate future buildout flows.

Project Details:

Project Element	Existing Total Capacity (mgd)	Proposed Total Capacity (mgd)	Replace/ New	No. of Pumps (Units)	Unit Cost ($)	Baseline Construction Cost(1) ($)	Capital Improvement Cost(2) ($)	Project Schedule
Lift Station	12.96	19.75 mgd	New	TBD	--	$ 9,875,000	$ 13,331,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

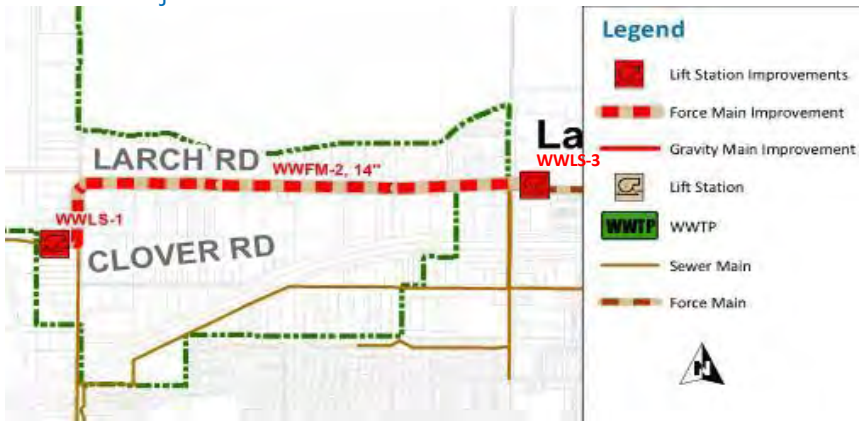
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 13,331,000
Total	100%	$ 13,331,000

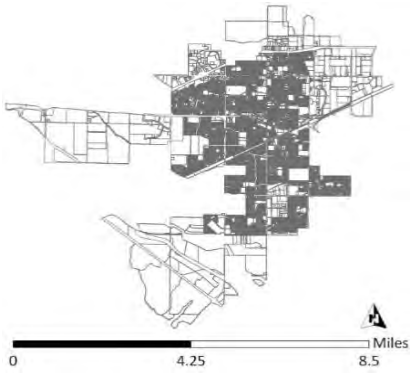
Notes on Cost Estimation:

As a future deficiency, future users are assigned 100-percent of the project's cost.

Project Detail:



Project Number: WWFM-1
Project Name: Schulte Road Force Main
System Type: Wastewater Collection System



Project Description:

This project is a force main for the Schulte Road Lift Station (WWLS-1). The force main consists of a 14-inch diameter force main that extends 7,790 feet along Schulte Road. ***This project is needed to convey flow from the new lift station project WWLS-2.***

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost(1) ($/ft)	Baseline Construction Cost ($)	Capital Improvement Cost(2) ($)	Project Schedule
Force Main	-	14	New	7,790	$ 445	$ 3,467,000	$ 4,680,000	2027

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 4,680,000
Total	100%	$ 4,680,000

Notes on Cost Estimation:

As a future deficiency, future users are assigned 100-percent of the project's cost.

Project Detail:

Project Number: WWFM-2
Project Name: Hansen Force Main
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of approximately 6,240 feet of 12-inch diameter force main. To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended the pipeline be replaced with a 16-inch diameter force main to accommodate future flows.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost(1) ($/ft)	Baseline Construction Cost ($)	Capital Improvement Cost(2) ($)	Project Schedule
Force Main	12	16	Replace	6,420	$ 445	$ 2,857,000	$ 3,857,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

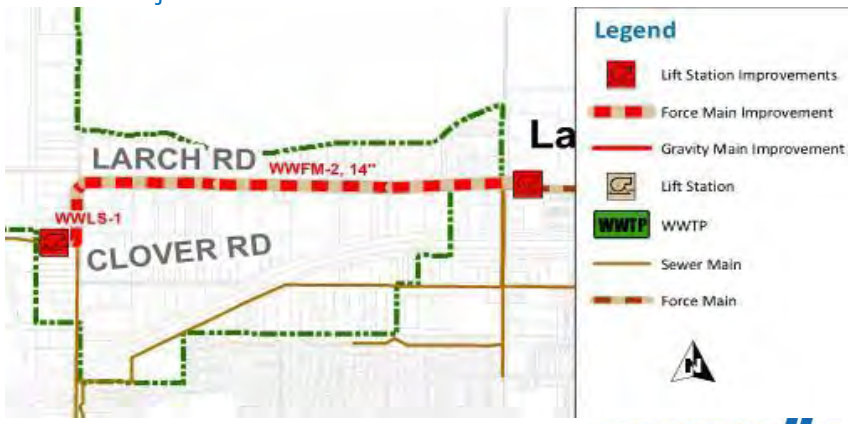
Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 3,857,000
Total	100%	$ 3,857,000

Notes on Cost Estimation:

As a future deficiency, future users are assigned 100-percent of the project's cost.

Project Detail:



Project Number: WWRR-1
Project Name: Annual Sewer Line Replacement Program
System Type: Wastewater Collection System

Project Description:
It is recommended that the City undergoes a Sewer Master Plan Update every 5-years to evaluate wastewater collection system.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost(1) ($/ft)	Baseline Construction Cost ($)	Capital Improvement Cost(2) ($)	Project Schedule
Annual Sewer Line Replacement	--	--	--	--	--	--	$ 150,000	2023
Annual Sewer Line Replacement	--	--	--	--	--	--	$ 150,000	2024
Annual Sewer Line Replacement	--	--	--	--	--	--	$ 150,000	2025
Annual Sewer Line Replacement	--	--	--	--	--	--	$ 150,000	2026
Annual Sewer Line Replacement	--	--	--	--	--	--	$ 600,000	2027-2030
Annual Sewer Line Replacement	--	--	--	--	--	--	$ 1,500,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	100%	$ 2,700,000
Future Users	0%	$ -
Total	100%	$ 2,700,000

Notes on Cost Estimation:

Project Number: WWO-1
Project Name: Wastewater Master Plan Update
System Type: Wastewater Collection System

Project Description:

It is recommended that the City undergoes a Sewer Master Plan Update every 5-years to evaluate wastewater collection system.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost(1) ($/ft)	Baseline Construction Cost ($)	Capital Improvement Cost(2) ($)	Project Schedule
Wastewater Master Plan Update	--	--	--	--	--	--	$ 150,000	2027
Wastewater Master Plan Update	--	--	--	--	--	--	$ 150,000	2031-2040
Wastewater Master Plan Update	--	--	--	--	--	--	$ 150,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	50%	$ 225,000
Future Users	50%	$ 225,000
Total	100%	$ 450,000

Notes on Cost Estimation:

Project Number: WWO-2
Project Name: Wastewater Treatment Plant Expansion Phase 2C
System Type: Wastewater Treatment Plant Expansion

Project Description:
Wastewater treatment plant expansion Phase 2C is fully designed but has yet to be completed.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost(1) ($/ft)	Baseline Construction Cost ($)	Capital Improvement Cost(2) ($)	Project Schedule
Phase 2C	--	--	--	--	--	--	$ 35,000,000	2026

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 35,000,000
Total	100%	$ 35,000,000

Notes on Cost Estimation:

Project Number: WWO-3
Project Name: Wastewater Treatment Plant Expansion Phase 3
System Type: Wastewater Treatment Plant Expansion

Project Description:

It is recommended that the Phase 3 wastewater treatment plant expansion will include the following: Grit removal basin #3, circular clarifier #3, primary sludge pump station #2, primary effluent equalization tank #2, aeration basin #5, secondary clarifier #2, new WAS and mixed liquor pump station, anaerobic digester #4, removal of 1975 trickling filters, new centrate equalization tank and pump station, and new sludge drying bed #4.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost(1) ($/ft)	Baseline Construction Cost ($)	Capital Improvement Cost(2) ($)	Project Schedule
Phase 3	--	--	--	--	--	$ 41,175,400	$ 55,587,000	2031-2040

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 55,587,000
Total	100%	$ 55,587,000

Notes on Cost Estimation:

Project Number: WWO-4
Project Name: Wastewater Treatment Plant Expansion Phase 4
System Type: Wastewater Treatment Plant Expansion

Project Description:

It is recommended that the Phase 4 wastewater treatment plant expansion include an additional effluent screen and channel, new primary clarifier effluent equalization pump station, and new outfall pipeline.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost(1) ($/ft)	Baseline Construction Cost ($)	Capital Improvement Cost(2) ($)	Project Schedule
Phase 4	--	--	--	--	--	$ 25,228,200	$ 34,058,000	2041 & beyond

Notes:

(1) ENR San Francisco Construction Cost Index for July 2022 is 15,640.

(2) Estimated Construction Cost includes a 15% general contingency, 10% for design costs, and 10% for construction management.

Project Cost Allocation:

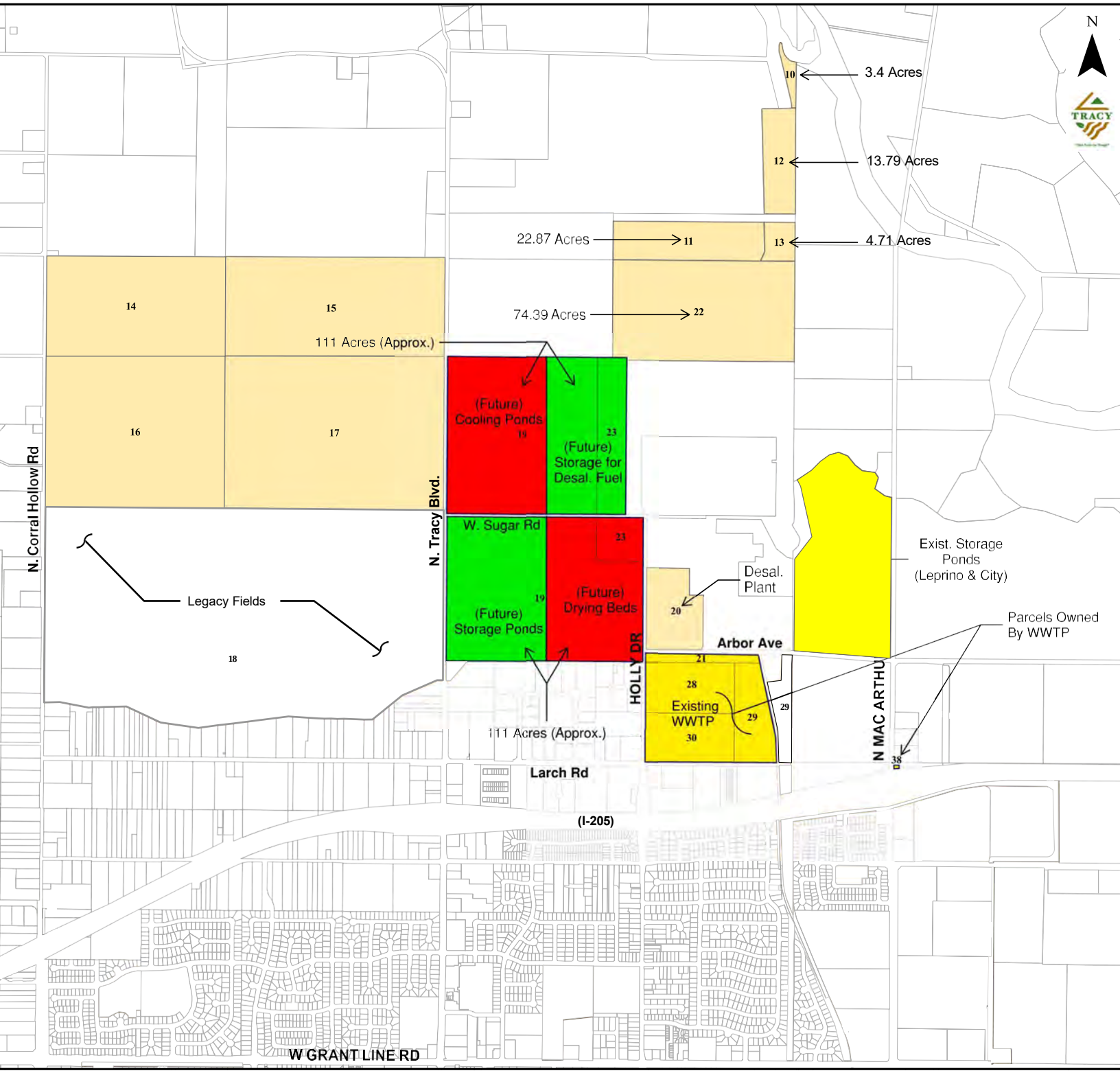
Reimbursement Category	Percent	Cost ($)
Existing Users	0%	$ -
Future Users	100%	$ 34,058,000
Total	100%	$ 34,058,000

Notes on Cost Estimation:

Appendix F

WASTEWATER TREATMENT PLANT EXPANSION AREAS

FUTURE EXPANSION AREAS OF THE WWTP



LEGEND

- CITY (WASTEWATER ENTERPRISE FUND) OWNED PARCELS
- FOR FUTURE EXPANSION & USES OF THE WWTP
- FOR FUTURE EXPANSION & USES OF THE WWTP

NOTE:
Most of the existing lands shown above is under leases to farms for Agricultural uses.

August 15, 2023

Agenda Item 3.C

RECOMMENDATION

Staff recommends that City Council review and discuss the Citywide Water System Master Plan Update.

EXECUTIVE SUMMARY

This item is for the City Council to review and discuss the Citywide Water System Master Plan Update (Master Plan Update). The proposed Master Plan Update will update the water infrastructure needed by the City to serve the new development identified in the City's General Plan and the growing population of the City.

BACKGROUND AND LEGISLATIVE HISTORY

The City's existing Water Master Plan was approved in January 2013 (Existing Master Plan). The Existing Master Plan was based on the City's 2011 General Plan (as amended, General Plan). The City has incorporated many general plan amendments since the 2011 adoption of the Existing Master Plan and has seen a significant increase in residential and commercial development throughout the City. The General Plan identifies existing and new areas of development within and around the existing City limits, including areas east of the City up to Chrisman Road, to the west of the City up to the Altamont Pass south of I-205, and the Larch Clover area both north and south of I-205.

ANALYSIS

The Master Plan Update provides an evaluation of the potable water and recycled water system facilities required to serve the City's existing and future needs. The State endured five years of drought starting in 2012, including the driest four consecutive years in California history. These unprecedented conditions led to statewide mandated water conservation, significant surface water supply reductions and curtailments, and legislation establishing new water efficiency standards.

The evaluation of the City's water supplies in the Master Plan Update was coordinated with the City's 2020 Urban Water Management Plan, which was adopted by the Tracy City Council in June 2021. Due to unprecedented drought conditions from 2012 through 2017 and new flow restrictions resulting from the 2018 Water Quality Control Plan for the San Francisco Bay/Sacramento San Joaquin Delta Estuary, the projected water supply of the City's surface water from the Central Valley Project (CVP) and South San Joaquin Irrigation District (SSJID) have been significantly reduced, particularly in dry years. Water supply conditions in California continue to change and City staff are closely monitoring potential impacts to the City's water supplies.

Recommended infrastructure improvements for the City's potable water system include new storage tanks, new Aquifer Storage and Recovery (ASR) wells, new transmission and distribution pipelines to extend the City's water system to serve proposed new development areas, and an expansion of the City's John Jones Water Treatment Plant (JJWTP) to provide additional water treatment capacity and operational flexibility, including a new building to

provide additional administrative and maintenance space for future staffing needs. The City also intends to participate in Contra Costa Water District's proposed Los Vaqueros Reservoir Expansion Project and United States Bureau of Reclamation (USBR) B.F. Sisk Dam Raise and Reservoir Expansion Project, both of which would provide the City with reliable options for storage of excess water during wet seasons for use during drought conditions.

Recommended infrastructure improvements for the City's recycled water system include new pump stations, a new storage tank, and new transmission, and distribution pipelines to serve new development areas in the western, southern and eastern portions of the City. Because the conversion of existing irrigated areas can be costly and disruptive, the Master Plan Update focuses on the infrastructure needed to deliver recycled water supplies to new development areas where practical and taking advantage of the recycled water infrastructure that has been constructed to date.

The Master Plan Update also includes a proposed Recycled Water Exchange Agreement with the USBR, whereby a portion of the City's tertiary treated wastewater (recycled water) would be discharged to the Delta Mendota Canal (DMC) and a like amount of water (i.e., a one-to-one exchange) could then be diverted from the DMC by the City for treatment at the City's JJWTP for potable use. With the potential reduction in reliability of the City's surface water supplies from the CVP and SSJID, this proposed recycled water exchange agreement will be a critical component of the City's future water supply portfolio.

Staff anticipates a decrease to the water development impact fees due to an overall decrease in water usage per household and drought conservation efforts.

FISCAL IMPACT

This item is to only to review and receive feedback regarding the Master Plan Update. The cost of completion of the Master Plan Update was funded from program management fees collected through our development impact fee program. The cost of construction of the physical infrastructure listed in the Master Plan Update would, if approved, be funded through development impact fees or other funding mechanisms without any impact to the City's General Fund.

PUBLIC OUTREACH / INTEREST

A Public Outreach Meeting was held for the Master Plan Update on February 14, 2022.

COORDINATION

The City's Engineering Division coordinated with our Operations and Utilities Department and West Yost & Associates to complete this update.

CEQA DETERMINATION

The project is an informational item only and exempt from the California Environmental Quality Act as no discretionary action is being taken by the City Council.

STRATEGIC PLAN

This agenda item supports the City of Tracy's Quality of Life Strategic Priority, which is to provide an outstanding quality of life by enhancing the City's amenities, business mix and services, and cultivating connections to promote positive change and progress in our community.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council review and discuss the Citywide Water System Master Plan Update.

Prepared by: Veronica Child, Management Analyst II

Reviewed by: Koosun Kim, PE, City Engineer / Assistant Director of Development Services
Sara Cowell, Finance Director
Bijal M. Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

ATTACHMENTS

Attachment A – Citywide Water System Master Plan Update
Attachment B – Presentation – Citywide Water System Master Plan Update

Attachment A

CITY OF TRACY

Citywide Water System Master Plan Update

FINAL REPORT

MAY 2023

WEST YOST ASSOCIATES

FINAL REPORT | MAY 2023

Citywide Water System Master Plan Update

Prepared for

City of Tracy

Project No. 404-12-18-41

Project Manager: Amy Kwong, PE	May 2023 Date
QA/QC Review: Elizabeth Drayer, PE	May 2023 Date

WEST YOST ASSOCIATES

PREFACE

During the time that this Citywide Water System Master Plan was prepared and completed, several development projects have progressed, and some associated water system infrastructure improvements have been completed. As such, tables and figures in this Master Plan showing existing water system facilities may not include all of the current existing water system facilities. Similarly, tables and figures showing future recommended water system facilities may include some water system facilities which have already been constructed. This does not change the results or the recommendations of the Citywide Water System Master Plan.

The Tracy Infrastructure Master Plan (TIMP) Impact Fee Nexus Study, being prepared by Harris & Associates based on this Citywide Water System Master Plan, does consider the recent completion of water system facilities, so that updated water system impact fees reflect only those water system facilities which have not yet been constructed.

The City's progress in completing water system infrastructure improvements is exciting, and we look forward to the completion of additional recommended infrastructure improvements in the coming years.

Table of Contents

Executive Summary

Purpose for the Citywide Water System Master Plan Update ES-1

Objectives of the Citywide Water System Master Plan Update ES-1

Key Changes from the 2012 Citywide Water System Master Plan ES-2

Existing and Projected Future Water Demands ES-4

Existing and Projected Future Water Supplies ES-6
- Existing Water Supplies ES-6
- Future Water Supplies ES-7

Evaluation of Existing and Future Potable Water System ES-10
- Existing Potable Water System ES-10
  - Pipeline Improvements ES-11
- 2025 Potable Water System ES-11
  - Pipeline Improvements ES-11
  - New Potable Water Pipelines ES-11
  - Interconnections ES-14
  - Re-zoning ES-14
  - Groundwater Wells ES-14
- Buildout Potable Water System ES-14
  - Storage Reservoirs ES-14
  - Groundwater Wells ES-15
  - Booster Pump Stations ES-15
  - New Potable Water Pipelines ES-15
  - Interconnections ES-16
  - Re-zoning ES-16
  - System Control and Data Acquisition (SCADA) System and Backup Power ES-16
  - JJWTP Expansion ES-16
  - Participation in Phase 2 Los Vaqueros Reservoir Expansion Project ES-17
  - Participation in the B.F. Sisk Dam Raise & Reservoir Expansion Project ES-17
  - Water Master Plan Updates ES-17

Evaluation of Future Recycled Water System ES-17
- 2025 Recycled Water System ES-18
  - Booster Pump Stations ES-18
  - New Recycled Water Pipelines ES-18
- Buildout Recycled Water System ES-18
  - Storage Reservoirs ES-18
  - Booster Pump Stations ES-20
  - New Recycled Water Pipelines ES-20
  - SCADA System ES-20

Recommended Capital Improvement Program ES-20

Chapter 1. Introduction

1.1 Citywide Water System Master Plan Update Purpose 1-1

1.2 Water Master Plan Objectives 1-1

1.3 Key Changes from the 2012 Citywide Water System Master Plan 1-2

1.4 Report Organization 1-4

1.5 Acknowledgements 1-5

Chapter 2. Water Supply and Infrastructure System Objectives, Goals, and Recommendations

2.1 Overview 2-1
2.2 Overall Water System Objectives and Goals 2-1
2.3 City of Tracy Water Conservation Programs 2-2
2.3.1 Existing Water Conservation Programs 2-2
2.3.2 Water Efficient Landscape Ordinance 2-3
2.4 Recycled and Non-Potable Water Ordinance 2-4
2.5 City of Tracy General Plan Water Service Goals, Objectives and Policies 2-5
2.6 Compliance with California Green Building Standards Code 2-7
2.7 Recommendations for New Development and New Water System Facilities 2-8
2.8 Principles for Sustainable Infrastructure in the City of Tracy 2-9

Chapter 3. Land Use Assumptions

3.1 Overview 3-1
3.2 City of Tracy General Plan and Sphere of Influence 3-1
3.3 Existing and Planned Development of the City's Sphere of Influence 3-3
3.3.1 Existing Developed Land Uses 3-3
3.3.2 Approved Projects 3-3
3.3.3 Additional Planned Development 3-6
3.3.4 Miscellaneous Infill Development 3-6
3.3.5 Mountain View Annexation 3-6
3.4 Development Time Frames Evaluated in this Water System Master Plan Update 3-8
3.4.1 2025 (Near-Term) Development of the City's Sphere of Influence 3-8
3.4.2 2040 Development of the City's Sphere of Influence 3-8
3.4.3 Buildout Development of the City's Sphere of Influence 3-8
3.5 Summary of Land Use Projections 3-9

Chapter 4. Existing and Future Water Demands

4.1 Overview 4-1
4.2 Existing Service Area 4-1
4.3 Population Served 4-3
4.4 Historical Potable Water Production and Consumption 4-6
4.4.1 Historical Potable Water Production 4-6
4.4.2 Historical Potable Water Consumption 4-10
4.4.3 Potable Unaccounted-for Water/Non-Revenue Water 4-12
4.4.4 Per Capita Potable Water Demand 4-13
4.5 Existing Recycled Water Production and Consumption 4-16
4.6 Water Conservation and Water Use Efficiency 4-16
4.6.1 Existing Water Conservation 4-16
4.6.2 Compliance with the Water Conservation Act of 2009 (SB X7-7) 4-16
4.6.3 Making Water Conservation a California Way of Life 4-17

4.7 Adopted Peaking Factors 4-18
4.7.1 Potable Water System Peaking Factors 4-18
4.7.2 Recycled Water System Peaking Factors 4-19

4.8 Future Water Demand Projections 4-20
4.8.1 Existing Unit Water Demand Factors and Land Use Assumptions 4-20
4.8.2 Verification of Unit Water Demand Factors 4-22
4.8.2.1 General Methodology 4-22
4.8.2.2 Residential Unit Water Demand Factors 4-23
4.8.2.3 Non-Residential Unit Water Demand Factors 4-24
4.8.3 Adopted Unit Water Demand Factors 4-28
4.8.4 Existing (Baseline) Water Demands 4-29
4.8.5 Recycled Water Use Assumptions 4-29
4.8.6 Projected Buildout Water Demands 4-30

4.9 Future Per Capita Water Use Projections 4-33

Chapter 5. Existing and Future Water Supplies

5.1 Overview 5-1

5.2 Changes to the City's Water Supplies Since the Completion of the 2012 Citywide Water System Master Plan and the 2015 Urban Water Management Plan 5-1

5.3 Existing Potable Water Supplies 5-2
5.3.1 Central Valley Project Water via the Delta-Mendota Canal 5-4
5.3.1.1 M&I-Reliability Supplies from the CVP 5-4
5.3.1.2 Ag-Reliability Supplies from the CVP 5-6
5.3.1.3 Treatment and Use of CVP Surface Water Supplies 5-7
5.3.2 Surface Water from BBID Pre-1914 Water Rights 5-8
5.3.3 Stanislaus River Water 5-9
5.3.4 Groundwater 5-11
5.3.4.1 City Wells 5-11
5.3.4.2 Groundwater Yield 5-11
5.3.4.3 Groundwater Quality 5-12
5.3.4.4 Groundwater Management 5-12
5.3.4.4.1 City Groundwater Management Policy and Mitigated Negative Declaration for City Groundwater Production of 9,000 af/yr 5-12
5.3.4.4.2 Compliance with the 1992 Groundwater Management Act (AB 3030) 5-12
5.3.4.4.3 Tracy Regional Groundwater Management Plan 5-13
5.3.4.4.4 Compliance with the 2014 Sustainable Groundwater Management Act 5-13
5.3.4.5 Historical Groundwater Use 5-15
5.3.4.6 Projected Future Groundwater Use 5-16
5.3.5 Aquifer Storage and Recovery 5-17
5.3.6 Out-of-Basin Water Banking 5-18

5.4 Future Potable Water Supplies 5-19
5.4.1 Additional ASR Wells 5-19
5.4.2 Additional CVP Water Supplies from USBR Available Through a Recycled Water Exchange Program 5-20
5.4.3 Additional CVP Water Supplies from BBID 5-21
5.4.4 Additional SCWSP Water Supplies 5-21

5.5 Existing Non-Potable Water Supplies 5-22
5.5.1 Recycled Water 5-22

5.5.2 Shallow Non-Potable Groundwater 5-22

5.6 Reliability of the City's Water Supplies 5-23
5.6.1 Potable Water Supply Reliability 5-23
5.6.1.1 Normal Years 5-23
5.6.1.2 Single Dry Years 5-25
5.6.1.3 Multiple Dry Years 5-27
5.6.2 Emergency Water Supply Conditions 5-31
5.6.3 Non-Potable Water Supply Reliability 5-31

5.7 Sufficiency of the City's Water Supplies 5-31
5.7.1 Potable Water Supply Availability 5-31
5.7.2 Recycled Water Supply Availability 5-33

5.8 Water Management Strategies and Options 5-34
5.8.1 Recycled Water for Non-Potable Use 5-34
5.8.2 Future Water Supply Projects 5-34
5.8.3 Implementation of Demand Management Measures 5-35
5.8.4 Policy-Based Water Efficiency Tools 5-35

5.9 Summary of Water Supply Recommendations 5-36

Chapter 6. System Performance and Operation Criteria

6.1 Overview 6-1

6.2 Potable Water System 6-2
6.2.1 General Potable Water System Reliability and Recommendations 6-2
6.2.1.1 Water Quality Standards 6-2
6.2.1.2 Recommendations for New Developments 6-2
6.2.2 Fire Flow Requirements 6-2
6.2.3 Potable Water System Capacity During High Demand Periods 6-5
6.2.3.1 Maximum Day Demand plus Fire Flow 6-5
6.2.3.2 Peak Hour Demand 6-5
6.2.4 Water Treatment Capacity 6-5
6.2.5 Potable Water Storage Capacity 6-6
6.2.5.1 Operational Storage 6-6
6.2.5.2 Fire Storage 6-6
6.2.5.3 Emergency Storage 6-7
6.2.5.4 Groundwater Credit 6-8
6.2.5.5 Treated Surface Water Supply Credit 6-8
6.2.5.6 Total Storage Capacity Recommended 6-9
6.2.6 Potable Water Pumping Facility Capacity 6-9
6.2.7 Potable Water Critical Supply Facilities 6-10
6.2.8 Potable Water Transmission and Distribution Pipeline Sizing and Recommended System Pressures 6-10
6.2.8.1 Potable Water Transmission System 6-11
6.2.8.2 Potable Water Distribution System 6-11

6.3 Recycled Water System 6-14
6.3.1 Recycled Water Demand Condition Evaluation 6-14
6.3.2 Recycled Water Treatment Capacity 6-14
6.3.3 Recycled Water Storage Capacity 6-14
6.3.3.1 Seasonal Storage 6-14
6.3.3.2 Operational Storage 6-14

6.3.3.3 Total Storage Capacity 6-15
6.3.4 Recycled Water Pumping Facility Capacity 6-15
6.3.5 Recycled Water Transmission Pipeline Sizing and Recommended System Pressures ... 6-15

Chapter 7. Existing Potable Water System Evaluation

7.1 Overview 7-1

7.2 Description of Existing Potable Water System Facilities 7-1
7.2.1 John Jones Water Treatment Plant 7-1
7.2.2 South County Water Supply Project 7-3
7.2.3 Groundwater Wells 7-4
7.2.4 Water Storage Facilities 7-6
7.2.5 Booster Pump Stations 7-6
7.2.6 Pressure Regulating Stations 7-8
7.2.7 Pressure Zone Boundaries 7-9
7.2.8 Transmission and Distribution System Pipelines 7-11
7.2.9 SCADA System 7-11

7.3 Hydraulic Model Update 7-11
7.3.1 Existing Hydraulic Model Description 7-11
7.3.2 Review of Existing Water System Facilities 7-12
7.3.3 Review of Existing Water System Operations 7-14

7.4 Existing Potable Water System Evaluation 7-14
7.4.1 Existing Potable Water Demands 7-15
7.4.2 Existing Water System Facilities Evaluation 7-17
7.4.2.1 Water Treatment Capacity 7-17
7.4.2.2 Storage Capacity 7-17
7.4.2.3 Pumping Capacity 7-19
7.4.2.4 Critical Supply Facilities 7-19
7.4.3 Existing Water System Hydraulic Analysis 7-22
7.4.3.1 Existing Water System Performance Criteria 7-22
7.4.3.1.1 Peak Hour Demand Scenario 7-22
7.4.3.1.2 Maximum Day Demand plus Fire Flow Scenario 7-23
7.4.3.2 Recommended Improvement Criteria 7-24
7.4.3.3 Existing Water System Evaluation Results 7-24
7.4.3.3.1 Peak Hour Demand Scenario 7-24
7.4.3.3.2 Maximum Day Demand plus Fire Flow Scenario 7-27

7.5 Summary of Recommended Existing Potable Water System Improvements 7-31
Pipeline Hydraulic Capacity Improvements 7-32
7.5.1 Pipeline Renewal and Replacement 7-32

Chapter 8. Future Potable Water System Evaluation

8.1 Overview 8-1

8.2 Pressure Zone Recommendations 8-2

8.3 Projected Future Potable Water Demands 8-5

8.4 Future Potable Water System Facility Evaluation 8-8
8.4.1 Water Treatment Capacity 8-8
8.4.2 Water Storage Capacity 8-10
8.4.3 Pumping Capacity 8-16

8.4.4 Critical Supply Facilities 8-20
8.4.5 SCADA System Improvements 8-20
8.4.6 Update of Future System Facilities in the Hydraulic Model 8-21

8.5 Future Potable Water System Performance Evaluation 8-26
8.5.1 Future Water System Performance Criteria 8-26
8.5.1.1 Peak Hour Demand Scenario 8-26
8.5.1.2 Maximum Day Demand plus Fire Flow Scenario 8-27
8.5.2 Recommended Improvements Criteria 8-28
8.5.3 2025 Water System Evaluation Results 8-28
8.5.3.1 2025 Peak Hour Demand Scenario 8-28
8.5.3.2 2025 Maximum Day Demand plus Fire Flow Scenario 8-31
8.5.4 Buildout Water System Evaluation Results 8-35
8.5.4.1 Buildout Peak Hour Demand Scenario 8-35
8.5.4.2 Buildout Maximum Day Demand plus Fire Flow Scenario 8-38

8.6 Summary of Recommended Future Potable Water System Improvements 8-41
8.6.1 2025 System Improvements 8-41
8.6.1.1 Pipelines 8-41
8.6.1.2 Interconnections 8-44
8.6.1.3 Re-Zoning 8-44
8.6.1.4 Groundwater Wells 8-44
8.6.2 Buildout System Improvements 8-44
8.6.2.1 Storage Facilities 8-44
8.6.2.2 Groundwater Wells 8-45
8.6.2.3 Booster Pumping Facilities 8-45
8.6.2.4 Pipelines 8-46
8.6.2.5 Interconnections 8-46
8.6.2.6 Re-Zoning 8-46
8.6.2.7 SCADA System/Backup Power 8-46
8.6.2.8 JJWTP Expansion 8-47
8.6.2.9 Participation in Phase 2 Los Vaqueros Reservoir Expansion Project 8-47
8.6.2.10 Water Master Plan Updates 8-47

Chapter 9. Recycled Water System Evaluation

9.1 Overview 9-1

9.2 Description of Existing Recycled Water System 9-2
9.2.1 Wastewater Treatment Plant 9-2
9.2.2 Booster Pump Stations 9-2
9.2.3 Pressure Zone Boundaries 9-2
9.2.4 Transmission and Distribution Pipelines 9-2
9.2.5 SCADA System 9-4

9.3 Existing Recycled Water Demands 9-4

9.4 Recommended Buildout Recycled Water System 9-4
9.4.1 Future Recycled Water Demand Areas 9-6
9.4.2 Pressure Zone Recommendations 9-7
9.4.3 Allocation of Future Recycled Water Demands 9-8
9.4.4 Recycled Water Exchange Program Seasonality 9-9
9.4.5 Seasonal and Diurnal Storage Facilities 9-11
9.4.6 Booster Pump Stations 9-12

9.4.7 Recycled Water Pipeline Alignments 9-13
9.4.8 Recycled Water Pipeline Sizes 9-14
9.5 Recycled Water System Criteria 9-16
9.6 Recycled Water System Evaluation Results 9-16
9.6.1 Peak Hour Demand Scenario 9-16
9.6.2 Fill Period Scenario 9-18
9.7 Summary of Recommended Future Recycled Water System Improvements 9-20
9.7.1 2025 System Improvements 9-22
9.7.1.1 Booster Pumping Facilities 9-22
9.7.1.2 Pipelines 9-22
9.7.1.3 Interconnections 9-22
9.7.1.4 SCADA System 9-22
9.7.2 Buildout System Improvements 9-23
9.7.2.1 Storage Facilities 9-23
9.7.2.2 Booster Pumping Facilities 9-23
9.7.2.3 Pipelines 9-24
9.7.2.4 Interconnections 9-24
9.7.2.5 SCADA System 9-24

Chapter 10. Recommended Capital Improvement Program

10.1 Overview 10-1
10.2 Recommended Potable Water System Capital Improvement Program 10-2
10.2.1 Existing Potable Water System Improvements 10-3
10.2.2 2025 Potable Water System Improvements 10-6
10.2.3 Buildout Potable Water System Improvements 10-7
10.2.4 Water Treatment Plant Expansion Costs 10-12
10.2.5 Summary of Recommended Potable Water System CIP Costs 10-12
10.3 Recommended Recycled Water System Capital Improvement Program 10-14
10.3.1 2025 Recycled Water System Improvements 10-14
10.3.2 Buildout Recycled Water System Improvements 10-15
10.3.3 Summary of Recommended Recycled Water System CIP Costs 10-18
10.4 Capital Improvement Program Timing and Triggers 10-20

List of Tables

Table ES-1. Summary of Future Projected Water Production ES-5
Table ES-2. Historical and Projected Potable Water Consumption by Customer Class ES-5
Table ES-3. Future Water Supply Needs under Single Dry Year Conditions ES-9
Table ES-4. Summary of Probable Construction Costs for Recommended Potable and Recycled Water System Improvements ES-21
Table 2-1. City of Tracy General Plan Objectives and Policies for Water Service 2-6
Table 3-1. Summary of Approved Projects 3-5
Table 3-2. Projected Development by Time Frame within the City's Sphere of Influence 3-9
Table 4-1. Historical Population Served 4-4

Table 4-2. Historical Annual City of Tracy Potable Water Production by Source 4-7
Table 4-3. Historical Annual Potable Water Production including Wheeled Water for Patterson Pass Business Park 4-10
Table 4-4. Potable Water Consumption 4-11
Table 4-5. Summary of Top 15 Potable Water Users in 2017 4-12
Table 4-6. Potable Unaccounted-for Water 4-13
Table 4-7. Historical Per Capita Potable Water Demand 4-14
Table 4-8. Historical Maximum Day Demand Peaking Factors 4-19
Table 4-9. Adopted Peaking Factors 4-20
Table 4-10. 2012 WSMP Adopted Unit Water Demand Factors 4-21
Table 4-11. Adopted Dwelling Unit Densities and Floor to Area Ratios[(a)] 4-21
Table 4-12. Refined Single-Family Residential Unit Water Demand Factors 4-24
Table 4-13. Unit Water Demand Factors for Commercial, Industrial, and Office Land Uses 4-27
Table 4-14. City of Tracy Maximum Allowable Water Use Factors for Irrigation[(a)] 4-28
Table 4-15. Adopted Unit Water Demand Factors 4-28
Table 4-16. Summary of Future Projected Water Production[(a,b,c)] 4-32
Table 4-17. Historical and Projected Potable Water Consumption by Customer Class 4-33
Table 4-18. Projected Population and Per Capita Potable Water Use 4-33
Table 5-1. Existing Water Supplies 5-3
Table 5-2. Historical Annual CVP M&I Allocations (South of Delta) 5-5
Table 5-3. Historical Annual CVP Ag Allocations (South of Delta) 5-6
Table 5-4. Historical Annual CVP Surface Water Supplies 5-7
Table 5-5. Historical Annual Deliveries to Patterson Pass Business Park 5-8
Table 5-6. Historical Deliveries from the SCWSP to the City of Tracy 5-9
Table 5-7. Groundwater Well Characteristics 5-15
Table 5-8. Historical Groundwater Production by the City of Tracy 5-16
Table 5-9. Tracy ASR Well 8 Annual Injection and Extraction 5-18
Table 5-10. Semitropic Water Storage District Banking Partners 5-18
Table 5-11. Projected Existing and Additional Planned Future Water Supplies Available in Normal Years at Buildout 5-25
Table 5-12. Projected Existing and Additional Planned Future Water Supplies Available in Single Dry Years at Buildout 5-27
Table 5-13. Projected Existing and Additional Planned Future Water Supplies Available Five-Consecutive-Dry Years at Buildout 5-30
Table 5-14. Summary of Buildout Total Water Supply Versus Demand During Hydrologic Normal, Single Dry, and Multiple Dry Years 5-32
Table 6-1. Recommended Fire Flow Requirements 6-4

Table 6-2. Summary of Recommended Potable Water System Performance and Operational Criteria 6-13
Table 6-3. Summary of Recommended Recycled Water System Performance and Operational Criteria 6-16
Table 7-1. Existing Surface Water Intake Pumps[a] 7-3
Table 7-2. Existing Groundwater Wells 7-5
Table 7-3. Existing Treated Water Storage Facilities 7-6
Table 7-4. Existing Booster Pump Stations 7-7
Table 7-5. Existing Pressure Regulating Stations and Pressure Reducing Valves 7-9
Table 7-6. Existing Pressure Zone Boundaries 7-10
Table 7-7. Existing Potable Water Demands by Pressure Zone 7-15
Table 7-8. Comparison of Available and Required Water Treatment Capacity 7-17
Table 7-9. Comparison of Available and Required Water Storage Capacity 7-20
Table 7-10. Comparison of Available and Required Firm Pumping Capacity 7-21
Table 7-11. Recommended Fire Flow Requirements[a] 7-23
Table 7-12. Results of Additional Fire Flow Simulations 7-31
able 8-1. Existing and Proposed Pressure Zone Boundaries 8-5
Table 8-2. 2025 Potable Water Demands by Pressure Zone 8-6
Table 8-3. Buildout Potable Water Demands by Pressure Zone 8-6
Table 8-4. Summary of Buildout Average Day Potable Water Demands by Development Project 8-7
Table 8-5. Comparison of Available and Required Water Treatment Capacity in 2025 8-8
Table 8-6. Comparison of Available and Required Water Treatment Capacity at Buildout 8-9
Table 8-7. Comparison of Available and Required Water Storage Capacity in 2025 8-12
Table 8-8. Comparison of Available and Required Water Storage Capacity at Buildout 8-13
Table 8-9. Comparison of Available, Proposed, and Required Water Storage Capacity at Buildout 8-15
Table 8-10. Comparison of Available and Required Firm Pumping Capacity in 2025 8-18
Table 8-11. Comparison of Available, Proposed, and Required Firm Pumping Capacity at Buildout 8-19
Table 8-12. Recommended Fire Flow Requirements[a] 8-27
Table 8-13. Results of Additional Fire Flow Simulations for 2025 System 8-32
Table 8-14. Results of Additional Fire Flow Simulations for Buildout System 8-38
Table 9-1. Existing Recycled Water Booster Pump Station 9-2
Table 9-2. Recycled Water Distribution Pressure Zones 9-8
Table 9-3. Recycled Water Demand Peaking Factors 9-8
Table 9-4. Buildout Recycled Water Demands by Pressure Zone 9-9
Table 9-5. Summary of Buildout Average Day Recycled Water Demands by Development Project 9-10

Table 9-6. Projected Buildout Recycled Water Supply and Demand 9-11
Table 9-7. Diurnal Storage Distribution 9-12
Table 9-8. Recycled Water Distribution System Pump Station Design Criteria 9-13
Table 10-1. Probable Construction Costs for the Recommended Existing Potable Water System CIP 10-4
Table 10-2. Probable Construction Costs for the Recommended 2025 Potable Water System CIP 10-9
Table 10-3. Probable Construction Costs for Recommended Buildout Potable Water System CIP 10-13
Table 10-4. Probable Construction Costs for the Recommended 2025 Recycled Water System CIP 10-16
Table 10-5. Probable Construction Costs for the Recommended Buildout Recycled Water System CIP 10-19

List of Figures

Figure ES-1. Existing and Planned Future Water Supplies vs. Water Demand at Buildout ES-8
Figure ES-2. Recommended Existing Potable Water System Improvements ES-12
Figure ES-3. Recommended Future Potable Water System Program Improvements ES-13
Figure ES-4. Recommended Future Recycled Water System Program Improvements ES-19
Figure 3-1. General Plan Land Use 3-2
Figure 3-2. Approved Projects 3-4
Figure 3-3. Additional Planned Development 3-7
Figure 4-1. Water Service Area 4-2
Figure 4-2. Historical Population Served (1990-2020) 4-5
Figure 4-3. Historical Annual Water Production (1990-2020) 4-9
Figure 4-4. Comparison of Historical Per Capita Water Demand, Production and Population 4-15
Figure 4-5. Residential Unit Water Demand Factor Methodology 4-23
Figure 4-6. Representative Commercial and Industrial Areas 4-26
Figure 5-1. Historical Water Supplies 5-4
Figure 7-1. Existing Potable Water System Facilities 7-2
Figure 7-2. New and Revised Existing System Facilities 7-13
Figure 7-3. Allocated Water Meters 7-16
Figure 7-4. Existing System Pressures Peak Hour Demand 7-25
Figure 7-5. Existing Pipeline Velocities Peak Hour Demand 7-26
Figure 7-6. Existing System Available Fire Flow 7-29
Figure 7-7. Locations of Additional Simultaneous Fire Flow Simulations 7-30
Figure 7-8. Existing System Recommended Improvements 7-33

Figure 7-9. Existing System Recommended Improvements from Hydraulic Evaluation 7-34
Figure 8-1. Proposed Development Areas and Pressure Zone Boundaries 8-4
Figure 8-2. 2025 Potable Water System Facilities 8-24
Figure 8-3. Buildout Potable Water System Facilities 8-25
Figure 8-4. 2025 System Pressures Peak Hour Demand 8-29
Figure 8-5. 2025 Pipeline Velocities Peak Hour Demand 8-30
Figure 8-6. 2025 System Available Fire Flow 8-33
Figure 8-7. 2025 System Locations of Additional Simultaneous Fire Flow Simulations 8-34
Figure 8-8. Buildout System Pressures Peak Hour Demand 8-36
Figure 8-9. Buildout Pipeline Velocities Peak Hour Demand 8-37
Figure 8-10. Buildout System Available Fire Flow 8-39
Figure 8-11. Buildout System Locations of Additional Simultaneous Fire Flow Simulations 8-40
Figure 8-12. Proposed Future Water System Recommended Improvements 8-42
Figure 8-13. 2025 System Recommended Pipeline CIP 8-43
Figure 9-1. Existing Recycled Water System Facilities 9-3
Figure 9-2. Buildout Recycled Water System Facilities 9-5
Figure 9-3. DMC Exchange Pipeline Alternatives 9-15
Figure 9-4. Buildout Recycled Water Peak Hour Demand 9-17
Figure 9-5. Buildout Recycled Water Fill Period 9-19
Figure 9-6. Proposed Future Recycled Water System Improvements 9-21
Figure 10-1. Recommended Existing Potable Water System Improvements 10-5
Figure 10-2. Recommended Future Potable Water System Program Improvements 10-8
Figure 10-3. Recommended Future Recycled Water System Program Improvements 10-17

List of Acronyms and Abbreviations

2018 Bay-Delta Water Quality Control Plan	2018 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary
AB	Assembly Bill
AC	Asbestos Cement
ADUs	Accessory Dwelling Units
af/ac/yr	Acre-Feet Per Acre Per Year
af/yr	Acre Feet Per Year
ASR	Aquifer Storage and Recovery
AWWA	American Water Works Association
BBID	Byron Bethany Irrigation District
BCID	Banta-Carbona Irrigation District
BMOs	Basin Management Objectives
BMP	Best Management Practices
BPS	Booster Pump Station
CARB	California Air Resources Board
CBSC	California Building Standards Commission
CFC	California Fire Code
CI	Cast Iron
CIP	Capital Improvement Program
City	City of Tracy
CUWCC	California Urban Water Conservation Council
CVP	Central Valley Project
DDW	Division of Drinking Water
DI	Ductile Iron
DMC	Delta-Mendota Canal
DWR	Department of Water Resources
EIRs	Environmental Impact Reports
EPA	Environmental Protection Agency
FAR	Floor to Area Ratios
fps	Feet Per Second
ft/kft	Feet Per Thousand Feet
GEI	GEI Consultants
GHG	Greenhouse Gas
GIS	Geographic Information System
GMO	Growth Management Ordinance
GMP	Groundwater Management Plan
gpcd	Gallons Per Capita Per Day
gpm	Gallons Per Minute
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
IPC	International Park of Commerce
JJWTP	John Jones Water Treatment Plant

K/J/C	Kennedy/Jenks/Chilton
LEED	Leadership in Energy and Environmental Design
Legislature	California State Legislature
lf	Linear Feet
M&I	Municipal & Industrial
MG	Million Gallons
mgd	Million Gallons per Day
MOA	Memorandum of Agreement
MSR	Municipal Service Review
MWELO	Model Water Efficient Landscape Ordinance
NEI	Northeast Industrial Area
NFPA	National Fire Protection Association
NRW	Non-Revenue Water
O&M	Operations and Maintenance
PPBP	Patterson Pass Business Park
PRS	Pressure Regulating Station
PRV	Pressure Reducing Valve
psi	Pounds Per Square Inch
PSV	Pressure Sustaining Valve
R&R	Renewal and Replacement
RGA	Residential Growth Allotment
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SB X7-7	Water Conservation Act of 2009
SCADA	Supervisory Control and Data Acquisition
SCS	Sustainable Community Strategy
SCWSP	South County Water Supply Project
SED	Substitute Environmental Document
SGMA	Sustainable Groundwater Management Act
SOI	Sphere of Influence
SSJID	South San Joaquin Irrigation District
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
Tracy Subbasin	San Joaquin Valley Groundwater Basin-Tracy Subbasin
UAFW	Unaccounted-for Water
USBR	United States Bureau of Reclamation
UWMP	Urban Water Management Plan
VFD	Variable Frequency Drive
VVH	VVH Consulting Engineers
WSCP	Water Shortage Contingency Plan
WSID	West Side Irrigation District
WSMP	Water System Master Plan
WWTP	Wastewater Treatment Plant

CITYWIDE WATER SYSTEM MASTER PLAN UPDATE
EXECUTIVE SUMMARY

PURPOSE FOR THE CITYWIDE WATER SYSTEM MASTER PLAN UPDATE

The purpose of this Citywide Water System Master Plan Update for the City of Tracy (City) is to provide an evaluation of the required backbone potable water and recycled water system facilities required to serve existing and future needs. The City's last Citywide Water System Master Plan was completed in 2012 (2012 WSMP) and was based on projected land uses included in the City's 2011 General Plan. Since that time, significant new residential and commercial development has occurred in the City (including the International Park of Commerce within the Cordes Ranch Specific Plan area, Tracy Ellis, Tracy Hills and numerous smaller projects) and planning for future developments has been refined. Also, during that same time, the State endured five years of drought starting in 2012, including the driest four consecutive years in California history. These unprecedented conditions led to statewide mandated water conservation, significant surface water supply reductions and curtailments and legislation establishing new water efficiency standards.

All of these factors have led to a need to reevaluate the City's potable water and recycled water needs, the projected availability and reliability of the City's water supplies and the required water system infrastructure improvements to ensure a safe and reliable water supply for the City's residents and businesses.

OBJECTIVES OF THE CITYWIDE WATER SYSTEM MASTER PLAN UPDATE

This Citywide Water System Master Plan Update has been prepared based on the following overall water system objectives and goals:

- Ensure safe, adequate and reliable water supplies for the City's existing and future residents and businesses.
- Support the goals, objectives and policies of the City's General Plan, particularly those contained in the Public Facilities and Services Element.
- Comply with existing and future legislation and regulations for both potable and non-potable (recycled) water supplies.

Based on the City's water system objectives, the objectives of this Citywide Water System Master Plan Update are to:

- Evaluate existing water demands to understand current water use patterns and trends and project future water demands for near-term (2025), future (2040) and General Plan buildout conditions.
- Provide an updated evaluation of the availability and reliability of the City's existing and future water supplies and their ability to meet existing and future water demands considering recent changes in projected supply reliability.

- Review and refine performance and operational criteria under which the potable and recycled water systems will be analyzed and recommendations for future facilities will be formulated.
- Evaluate the need for new backbone potable water facilities (including pipelines, storage facilities and pumping facilities) to serve buildout of the City's General Plan.
- Evaluate the need for new backbone recycled water facilities (including pipelines, storage facilities and pumping facilities) to serve buildout of the City's General Plan.
- Develop a capital improvement program for recommended potable and recycled water system facilities.

KEY CHANGES FROM THE 2012 CITYWIDE WATER SYSTEM MASTER PLAN

This Cityside Water System Master Plan Update incorporates and considers several changed conditions, new water system facilities, and new water supply opportunities from what was included in the 2012 Citywide Water System Master Plan. A summary of these is provided below:

- Changes in Projected Land Use: Compared to the projected land use in 2012 Citywide Water System Master Plan, there has been a significant shift in the City's projected land use composition towards residential development and away from commercial and industrial development. However, when compared to the City's historical and existing land uses, which were primarily residential, the projected land uses for new development are more heavily skewed to non-residential uses (with almost 60 percent of the projected acres of new development being non-residential uses). The future industrial, commercial, and retail growth anticipated in the City's Sphere of Influence is reflective of the City's goal to bring jobs and economic growth and improve the City's jobs-housing balance (see Chapter 3 for additional information).
- Reduction in Unit Water Demands: Due to changes in water use trends and habits resulting from improved water use efficiency, unit water demand factors have been reduced for most land use categories (see Chapter 4 for additional information).
- Reduction in Maximum Day and Peak Hour Demand Factors: Due to changes in water use trends and habits from improved water use efficiency, maximum day and peak hour demand factors have been reduced (see Chapter 4 for additional information).
- Changes in Recycled Water System Planning: Previously, the City was considering implementing the proposed Gateway Exchange Program, under which recycled water service would be extended to most of the existing parks and large irrigated areas in the City to offset the potable water demands from the Gateway development (now called Westside). The Gateway Exchange Program is no longer being considered, and it is projected that only a few existing parks and irrigated areas will receive recycled water supply. Expansion of the recycled water system will focus on extending service to newly developed areas (see Chapters 4 and 9 for additional information).

- Reduction in Surface Water Supply Reliability: Due to unprecedented drought conditions from 2011 through 2017 and new flow restrictions resulting from the 2018 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, projected reliabilities of surface water supplies from the Central Valley Project (CVP) and South San Joaquin Irrigation District (SSJID) have been significantly reduced, particularly in dry years. The City has entered into discussions with the Contra Costa Water District and the San Luis & Delta-Mendota Water Authority to explore the City's potential participation in the Phase 2 Los Vaqueros Reservoir Expansion Project to increase the City's water supply reliability by providing storage of supplies for use in dry years (see Chapter 5 for additional information).
- Proposed Recycled Water Exchange Agreement: The City is evaluating the potential for indirect reuse of its available recycled water through an exchange agreement with the United States Bureau of Reclamation (USBR) whereby a portion of the City's tertiary-treated wastewater (recycled water) would be discharged to the Delta Mendota Canal (DMC) and a like amount of water (i.e., a one-to-one exchange) could then be diverted from the DMC by the City for treatment at the City's John Jones Water Treatment Plant (JJWTP) for potable use. Such supplies would be 100 percent reliable and would not be subject to drought cutbacks. With the potential reduction in reliability of the City's surface water supplies from the CVP and SSJID, this proposed recycled water exchange agreement will be a critical component of the City's future water supply portfolio (see Chapter 5 for additional information).
- Reduction in Emergency Storage Requirement: The 2012 WSMP used an emergency storage volume requirement of two (2) times the average day demand. After reviewing emergency storage criteria for other similar water systems within the region, and taking into account the City's redundant sources of supply (CVP, SSJID, and groundwater), it is recommended that the City reduce the minimum quantity of emergency storage volume required to 1.5 times the average day demand for this Citywide Water System Master Plan Update (see Chapter 6 for additional information).
- Addition of New Water System Facilities: Several new water system facilities have been recently completed which provide for added water system capabilities. These include the Cordes water storage tank and pump station, the Tracy Hills water storage tank and pump station (nearing completion as of September 2021), new pump stations at the City's JJWTP to serve the City's Pressure Zone 3 and initial phases of the Tracy Hills development, and a recycled water pump station and pipeline on the west side of the City to distribute recycled water supplies from the City's Wastewater Treatment Plant to recycled water users on the western side of the City (see Chapters 7 and 9 for additional information).

- Renaming of Potable Water Pressure Zones: To minimize confusion when referring to the City's primary potable water system pressure zones, the potable water system pressure zones have been renamed as follows:
  - Pressure Zone 1 – no change
  - Pressure Zone 2 – no change
  - City-side Pressure Zone 3 – now referred to as Pressure Zone 3
  - Tracy Hills Pressure Zone 3 – now referred to as Pressure Zone 4
  - Tracy Hills Pressure Zone 4 – now referred to as Pressure Zone 5
  - Tracy Hills Pressure Zone 5 – now referred to as Pressure Zone 6

  The remainder of this Citywide Water System Master Plan Update, and all subsequent water system evaluations and studies, will utilize these new pressure zone designations.

EXISTING AND PROJECTED FUTURE WATER DEMANDS

The City of Tracy currently serves a population of about 96,000 people. Total potable water production in 2020 was 18,687 acre-feet per year (af/yr), not including water treated and wheeled to the Patterson Pass Business Park, which equates to a per capita water use of about 174 gallons per capita per day (gpcd). This per capita water use is significantly lower than the City's historical per capita water use which was as high as 300 gpcd in the early 1980s. Per capita water use was as low as 144 gpcd in 2015 due to extreme drought conditions which resulted in voluntary and mandatory water conservation. The per capita water use has increased somewhat in recent years as water use restrictions have been lifted and customers have resumed more typical water use behavior.

As described in Chapter 4, future water demands for buildout of the City's General Plan were projected based on revised unit water demand factors reflecting recent water use patterns and trends for the City's various land uses, consistency with the Model Water Efficient Landscape Ordinance (MWELO) for landscape irrigation water use and the use of recycled water for landscape irrigation for selected land use designations.

With the planned buildout of the City's sphere of influence (SOI), the City's population is projected to increase to about 186,000 people. At buildout, potable water demands are projected to be about 33,500 af/yr, while recycled water demands (for irrigation of landscaped areas) are projected to be 6,300 af/yr. As noted in the City's 2012 WSMP, the City's future use of recycled water for non-potable uses such as landscape irrigation is key to the reduction (offset) of the City's future potable water demand, and the City's ability to meet future demands using existing and future available water supplies.

A summary of the projected future water demands and water production at 2025 (near-term), at 2040, and at buildout, is provided in Table ES-1.

Table ES-1. Summary of Future Projected Water Production[a,b,c]

Demand Category	2025 (Near Term)		2040		Buildout	
	Potable Water, af/yr	Recycled Water, af/yr	Potable Water, af/yr	Recycled Water, af/yr	Potable Water, af/yr	Recycled Water, af/yr
Future	3,000	900	10,900	4,100	15,700	6,200
Existing - City[d]	17,800	100	17,800	100	17,800	100
Total to be Met by City Water Supply Contracts and Rights	**20,800**	**1,000**	**28,700**	**4,200**	**33,500**	**6,300**
Existing - PPBP Wheeled Water[e]	600	0	600	0	600	0
Total to be Delivered by City Distribution System	**21,400**	**1,000**	**29,300**	**4,200**	**34,100**	**6,300**

(a) Refer to Appendix A for detailed water demand calculations.
(b) Includes unaccounted for water.
(c) Totals rounded to the nearest hundred.
(d) Includes water delivered to existing buildings in the International Park of Commerce (IPC).
(e) Does not include water delivered to existing buildings in IPC.

As the City continues to develop, potable water consumption between customer classes is expected to shift due to changes in the City's projected land use composition. A comparison of the historical average and projected potable water consumption by customer class is shown in Table ES-2. As shown, the residential customer classes are expected to decrease their overall potable water consumption proportion as water use shifts towards non-residential customer classes. This trend is primarily due to large industrial developments such as Cordes Ranch, West Side Industrial, East Side Industrial, UR 3, and Tracy Hills Phase 5, among others.

Table ES-2. Historical and Projected Potable Water Consumption by Customer Class

Customer Class	Historical Average Annual Consumption[a]	Projected Annual Consumption in 2025[b]	Projected Annual Consumption in 2040[b]	Projected Annual Consumption at Buildout[b]
Single Family Residential[c]	60.1%	58.0%	54.0%	53.3%
Multi-Family Residential[d]	6.7%	7.6%	6.9%	8.5%
Residential Subtotal	66.8%	65.6%	60.9%	61.7%
Commercial[e]	15.4%	13.5%	14.2%	14.2%
Industrial	4.9%	9.3%	16.4%	17.6%
Irrigation[f]	12.9%	11.6%	8.4%	6.5%
Total	**100%**	**100%**	**100%**	**100%**

(a) Refer to Table 4-4.
(b) Includes existing and projected future potable demands.
(c) Includes projected future residential demands (excluding irrigation) for Residential - Very Low Density, Residential - Low Density, and Residential - Medium Density land use types.
(d) Includes projected future residential demands (excluding irrigation) for Residential - High Density and Residential - Very High Density land use types.
(e) Includes projected future demands (excluding irrigation) for Commercial, Office, and Institutional land use types.
(f) Includes projected future irrigation demands to be served by potable water. Accounts for planned conversions of irrigation services to recycled water use.

Landscape irrigation water use is projected to be a much smaller proportion of the City's potable water use at buildout because many new development areas will be served by the recycled water system at buildout, and some of the City's existing irrigated areas will be converted to recycled water use.

EXISTING AND PROJECTED FUTURE WATER SUPPLIES

Chapter 5 of this Citywide Water System Master Plan Update describes updates to the City's water supply availability and reliability which have occurred since the completion of the 2012 WSMP and the City's 2015 Urban Water Management Plan (2015 UWMP). The water supply availability and reliability described in Chapter 5 is consistent with the City's 2020 UWMP, which was adopted in June 2021.

Existing Water Supplies

The City currently receives water supplies from the following sources:

- Untreated surface water from the DMC (CVP) (treated at the City's John Jones Water Treatment Plant (JJWTP))
- Untreated surface water from Byron Bethany Irrigation District (BBID) pre-1914 rights (treated at the City's JJWTP)
- Treated surface water from the Stanislaus River via the South County Water Supply Project (SCWSP) (treated and delivered to the City by the SSJID)
- Groundwater pumped from eight groundwater wells located within the City

Since the completion of the 2012 WSMP and the 2015 UWMP, the availability and reliability of the City's water supplies have been impacted by drought conditions and associated unprecedented cutbacks in surface water supply deliveries. Also, in recent years new legislation has been passed which will impact future water use and future water supply availability and reliability, including the Sustainable Groundwater Management Act (SGMA), SB 606 and Assembly Bill 1668 Making Water Conservation a California Way of Life and most recently the 2018 amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) which was adopted by the State Water Resources Control Board (SWRCB) in December 2018 and restricts the use of flows from the Lower San Joaquin River and its tributaries (the Stanislaus, Tuolumne and Merced Rivers) to improve conditions for fish and wildlife. Specifically, it restricts the use of flows until 40 percent of unimpaired flows are rededicated for water quality and instream fisheries. The Bay-Delta Plan Amendment, depending on its actual implementation, has potential impacts to the water supplies that the City receives from SSJID.

Also, in 2017, new guidelines and procedures went into effect associated with the updated CVP M&I Water Shortage Policy, which base dry year allocations on a contractor's historical use of CVP supplies, not its contractual amount of CVP supplies.

These changed conditions significantly impact the availability and reliability of the City's surface water supplies in dry years (specifically the City's CVP supplies and SSJID supplies).

Future Water Supplies

The City has a projected potable water supply production requirement of 33,500 af/yr for buildout of the City's General Plan. The City will need to develop future water supplies to meet these projected future demands. This will include expansion of its Aquifer Storage and Recovery Program (up to 1,000 af/yr) and implementation of a proposed Recycled Water Exchange Program (up to 7,500 af/yr) to meet its projected future potable water demands. Furthermore, 6,300 af/yr recycled water will be needed to meet landscape irrigation demands at buildout.

The City's Aquifer Storage and Recovery (ASR) Program should be expanded in the future to provide up to 1,000 af/yr of supply. As described in Chapter 5, an evaluation of potential ASR options and operational scenarios should be conducted as additional ASR wells are planned to determine if dedicated SSJID supply pipelines to the ASR wells will be required if the City's ASR permit cannot be modified to allow for other supplies to be injected.

The proposed Recycled Water Exchange Program would provide for the potential for indirect use of its available recycled water through an exchange agreement with the USBR whereby a portion of the City's tertiary-treated wastewater (recycled water) would be discharged to the DMC and a like amount of water (i.e., a one-to-one exchange) could then be diverted from the DMC by the City for treatment at the City's JJWTP for potable use. Such supplies would be 100 percent reliable and would not be subject to drought cutbacks. The project would require development of a project description, NEPA/CEQA review, approval of an exchange agreement, design and construction of a recycled water pipeline that could discharge recycled water to the DMC downstream of the City's JJWTP intake and expansion of the City's wastewater treatment plant. Additional discussion of the pipeline required for the Recycled Water Exchange Program is provided in Chapter 9. If such a project is approved and implemented, the City anticipates that it would initially provide up to 5,900 af/yr of additional potable water supplies to the City, with future expansion as needed to meet future demands.

As shown on Figure ES-1, even with additional supplies, the City may experience water supply shortages in dry years. Table ES-3 provides a summary of the projected water supply needs to meet the single dry year conditions (the most critical hydrologic condition) under the City's projected near-term (2025), future (2040) and buildout demand conditions. As shown, the projected potable water supplies are less than the projected potable water demands, indicating that the City would need to implement its Water Shortage Contingency Plan to reduce water demands and/or develop additional water supplies to meet the projected water demands. Chapter 5 provides a summary of the City's water management strategies and options, including participation in the Phase 2 Los Vaqueros Reservoir Expansion Project, as described in the City's 2020 UWMP.

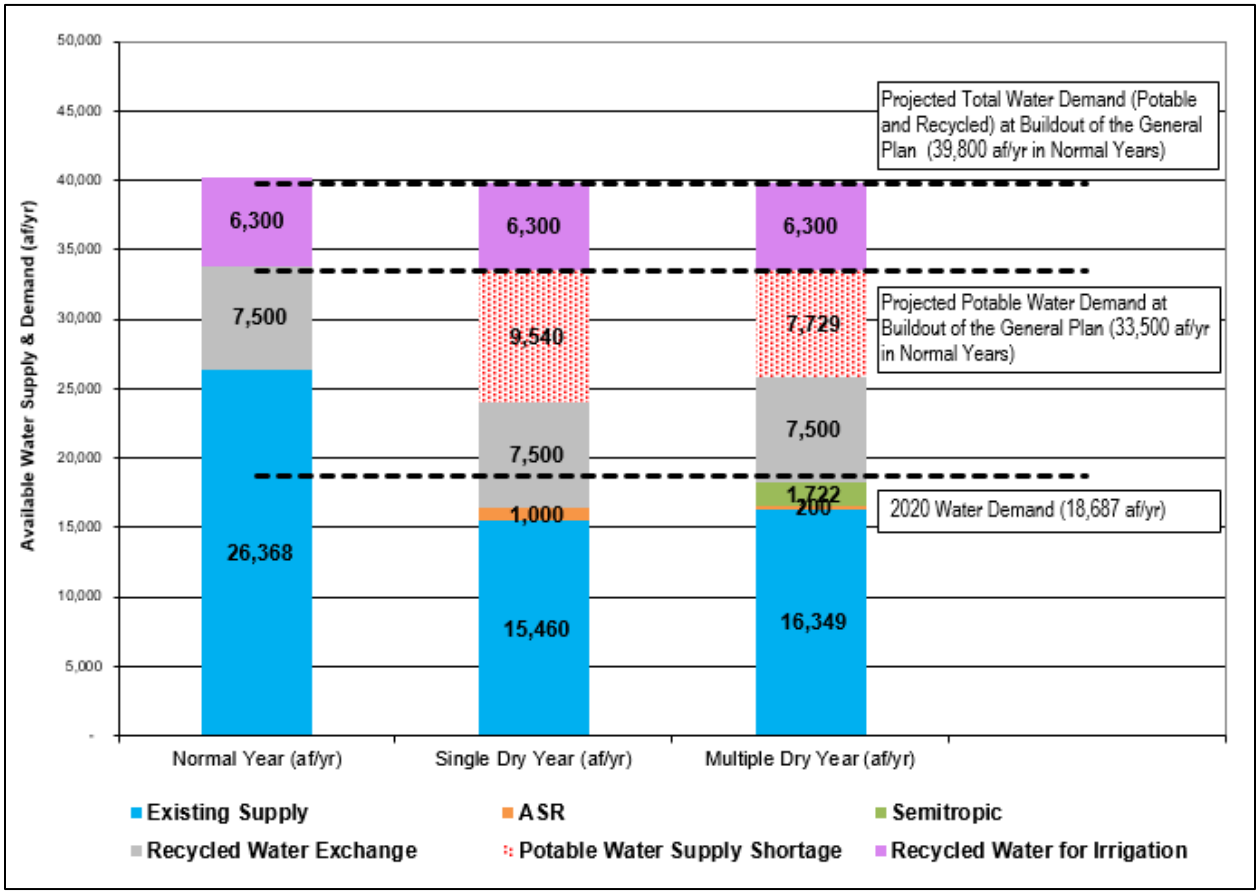


Figure ES-1. Existing and Planned Future Water Supplies vs. Water Demand at Buildout

Table ES-3. Future Water Supply Needs under Single Dry Year Conditions

	Near-Term (2025), af/yr	Future (2040), af/yr	Buildout, af/yr	Comments
Existing Potable Water Supplies				
CVP Surface Water Supplies	1,483	1,483	1,483	Based on 25% of historical use
SSJID Surface Water Supplies	9,974	6,177	6,177	2025 supply includes temporary contract with City of Escalon (which ends in 2025) and a 76% allocation; 2040 and buildout supply assumes a 56% allocation
BBID Pre-1914 (to meet Tracy Hills demand)	800	2,500	3,300	Based on projected potable water demand at Tracy Hills; see Appendix A
Groundwater	4,500	4,500	4,500	Increased from normal year supply of 2,500 af/yr
Total Existing Potable Water Supplies	16,757	14,660	15,460	
Existing Dry Year Water Supplies				
Semitropic Dry Year Supply	0	0	0	Assumed to not be available in Single Dry Years
ASR Dry Year Supply	700	1,000	1,000	Existing capability is 700 af/yr for Well 8; additional ASR wells would be needed for expansion of the ASR program
Total Existing Dry Year Water Supplies	700	1,000	1,000	
Future Potable Water Supplies				
Recycled Water Exchange	0	5,000	7,500	
Total Future Potable Water Supplies	0	5,000	7,500	
Total Potable Water Supplies	**17,457**	**20,660**	**23,960**	
Potable Water Demand	**20,800**	**28,700**	**33,500**	See Table 4-16 in Chapter 4
Recycled Water				
Recycled Water Demand for Landscape Irrigation	**1,000**	**4,200**	**6,300**	See Table 4-16 in Chapter 4
Total Recycled Water Needed, af/yr	1,000	9,200	13,800	As needed to meet needs for Recycled Water Exchange and Landscape Irrigation
Total Recycled Water Needed (average day), mgd	0.9	8.2	12.3	

Subsequent revisions to the projected potable water demand and/or the water supply availability and reliability assumptions may change the required quantities and timing of the proposed Recycled Water Exchange Program. However, even if the required quantities or timing are modified in the future, the direct use of recycled water for landscape irrigation demands and indirect use of recycled water as part of the proposed Recycled Water Exchange Program will be critical components of the City's future water supply portfolio.

The planned future direct and indirect use of recycled water will also require an expansion of the City's Wastewater Treatment Plant (WWTP) to produce adequate quantities of recycled water to meet both the future Recycled Water Exchange Program needs (indirect use), as well as the landscape irrigation demands (direct use), at buildout.

It should also be noted that supply availability and reliability, and actual water demands, may change in the future. As such, the City may need to acquire additional potable water supplies in the future. The City will need to closely track actual potable water demands and supply availability and reliability as future service areas are approved and developed to determine if existing and future supplies are adequate and/or if and when additional potable or recycled water supplies may be required.

EVALUATION OF EXISTING AND FUTURE POTABLE WATER SYSTEM

Chapters 7 and 8 of this Citywide Water System Master Plan Update identify the improvements necessary to eliminate existing deficiencies and support the City's projected future potable water demands, respectively. Recommended improvements are based on evaluations of the existing and future (2025 and buildout) potable water system's treatment, storage, and pumping capacities, as well as its ability to meet recommended performance and operational criteria under maximum day demand plus fire flow and peak hour demand scenarios.

Facility improvements are identified at a Master Plan level and do not necessarily include all required on-site infrastructure nor constitute design of improvements. Subsequent detailed design is required to determine the sizes and locations of the proposed improvements. Further, the hydraulic model is not an "all pipes" model (i.e., not all smaller diameter pipelines are included), so the hydraulic simulations performed may not identify all necessary water system improvements. West Yost recommends conducting additional hydraulic evaluations as development details become available.

The following recommendations exclude non-backbone facilities that only serve a specific development, instead focusing on backbone facility improvements with more widespread system benefit. These shared facilities are designated program facilities.

Existing Potable Water System

The City's existing potable water system includes the following major facilities: JJWTP, eight groundwater wells, clearwells and storage tanks, booster pump stations, pressure regulating stations, and transmission and distribution system pipelines. The City's existing distribution system is divided into four pressure zones. Significant new infrastructure has been constructed in recent years to serve new development projects, including new pump stations at the JJWTP to serve Pressure Zones 3 and 4, a new storage tank and pump station in the Cordes Ranch area, and a new storage tank and pump station in Tracy Hills.

Recommendations for the existing potable water distribution system are shown on Figure ES-2 and described below. These existing system improvements are recommended based on existing water demands, and are not triggered by future new development. The existing water system infrastructure in the areas listed below is insufficient to meet the fire flow requirements based on existing land use and water demands. As such, planning and design for these improvements should be prioritized.

Pipeline Improvements

The following pipeline improvements are recommended:

- Improvement #1:
  - Replace the existing pipelines in 20th Street between Bessie Avenue and Parker Avenue, Wall Street between Lowell Avenue and 20th Street, Emerson Avenue between Bessie Avenue and Holly Drive, Court Drive between Whittier Avenue and Lowell Avenue, and Lowell Avenue between Parker Avenue and Holly Drive with approximately 6,000 linear feet (lf) of new 8-inch diameter pipelines.
- Improvement #2:
  - Install approximately 515 lf of 12-inch diameter pipeline in Ninth Street between School Street and Tenth Street.
- Improvement #3:
  - Replace approximately 485 lf of existing 4-inch diameter pipeline in Tracy Boulevard north of Mount Diablo Avenue with new 12-inch diameter pipeline.

2025 Potable Water System

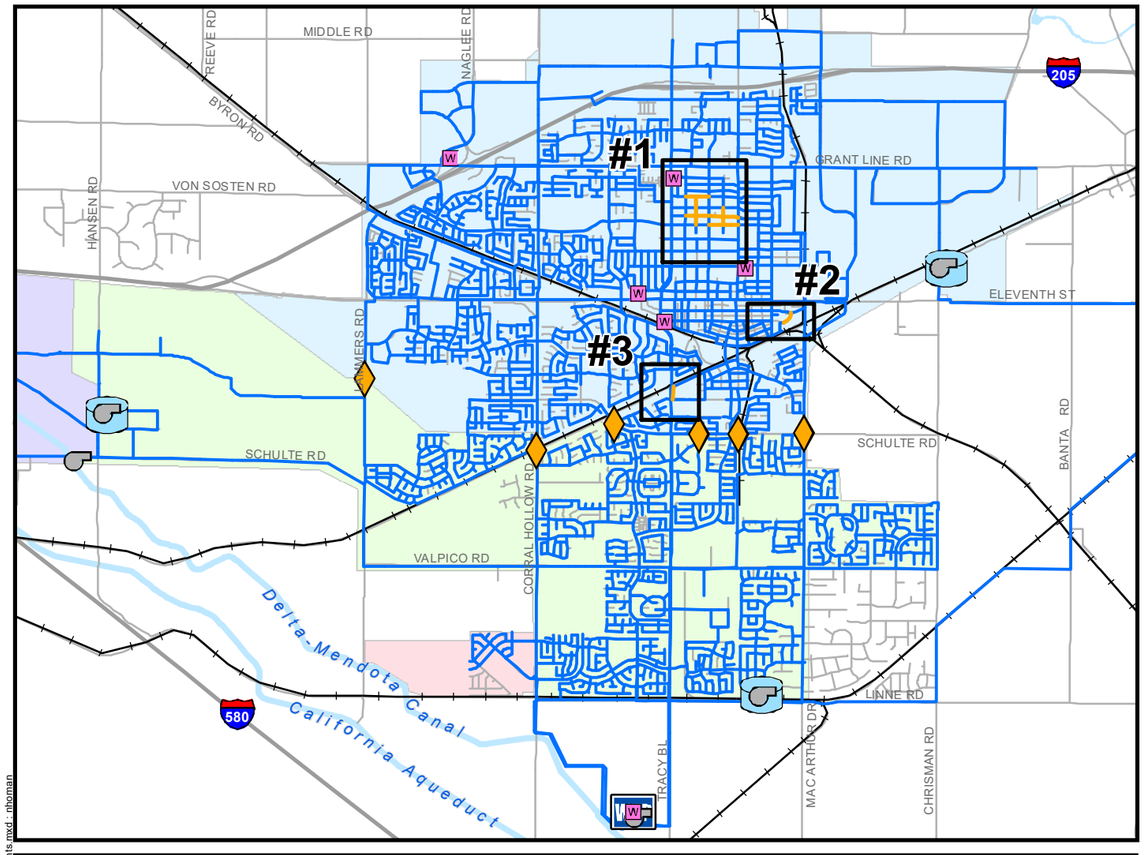
Program facility recommendations for the 2025 potable water system are shown on Figure ES-3 and described below. A complete listing of recommended potable water system improvements (both program and non-program) to serve projected 2025 potable water demands is provided in Chapter 8 along with recommendations for their timing.

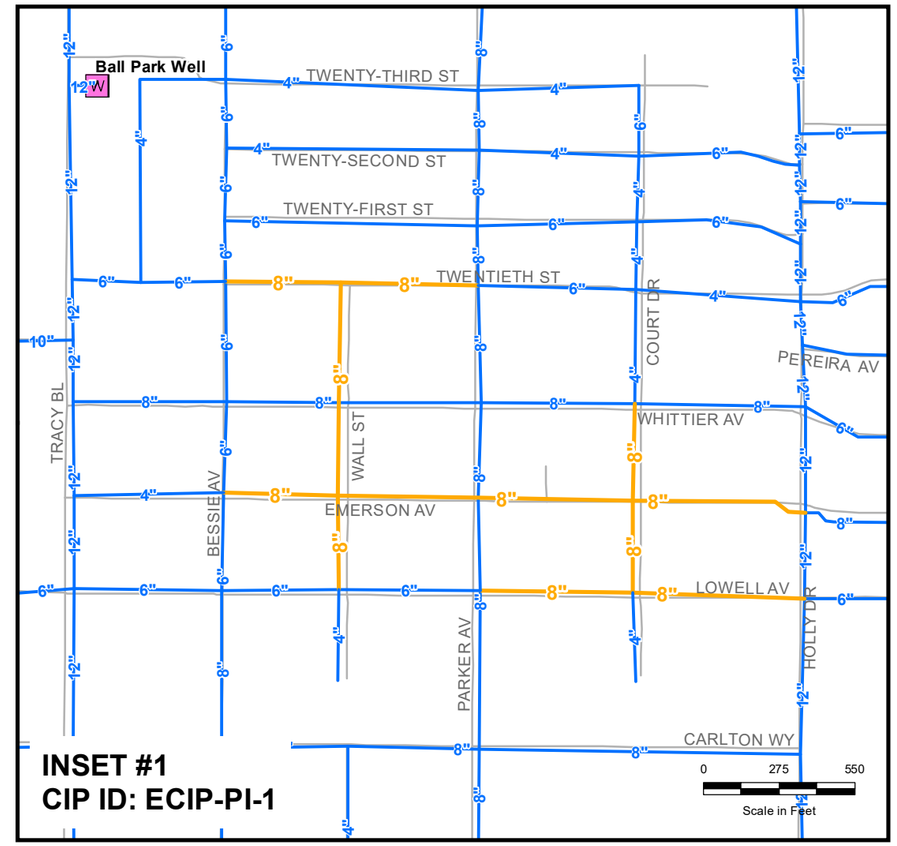
Pipeline Improvements

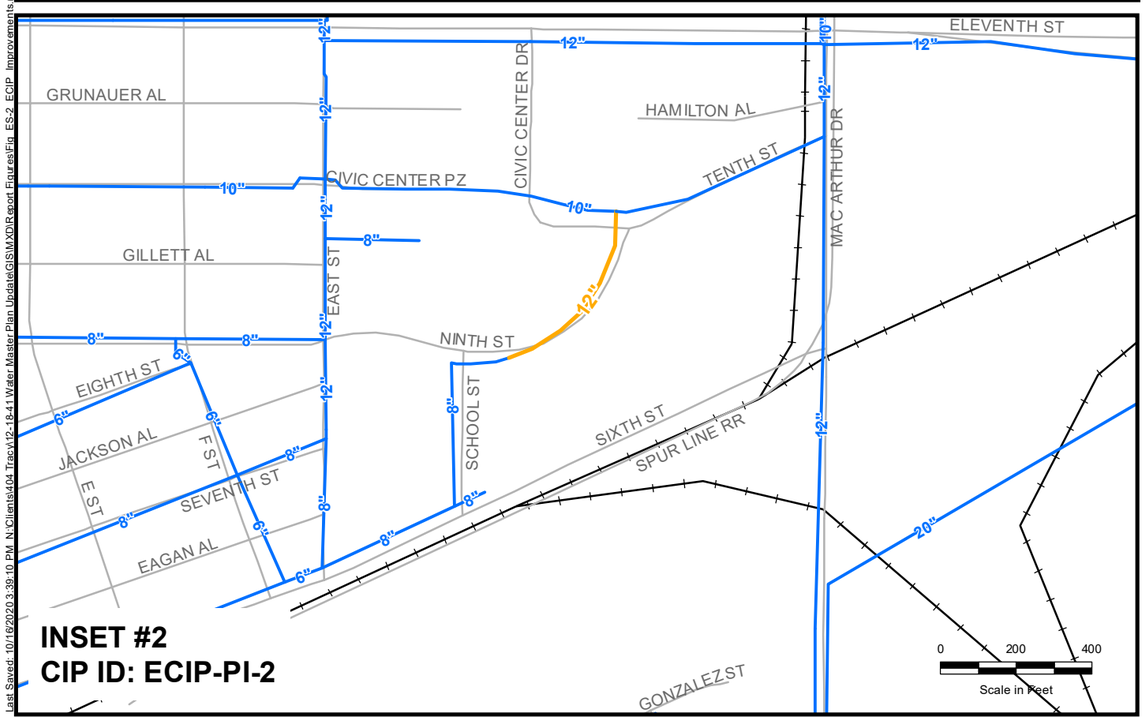
- To serve 2025 potable water demands, replace existing pipelines in Sixth Street, Tracy Boulevard, and Eleventh Street with approximately 1,390 linear feet of new 18-inch and 24-inch diameter pipelines.

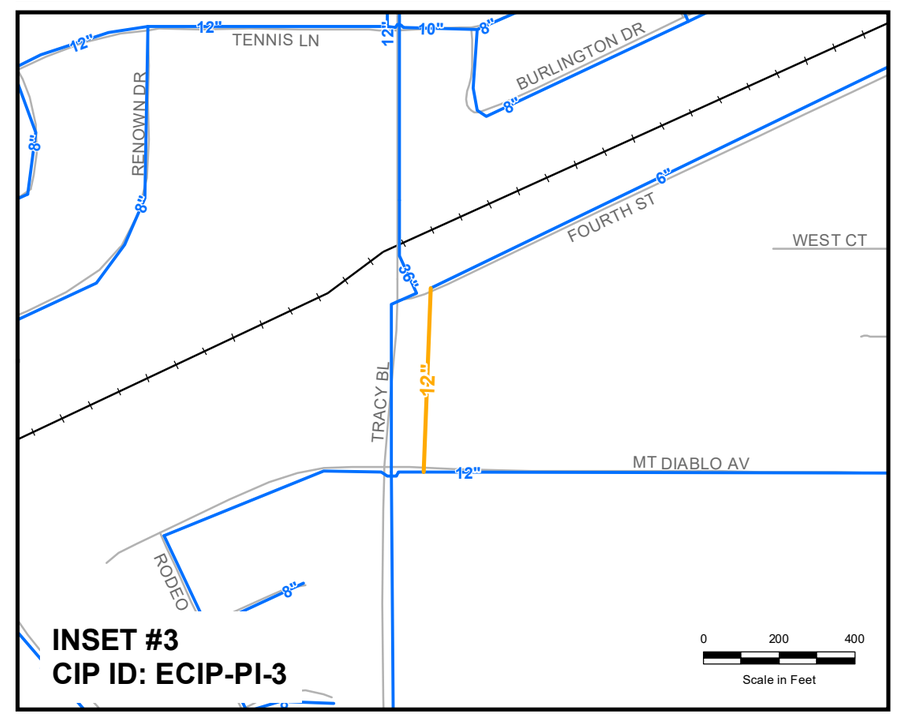
New Potable Water Pipelines

- To serve 2025 potable water demands, install approximately 43,010 lf of new pipelines ranging in diameter from 12 to 24 inches.









Symbology

- Existing Pipeline
- Pipeline Improvement
- Pressure Regulating Station
- Booster Pump Station
- Groundwater Well
- Storage Tank
- WTP John Jones Water Treatment Plant

Pressure Zone

- Zone 1
- Zone 2
- Zone 3 (IPC/PPBP)
- Ellis Reduced Zone

Notes:
1. The City's existing hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.

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Figure ES-2

Recommended Existing Potable Water System Improvements

City of Tracy
Water System Master Plan Update

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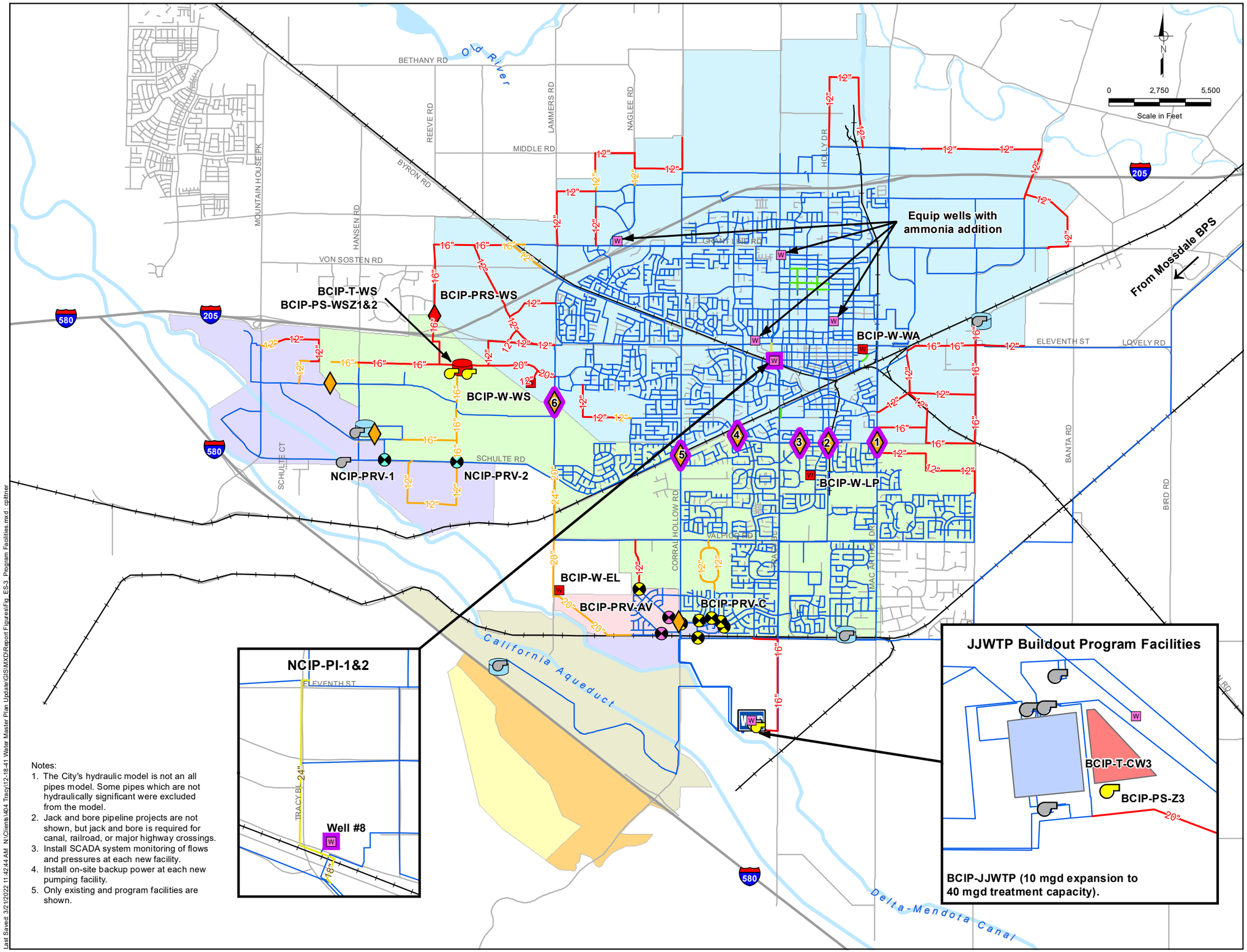

Notes:
1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
2. Jack and bore pipeline projects are not shown, but jack and bore is required for canal, railroad, or major highway crossings.
3. Install SCADA system monitoring of flows and pressures at each new facility.
4. Install on-site backup power at each new pumping facility.
5. Only existing and program facilities are shown.

Symbology

Proposed Buildout Program Facilities
- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Buildout System Pipeline
- SCADA System Improvement

Proposed 2025 Facilities
- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Existing System Facilities
- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- John Jones Water Treatment Plant
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

Pressure Zone
- Zone 1
- Zone 2
- Zone 3
- Ellis Reduced Zone
- Zone 4
- Zone 5
- Zone 6

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Figure ES-3

Recommended Future Potable Water System Program Improvements

City of Tracy
Water System Master Plan Update

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Interconnections

- Install PRVs at Schulte Road and Bud Lyons Way and at Schulte Road and Pavillion Parkway before the transmission main in Schulte Road is re-zoned to Zone 3.

Re-zoning

- Re-zone the existing transmission mains in Lammers Road, Schulte Road, and Hansen Road from Zone 2 to Zone 3 as described in Appendix D.

Groundwater Wells

- Provide ammonia addition for existing City wells (Lincoln Well, Lewis Manor Well, Park & Ride Well and Ball Park Well) (as noted below under Buildout System Improvements, all future wells are also recommended to be equipped with ammonia addition).
- A feasibility study is recommended to develop an implementation plan for future ASR expansion.

Buildout Potable Water System

Program facility recommendations for the buildout potable water system are shown on Figure ES-3 and described below. A complete listing of recommended potable water system improvements (both program and non-program) to serve projected buildout potable water demands is provided in Chapter 8 along with recommendations for their timing.

Storage Reservoirs

Planning and design of these new storage facilities should be conducted so that the proposed facilities are constructed and operational in time to serve their respective service areas (e.g., Westside, Zone 5 or Zone 6). Because of the additional operational flexibility that Clearwell #3 would provide, it is recommended that Clearwell #3 be constructed as soon as possible. As noted above, no additional storage facilities are required by 2025, but it is recommended that Clearwell #3 be constructed by no later than 2030.

- Westside Tank: Install a new storage tank with a minimum active storage capacity of 1.0 million gallons (MG).
- JJWTP Clearwell #3: Install a new clearwell with a minimum active storage capacity of 1.0 MG to provide storage for Zone 3.

Groundwater Wells

Planning and design of these new groundwater wells should be phased so that the City's ASR Program can be expanded as needed to meet the City's water supply needs, particularly in dry years. A feasibility study for the expansion of the City's ASR Program is included under the 2025 Potable Water System recommendations listed above.

- Westside: Install a new ASR well with a minimum firm pumping capacity of 2,500 gallons per minute (gpm).
- Wainwright: Install a new ASR well with a minimum firm pumping capacity of 2,500 gpm.
- Larsen Park: Install a new ASR well with a minimum firm pumping capacity of 2,500 gpm.
- Ellis: Install a new ASR well with a minimum firm pumping capacity of 1,000 gpm.

Booster Pump Stations

Planning and design of these new booster pumping facilities should be coordinated with the construction of other related facilities (e.g., associated storage tanks) and the timing of new development.

- Zone 3 BPS (JJWTP): Install additional Zone 3 booster pumps at the JJWTP with a minimum firm pumping capacity of 1,500 gpm.
- Westside Zone 1 Tank: Install a new booster pump station with a minimum firm pumping capacity of 4,500 gpm.
- Westside Zone 2 Tank: Install a new booster pump station with a minimum firm pumping capacity of 2,400 gpm.

New Potable Water Pipelines

Planning and design of these new pipelines should be coordinated with the timing of new development.

- To serve buildout potable water demands, install approximately 131,280 lf of new pipelines (in addition to the proposed 2025 pipelines) ranging in diameter from 12 to 20 inches.

Interconnections

Planning and design of these new interconnections should be coordinated with the timing of new development in the respective pressure zones.

- Install the following interconnections between pressure zones to provide supply during peak demands and/or emergency conditions:
  - Westside Pressure Regulating Station (PRS) (from Zone 2 into Zone 1)
  - Avenues Pressure Reducing Valve (PRV) (from Ellis Reduced Zone into Zone 2)
- To provide adequate pressure to the Plan C area and prevent the accumulation of stagnant water in dead-end mains, installation of six (6) PRVs is recommended before the Plan C re-zoning occurs (to be funded through Plan C).

Re-zoning

Planning and design of this rezoning should be coordinated with the timing of the new Zone 3 pipeline from the JJWTP.

- Re-zone the Plan C area from Zone 2 to Zone 3 (to be funded through Plan C).

System Control and Data Acquisition (SCADA) System and Backup Power

Planning and design of the recommended SCADA system improvements and backup power should be prioritized and completed as soon as possible, as these improvements will improve operational flexibility and reliability.

- Install SCADA system monitoring of flows and pressures at PRS #1-#6 to provide operators with additional understanding and flexibility in system operations.
- Add remote operation of Well 8 from the SCADA system to provide additional operational flexibility.
- Install SCADA system monitoring of flows and pressures at each new water supply facility to provide operators with real-time system data and flexibility in system operations.
- Install on-site backup power to any proposed buildout system pumping facility to improve supply reliability.

JJWTP Expansion

- A future additional 10 mgd expansion of the JJWTP (for a total treatment capacity of 40 mgd) is recommended to provide the City with additional water treatment capacity, as well as operational flexibility and reliability. The expansion would also include a new administration/maintenance building to accommodate future staffing needs and maintenance activities.

Participation in Phase 2 Los Vaqueros Reservoir Expansion Project

- The City's participation in the Phase 2 Los Vaqueros Reservoir Expansion Project would increase the City's water supply reliability by providing storage of supplies for use in dry years.
- The estimated cost for 5,000 acre-feet of storage for the City will be approximately $10 million plus an additional $1.5 million for implementation and will be shared by existing rate payers and new development.

Participation in the B.F. Sisk Dam Raise & Reservoir Expansion Project

- The City's participation in the B.F. Sisk Dam Raise & Reservoir Expansion Project would increase the City's water supply reliability by providing storage of supplies for use in dry years.
- The estimated cost for 5,000 acre-feet of storage for the City will be approximately $38 million and will be shared by existing rate payers and new development.

Water Master Plan Updates

- Regular updates of this Citywide Water System Master Plan are recommended to evaluate potable water and recycled water infrastructure needs to reflect any changes in future development plans, water use trends and patterns, and water supply availability and reliability, as well as new regulations and operational needs as new potable water and recycled water system infrastructure is constructed. It is recommended that updates be prepared at least once every 10 years, or more often if changing conditions warrant more frequent updates. For purposes of this Citywide Water System Master Plan Update, three future updates are planned.

EVALUATION OF FUTURE RECYCLED WATER SYSTEM

Chapter 9 of this Citywide Water System Master Plan Update identifies the improvements necessary to support the City's projected future recycled water demands and the recycled water exchange agreement. Recommended improvements are based on evaluations of the future (2025 and buildout) recycled water system's treatment, storage, and pumping capacities, as well as its ability to meet recommended performance and operational criteria under maximum day demand plus fill and peak hour demand scenarios.

Recycled water facility improvements are identified at a Master Plan level and do not necessarily include all required on-site infrastructure nor constitute design of improvements. Subsequent detailed design is required to determine the sizes and locations of the proposed improvements. Further, the recycled water hydraulic model is not an "all pipes" model (i.e., not all smaller diameter pipelines are included), so the hydraulic simulations performed may not identify all necessary system improvements. West Yost recommends conducting additional hydraulic evaluations as development details become available.

The following recommendations exclude non-backbone facilities that only serve a specific development, instead focusing on backbone facility improvements with more widespread system benefit. These shared facilities are designated program facilities.

2025 Recycled Water System

Program facility recommendations for the 2025 recycled water system are shown on Figure ES-4 and described below. A complete listing of recommended recycled water system improvements (both program and non-program) to serve projected 2025 recycled water demands is provided in Chapter 9 along with recommendations for their timing.

Booster Pump Stations

- Zone C Booster Pump Station (BPS): Install a new booster pump station with a minimum pumping capacity of 1,700 gpm.

New Recycled Water Pipelines

- To serve 2025 recycled water demands, install approximately 11,370 lf of new pipelines ranging in diameter from 8 to 30 inches.
- To deliver recycled water to the DMC as part of the City's planned recycled water exchange program, install approximately 23,680 lf of new, 30-inch diameter pipeline (as described above, the exchange program is an essential part of the City's projected future water supply portfolio and should be implemented as soon as possible).

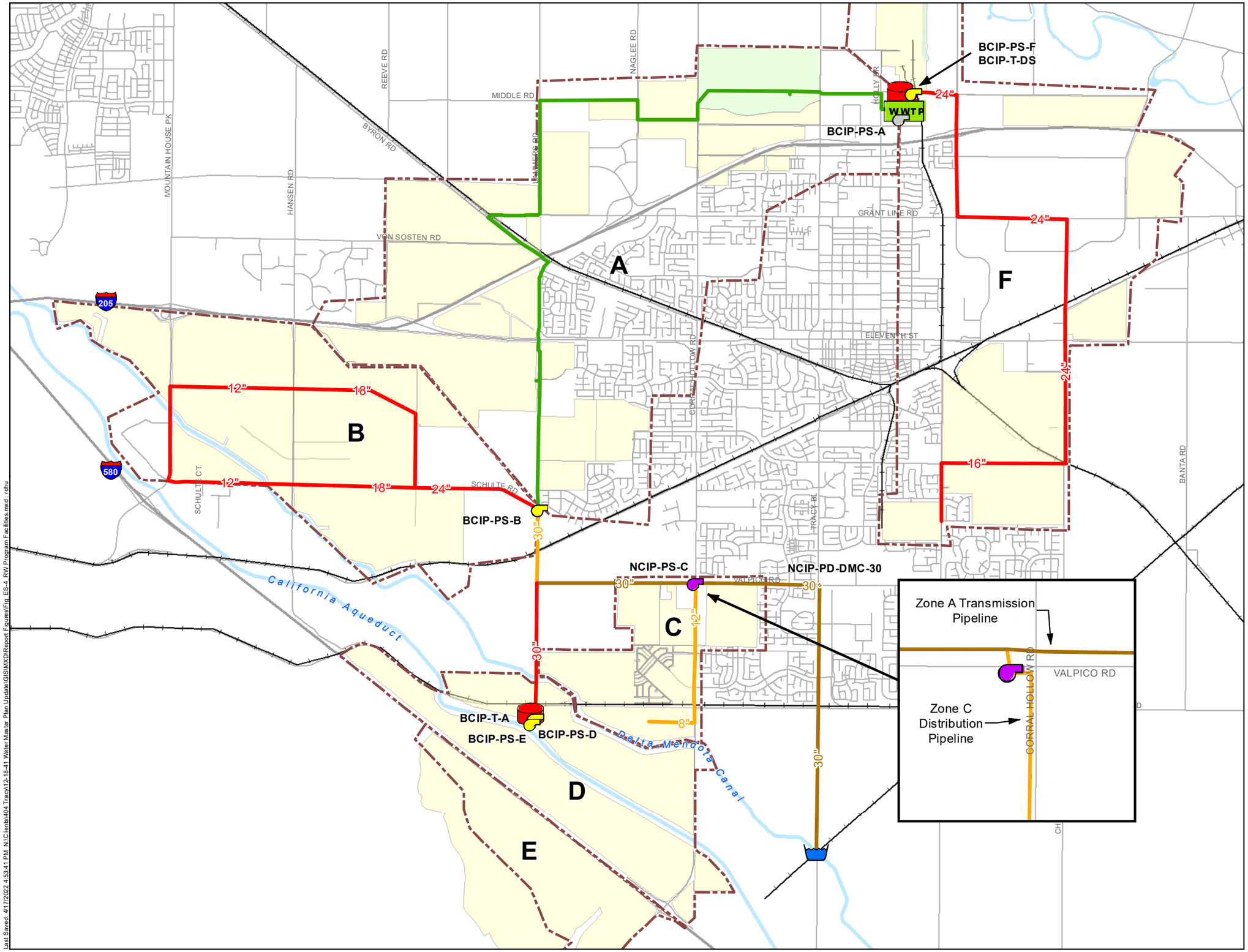
Buildout Recycled Water System

Program facility recommendations for the buildout recycled water system are shown on Figure ES-4 and described below. A complete listing of recommended recycled water system improvements (both program and non-program) to serve projected buildout recycled water demands is provided in Chapter 9 along with recommendations for their timing.

As described in Chapter 9, planning and design for these improvements should be conducted so that these improvements can be constructed and operational as soon as possible, as funding is available, so that recycled water supplies can be used to meet landscape irrigation and other non-potable water demands to minimize the use of potable water supplies for these uses.

Storage Reservoirs

- Zone A Tank: Install an above ground, welded steel storage tank with a minimum active storage capacity of 5.7 MG.
- WWTP Diurnal Tank: Install a partially buried, prestressed concrete diurnal storage tank at the WWTP with a minimum active storage capacity of 2.3 MG; the need for this storage will depend on WWTP diurnal flow patterns, and it is recommended that the City re-evaluate the required diurnal storage at the WWTP by performing a diurnal flow study in 2040.



Symbology

Proposed Buildout Program Facilities

- Buildout Booster Pump Station
- Buidlout Storage Tank
- Buildout System Pipeline

Proposed 2025 Program Facilities

- 2025 Booster Pump Station
- 2025 System Pipeline
- Delta-Mendota Canal Pipeline
- Delta-Mendota Canal Discharge Point

Existing System Facilities

- Existing Booster Pump Station
- WWTP Wastewater Treatment Plant
- Existing System Pipeline
- Legacy Fields
- Future Recycled Water Use Area
- Recycled Water Pressure Zone

Notes:

1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
2. Jack and bore pipeline projects are not shown, but jack and bore is required for canal, railroad, or major highway crossings.
3. Install SCADA system monitoring of flows and pressures at each new facility.
4. Only existing and program facilities are shown.

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Figure ES-4

Recommended Future Recycled Water System Program Improvements

City of Tracy
Water System Master Plan Update

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Booster Pump Stations

- Zone A BPS Expansion: Install additional booster pumps with a minimum pumping capacity of 3,472 gpm.
- Zone B: Install a new booster pump station with a minimum pumping capacity of 5,780 gpm.
- Zone D BPS: Install a new booster pump station with a minimum pumping capacity of 2,700 gpm.
- Zone E BPS: Install a new booster pump station with a minimum pumping capacity of 2,000 gpm.
- Zone F: Install a new booster pump station with a minimum pumping capacity of 4,400 gpm.

New Recycled Water Pipelines

- To serve buildout recycled water demands, install approximately 42,790 lf of new pipelines (in addition to the proposed 2025 pipelines) ranging in diameter from 16 to 30 inches.

SCADA System

- Install SCADA system monitoring of flows and pressures at each new water supply facility to provide operators with real-time system data and flexibility in system operations.

RECOMMENDED CAPITAL IMPROVEMENT PROGRAM

Chapter 10 of this Citywide Water System Master Plan Update presents the recommended Capital Improvement Program (CIP) for the City's existing and future (2025 and buildout) potable water system and proposed future (2025 and buildout) recycled water system to support the City's projected buildout potable water and recycled water demands, respectively. These costs are summarized in Table ES-4. A detailed breakdown of the costs is provided in Chapter 10.

Costs exclude non-backbone facilities that only serve a specific development, as costs associated with those facilities will be borne solely by the corresponding developers. Table ES-4 only includes costs for program facilities.

Table ES-4. Summary of Probable Construction Costs for Recommended Potable and Recycled Water System Improvements[a]

Recommended Improvements	CIP Cost (includes mark-ups)[b,c]
Potable Water System	
Existing Potable Water System CIP (see Table 10-1)	$1,960,000
2025 Potable Water System CIP (see Table 10-2)	$21,988,000
Buildout Potable Water System CIP (see Table 10-3)[d]	$211,916,000
Previous Water Treatment Plant Expansion Buy-in Cost[e]	$27,000,000
Total Potable Water System CIP	**$262,864,000**
Recycled Water System	
2025 Recycled Water System CIP (see Table 10-4)	$27,924,000
Buildout Recycled Water System CIP (see Table 10-5)	$65,528,000
Total Recycled Water System CIP	**$93,452,000**

(a) Includes only costs for program facilities; improvements benefiting only specific developments are excluded.
(b) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.
(c) CIP cost includes mark-ups equal to 40 percent (General Contingency: 15 percent; Design and Planning: 10 percent; Construction Management: 10 percent; and Program Administration: 5 percent) and are based on 2020 dollars.
(d) Includes cost for participation in Phase 2 Los Vaqueros Reservoir Expansion Project and the B.F. Sisk Dam Raise & Reservoir Expansion Project which is to be shared between existing rate payers and new development.
(e) The JJWTP was last expanded in 2008. The cost presented in this line item represents the buy-in cost for the portion of the expanded capacity to be utilized by new developments (estimated to be 9 mgd). The cost for the recommended additional 10 mgd expansion of the JJWTP is included in the Buildout Potable Water System CIP (see Table 10-3).

CHAPTER 1
Introduction

1.1 CITYWIDE WATER SYSTEM MASTER PLAN UPDATE PURPOSE

The purpose of this Citywide Water System Master Plan Update for the City of Tracy (City) is to provide an evaluation of the required backbone potable water and recycled water system facilities required to serve existing and future needs. The City's last Citywide Water System Master Plan was completed in 2012 and was based on projected land uses included in the City's 2011 General Plan. Since that time, significant new residential and commercial development has occurred in the City (including the International Park of Commerce within the Cordes Ranch Specific Plan area, Tracy Ellis, Tracy Hills and numerous smaller projects) and planning for future developments has been refined. Also, during that same time, the State endured five years of drought starting in 2012, including the driest four consecutive years in California history. These unprecedented conditions led to statewide mandated water conservation, significant surface water supply reductions and curtailments and legislation establishing new water efficiency standards.

All of these factors have led to a need to reevaluate the City's potable water and recycled water needs, the projected availability and reliability of the City's water supplies and the required water system infrastructure improvements to ensure a safe and reliable water supply for the City's residents and businesses.

1.2 WATER MASTER PLAN OBJECTIVES

The objectives of this Citywide Water System Master Plan Update are to:

- Evaluate existing water demands to understand current water use patterns and trends and project future water demands for near-term (2025), future (2040) and General Plan buildout conditions.
- Provide an updated evaluation of the availability and reliability of the City's existing and future water supplies and their ability to meet existing and future water demands considering recent changes in projected supply reliability.
- Review and refine performance and operational criteria under which the potable and recycled water systems will be analyzed and recommendations for future facilities will be formulated.
- Evaluate the need for new backbone potable water facilities (including pipelines, storage facilities and pumping facilities) to serve buildout of the City's General Plan.
- Evaluate the need for new backbone recycled water facilities (including pipelines, storage facilities and pumping facilities) to serve buildout of the City's General Plan.
- Develop a capital improvement program for recommended potable and recycled water system facilities.

1.3 KEY CHANGES FROM THE 2012 CITYWIDE WATER SYSTEM MASTER PLAN

This Cityside Water System Master Plan Update incorporates and considers several changed conditions, new water system facilities, and new water supply opportunities from what was included in the 2012 Citywide Water System Master Plan (WSMP). A summary of these is provided below:

- Changes in Projected Land Use: Compared to the projected land use in 2012 Citywide Water System Master Plan, there has been a significant shift in the City's projected land use composition towards residential development and away from commercial and industrial development. However, when compared to the City's historical and existing land uses, which were primarily residential, the projected land uses for new development are more heavily skewed to non-residential uses (with almost 60 percent of the projected acres of new development being non-residential uses). The future industrial, commercial, and retail growth anticipated in the City's Sphere of Influence is reflective of the City's goal to bring jobs and economic growth and improve the City's jobs-housing balance (see Chapter 3 for additional information).
- Reduction in Unit Water Demands: Due to changes in water use trends and habits resulting from improved water use efficiency, unit water demand factors have been reduced for most land use categories (see Chapter 4 for additional information).
- Reduction in Maximum Day and Peak Hour Demand Factors: Due to changes in water use trends and habits from improved water use efficiency, maximum day and peak hour demand factors have been reduced (see Chapter 4 for additional information).
- Changes in Recycled Water System Planning: Previously, the City was considering implementing the proposed Gateway Exchange Program, under which recycled water service would be extended to most of the existing parks and large irrigated areas in the City to offset the potable water demands from the Gateway development (now called Westside). The Gateway Exchange Program is no longer being considered, and it is projected that only a few existing parks and irrigated areas will receive recycled water supply. Expansion of the recycled water system will focus on extending service to newly developed areas (see Chapters 4 and 9 for additional information).
- Reduction in Surface Water Supply Reliability: Due to unprecedented drought conditions from 2011 through 2017 and new flow restrictions resulting from the 2018 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, projected reliabilities of surface water supplies from the Central Valley Project (CVP) and South San Joaquin Irrigation District (SSJID) have been significantly reduced, particularly in dry years. The City has entered into discussions with the Contra Costa Water District and the San Luis & Delta-Mendota Water Authority to explore the City's potential participation in the Phase 2 Los Vaqueros Reservoir Expansion Project to increase the City's water supply reliability by providing storage of supplies for use in dry years (see Chapter 5 for additional information).

- Proposed Recycled Water Exchange Agreement: The City is evaluating the potential for indirect reuse of its available recycled water through an exchange agreement with the United States Bureau of Reclamation (USBR) whereby a portion of the City's tertiary-treated wastewater (recycled water) would be discharged to the Delta Mendota Canal (DMC) and a like amount of water (i.e., a one-to-one exchange) could then be diverted from the DMC by the City for treatment at the City's John Jones Water Treatment Plant (JJWTP) for potable use. Such supplies would be 100 percent reliable and would not be subject to drought cutbacks. With the potential reduction in reliability of the City's surface water supplies from the CVP and SSJID during dry years, this proposed recycled water exchange agreement will be a critical component of the City's future water supply portfolio (see Chapter 5 for additional information).
- Reduction in Emergency Storage Requirement: The 2012 WSMP used an emergency storage volume requirement of two (2) times the average day demand. After reviewing emergency storage criteria for other similar water systems within the region, and taking into account the City's redundant sources of supply (CVP, SSJID, and groundwater), it is recommended that the City reduce the minimum quantity of emergency storage volume required to 1.5 times the average day demand for this Citywide WSMP Water System Master Plan Update (see Chapter 6 for additional information).
- Addition of New Water System Facilities: Several new water system facilities have been recently completed which provide for added water system capabilities. These include the Cordes water storage tank and pump station, the Tracy Hills water storage tank and pump station (nearing completion as of September 2021), new pump stations at the City's JJWTP to serve the City's Pressure Zone 3 and initial phases of the Tracy Hills development, and a recycled water pump station and pipeline on the west side of the City to distribute recycled water supplies from the City's Wastewater Treatment Plant to recycled water users on the western side of the City (see Chapters 7 and 9 for additional information).
- Renaming of Potable Water Pressure Zones: To minimize confusion when referring to the City's primary potable water system pressure zones, the potable water system pressure zones have been renamed as follows:
  - Pressure Zone 1 – no change
  - Pressure Zone 2 – no change
  - City-side Pressure Zone 3 – now referred to as Pressure Zone 3
  - Tracy Hills Pressure Zone 3 – now referred to as Pressure Zone 4
  - Tracy Hills Pressure Zone 4 – now referred to as Pressure Zone 5
  - Tracy Hills Pressure Zone 5 – now referred to as Pressure Zone 6

  The remainder of this Citywide Water System Master Plan Update, and all subsequent water system evaluations and studies, will utilize these new pressure zone designations.

1.4 REPORT ORGANIZATION

This Citywide Water System Master Plan Update is organized into the following chapters:

Chapter 1:	Introduction
Chapter 2:	Water Supply and Infrastructure System Objectives, Goals and Recommendations
Chapter 3:	Land Use Assumptions
Chapter 4:	Existing and Future Water Demands
Chapter 5:	Existing and Future Water Supplies
Chapter 6:	System Performance and Operational Criteria
Chapter 7:	Existing Potable Water System Evaluation
Chapter 8:	Future Potable Water System Evaluation
Chapter 9:	Recycled Water System Evaluation
Chapter 10:	Recommended Capital Improvement Program

The following appendices to this Citywide Water System Master Plan Update contain additional technical information, assumptions and calculations:

Appendix A:	Land Use Assumptions and Projected Water Demands for New Developments
Appendix B:	JJWTP Expansion Project Site Plan, Process Schematic, and Hydraulic Profile
Appendix C:	Existing Potable Water System Hydraulic Grade Schematic
Appendix D:	Lammers Road and Hood Way Design Recommendation Technical Memoranda
Appendix E:	Cost Estimating Assumptions
Appendix F:	Proposed Future Potable Water System Facility Improvements
Appendix G:	Proposed Future Recycled Water System Facility Improvements

1.5 ACKNOWLEDGEMENTS

The development of this Citywide Water System Master Plan Update would not have been possible without the focused involvement and assistance of City staff. In particular, the following staff provided comprehensive information, significant input and important insights throughout development of this Citywide Water System Master Plan Update:

- Robert Armijo, City Engineer/Assistant Director of Development Services
- Steve Bayley, Project Specialist
- Wayne Bogart, Public Works Superintendent
- Aleck Cheney, Engineer
- Veronica Child, Management Analyst II
- Bill Dean, Assistant Director of Development Services
- Lea Emmons, Water Treatment Plant Superintendent
- Vicki Lombardo, Senior Planner
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- Karin Schnaider, Director of Finance
- Don Scholl, Director of Public Works
- Kul Sharma, Director of Utilities
- Paul Verma, Senior Civil Engineer
  (Project Manager for the Citywide Water System Master Plan Update)
- Thomas Ward, Construction Inspector

CHAPTER 2
Water Supply and Infrastructure System Objectives, Goals, and Recommendations

2.1 OVERVIEW

The recent California drought conditions, environmental restrictions in the San Joaquin Delta, increasing population, and limited water resources are serious problems affecting water agencies statewide. Many water agencies have adopted ordinances and taken other measures to ensure a reliable water supply for their customers. Unfortunately, the challenge of sustaining a water supply for future generations is becoming more and more challenging each year.

This chapter presents an overview of the City's water supply and infrastructure system objectives and goals, describes existing policies, and provides recommendations for future measures to help the City meet those objectives and goals.

2.2 OVERALL WATER SYSTEM OBJECTIVES AND GOALS

This Citywide Water System Master Plan Update has been prepared based on the following overall water system objectives and goals:

- Ensure safe, adequate and reliable water supplies for the City's existing and future residents and businesses.
- Support the goals, objectives and policies of the City's General Plan, particularly those contained in the Public Facilities and Services Element.
- Comply with existing and future legislation and regulations for both potable and non-potable (recycled) water supplies including, but not limited to, the following:
  - Support the City's compliance with legislation related to reducing greenhouse gases (Assembly Bill (AB) 32[1] and Senate Bill (SB) 375[2]) by improving the efficiency of water system facility operations when feasible.
  - Comply with the California Green Building Standards Code, and other "green" building guidelines, as they relate to standards for interior and exterior water use, to promote more efficient use of the City's water supplies.

[1] AB 32 California Global Warming Solutions Act of 2006: Signed into law September 27, 2006; requires the California Air Resources Board (CARB) to develop regulations and market mechanisms that will ultimately reduce California's greenhouse gas (GHG) emissions by 25 percent (to 1990 levels) by 2020.

[2] SB 375: Signed into law September 30, 2008; requires each metropolitan region to adopt a "sustainable community strategy" (SCS) in its regional transportation plans to encourage compact development that aligns with regional GHG emissions reduction targets set by the CARB; enhances the CARB's ability to reach AB 32 goals; intended to promote more environmentally-friendly communities, more sustainable developments, less time people spend in their cars, and more alternative transportation options.

— Comply with the Water Conservation Act of 2009 (SB X7-7) which was passed in November 2009 to increase water use efficiency by reducing per capita water use statewide with a goal to increase the sustainability and extend the longevity of the City's existing water supplies. Per SB X7-7, the City's adopted per capita water use targets are 204 gallons per capita per day (gpcd) (2015 interim target) and 181 gpcd (2020 final target). The City's per capita water use in 2015 was 142 gpcd, which was well below the City's 2015 interim target. The City's per capita water use in 2020 was 181 gpcd, equal to the City's 2020 final target. Additional discussion on the City's per capita water use and compliance with SB X7-7 is provided in Chapter 4.

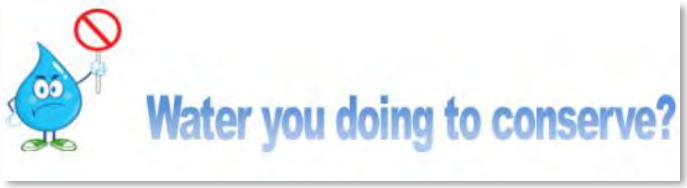
— Comply with the Sustainable Groundwater Management Act (SGMA) which became effective in January 2015 with the passage of comprehensive groundwater legislation contained in SBs 1168 and 1319, and AB 1739. The legislative intent of SGMA is to provide sustainable management of groundwater basins, enhance local management of groundwater, establish minimum standards for sustainable groundwater management, and provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater. Discussion on the City's compliance activities related to SGMA is provided in Chapter 5.

— Comply with SB 606 and AB 1668 which were passed in May 2018 and established new statewide water use efficiency standards for indoor residential water use, outdoor residential water use, commercial, industrial and institutional irrigation of landscaped areas and distribution system water loss. A primer entitled "Making Water Conservation a California Way of Life" was developed to be a reference document for the implementation of the complex 2018 legislation. Discussion on the City's compliance with SB 606 and AB 1668 is provided in Chapter 4.

The following sections of this chapter describe the City's existing policies and recommended measures for water conservation, recycled and non-potable water, and water system facility operations, to help meet these overall water system objectives and goals.

2.3 CITY OF TRACY WATER CONSERVATION PROGRAMS

2.3.1 Existing Water Conservation Programs



The City has an on-going water conservation program that includes residential surveys, public and school education programs, rebates for water-efficient appliances and other specific programs. These programs have been successful in reducing water use, especially during the recent drought. In the late 1980's and early 1990's, the City's overall per capita water use was about 300 gpcd. However, since the late 1990's, the City's overall per capita water use has been significantly reduced. Since 2008, the City's average overall per capita water use has been 170 gpcd.

In 2015 and 2016, which were dry years, and years in which overall water demands were affected by water conservation measures and water use restrictions, the City's per capita water use dropped to 142 and 146 gpcd, respectively.

The City also has a Water Shortage Contingency Plan (WSCP) which was originally developed in 1992. The City's WSCP was updated in June 2015 to incorporate mandatory prohibitions on water use required by State Water Resources Control Board (SWRCB), and again updated in early 2021 in conjunction with the City's 2020 Urban Water Management Plan (UWMP) based on new requirements for WSCPs. The WSCP includes mandatory water use prohibitions and restrictions which are always in effect, triggers for implementation of various stages of the WSCP based on various water supply shortage scenarios, and specific water use restrictions for each stage of the WSCP, which are intended to reduce the City's water demand by up to 50 percent and greater than 50 percent in the event of a water supply emergency or a drought condition. Water use restrictions in each stage of the WSCP become increasingly restrictive as needed to reduce the City's water demand.

The City's current WSCP is included in Section 8 of the City's 2020 UWMP. The Tracy Municipal Code (Chapter 11.28 Water Management, Article 5 Drought and Other Water Emergency and Article 6 Water Conservation and Rationing Plan, Water Emergency Plan, Variances and Appeals) will be updated in late 2021 to be consistent with the latest updates to the WSCP.

2.3.2 Water Efficient Landscape Ordinance

About half of the urban water is used for landscape irrigation in California. Large water savings can be gained by efficient landscape design, installation, and maintenance. New development and retrofitted landscape water efficiency standards are governed by the State Model Water Efficient Landscape Ordinance (MWELO) which is codified in the California Code of Regulations Title 23 Waters, Division 2 Department of Water Resources, Chapter 2.7 Model Water Efficient Landscape Ordinance. All agencies must adopt, implement, and enforce the MWELO or a more stringent ordinance. The City has adopted MWELO and it is included in the Tracy Municipal Code Chapter 11.28 Water Management, Article 8 Water Efficient Landscape Ordinance.

Key components of MWELO include requirements for the following:

- Landscape design plans (e.g., plant selection, slopes, guidelines for water features, etc.)
- Irrigation design plans (e.g., separate meters for large landscape areas, automatic irrigation controllers utilizing evapotranspiration or soil moisture sensor data, use of rain sensors, etc.)
- Grading design plans (e.g., erosion and runoff protection)
- Irrigation scheduling and the development of a maximum applied water allowance (e.g., allowable water days and times, landscape water budgets, etc.)
- Landscape and irrigation maintenance scheduling
- Irrigation audits, irrigation surveys and irrigation water use analysis
- Use of recycled water (e.g., landscape irrigation, decorative water features)

2.4 RECYCLED AND NON-POTABLE WATER ORDINANCE

In 2002, the City adopted a Recycled and Non-Potable Water Ordinance which established the policy that recycled water may be used for non-potable uses within the City's designated recycled water use areas (as defined in the Tracy Municipal Code in Chapter 11.30 Recycled and Non-Potable Water). Specific provisions include the following:

> *11.30.030 (b) Each subdivision for which a tentative map or parcel map is required under Government Code section 66426 and located within designated recycled water use areas is required to install a recycled water distribution system to provide recycled water to the common areas[3] of the subdivision and for any industrial cooling or processing uses in the subdivision.*

The intent of this existing City policy is to require new development to use recycled water for landscape irrigation on professionally managed and maintained landscapes located within the City, such as golf courses, parks, greenbelts, and landscaped streets and medians, and for any applicable industrial cooling or processing purposes. This applies to all land use designations within the City's General Plan including, but not limited to, residential, commercial, industrial, and institutional. The only exception is landscaped areas within residential land uses which are maintained by private homeowners (e.g., private backyards or front yards which are not considered common areas); recycled water will not be required for landscape irrigation in these privately maintained areas.

To further encourage and expand the future use of recycled and/or non-potable water within the City, the following additional measures should be considered:

- Require the use of recycled or non-potable water for all decorative water features and artificial lakes.
- Require that existing large, landscaped areas currently irrigated with potable water supplies, such as City parks and sports fields, be converted to recycled or non-potable water use as opportunities for construction of recycled or non-potable water facilities to serve these existing areas occur .

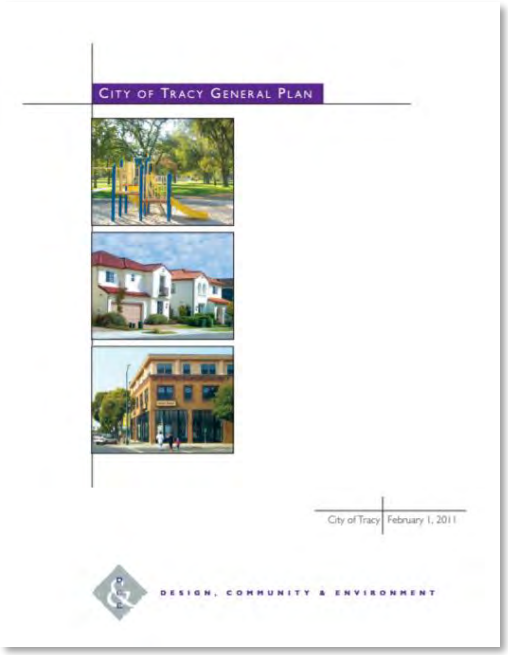
[3] "Common areas" shall include, but not be limited to, golf courses, parks, greenbelts, landscaped streets, and landscaped medians.

- Require that existing facilities with evaporative cooling systems and other industrial cooling processes currently using potable water supplies be converted to recycled or non-potable water use as opportunities for construction of recycled or non-potable water facilities to serve these existing areas occur.

As described further in Chapters 4, 5, and 9, the City has begun construction of a recycled water distribution system to deliver recycled water supplies to designated use areas.

2.5 CITY OF TRACY GENERAL PLAN WATER SERVICE GOALS, OBJECTIVES AND POLICIES

The City's General Plan, last updated in 2011, includes a Public Facilities and Services Element that provides information and policy guidance to ensure provision of facilities and services that will support existing and new development in the City. It addresses the changing public services and infrastructure needs of Tracy and provides for their logical and timely extension to keep pace with growth. Policies supporting well-maintained infrastructure are essential to achieve broader development objectives and support the future envisioned by the residents of Tracy. Specific goals, objectives and policies for water services are included in the Public Facilities and Services Element.



The General Plan goal for the City's water service is to provide "adequate supplies of water for all types of users" (General Plan Goal PF-6). Specific General Plan objectives and policies associated with this goal are summarized in Table 2-1.

Table 2-1. City of Tracy General Plan Objectives and Policies for Water Service

Objectives	Policies
Objective PF-6.1 Ensure that reliable water supply can be provided within the City's service area, even during drought conditions, while protecting the natural environment.	P1. The City shall promote water conservation by implementing the Best Management Practices contained in the UWMP. P2. The City shall continue to acquire additional sources of water supplies to meet the City's future demands. P3. To the extent feasible, the City shall use surface water supplies to meet daily water needs and reduce reliance on groundwater supplies. P4. The City shall establish water demand reduction standards for new development and redevelopment to reduce per capita and total demand for water.
Objective PF-6.2 Provide adequate water infrastructure facilities to meet current and future populations.	P1. The City shall maintain water storage, conveyance and treatment infrastructure in good working condition in order to supply domestic water to all users with adequate quantities, flows and pressures. P2. Storage reservoirs should be buried or partially buried depending on local groundwater conditions to allow for the joint use of the site with parks or recreational facilities, unless reservoirs are elevated to provide a gravity flow system, in which case the reservoirs shall be screened by landscaping and/or earthen berms.
Objective PF-6.3 Promote coordination between land use planning and water facilities and service.	P1. Structures with plumbing that are located within the City limits shall connect to the City water supply system. P2. New developments shall dedicate land for utility infrastructure such as treatment facilities, tanks, pump stations and wells as needed to support the development of their project. P3. The City shall be responsible for constructing new transmission water lines, as needed to meet future needs. Individual development projects shall be responsible for the construction of all water transmission means. P4. All new water facilities shall be designed to accommodate expected capacity for buildout of areas served by these facilities but may be constructed in phases to reduce initial and overall costs. P5. The availability of sufficient, reliable water shall be taken into account when considering the approval of new development. P6. Costs for water service expansion shall be distributed among new water users fairly and equitably.
Objective PF-6.4 Design and manage water system facilities for reliability during catastrophic events such as fires, power outages, droughts and earthquakes.	P1. Groundwater supplies should be reserved for emergency use during water treatment shutdowns, short-term shortages of surface water supplies or during droughts. P2. Backup emergency power systems shall be provided at all essential water facilities that rely on electric power. P3. Storage reservoir facilities should be located at naturally high topographic locations to capitalize on gravity flow, whenever possible. P4. Future water systems and facilities shall be designed to minimize the likelihood of damage from vandalism or terrorist activity.
Objective PF-6.5 Use recycled water to reduce non-potable water demands whenever practicable and feasible.	P1. The City shall provide recycled water systems, including pipelines, pump stations and storage facilities, to serve primarily City-owned facilities, schools and parks as funding becomes available. P2. Recycled water piping systems ("purple pipe") shall be constructed as appropriate in all new development projects to facilitate the distribution and use of recycled water. The specific location and size of the recycled water systems shall be determined during the development review process. P3. Recycled water shall be used for all public properties and large private open spaces or common areas to the extent feasible. P4. The City shall plan for recycled water infrastructure in the City's Infrastructure Master Plans and, to the extent feasible, recycled water should be utilized for non-potable uses, such as landscape irrigation, dust control, industrial uses, cooling water and irrigation of agricultural lands.

2.6 COMPLIANCE WITH CALIFORNIA GREEN BUILDING STANDARDS CODE

The California Green Building Standards Code, also known as CALGreen, was the first-in-the-nation mandatory green building standards code. In 2007, the California Building Standards Commission (CBSC) developed green building standards in an effort to meet the goals of California's landmark initiative AB 32 California Global Warming Solutions Act of 2006, which established a comprehensive program of cost-effective reductions of GHG to 1990 levels by 2020.

The 2008 CALGreen Code was first published in Part 11 of California's Title 24 Code and became effective on August 1, 2009. It included primarily voluntary green building standards for non-residential buildings, and mandatory standards for low-rise residential buildings. The 2010 CALGreen Code established mandatory and voluntary provisions for residential and non-residential construction. The 2016 CALGreen Code and later code supplements updated these provisions with an effective date of July 1, 2018. The 2019 CALGreen Code was published July 1, 2019 with an effective date of January 1, 2020.

The City adopted the 2019 CALGreen Code on November 19, 2019.

The key mandatory provisions of CALGreen are as follows:

- Residential Mandatory Measures:
  - Reduce indoor potable water use by installing ultra-low-flow fixtures and appliances (e.g., 1.8 gallons per minute (gpm) showerheads, 1.8 gpm kitchen faucets, 1.28 gallons/flush toilets, 0.125 gallons/flush wall-mounted urinals).
  - Residential developments with a total landscape area equal to or greater than 500 square feet shall establish landscape irrigation water budgets which conform to the local water efficient landscaping ordinance or to the State MWELO where no local ordinance is applicable.
  - Newly constructed residential developments may be required to have recycled water supply systems installed where disinfected tertiary recycled water is available from a municipal source.
- Non-Residential Mandatory Measures:
  - For buildings in excess of 50,000 square feet, provide separate submeters for each individual leased, rented or other tenant space within the building projected to consume more than 100 gallons per day.
  - Reduce indoor potable water use by 20 percent by installing ultra-low-flow fixtures and appliances (e.g., 1.8 gpm showerheads, 1.8 gpm kitchen faucets, 1.28 gallons/flush toilets, and 0.125 gallons/flush wall-mounted urinals).
  - Establish landscape irrigation water budgets which conform to the local water efficient landscaping ordinance or to the State's MWELO where no local ordinance is applicable.

— Newly constructed non-residential developments are required to have a recycled water supply system installed where a disinfected tertiary recycled water supply pipeline from a municipal source is within 300 feet of the construction site boundary.

Voluntary measures included in the CALGreen Code include further reductions in indoor water use in both residential and non-residential buildings, installation of low-water consumption irrigation systems, installation of rainwater systems, installation of graywater systems, landscaping with noninvasive species, and installation of dual plumbing systems.

2.7 RECOMMENDATIONS FOR NEW DEVELOPMENT AND NEW WATER SYSTEM FACILITIES

In addition to the various guidelines described above, and to allow the City to meet its water conservation goals and maintain the long-term sustainability of its water resources, the following recommendations should be considered for new development projects and new water system facilities in the City:

- Require new development projects to offset or mitigate its water demands if demands exceed those accounted for in the Citywide Water System Master Plan Update based on buildout of the City's adopted General Plan. The offset or mitigation may be achieved by reducing the water demands within the project (through the implementation of water conservation measures and/or incorporation of recycled water use) and/or participating in a project to reduce potable water demands in another portion of the City to offset the potable water demands of the proposed project.
- Establish designated utility corridors within new development areas to be within public rights-of-way to minimize or eliminate the need for utility easements within private property.
- Install solar power systems, or alternative power sources, at existing and new pump stations and other water system facilities, as feasible, to reduce electrical power consumption.
- Increase the frequency of routine operations and maintenance (O&M) activities for existing pump stations and wells to maintain pump efficiencies and reduce power demands.

2.8 PRINCIPLES FOR SUSTAINABLE INFRASTRUCTURE IN THE CITY OF TRACY

In November 2009, the City developed a list of principles for sustainable infrastructure for use in developing its 2012 Infrastructure Master Plans[4]. Principles were developed for storm drainage, water, wastewater, recycled water, and roadways and transportation and, for the most part, remain applicable for this Citywide Water System Master Plan Update.

The principles related to water infrastructure are summarized as follows:

- Energy efficient design and control systems should be used in all new facilities to minimize power consumption. Look for opportunities to use solar generation facilities.
- Promote and encourage, where feasible, the use of recycled water for non-potable uses in existing and future public landscaped areas.
- Establish and adopt interior and exterior water conservation requirements which are consistent with recommended State guidelines, to the degree possible.
- Require existing City customers to participate in water conservation activities that will enable the City to meet or exceed statewide water conservation requirements.
- Create a water rate structure that supports and provides incentives for water conservation.
- Encourage and create incentives to convert high water use outdoor landscaping to more drought-resistant plantings to facilitate water conservation among existing water users.

As applicable, these sustainability principles are incorporated into this Citywide Water System Master Plan Update as described in the following chapters.

[4] See Chapter 2 and Appendix A of the 2012 Citywide Water System Master Plan.

CHAPTER 3
Land Use Assumptions

3.1 OVERVIEW

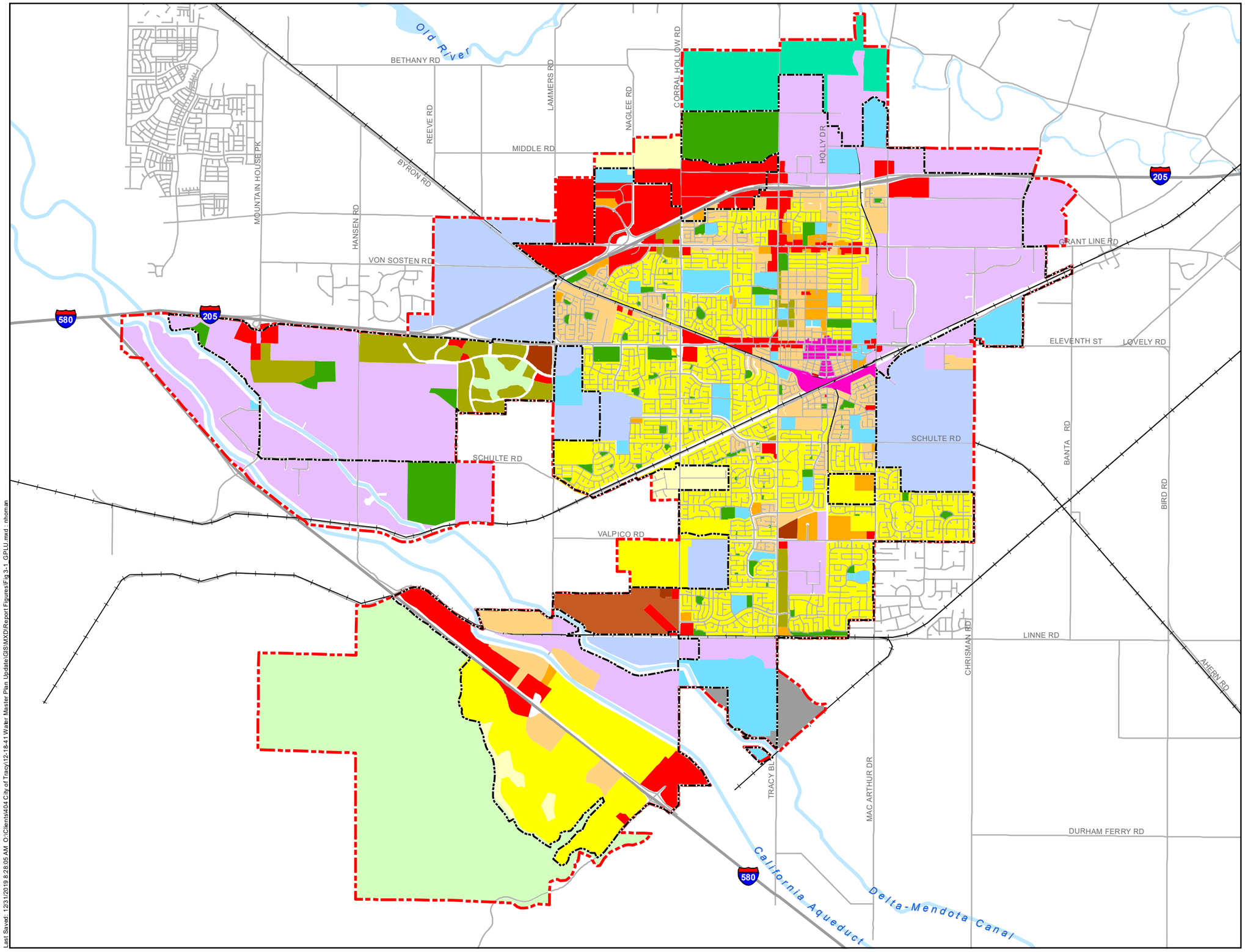
The purpose of this Citywide Water System Master Plan Update is to evaluate the required potable water and recycled water infrastructure to serve buildout of the City's General Plan and Sphere of Influence (SOI). In this Citywide Water System Master Plan Update, the term "buildout" is used to refer to full development of approved projects, additional planned developments, and miscellaneous infill, as identified by the City's Planning Division. However, as it is unclear when buildout will actually occur, no specific year is identified for the buildout condition. Two interim time frames are evaluated in this Citywide Water System Master Plan Update: Year 2025 (near-term) and Year 2040, to help provide prioritization of future system improvements in the period prior to buildout. The following sections present the land use assumptions for the City at 2025, 2040, and buildout time frames.

3.2 CITY OF TRACY GENERAL PLAN AND SPHERE OF INFLUENCE

The City's General Plan is the principal policy document for guiding future planning and development of the City of Tracy, including the SOI, which is the area outside of the City limits that the City expects to annex and urbanize in the future. The SOI area in the City's General Plan is about 16 square miles (existing City limits are approximately 26 square miles, for a total General Plan area of about 42 square miles). The City's most recent General Plan was adopted by City Council on February 1, 2011 and is used as the basis for the City's Infrastructure Master Plans, including this Citywide Water System Master Plan Update. Figure 3-1 illustrates the SOI boundary and the land uses included in the General Plan.

As shown on Figure 3-1, some of the areas outside of the City limits, but within the SOI, are designated as Urban Reserve. Proposed future development within these Urban Reserve areas includes a variety of land uses, such as Residential, Commercial, and Industrial.

Due to the nature of the planning and development process, actual development within the SOI may not conform to the planned land uses shown in the General Plan. Where available, more recent land use data from the City's Planning Division, specific plans, and other available planning documents were used preferentially over the General Plan land uses.



Notes:
1. General Plan land use GIS file recieved from the City on April 5, 2018.

Figure 3-1

General Plan Land Use

City of Tracy
Water System Master Plan Update

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3.3 EXISTING AND PLANNED DEVELOPMENT OF THE CITY'S SPHERE OF INFLUENCE

Development of the City's SOI will include the following land use components:

- Existing developed land uses within the City limits
- Approved projects
- Additional planned development
- Miscellaneous infill located in existing developed areas
- Annexation of the Mountain View area

Each of these land use components is discussed in more detail below.

3.3.1 Existing Developed Land Uses

Existing developed land use within the City consists primarily of low-density residential land use. With some exceptions, existing developed land use within the City limits conforms to the General Plan. Water demands from the existing developed land uses will be included in the future water demand projections.

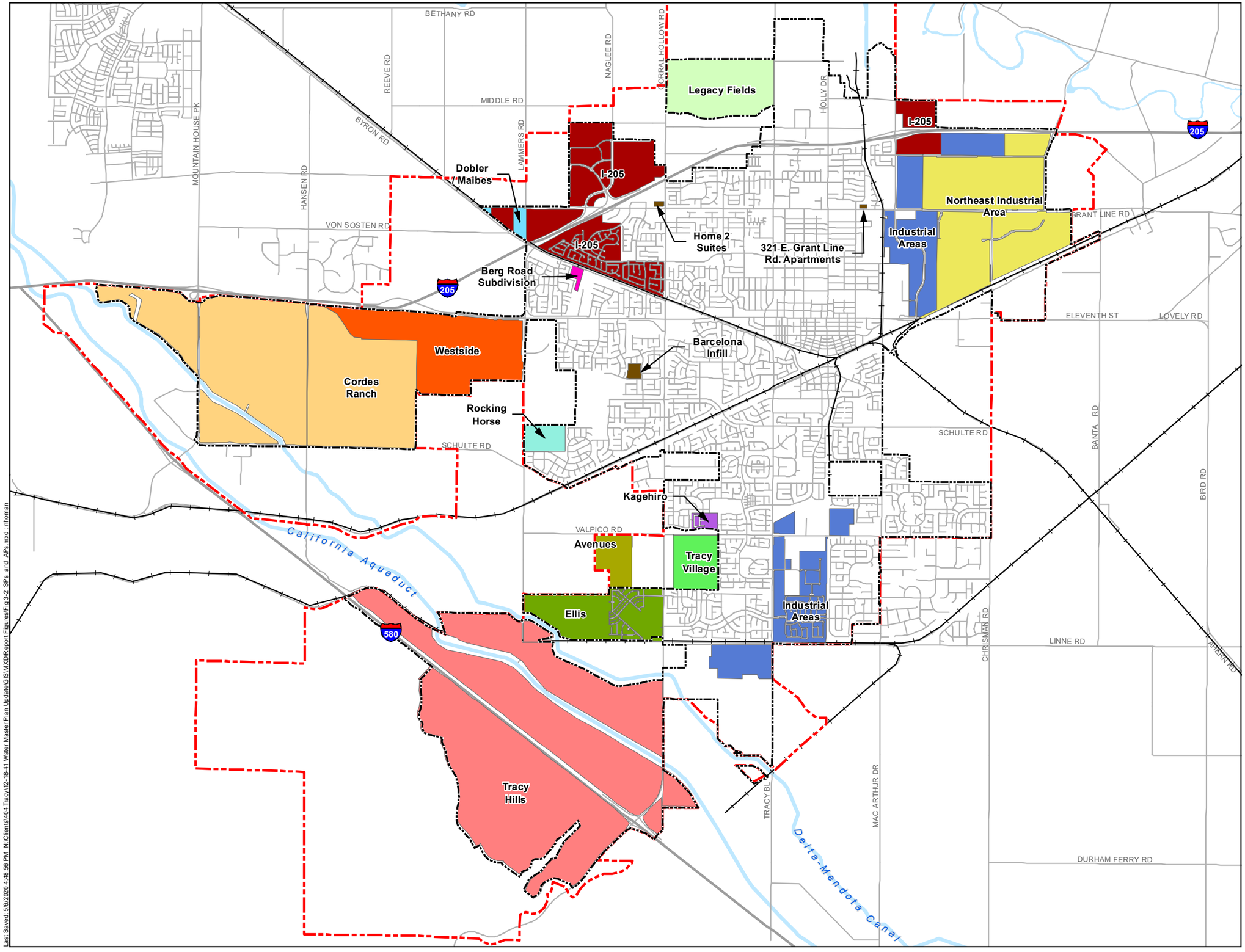
3.3.2 Approved Projects

Approved projects are developments which are far along in the planning process. Future land use can be projected with greater certainty in these areas due to available tentative maps, Environmental Impact Reports (EIRs), hydraulic evaluations, or other planning documents which have been prepared for these developments. Figure 3-2 shows the location of the approved projects in the City.

Table 3-1 summarizes the approved projects in the City. Many of the areas listed in Table 3-1 are partially developed, including the Cordes Ranch, Ellis, and Tracy Hills Specific Plan areas, which have ongoing and rapid development occurring within them.

As discussed in Chapter 4, water demands for the developed portions of these projects are included in the City's existing water demands[1]. Land use data regarding the number of residential dwelling units and non-residential acres remaining to be developed within each of these approved projects were obtained from the data sources listed in Table 3-1. This data was then used to estimate the anticipated additional future water demands associated with completion of these specific plans and projects, which are included in the future water demand projections.

[1] Water meter billing data from 2017 were used as the basis for the existing water system. Land use for development which occurred after 2017 is presented as future land use in this Water System Master Plan Update.



Notes:
1. Dobler / Maibes is part of the I-205 Specific Plan area, but is accounted for separately in this WSMP.

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Figure 3-2

Approved Projects

City of Tracy
Water System Master Plan Update

Table 3-1. Summary of Approved Projects

Project Name	Primary Planning Document(s)	Source(s) of Land Use Data Used
I-205 Corridor Specific Plan	Specific Plan dated February 1991	Previous hydraulic evaluations[(a)]; Data from Planning Division[(b)]
Industrial Areas Specific Plan (North and South)	Specific Plan dated June 1988; major Specific Plan amendment dated 1999	Data from Planning Division[(b)]
Northeast Industrial Specific Plan (Phases 1, 2, and 3)	Specific Plan dated July 2012	Hydraulic Evaluation of Northeast Industrial Area (NEI) Specific Plan, West Yost Associates, September 2018
Avenues Specific Plan	Specific Plan dated May 2018	Hydraulic Evaluation of Avenues Specific Plan, West Yost Associates, April 2018
Cordes Ranch Specific Plan	Specific Plan dated September 2013	Previous hydraulic evaluations[(c)]; Data from Planning Division[(b)]
Ellis Specific Plan	Specific Plan dated January 2013	Hydraulic Evaluation of Ellis Specific Plan Phase 2 - The Gardens, West Yost Associates, December 2016; Hydraulic Evaluation of Ellis Specific Plan Phase 3 - Draft TM, West Yost Associates, July 2019
Tracy Hills Specific Plan	Specific Plan dated April 2016	Peer Review and Hydraulic Evaluation for Tracy Hills Phase 1B and 1C, West Yost Associates, May 2020; Data from Planning Division[(b)]
Tracy Village Specific Plan	Specific Plan dated May 2018	Hydraulic Evaluation of Tracy Village Specific Plan, West Yost Associates, February 2018
Westside Specific Plan	Specific Plan area was previously included in the Gateway Specific Plan; Draft EIR is currently being prepared for the Westside Specific Plan	Preliminary tables from Draft EIR
Berg Road Subdivision	-	Berg Road Properties Development Water Distribution System Analysis, Black Water, January 2016
Dobler / Maibes[(d)]	Included in the I-205 Corridor Specific Plan	Data from Planning Division[(b)]
Kagehiro	-	Data from Planning Division[(e)]
Rocking Horse	Initial Study and Mitigated Negative Declaration dated December 2015	Hydraulic Evaluation of South Lammers Road Development, West Yost Associates, May 2015
Legacy Fields (Holly Sugar Sports Park)	Final EIR dated June 2010	2013 City of Tracy Parks Master Plan
Small Approved Projects[(f)]	-	Previous hydraulic evaluations

(a) Land use data from previous hydraulic evaluations was used for the following development projects within the I-205 Corridor Specific Plan area: Sierra Hills, Grant Line Road Apartments, Aspire II, and Harvest.

(b) *Land Uses with TAZ Estimates_06_25_2021_2025_2040_BU_Independent.xlsx*, received from the City on June 25, 2021.

(c) Hydraulic Evaluation of International Park of Commerce (IPC) Buildings 3, 4, and 12, West Yost Associates, May 2017; Hydraulic Evaluation of International Park of Commerce (IPC) Building 25, West Yost Associates, July 2017; Hydraulic Evaluation of International Park of Commerce (IPC) Buildings 22, 23, and Thermo Fisher, West Yost Associates, October 2017; Hydraulic Evaluation of International Park of Commerce (IPC) Buildings 9, 10, and 14, West Yost Associates, May 2018; Hydraulic Evaluation of IPC Building 19A Draft TM, West Yost Associates, August 2019.

(d) Dobler / Maibes is part of the I-205 Corridor Specific Plan area but is accounted for separately in this WSMP Update.

(e) Correspondence from City staff received on August 7, 2019.

(f) Includes Home 2 Suites, 321 E. Grant Line Road Apartments, and Barcelona Infill.

3.3.3 Additional Planned Development

In addition to the approved projects, the City has also identified many additional planned development areas within the City's SOI which will be served by the City in the future. As described above, some of these additional planned development areas are designated as Urban Reserve in the City's General Plan. Projections of future land use in these areas are less certain than those for the approved projects, as there are few, if any, planning documents available. Many of these additional planned development areas are located outside of the existing City limits. As future developments within the City's SOI, but outside the City limits, are approved, they will be annexed and served by the City. Figure 3-3 shows the locations of these additional planned development areas.

Land use projections for additional planned development areas were provided by the City's Planning Division[2]. This data was then used to estimate the anticipated additional future water demands associated with development of the additional planned development areas, which are included in the future water demand projections.

3.3.4 Miscellaneous Infill Development

Vacant parcels that are not covered by any of the areas previously discussed may be developed as miscellaneous infill. Land use projections for development of miscellaneous infill parcels were provided by the City's Planning Division[2]. This data was used to estimate the anticipated additional future water demands associated with development of the infill parcels, which are included in the future water demand projections.

It should be noted that in more urbanized cities throughout California, there has been a recent increase in applications for Accessory Dwelling Units (ADUs), also known as guest houses or granny suites. An ADU is defined as an attached or detached residential dwelling unit built on the same parcel as an existing primary single-family dwelling, which provides complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation. Discussions with City staff acknowledge the possibility of an increase in development of ADUs in the future. However, due to the uncertainty in the timing and extent of ADU development in the City, they were not included in the future water demand projections.

3.3.5 Mountain View Annexation

As stated in the City's 2019 Municipal Service Review (MSR), the area of rural residential land use near the intersection of Mountain View Road and Corral Hollow Road may be annexed and served by the City in the future. The location of the Mountain View Annexation is shown on Figure 3-3.

Although the Mountain View area is already developed, extending water service to these homes would increase the City's water demands. Data from the MSR was used to estimate the anticipated additional future water demands associated with extending service to the Mountain View area, which are included in the future water demand projections.

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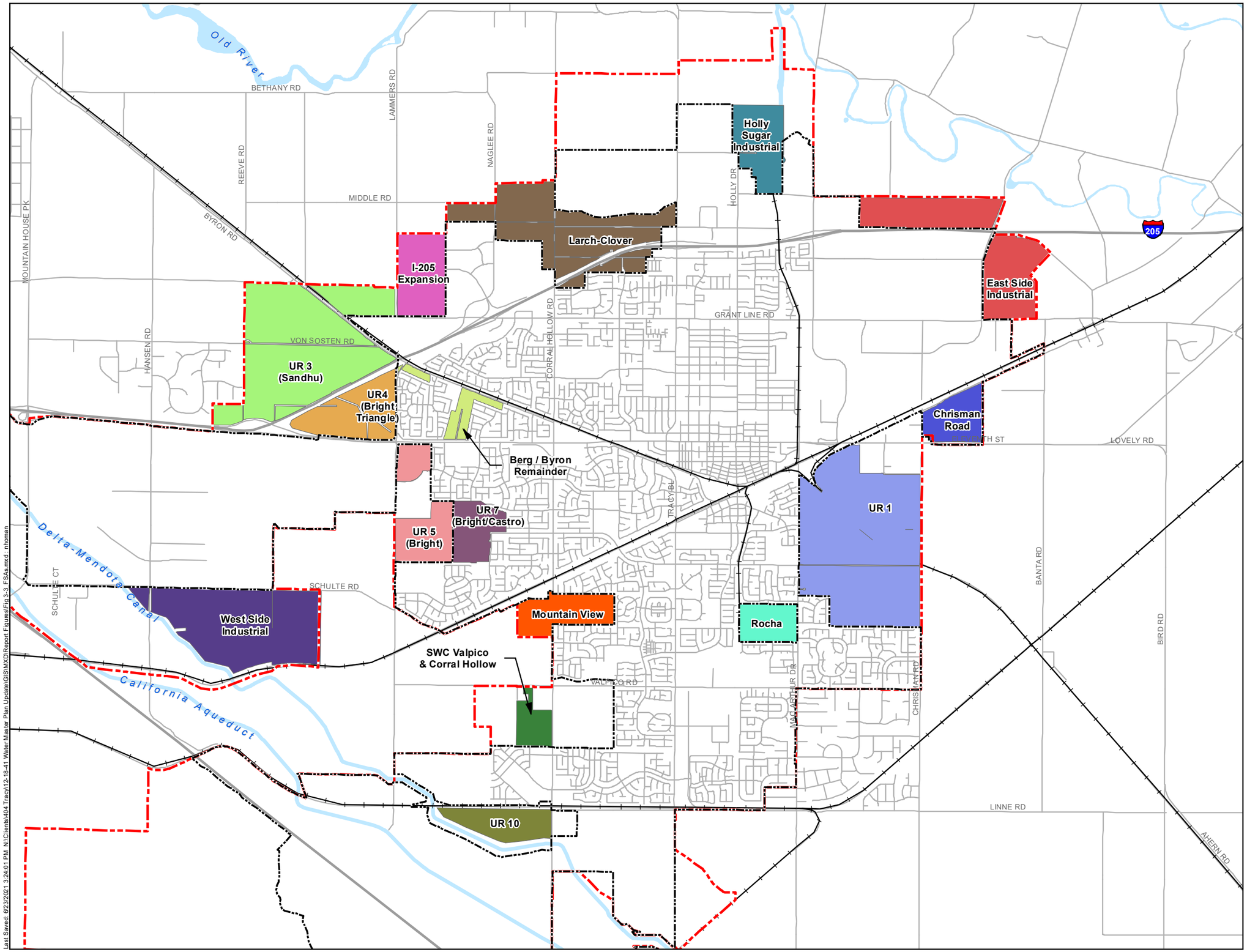
[2] *Land Uses with TAZ Estimates_06_23_2021_2025_2040_BU_Independent.xlsx*, received from the City on June 25, 2021.



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Scale in Feet

Symbology

- City Limits
- Sphere of Influence
- Mountain View

Additional Planned Development Areas

- Berg / Byron Remainder
- Chrisman Road
- East Side Industrial
- Holly Sugar Industrial
- I-205 Expansion
- Larch-Clover
- Rocha
- SWC Valpico & Corral Hollow
- UR 1
- UR 3 (Sandhu)
- UR 4 (Bright Triangle)
- UR 5 (Bright)
- UR 7 (Bright/Castro)
- UR 10
- West Side Industrial

Notes:
1. Miscellaneous Infill is not shown. It is assumed that small vacant parcels are evenly distributed throughout the central developed areas of the City.

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Figure 3-3

Additional Planned Development

City of Tracy
Water System Master Plan Update

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3.4 DEVELOPMENT TIME FRAMES EVALUATED IN THIS WATER SYSTEM MASTER PLAN UPDATE

Three development time frames are evaluated in this Water System Master Plan Update:

- 2025 (Near-Term)
- 2040
- Buildout

Assumptions for each development time frame are described below. Projections for timing of development were provided by the City's Planning Division.

3.4.1 2025 (Near-Term) Development of the City's Sphere of Influence

Most of the near-term development is projected to occur in the areas covered by the approved projects discussed above. Except for the Westside Specific Plan, Avenues Specific Plan, and Dobler/Maibes projects, all of the approved projects listed in Table 3-1 are expected to begin development soon or continue developing through 2025. A small portion of the near-term development is projected to occur within the UR 7 (Bright/Castro), UR 1, Westside Industrial, Larch-Clover, and Berg/Byron Remainder development areas. In addition, approximately 44 acres of miscellaneous vacant parcels are projected to develop by 2025.

3.4.2 2040 Development of the City's Sphere of Influence

Except for the Tracy Hills Specific Plan and Cordes Ranch Specific Plan it was assumed that all of the other approved projects listed in Table 3-1 will be completely developed by 2040. Only a small portion of the Cordes Ranch Specific Plan was assumed to be developed after 2040. Significant development is projected to occur in many of the additional planned development areas by 2040; only the UR 10, UR 4 (Bright Triangle), UR 3 (Sandhu), Chrisman Road, Rocha, and SWC Valpico & Corral Hollow future service areas are projected to start development after 2040. In addition, approximately 215 acres of miscellaneous vacant parcels are projected to develop by 2040 (171 acres in addition to 2025 development).

3.4.3 Buildout Development of the City's Sphere of Influence

The remaining planning areas assumed to be developed after 2040 were assumed to be part of the buildout development of the City's SOI. In addition, it was assumed that a total of 311 acres of miscellaneous vacant parcels within the City limits will develop by buildout (91 acres in addition to 2040 development). As noted above, actual timing for full buildout of the City's SOI is uncertain as development plans continually change and the City's General Plan is periodically updated.

3.5 SUMMARY OF LAND USE PROJECTIONS

Table 3-2 presents the total projected land use to be developed in the City's SOI by the 2025, 2040, and buildout time frames. Table 3-2 does not include existing developed land within the City, unless it was developed after 2017. Refer to Appendix A for detailed land use assumptions.

Approximately 25,000 new dwelling units and 5,600 new acres of non-residential land use are projected to be developed by buildout. A direct comparison with land use projections from the 2012 WSMP is difficult, as some development has occurred between the completion of the 2012 WSMP and the preparation of this Citywide Water System Master Plan Update. In general, the projection for number of dwelling units at buildout has increased significantly since the 2012 WSMP, while the projection for non-residential acreage at buildout has decreased since the 2012 WSMP. However, when compared to the City's historical and existing land uses, which were primarily residential, the projected land uses for new development are more heavily skewed to non-residential uses (with almost 60 percent of the projected acres of new development at buildout being non-residential uses). The future industrial, commercial, and retail growth anticipated in the City's Sphere of Influence is reflective of the City's goal to bring jobs and economic growth and improve the City's jobs-housing balance.

Table 3-2. Projected Development by Time Frame within the City's Sphere of Influence[a]

Land Use Type	Total Projected New Development by 2025		Total Projected New Development by 2040[b]		Total Projected New Development at Buildout[c]	
	Dwelling Units	Gross Acres	Dwelling Units	Gross Acres	Dwelling Units	Gross Acres
Residential – Very Low Density[d]	-	-	265	223	1,292[e]	907
Residential – Low Density[d]	2,880	647	6,490	1,438	8,375	1,871
Residential – Medium Density[d]	253	49	5,444	608	8,150	902
Residential – High Density	1,591	81	3,300	181	7,033	380
Residential – Very High Density	110	3	110	3	110	3
Commercial	-	45	-	549	-	818
Office	-	1	-	115	-	256
Industrial	-	859	-	3,136	-	4,093
Institutional	-	3	-	187	-	187
Identified Parks[f]	-	139	-	280	-	280
Total	4,834	1,826	15,609	6,720	24,960	9,698

(a) Includes existing development constructed after 2017.
(b) Includes new development constructed within 2025 and 2040 time frames.
(c) Includes new development constructed within 2025, 2040, and Buildout time frames.
(d) For selected projects and development areas, it was assumed that 11.2% of the total gross acres in the very low, low, and medium density residential land use categories will develop as parks.
(e) Includes existing units from Mountain View Annexation.
(f) Includes park areas identified with the Rocking Horse, Ellis, Avenues, Tracy Hills Phase 1 and Legacy Fields developments.

CHAPTER 4
Existing and Future Water Demands

4.1 OVERVIEW

The purpose of this chapter is to present the existing potable and recycled water demands currently served by the City, as well as the projected future potable and recycled water demands for the 2025 (near-term), 2040, and buildout time frames. Any additional evaluations regarding the timing and phasing of future water demands outside of the specified time frames will be developed as part of separate evaluations and are not included in this Citywide Water System Master Plan Update.

Accurate and detailed potable and recycled water demand data and projections are required to:

1. Develop and calibrate the potable and recycled water system hydraulic models.
2. Identify deficiencies in the existing potable and recycled water systems and required improvements.
3. Assess the future water system capacity and identify improvements needed to serve proposed development.

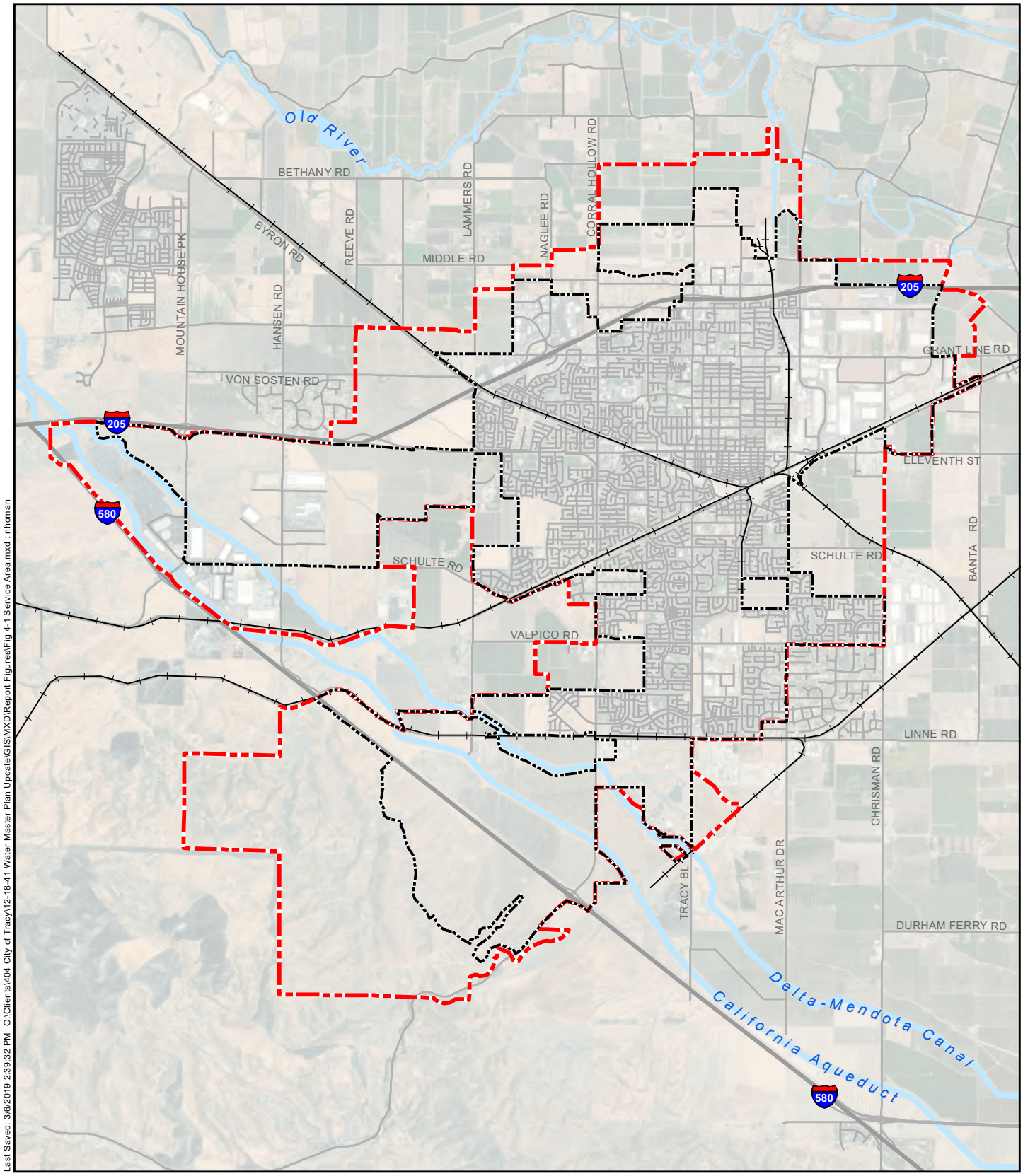
Accurate demand projections also play a key role in helping the City identify and secure sufficient water supplies to serve their customers under various hydrologic conditions. A discussion of the City's existing and future water supplies is provided in Chapter 5 of this Citywide Water System Master Plan Update.

The following sections of this chapter describe the data and methodology used to determine the City's potable and recycled water system demands:

- Existing Service Area
- Population Served
- Historical Potable Water Production and Consumption
- Existing Recycled Water Production and Consumption
- Water Conservation and Water Use Efficiency
- Adopted Peaking Factors
- Future Water Demand Projections
- Future Per Capita Water Use Projections

4.2 EXISTING SERVICE AREA

The City is located in San Joaquin County, California, approximately 70 miles south of Sacramento and 60 miles east of San Francisco. The existing incorporated area of the City (i.e., City limits) encompasses approximately 26 square miles. As described in Chapter 3, the City's SOI is approximately 42 square miles and is 16 square miles larger than the City limits. The SOI encompasses the area outside of and contiguous with the City limits that the City expects to annex and urbanize in the future. Figure 4-1 shows the boundaries of the existing City limits and SOI.



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Symbology

- City Limits / Existing Water Service Area
- Sphere of Influence

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Scale in Feet

TRACY

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Figure 4-1

Water Service Area

City of Tracy
Water System
Master Plan Update

The City's existing water service area is generally coterminous with the City limits as shown on Figure 4-1. The City currently provides potable water service to all of its residents, as well as approximately 400 residents of the Larch-Clover County Services District and the unincorporated Patterson Pass Business Park. Future growth potential for the City includes completion of ongoing development projects and infill within the City limits, and development of areas outside of the City limits within the SOI boundary. Refer to Chapter 3 for details on future land use within the City's SOI.

4.3 POPULATION SERVED

Approximately 96,000 people live in the City as of January 2020. Population growth was rapid in the City over the 15-year period 1990 through 2005, with the City growing by 139 percent. Between 2005 and 2020, however, growth has slowed relative to historical rates; population increased approximately 68 percent over this 15-year period. The reduction in growth rate has likely been caused by a combination of economic forces, such as the economic downturn of 2008 through 2011, and measures taken by the City to limit growth. In 1987, the City adopted a residential Growth Management Ordinance (GMO), which was amended in 2000 by the voter-initiated Measure A. The objective of the GMO and Measure A was to achieve a steady and orderly growth rate that allows for the adequate provision of services and community facilities and includes a balance of housing opportunities. Under the adopted GMO, builders must obtain a Residential Growth Allotment (RGA) in order to secure a residential building permit.

Table 4-1 and Figure 4-2 summarize the City's population between 1990 and 2020.

Table 4-1. Historical Population Served

Year	Population[a]	Annual Growth	Last 5-yr Average Annual Growth	Last 10-yr Average Annual Growth	Last 30-yr Average Annual Growth
1990[b]	32,450				
1991[c]	35,871	11%			
1992[c]	38,006	6%			
1993[c]	40,455	6%			
1994[c]	42,111	4%			
1995[c]	44,546	6%			
1996[c]	45,949	3%			
1997[c]	47,428	3%			
1998[c]	48,962	3%			
1999[c]	51,959	6%			
2000[c]	56,070	8%			
2001[d]	61,048	9%			
2002[d]	65,993	8%			
2003[d]	70,060	6%			
2004[d]	74,745	7%			
2005[d]	78,228	5%			3.7%
2006[d]	80,152	2%			
2007[d]	80,700	1%			
2008[d]	81,490	1%			
2009[d]	82,040	1%			
2010[d]	82,922	1%			
2011[e]	83,539	1%			
2012[e]	84,357	1%			
2013[e]	85,568	1%			
2014[e]	86,061	1%			
2015[e]	87,194	1%		1.5%	
2016[e]	88,712	2%			
2017[e]	90,488	2%			
2018[e]	92,395	2%	1.9%		
2019[e]	94,326	2%			
2020[e]	95,861	2%			

(a) Does not include Larch Creek Clover CSD service area population which has an estimated total number of accounts (118) and a person per household factor of 3.51 for an estimated population of 414 people.

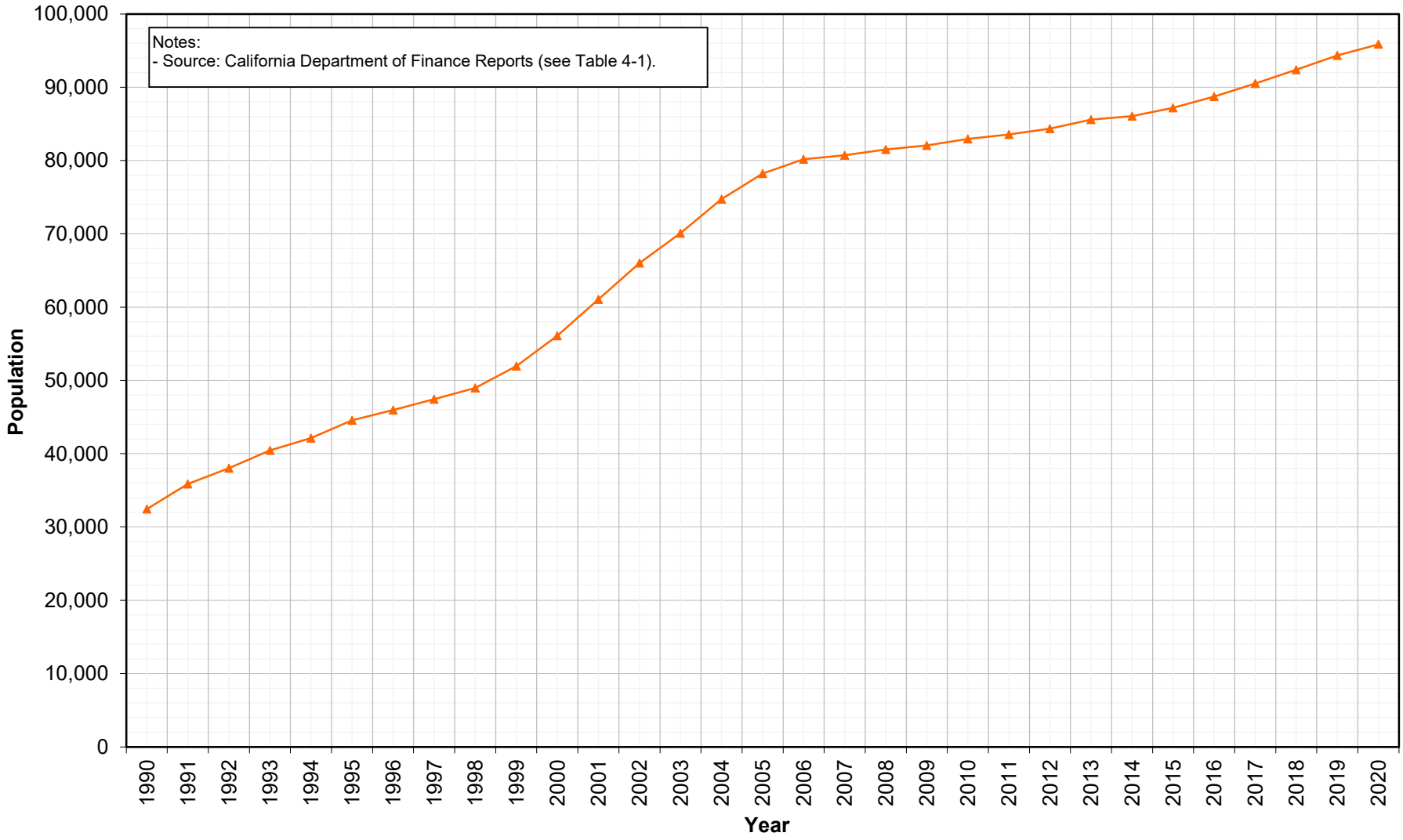
(b) Source: Department of Finance, E-4 Population Estimates for California Cities and Counties, January 1, 1981 to January 1, 1990.

(c) Source: Department of Finance, E-4 Historical Population Estimates for City, County and the State, 1991-2000, with 1990 and 2000 Census Counts, August 2007.

(d) Source: Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001–2010, with 2000 and 2010 Census Counts, November 2012.

(e) Source: Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State 2011-2021 with 2010 Census Benchmark, May 2021

Figure 4-2. Historical Population Served (1990-2020)



4.4 HISTORICAL POTABLE WATER PRODUCTION AND CONSUMPTION

The City's potable water production is the combined quantity of surface water purchased from the United States Bureau of Reclamation (USBR) and the South San Joaquin Irrigation District (SSJID) plus the groundwater produced by the City's wells[1], while potable water consumption is the quantity of water actually consumed or used by the City's customers. As will be discussed later, the difference between production and consumption is unaccounted-for water (UAFW), also referred to as non-revenue water (NRW).

The City currently tracks all of the surface water purchased from USBR and SSJID plus the groundwater produced by its wells. The City also meters all of its customers' water use and categorizes their water use by customer class. Consequently, the City tracks water use in two ways: production records and meter (consumption) records. Both are discussed in more detail below, along with a discussion on UAFW and per capita water demands.

4.4.1 Historical Potable Water Production

The City meets its customers' potable water demands with a combination of surface water purchased from USBR and SSJID plus groundwater pumped from municipal wells. Table 4-2 presents the historical annual potable water production, by source, from 1990 to 2020.

Table 4-2 indicates that since SSJID began surface water deliveries in 2005, the City has significantly increased its surface water use to meet its customers' water demands, and as a result groundwater production has dramatically decreased. Surface water use in recent years (2010-2020) accounts for over 94 percent of the total annual water production.

The City plans to continue maximizing surface water use because the City's groundwater is heavily mineralized (e.g., high total dissolved solids (TDS)). Consequently, the reduction in groundwater use will ultimately increase the overall quality of the City's drinking water. However, the City will continue to rely on groundwater for peaking, drought, and emergency supplies to meet water demands when surface water supplies may be limited. Detailed discussions on water supplies and their historical use and availability are presented in Chapter 5.

[1] In 2019, the City also began receiving surface water supplies through an agreement with the Byron Bethany Irrigation District (BBID). The BBID surface water supplies are treated at the City's John Jones Water Treatment Plant (JJWTP) and are used to meet potable water demands within the City's Tracy Hills development. Additional discussion on this water supply is provided in Chapter 5.

Table 4-2. Historical Annual City of Tracy Potable Water Production by Source

Year	Surface Water, af/yr			Groundwater, af/yr	City Production, af/yr	City Production, MG	Percent Surface Water	Percent Groundwater
	USBR[a]	SSJID[b]	Total Surface Water					
1990[c]	4,968	-	4,968	5,838	10,806	3,521	46%	54%
1991[c]	4,995	-	4,995	4,815	9,810	3,197	51%	49%
1992[c]	7,148	-	7,148	4,002	11,150	3,633	64%	36%
1993[c]	7,800	-	7,800	4,127	11,927	3,886	65%	35%
1994[c]	7,788	-	7,788	4,901	12,689	4,135	61%	39%
1995[c]	8,387	-	8,387	4,310	12,697	4,137	66%	34%
1996[c]	8,817	-	8,817	4,562	13,379	4,360	66%	34%
1997[c]	7,539	-	7,539	5,789	13,328	4,343	57%	43%
1998[c]	6,282	-	6,282	4,797	11,079	3,610	57%	43%
1999[c]	7,551	-	7,551	5,559	13,110	4,272	58%	42%
2000[c]	7,785	-	7,785	6,548	14,333	4,670	54%	46%
2001[c]	7,302	-	7,302	7,321	14,623	4,765	50%	50%
2002[c]	7,878	-	7,878	7,802	15,680	5,109	50%	50%
2003[c]	10,118	-	10,118	6,847	16,965	5,528	60%	40%
2004[c]	11,187	-	11,187	7,176	18,363	5,984	61%	39%
2005[d]	8,920	3,146	12,066	5,826	17,892	5,830	67%	33%
2006[d]	6,048	8,918	14,966	3,034	18,000	5,865	83%	17%
2007[d]	6,374	9,130	15,504	3,672	19,176	6,249	81%	19%
2008[d]	6,503	8,017	14,520	2,598	17,118	5,578	85%	15%
2009[d]	4,965	10,401	15,366	1,327	16,693	5,439	92%	8%
2010[d]	5,303	10,850	16,153	498	16,651	5,426	97%	3%
2011[d]	4,790	11,793	16,583	292	16,875	5,499	98%	2%
2012[d]	4,878	12,294	17,172	420	17,592	5,732	98%	2%
2013[d]	4,960	13,112	18,072	515	18,587	6,057	97%	3%
2014[d]	4,018	11,515	15,533	680	16,213	5,283	96%	4%
2015[d]	3,193	10,329	13,522	519	14,041	4,575	96%	4%
2016[d]	2,634	11,372	14,006	648	14,654	4,775	96%	4%
2017[d]	4,906	11,464	16,370	995	17,365	5,658	94%	6%
2018[d]	5,184	10,471	15,655	817	16,472	5,367	95%	5%
2019[d]	7,537	8,750	16,287	645	16,932	5,517	96%	4%
2020[d]	5,733	11,773	17,506	1,181	18,687	6,089	94%	6%

(a) Does not include USBR water wheeled to Patterson Pass Business Park and the Safeway Distribution Center.

(b) SSJID began surface water deliveries to the City in 2005.

(c) Source: Figure 7, WSA for the Holly Sugar Sports Park, June 2009.

(d) Source: Annual Production Totals.xls spreadsheets received from the City.

Figure 4-3 presents the total historical annual potable water production for the City. This historical data indicates that annual water production generally increased at about 3 percent per year from 1990 to 2007. Water production decreased in 2008 and remained relatively constant through 2011, likely in response to poor economic conditions that resulted in vacant properties and unoccupied homes. Water production increased in 2012 and 2013 as economic conditions improved, before decreasing dramatically in 2014 and 2015 due to the voluntary and mandatory water conservation efforts that were implemented by the City's water customers during the extended drought. Water production has increased in recent years (2016-2020) as water use restrictions were lifted and new development projects are being constructed. While the City's water production will likely continue to increase as the City expands, the rate at which water production is expected to increase will likely be lower than 3 percent due to the adopted GMO and water conservation and water use efficiency measures implemented in response to the recent drought and recent legislation. Discussions on the City's projected future water production are presented below under *Section 4.8.6 Projected Buildout Water Demands*.

In addition to providing water to its residents, the City also serves water to the Patterson Pass Business Park (PPBP), which is located outside of the City limits. Water supplied to PPBP is not included in the City's production totals as presented in Table 4-2 and Figure 4-3 because the water supply for this area is purchased by PPBP from the Byron Bethany Irrigation District (formerly the Plain View Water District). The City is only responsible for providing water treatment and delivery services to PPBP in accordance with a "treat and wheel" agreement. Table 4-3 presents the historical water wheeled to PPBP by the City under this agreement.

The City's highest monthly water production has historically occurred in either the month of July or August, which corresponds with the high temperatures and minimal rainfall that is experienced in the City during those summer months. The lowest monthly water production has historically occurred in either January or February. These months correspond with the shut-down of the John Jones Water Treatment Plant for maintenance, which typically occurs in the winter months (e.g., December, January, and/or February).

Figure 4-3. Historical Annual Water Production (1990-2020)

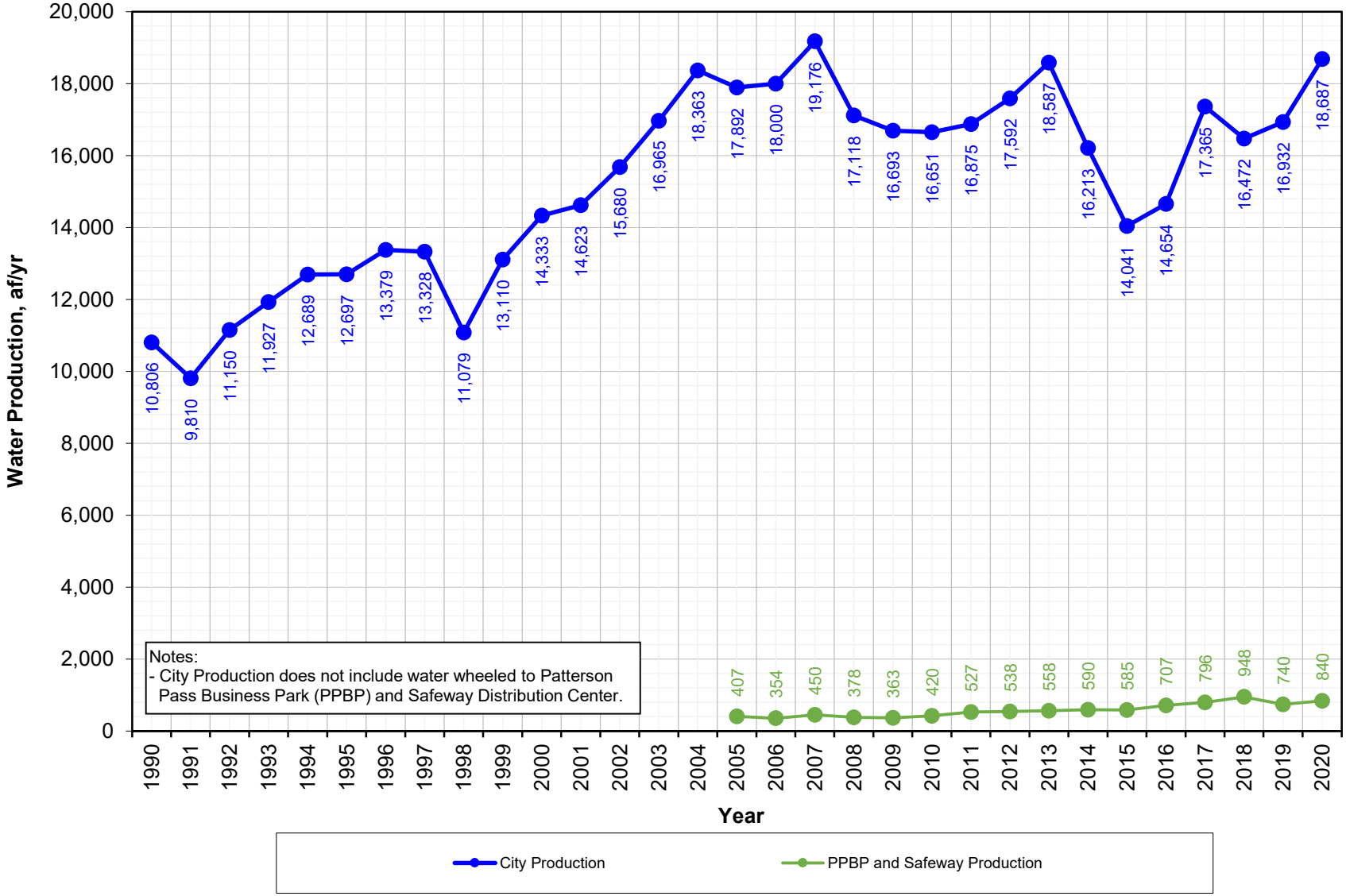


Table 4-3. Historical Annual Potable Water Production including Wheeled Water for Patterson Pass Business Park

Year	City Production, af/yr[(a)]	Wheeled USBR Water for the PPBP, af/yr[(b)]	Total Production	
			af/yr	MG
2005	17,892	407	18,299	5,963
2006	18,000	354	18,354	5,981
2007	19,176	450	19,626	6,395
2008	17,118	378	17,496	5,701
2009	16,693	363	17,056	5,558
2010	16,651	420	17,071	5,563
2011	16,875	527	17,402	5,670
2012	17,592	538	18,130	5,908
2013	18,587	558	19,145	6,239
2014	16,213	590	16,803	5,475
2015	14,041	585	14,626	4,766
2016	14,654	707	15,361	5,005
2017	17,365	796	18,161	5,918
2018	16,472	948	17,420	5,676
2019	16,932	740	17,672	5,758
2020	18,687	840	19,527	6,363

(a) Source: Annual Production Totals.xls spreadsheets received from the City.
(b) The City wheels USBR water for the Patterson Pass Business Park and the Safeway Distribution Center. This water is not part of the City's annual water rights allocations and is therefore tracked separately from the City Production.

4.4.2 Historical Potable Water Consumption

Potable water consumed by customer class between 2015 and 2017 is summarized in Table 4-4. This data indicates that, on average, residential use (including single family and multi-family land use types) represents approximately 67 percent of the total metered water consumption in the City. Commercial and Industrial customers represent an average of approximately 15 and 5 percent, respectively, of the total metered water consumption. Irrigation accounts for the remaining 13 percent of the total metered water consumption.

Projected future water consumption by customer class is discussed below under *Section 4.8.6 Projected Buildout Water Demands*.

Table 4-5 provides a summary of the top 15 potable water users in 2017 by customer classification. These top users accounted for approximately 11 percent of the total metered water consumption in 2017. The top user is an industrial food processing user, and their overall water use represents more than 4 percent of the City's 2017 water consumption. The remaining large Commercial, Multi-Family Residential, and Irrigation water users account for about 7 percent of the City's total water consumption in 2017.

Table 4-4. Potable Water Consumption

Year	Residential Single-Family		Residential Multi-Family		Commercial		Industrial		Irrigation		Total, af/yr[b]
	Percent[a]	af/yr	Percent[a]	af/yr	Percent[a]	af/yr	Percent[a]	af/yr	Percent[a]	af/yr	
2015	61.3%	8,582	7.0%	984	15.2%	2,129	5.2%	725	11.3%	1,579	13,999
2016	60.1%	8,400	7.0%	977	15.0%	2,102	4.9%	685	13.0%	1,811	13,976
2017	58.8%	9,737	6.0%	999	15.8%	2,619	4.7%	784	14.6%	2,413	16,552
Average	60.1%	8,907	6.7%	987	15.4%	2,283	4.9%	731	12.9%	1,935	14,842

(a) Based on meter data received from the City on October 15, 2019.

(b) Source: City of Tracy AWWA Water Audit Spreadsheets, received from the City on November 1, 2018.

Table 4-5. Summary of Top 15 Potable Water Users in 2017

No.	Customer Class	Total Annual Consumption, ccf	Total Annual Consumption, MG	Percentage of Total Annual Consumption, %
1	Industrial	295,480	221	4.10
2	Commercial	123,785	93	1.72
3	Commercial	47,990	36	0.67
4	Irrigation	42,985	32	0.60
5[(a)]	Irrigation	29,466	22	0.41
6	Multi-Family Residential	29,210	22	0.41
7	Irrigation	28,857	22	0.40
8	Commercial	28,070	21	0.39
9	Multi-Family Residential	26,308	20	0.36
10	Commercial	25,167	19	0.35
11	Commercial	23,962	18	0.33
12	Commercial	23,198	17	0.32
13	Commercial	22,344	17	0.31
14	Irrigation	20,720	15	0.29
15	Commercial	20,050	15	0.28
	Total	**787,592**	**589**	**10.9**

Source: 2015. May 2018 Reads.csv received from the City on May 30, 2018.

(a) Large user appears to be due to a leak and has been resolved.

4.4.3 Potable Unaccounted-for Water/Non-Revenue Water

Unaccounted-for water (UAFW) within the City is the difference between the recorded water production and metered water consumption. UAFW includes a combination of various water uses that are not metered, such as water used for hydrant testing, firefighting, and system flushing or water that is lost from system leaks and water main breaks. As noted above, unaccounted-for water is also referred to as non-revenue water (NRW).

Potable UAFW between 2015 and 2017[2] is summarized in Table 4-6. Table 4-6 indicates that the potable UAFW within the City averaged approximately 8.9 percent between 2016 and 2017 (data from 2015 appeared suspect and was not included in the average). This UAFW percentage is lower than the UAFW percentage used in the 2015 UWMP (9.6 percent), but is above the UAFW percentage (7.5 percent) used in the 2012 WSMP. For planning purposes in this Citywide Water System Master Plan, a UAFW percentage of 9.6 percent (consistent with the 2015 UWMP) was used to project the City's total future water production requirements.

[2] The City's 2018-2020 consumption data was not available at the time of this evaluation. Based on data provided in the City's 2020 UWMP, UAFW in 2018 and 2019 dropped to about 6.8 percent and 5.8 percent, respectively, but then increased significantly in 2020 to over 18 percent, although the 2020 data had not yet been validated.

Table 4-6. Potable Unaccounted-for Water

Year	Total Production, af/yr[(a)]	Consumption, af/yr[(b)]	Difference, af/yr	Percentage, UAFW, %
2015	14,626	13,999	627	4.3
2016	15,361	13,976	1,385	9.0
2017	18,161	16,552	1,609	8.9
			Average (2016 and 2017)[(c)]	**8.9**

(a) Source: Refer to Table 4-3. Includes water wheeled to Patterson Pass Business Park and Safeway Distribution Center by the City.
(b) Source: City of Tracy AWWA Water Audit Spreadsheets, received from the City on November 1, 2018.
(c) Average does not include 2015 because data appears to be suspect.

The City Utilities Department, in conjunction with the Public Works and Construction Management Departments, is implementing several new programs to address water loss. A new process was developed for the coordination of installation of new meters in new development areas with the City's billing and accounting systems to ensure that new accounts are metered and billed appropriately. The City has also implemented a new construction meter program, whereby the Public Works Department is now installing the meter on the hydrant and providing clamps so that the meter cannot be moved or stolen. These programs were started in Fall 2021 and water loss numbers were reduced immediately. The City will be conducting ongoing investigations to evaluate water loss and make improvements as needed to meet the State's new water loss standards.

4.4.4 Per Capita Potable Water Demand

Historical per capita potable water demands were calculated by dividing the annual potable water production previously presented in Table 4-2 by the respective annual population previously presented in Table 4-1. Table 4-7 summarizes the per capita potable water demands for the City between 2009 and 2020. As shown in Table 4-7, the per capita water demand has averaged approximately 168 gpcd over the past 10 years. The per capita demand decreased significantly in 2015 and 2016 to 144 gpcd and 147 gpcd, respectively. As discussed previously, this sharp decrease in 2015 and 2016 is most likely due to the extreme dry hydrologic (drought) conditions resulting in voluntary and mandatory water conservation. The per capita demand has increased in recent years (2017-2020) as water use restrictions have been lifted and customers have resumed more typical water use behavior.

Figure 4-4 compares the per capita water demand, water production, and population for the period from 2011 to 2020. As shown on Figure 4-4, the population has increased at a relatively constant rate from 2011 to 2020. Therefore, the majority of the variation observed in the per capita water demand is due to variations in the City's total water production, which appears to vary based on economic and hydrologic conditions.

A comparison of per capita water demands with the goals set by SB X7-7 legislation is discussed below in *Section 4.6 Water Conservation and Water Use Efficiency* and *Section 4.9 Future Per Capita Water Use Projections*.

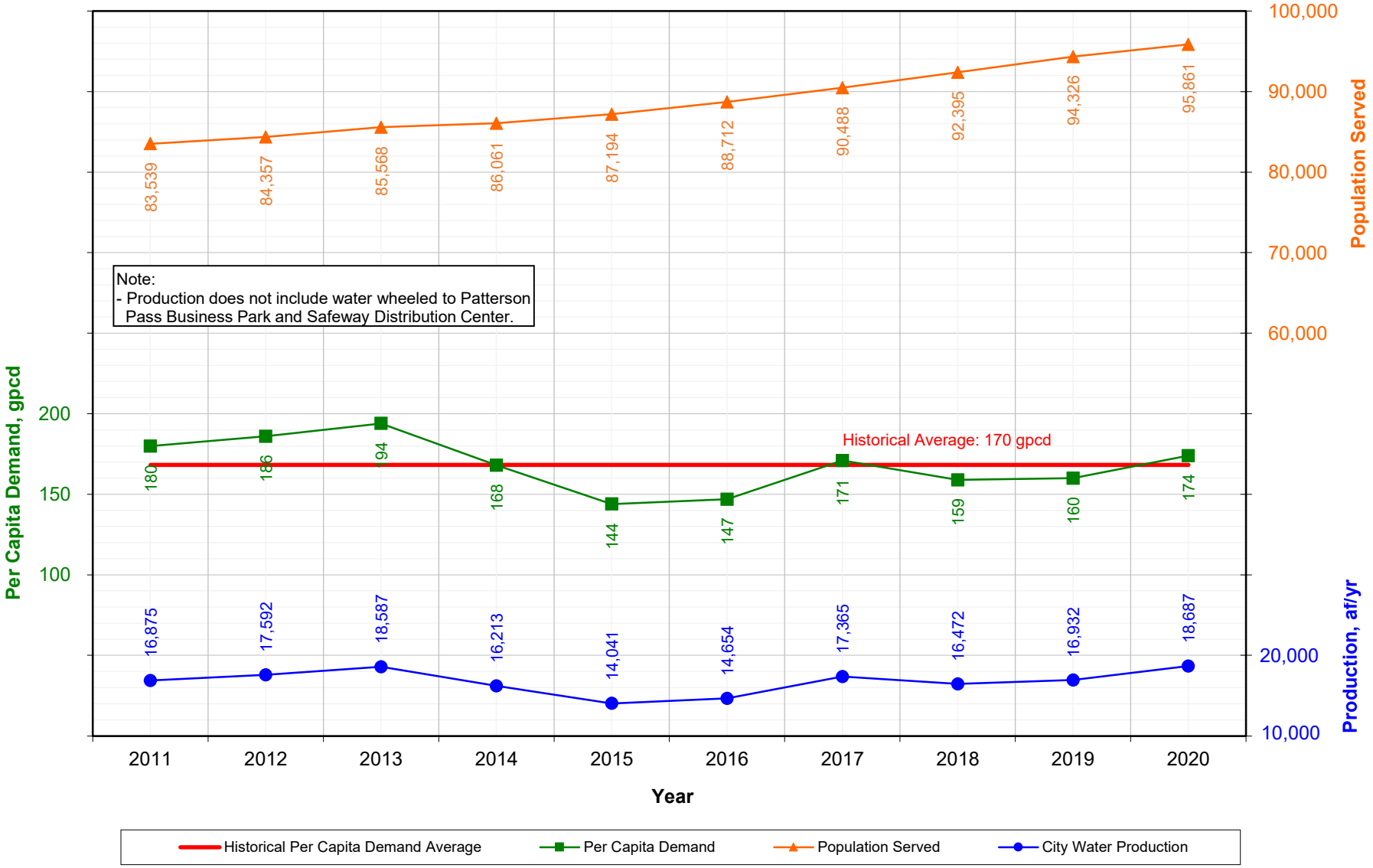
Table 4-7. Historical Per Capita Potable Water Demand

Year	Population Served[a]	City Potable Water Production, af/yr[b]	Per Capita Potable Water Demand, gpcd	5-yr Average Per Capita Potable Water Demand, gpcd	10-yr Average Per Capita Potable Water Demand, gpcd
2009	82,040	16,693	182		
2010	82,922	16,651	179		
2011	83,539	16,875	180		
2012	84,357	17,592	186		
2013	85,568	18,587	194		
2014	86,061	16,213	168		
2015	87,194	14,041	144		168
2016	88,712	14,654	147		
2017	90,488	17,365	171		
2018	92,395	16,472	159	162	
2019	94,326	16,932	160		
2020	95,861	18,687	174		

(a) Source: Refer to Table 4-1.

(b) Source: Refer to Table 4-2. Includes UAFW. Does not include water wheeled to Patterson Pass Business Park and Safeway Distribution Center, as these are located outside of the City limits.

Figure 4-4. Comparison of Historical Per Capita Water Demand, Production and Population



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Last Revised: 08-20-21

City of Tracy
Citywide Water System
Master Plan Update

4.5 EXISTING RECYCLED WATER PRODUCTION AND CONSUMPTION

The City anticipates using recycled water for landscape irrigation to offset potable water demands. The City's Wastewater Treatment Plant can currently produce up to approximately 9 mgd of tertiary-treated wastewater meeting Title 22 requirements, which can be used for landscape irrigation and other non-potable uses. Initially, the City intends to irrigate using recycled water at the Legacy Fields sports complex.

4.6 WATER CONSERVATION AND WATER USE EFFICIENCY

As discussed in Chapter 2, the City has developed a list of principles for sustainable infrastructure to ensure a reliable water supply for future generations. A key principle that relates to the Citywide Water System Master Plan Update is water conservation and water use efficiency. Water conservation and water use efficiency will be necessary to meet requirements set by the State (e.g., the Water Conservation Act of 2009 and Making Water Conservation a California Way of Life legislation) to reduce the City's per capita water use. Discussions regarding existing and future water conservation and water use efficiency in the City are presented below.

4.6.1 Existing Water Conservation

The City is committed to preserving California's water resources through water conservation and efficient use of water, and currently has an ongoing Water Conservation Plan that implements the Best Management Practices (BMPs) which were developed by the California Urban Water Conservation Council (CUWCC)[3]. These BMPs include residential surveys, public and school education programs, rebates for water efficient appliances and other specific programs. These programs have been successful in reducing the City's water use, especially in the recent dry years.

4.6.2 Compliance with the Water Conservation Act of 2009 (SB X7-7)

In February 2008, Governor Arnold Schwarzenegger called for a statewide 20 percent reduction in per capita water use by 2020 and asked State and local agencies to develop a more aggressive plan of water conservation to achieve the goal. A team of State and federal agencies (the 20x2020 Agency Team) consisting of the DWR, SWRCB, California Energy Commission, Public Utilities Commission, Department of Public Health, California Air Resources Board, CALFED Program, the USBR, and the CUWCC was formed to develop a statewide implementation plan for achieving this goal.

Then, on November 10, 2009, Governor Arnold Schwarzenegger signed Senate Bill X7-7 (SB X7-7), one of several bills passed as part of a comprehensive set of Delta and water policy legislation. SB X7-7, known as the Water Conservation Act of 2009, requires a 20 percent reduction in urban water usage by 2020 and establishes various methodologies for urban water suppliers to establish their interim (2015) and final (2020) per capita water use targets.

[3] It should be noted that the CUWCC was replaced by a new organization, the California Water Efficiency Partnership (CalWEP), in March of 2018.

As documented in the City's 2015 UWMP, the City's adopted per capita water use targets were 204 gpcd (2015 interim target) and 181 gpcd (2020 final target). As documented in the City's 2015 UWMP, the City's per capita water use in 2015 was 146 gpcd, which was well below the 2015 interim target[4]. In recent years there has been some rebound in per capita water use from the historic low in 2015 (see Table 4-7 and Figure 4-4). As documented in the City's 2020 UWMP, the City's per capita water use in 2020 was 181 gpcd, equal to its 2020 final target[5].

4.6.3 Making Water Conservation a California Way of Life

In May 2016, Governor Jerry Brown signed Executive Order B-37-16, instructing State agencies to help Californians adopt permanent changes to use water more wisely. The Executive Order laid out a framework for moving the State from temporary, emergency water conservation measures to a more lasting approach customized to the unique conditions of each local water agency.

In May 2018, the California State Legislature (Legislature) enacted two policy bills (SB 606 and AB 1668) to establish a new foundation for long-term improvements in water conservation and drought planning to adapt to climate change and the resulting longer and more intense droughts in California. These two bills amended existing law to expand authorities and requirements to enable permanent changes and actions for those purposes to improve the State's water future for generations to come. SB 606 and AB 1668 are direct outcomes of Governor Brown's Executive Order B-37-16.

The recommendations in the April 2017 report entitled "Making Water Conservation a California Way of Life, Implementing Executive Order B-37-16" and subsequent extensive legislative outreach efforts informed the development of SB 606 and AB 1668. The new laws focus on establishing water use objectives and long-term water efficiency standards that apply to urban retail water suppliers, including:

- **Indoor Residential Water Use:** Although not all standards have been developed, the indoor residential water use efficiency standard has been set by the Legislature. Until January 1, 2025, the standard is set at 55 gpcd, then it drops to the greater of 52.5 gpcd or a standard developed by the DWR between January 2, 2025 and January 1, 2030; and then the greater of 50 gpcd or a standard developed by DWR after January 1, 2030.

[4] It should be noted that the 2015 per capita water use calculated in the City's 2015 UWMP (146 gpcd) is slightly higher than the 2015 per capita water use shown in Table 4-7 and Figure 4-4. The difference is due to a slightly different service area population in the 2015 UWMP per capita water use population.

[5] It should be noted that the 2020 per capita water use calculated in the City's 2020 UWMP (181 gpcd) is slightly higher than the 2020 per capita water use shown in Table 4-7 and Figure 4-4. The difference is due to the inclusion of the Larch Clover CSD in the service area population and the inclusion of the water production wheeled to the PPBP in the 2020 UWMP per capita water use calculation.

- **Outdoor Residential Water Use and Commercial, Industrial and Institutional (CII) Irrigation with Dedicated Meters:** Per SB 606 and AB 1668, the SWRCB is required to adopt long-term standards for outdoor irrigation of landscape areas by June 30, 2022. The standards to be set shall incorporate the principles of the State's MWELO[6], which considers evapotranspiration adjustment factors, landscape areas, maximum applied water allowance, reference evapotranspiration, and special landscape area.
- **Water Loss (due to leaks in water system pipes):** With regard to water loss standards, SB 555, passed in October 2015, requires the SWRCB to develop water loss performance standards for urban retail water suppliers. The SWRCB is required to evaluate the life-cycle cost of achieving these standards. The standards will incorporate local and operational conditions to determine economically achievable water loss reduction for each urban retail water supplier.

The recently passed water efficiency legislation only provides a "provisional standard" for indoor residential water use and does not currently provide specific information on what the water efficiency standards will be for outdoor residential water use and non-residential water uses. These standards will be developed in the coming years and should be further evaluated in subsequent planning studies. Also, there are no guarantees that urban retail water suppliers will meet the water efficiency standards to be set, so West Yost recommends that the City continue to consider more conservative water demand projections based on recent water use for their future water supply and system planning.

4.7 ADOPTED PEAKING FACTORS

Peaking factors are used to calculate water demands expected under high demand conditions (i.e., maximum day and peak hour). The resulting water demands calculated for maximum day and peak hour conditions are then used to evaluate and size transmission/distribution pipelines and storage facilities, and to define water supply needs and capacity requirements. This section describes the methodology used to develop peaking factors for the maximum day and peak hour demand conditions within the City's potable and recycled water systems.

4.7.1 Potable Water System Peaking Factors

Table 4-8 summarizes the average and maximum day production and the corresponding peaking factors between 2010 and 2018. As shown in Table 4-8, the maximum day peaking factor for the City ranged from a low of 1.5 in 2015 and 2017 to a high of 1.8 in 2018. The average maximum day peaking factor from 2010 to 2018 is equal to 1.6 times the average day demand.

The City currently has an adopted maximum day peaking factor of 2.0 times the average day demand, which is higher than what has been observed in recent years. Based on the data from more recent maximum day trends, this higher peaking factor provides a very conservative estimate of the required water supply and distribution facilities to support projected water demands.

[6] California Code of Regulations Title 23 Chapter 2.7 Model Water Efficient Landscape Ordinance.

Consequently, for planning purposes in this Citywide Water System Master Plan Update, a maximum day peaking factor of 1.7 was adopted. This factor provides a slightly more conservative estimate of maximum day demands when compared with the 2010 to 2018 average maximum day peaking factor of 1.6, but will not excessively overestimate maximum day demands as compared with the City's current adopted maximum day peaking factor of 2.0.

Table 4-8. Historical Maximum Day Demand Peaking Factors

Year	Date[(a)]	Maximum Day Production, mgd[(a)]	Average Day Production, mgd[(b)]	Maximum Day to Average Day Factor
2010	July 17	25.8	15.2	1.7
2011	July 28	25.5	15.5	1.6
2012	July 13	27.8	16.2	1.7
2013	June 8	27.0	17.1	1.6
2014	June 9	24.9	15.0	1.7
2015	June 20	19.8	13.1	1.5
2016	August 8	22.0	13.7	1.6
2017	August 1	25.0	16.2	1.5
2018[(c)]	August 17	27.2	15.3	1.8
			Average	**1.6**

(a) Source: Max Day Data 201810221430.pdf received from the City on October 22, 2018.
(b) Source: Refer to Table 4-3. Includes water wheeled to Patterson Pass Business Park and Safeway Distribution Center.
(c) Maximum day production data for 2018 is from compiled SCADA data received from the City on May 3, 2019.

The City currently has an adopted peak hour demand factor of 3.4 times the average day demand, equivalent to a factor of 1.7 times the maximum day demand. SCADA data from 2018 was used to confirm the peak hour factor, which was found to be 1.6 times the maximum day demand. This confirms that the currently adopted peak hour factor of 1.7 times the maximum day demand is still accurate; this factor will continue to be used for planning purposes in this Citywide Water System Master Plan Update. However, because the adopted maximum day demand factor has been decreased from 2.0 times the average day demand to 1.7 times the average day demand, the new adopted peak hour demand factor used for planning purposes in this Citywide Water System Master Plan Update will be 2.9 times the average day demand.

4.7.2 Recycled Water System Peaking Factors

Peaking factors for recycled water systems are somewhat different from potable water systems, in that irrigation periods are generally limited to shorter time periods, typically during the late evenings and very early mornings (e.g., 10 p.m. to 6 a.m.). For purposes of this Citywide Water System Master Plan Update, an irrigation period of eight (8) hours per day has been assumed. In addition, recycled water demand is anticipated to be at its maximum during the summer and fall months when temperatures and landscape irrigation water demands are at their highest.

To estimate future monthly recycled water use, the City's existing monthly potable water use for its dedicated landscape irrigation accounts was evaluated. Based on 2017 data, monthly irrigation water use reaches a maximum in September with irrigation water use equal to 17.6 percent of the total annual irrigation water use. This percentage of irrigation water use during the maximum month can be converted to an average day to maximum day peaking factor equal to 6.4 times the average day irrigation demand (0.176/30 days x 365 days x [24 hours/8-hour irrigation period]). This factor is higher than the currently adopted factor of 5.8 times the average day irrigation demand. To be conservative, for planning purposes in this Citywide Water System Master Plan Update, the new (higher) maximum day irrigation peaking factor of 6.4 was adopted.

The peak hour recycled water demand was assumed to be approximately 10 percent above the maximum day irrigation demand, which equates to a peak hour peaking factor of 7.0 (1.1 x 6.4).

Table 4-9 summarizes the maximum day and peak hour peaking factors adopted for this Citywide Water System Master Plan Update.

Table 4-9. Adopted Peaking Factors

Demand Condition	Potable Water System	Recycled Water System
Average Day	Annual Use divided by 365 days per year	Annual Use divided by 365 days per year
Maximum Day	1.7 times the Average Day Demand	6.4 times the Average Day Demand (assuming an 8-hour irrigation period)
Peak Hour	2.9 times the Average Day Demand	7.0 times the Average Day Demand (10% above Maximum Day Demand)

4.8 FUTURE WATER DEMAND PROJECTIONS

Future water demands projections consist of two components: (1) existing (baseline) water demands, and (2) projected water demands from new developments calculated using unit water demand factors and the land use assumptions discussed previously in Chapter 3 and presented in Appendix A.

Using the land use assumptions presented in Appendix A, future water demands were calculated using a unit water demand methodology based on the proposed land use acreage or residential dwelling units projected for each project or development area. Subsequent sections describe the current unit water demand factors adopted in the 2012 WSMP and the development of the updated unit water demand factors used to calculate future water demands for this Citywide Water System Master Plan Update, followed by a discussion of total projected water demands for the 2025, 2040, and buildout time frames.

4.8.1 Existing Unit Water Demand Factors and Land Use Assumptions

In the 2012 WSMP, unit water demand factors were generally developed by correlating land use data with existing metered water use. The City's existing unit water demand factors are summarized in Table 4-10. These factors are typically multiplied by dwelling units or land use area data to calculate a projected water demand estimate.

Table 4-10. 2012 WSMP Adopted Unit Water Demand Factors

Land Use Designation	Unit Water Demand Factor		
	gpcd	gpd/du	af/ac/yr
Residential – Very Low Density[(a)]	130	429	--
Residential – Low Density[(a)]	130	429	--
Residential – Medium Density[(b)]	115	310	--
Residential – High Density[(b)]	100	220	--
Residential – Very High Density	100	150	--
Commercial[(c)]	--	--	2.0
Office[(c)]	--	--	1.5
Industrial[(c,d)]	--	--	1.5
Institutional[(c)]	--	--	1.5
Parks[(e)]	--	--	4.0

(a) Assumes exterior water use will be with potable water, except for parks.
(b) Assumes exterior water use will be with recycled water (i.e., 15 percent of the total gross acres will be landscaped and irrigated with recycled water).
(c) Unit water demand factor to be applied to 85 percent of the total gross acres only, assuming that 15 percent of the total gross acres will be landscaped and irrigated with recycled water.
(d) Assumes that high water use industries will not be developed.
(e) Unit water demand factor to be applied to 15 percent of the total gross acres and/or any gross acreage that will require exterior water use.

In addition to these adopted unit water demand factors, the City has also used the following specific assumptions regarding dwelling units per acre for each residential land use type and floor to area ratios (FAR) for Commercial and Industrial land uses. These assumptions help to further refine water demand estimates from various proposed development projects that do not have a specific dwelling unit count or floor area estimate available. Table 4-11 summarizes the adopted dwelling unit and FAR assumptions that the City has recommended for estimating future water demands.

Table 4-11. Adopted Dwelling Unit Densities and Floor to Area Ratios[(a)]

Land Use Designation	Range	Recommended Density or Ratio
Residential – Very Low Density	0.1 to 2.0 du/acre	1.5 du/acre
Residential – Low Density	2.1 to 5.8 du/acre	4.35 du/acre
Residential – Medium Density	5.9 to 12.0 du/acre	9 du/acre
Residential – High Density	12.1 to 25 du/acre	18.75 du/acre
Residential – Very High Density	Up to 40 du/acre[(b)]	--
Commercial	Maximum FAR 1.0	FAR 0.3
Office	Maximum FAR 1.0	FAR 0.3
Industrial	Maximum FAR 0.5	FAR 0.4

(a) Source: General Plan, DC&E (February 1, 2011).
(b) Source: Water Supply Assessment for the Downtown Specific Plan, West Yost Associates (April 2009).

4.8.2 Verification of Unit Water Demand Factors

Due to possible changes in water use patterns over time, the existing unit water demand factors presented in Table 4-10 were verified to confirm if they are still representative of the City's more recent water use patterns. Unit water demand factors that are refined using more recent water use data help to project more accurate water demands. The following sections discuss the methodologies used to "spot check" and verify existing residential and non-residential unit water demand factors.

4.8.2.1 General Methodology

Unit water demand factors were verified using existing land use and parcel information in Geographic Information System (GIS) format, which were correlated to existing (2017) metered water use data. Meter data from 2017 was used to verify the unit water demand factors because it was (1) the most recent data available at the time of the evaluation, and (2) more representative of normal water use than 2015 or 2016 data when there were mandatory water use restrictions in place. To calculate unit water demand factors by land use designation, the City's existing land use data was first added to the parcel data using GIS analysis tools. Metered water use data was then automatically linked to the land use/parcel data by service addresses first or manually by location if needed. The unit water demand factor for each land use designation was then calculated by dividing the total metered water use by the total parcel area for which it was linked.

The parcel area used in this initial calculation did not include streets and therefore represented net area. Accordingly, the unit water demand factors calculated were "net" factors. Subsequently, the "net" unit water demand factors were adjusted to account for acreage from streets so they could be applied to the gross acreage information provided by City staff for future development[7]. The following sections describe the updated unit water demand factors first for residential land uses and then for non-residential land uses.

Typically, metered water use data used to determine unit water demand factors would be normalized to represent average water use across multiple years. Although it is expected that some increase or "rebound" in water demand from 2017 could potentially occur in the future, a portion of the observed reduction in water use will likely be permanent. This is supported by the City's 2018 water production, which was less than 2017 water production. Therefore, due to these permanent changes in water use, the 2017 metered water use data was not normalized based on historical water use.

[7] The gross acreage within the existing City limits is 16,616 acres, and the net acreage within the City limits assigned an existing or planned land use is 13,607 acres. Therefore, a factor of 1.22 was used to convert from net acreage to gross acreage.

4.8.2.2 Residential Unit Water Demand Factors

Single family residential unit water demand factors (Residential-Very Low Density and Residential-Low Density land uses) were refined by automatically linking metered water use to parcels by service address. Single family residences are typically served by a single meter, and there is typically only one single family residence on a given parcel. Because of this one-to-one relationship between meters and parcels, the unit water demand factors for single family residences could be accurately calculated using this method. In summary, 87 percent of the existing single family residential parcels were linked with a water meter by service address. Figure 4-5 illustrates the methodology used to calculate the refined unit water demand factors for single family residential land use types.

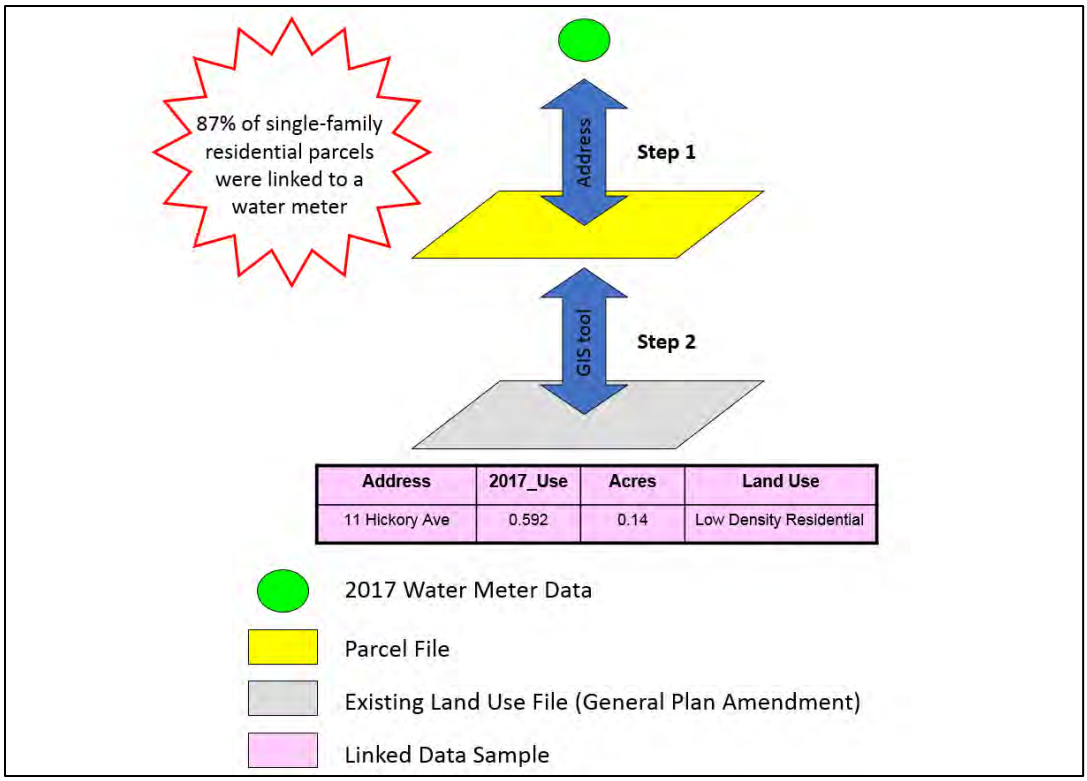


Figure 4-5. Residential Unit Water Demand Factor Methodology

Table 4-12 presents the unit water demand factors calculated using the methodology described above. The calculated Residential-Very Low Density factor is 8 percent higher than the factor adopted in the 2012 WSMP. Because this factor is based on a small sample size of 83 parcels, it is recommended that no adjustment be made to the Residential-Very Low Density unit water demand factor. The calculated Residential-Low Density factor is 14 percent lower than the factor adopted in the 2012 WSMP. Although some rebound in water use from 2017 is expected in existing residences, it is also projected that a combination of future State-mandated conservation measures and the installation of water efficient appliances and landscaping in new homes will lower residential water use even further in the future. Therefore, it is recommended that the Low Density Residential unit water use factor be adjusted 15 percent lower than the adopted 2012 WSMP factor to reflect more recent water use trends.

Table 4-12. Refined Single-Family Residential Unit Water Demand Factors

Land Use Designation	2017 Metered Water Use Linked, af/yr	Number of Occupied Parcels/Dwelling Units Linked[(a)]	Calculated Unit Water Demand Factor, gpd/du[(b)]	2012 WSMP Unit Water Demand Factor, gpd/du	Calculated Change in Unit Water Demand Factor, %	Recommended Change in Unit Water Demand Factor, %
Residential – Very Low Density	43	83	464	429	8%	0%
Residential – Low Density	6,238	15,139	368	429	-14%	-15%

(a) Does not include vacant parcels (parcels with no water use in 2017).
(b) Assumes one dwelling unit per parcel.

Residential-Medium, Residential-High Density, and Residential-Very High Density land uses generally have multiple meters and multiple addresses associated with a single parcel. Because of this, the methodology described above to calculate unit water demand factors often underestimates the unit water demand factors for these land use categories because not all the meters which supply a given parcel can be automatically linked with a single parcel address. Therefore, the unit water demand factors for Residential-Medium, Residential-High Density, and Residential-Very High Density land uses are recommended to be reduced by 15 percent, consistent with the adjustment for the Residential-Low Density factor.

4.8.2.3 Non-Residential Unit Water Demand Factors

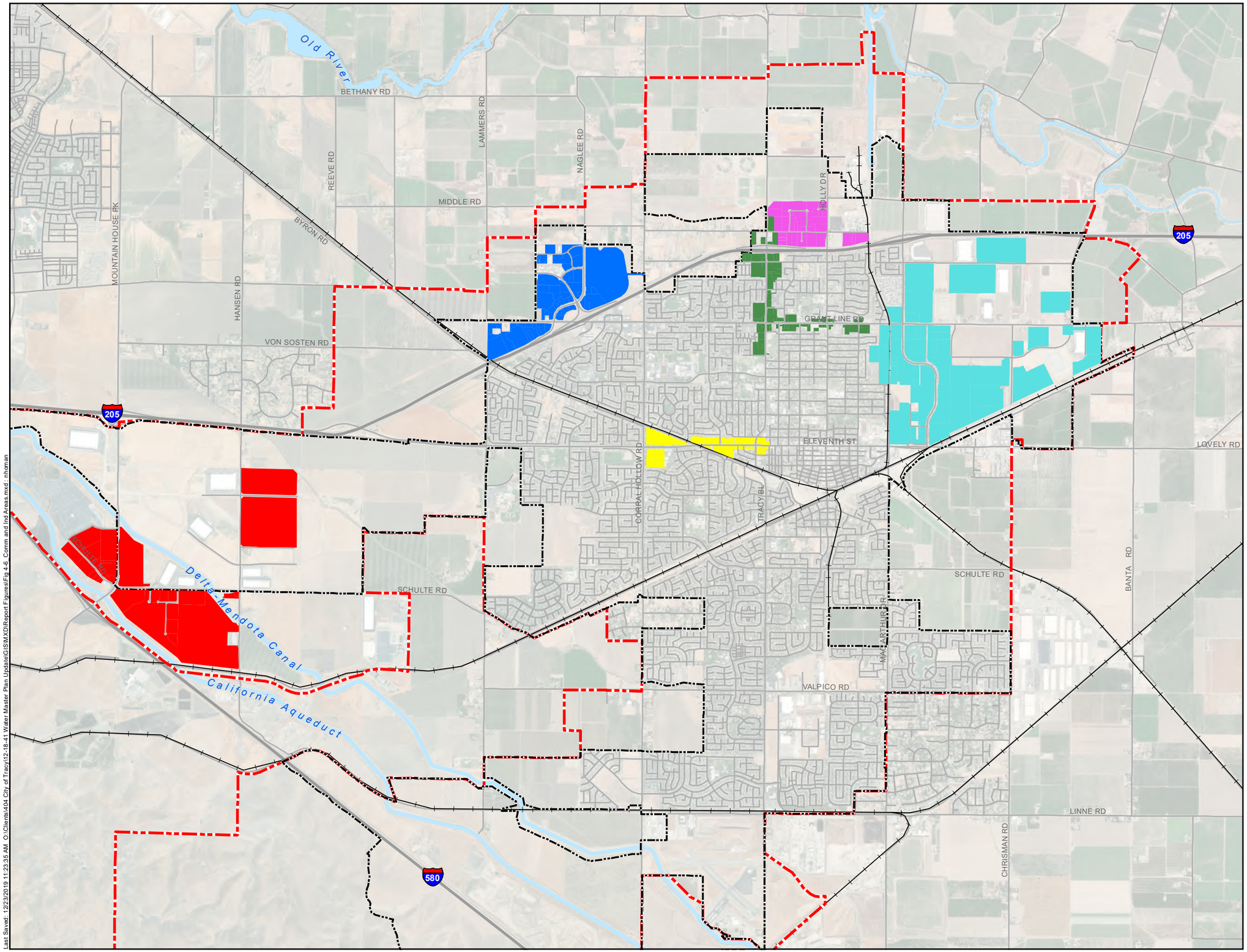
Non-residential land uses generally have multiple water service meters (e.g., domestic and irrigation meters) and multiple addresses associated with a single parcel. Because of this, automatically linking metered water use from multiple meters to a single parcel by address is difficult and would generally underestimate the unit water demand factors for non-residential land use categories because not all the meters which supply a single parcel can be automatically linked with that parcel. Therefore, a different methodology was used to "spot check" and refine the unit water demand factors for non-residential land use categories.

Representative areas of the City with high concentrations of Commercial and Industrial land uses were first selected as shown on Figure 4-6, and the metered water use from water meters in these areas were manually associated with parcels based on each meter's spatial location. From the metered water use and parcel acreage that were linked through this process, unit water demand factors were then calculated for each of these representative areas, which are summarized in Table 4-13.

Unit water demand factors for Commercial land use in the representative areas varied from 1.4 to 2.0 acre-feet per acre per year (af/ac/yr). The much lower factor for the Naglee Mall and West Grant Line Road Shopping Center is likely due to the inclusion of large parking lots which serve the Mall and Shopping Center in the gross acreage linked. The average unit water demand factor for the representative Commercial areas is 1.7 af/ac/yr. To be conservative, it is recommended that a Commercial unit water demand factor of 1.8 af/ac/yr, which is slightly above the average, be adopted. This represents approximately a 10 percent reduction from the 2012 WSMP factor of 2.0 af/ac/yr.

Unit water demand factors for Industrial land use in the representative areas varied from 0.8 to 1.3 af/ac/yr. The Northeast Industrial area likely has a higher factor due to the presence of high water use industries such as food processing plants. The IPC and Patterson Pass Business Park areas have a much lower factor because most of the existing buildings are warehouses with low water use. To be conservative, it is recommended that a unit water demand factor of 1.3 af/ac/yr be adopted as the new Industrial unit water demand factor to accommodate the wide range of possible Industrial water uses for planning purposes. This represents approximately a 13 percent reduction from the 2012 WSMP factor of 1.5 af/ac/yr.

The unit water demand factor for Office land use was also calculated using this procedure. However, since there are no highly concentrated areas of Office land use in the City, and the amount of Office land use is relatively small, the metered water use from water meters for all Office parcels was manually linked with each Office parcel to calculate an Office unit water demand factor. The unit water demand factor calculated in this manner was found to have slightly increased from the 2012 WSMP factor of 1.5 af/ac/yr. However, it is recommended that no adjustment be made to the Office unit water demand factor.



Symbology

- City Limits
- Sphere of Influence

Representative Commercial Areas

- Naglee Mall and Grant Line Road Shopping Center
- Tracy Boulevard and East Grant Line Road
- Eleventh Street

Representative Industrial Areas

- Northeast Industrial Area
- Northern Industrial Area
- IPC/Patterson Pass Business Park

Figure 4-6

Representative Commercial and Industrial Areas

City of Tracy
Water System Master Plan Update

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Table 4-13. Unit Water Demand Factors for Commercial, Industrial, and Office Land Uses

Representative Area	2017 Water Use Linked, af/yr	Gross Acreage Linked[(a)]	Unit Water Demand Factor, af/ac/yr
Commercial Land Use			
Naglee Mall and West Grant Line Road Shopping Center	426	313	1.4
Tracy Boulevard and East Grant Line Road	253	126	2.0
Eleventh Street	135	81	1.7
		Average	**1.7**
Industrial Land Use			
Northeast Industrial Area	1,134	900	1.3
Northern Industrial Area	109	130	0.8
IPC/Patterson Pass Business Park	623	730	0.9
		Average	**1.0**
Office Land Use			
All Existing Parcels	87	56	1.6

(a) A factor of 1.22 was used to convert from net acreage to gross acreage.

For Institutional land use, the water meter data which could be linked was insufficient to justify adjusting the Institutional unit water demand factor.

Similarly, the water meter data which could be linked with Parks land use parcels was also insufficient to justify adjusting the Parks unit water demand factor. However, the Parks factor was compared with the maximum allowable water use for parks per MWELO[8] to verify that it did not exceed the maximum allowable usage. As shown in Table 4-14, the maximum allowable water use for parks, which qualify as special landscape areas, is 4.3 af/ac/yr based on MWELO guidelines. Since this is greater than the current Parks unit water demand factor of 4.0 af/ac/yr, it is recommended that no adjustment be made to the Parks unit water demand factor. This factor will also be used for all recycled water irrigation areas within the City.

In the 2012 WSMP, the Parks unit water demand factor was used to calculate water use for irrigated areas for residential and non-residential land uses. However, under current MWELO guidelines, the maximum allowable water use for potable water irrigation in residential and non-residential land use areas is restricted to approximately 2.4 and 1.9 af/ac/yr, respectively, as shown in Table 4-14. Therefore, these factors will be adopted for planning purposes in this Citywide Water System Master Plan Update to comply with MWELO and the City's Water Efficient Landscape Ordinance.

[8] The State's MWELO was adopted by the City of Tracy as part of its Water Efficient Landscape Ordinance (City of Tracy Municipal Code, Chapter 11.28 Water Management, Article 8 Water Efficient Landscape Ordinance).

Table 4-14. City of Tracy Maximum Allowable Water Use Factors for Irrigation[a]		
Land Use	Maximum ETAF[b]	Water Use Factor, af/ac/yr
Special Landscape Areas[c]	1.00	4.3
Residential	0.55	2.4
Non-Residential	0.45	1.9

(a) Based on the California Code of Regulations, Title 23 Waters, Division 2 DWR, Chapter 2.7 Model Water Efficient Landscape Ordinance (MWELO), updated 2015 and included in the City of Tracy Municipal Code Chapter 11.28 Water Management, Article 8 Water Efficient Landscape Ordinance.
(b) ETAF = Evapotranspiration Adjustment Factor = (Plant Factor based on Hydrozone Area)/(Irrigation Efficiency).
(c) Special Landscape Areas are areas dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, or water features using recycled water.

4.8.3 Adopted Unit Water Demand Factors

As discussed above, most of the unit water demand factors were verified and refined (if needed) by linking metered water use data to existing land use data either automatically by service address or manually by location. Table 4-15 summarizes the unit water demand factors adopted for this Citywide Water System Master Plan Update. Based on work completed to "spot check" and refine these adopted factors, they are appropriate for use in projecting future water demands as discussed in the following sections.

Table 4-15. Adopted Unit Water Demand Factors			
Land Use Designation	gpd/du	af/ac/yr	Percent Change from 2012 WSMP, %
Residential – Very Low Density[a]	429	--	0
Residential – Low Density[a]	365	--	-15
Residential – Medium Density[b]	264	--	-15
Residential – High Density[b]	187	--	-15
Residential – Very High Density[b]	128	--	-15
Commercial[c]	--	1.8	-10
Office[c]	--	1.5	0
Industrial[c]	--	1.3	-13
Institutional[c,d]	--	1.5	0
Parks and Areas Irrigated with Recycled Water[d,e]	--	4.0	0
Other Irrigated Area - Residential[f,g]	--	2.4	NA
Other Irrigated Area - Non-Residential[f,h]	--	1.9	NA

(a) Includes exterior water use.
(b) Does not include exterior water use. Assumes that 15 percent of the total gross acres will be landscaped and irrigated.
(c) Does not include exterior water use. Water demand factor to be applied to 85 percent of the total gross acres only, assuming that 15 percent of the total gross acres will be landscaped and irrigated.
(d) Insufficient data available to adjust factor using water meter data; therefore, no adjustment was made.
(e) Factor to be used for turf, recreational areas, edible plants, and areas irrigated with recycled water.
(f) Based on the Maximum Allowable Water Use per MWELO and the City's Water Efficient Landscape Ordinance.
(g) Unit water demand factor to be applied to gross acreage in residential areas that will require potable water for exterior water use.
(h) Unit water demand factor to be applied to gross acreage in non-residential areas that will require potable water for exterior water use.

4.8.4 Existing (Baseline) Water Demands

For this Citywide Water System Master Plan Update, the total "existing" water demand component used for future water demand projections was calculated as the sum of the water delivered to the PPBP and IPC in 2017 plus the City's average water production from 2005 to 2013 for a total of approximately 18,400 af/yr. Because the PPBP and IPC have been growing rapidly, recent water production data was considered the most representative of existing water use for these areas. However, due to the recent drought and associated conservation measures, water production data from 2014 through 2016 were considered less representative of future water use in other areas of the City. It should be noted that the estimated existing baseline water demand of 18,400 af/yr is very similar to the average total water production for 2019 and 2020 (18,600 af/yr), thus validating the estimated existing baseline demand.

Because the water delivered to PPBP is wheeled water, only approximately 17,800 af/yr of the existing water demands must be met by the City's water supply agreements and contracts. The City is responsible for delivering the remaining 600 af/yr to PPBP, and must have adequate water treatment capacity, pumping capacity, and transmission capacity to serve a total of 18,400 af/yr, in addition to projected future water demands.

4.8.5 Recycled Water Use Assumptions

Recycled water will be used as a source of water supply for landscape irrigation and other non-potable uses to offset potable water demands on a project-by-project basis where feasible. The City has constructed a recycled water transmission line which extends south along Lammers Road to the intersection with Schulte Road, and further expansions to the recycled water system are planned in the future.

For this Citywide Water System Master Plan Update, the following assumptions were made regarding the recycled water system:

- The transmission main in Lammers Road will be extended south to the Delta Mendota Canal by 2025. Most large development projects located on the west side of the City will be served by the recycled water system by 2025, except for Cordes Ranch, West Side Industrial, and Tracy Hills Specific Plans.
- Recycled water service will be extended to Cordes Ranch, West Side Industrial, and Tracy Hills Specific Plans by 2040.
- Future recycled water service areas on the east side of the City (East Side Industrial, Chrisman Road, UR 1, and Rocha), will be served by a separate recycled water transmission main which will not be constructed until after 2040.
- Recycled water service will not be extended to developments in the following areas due to the isolated locations and relatively small individual potential recycled water demands within them:
  - I-205 Corridor Specific Plan
  - Industrial Areas Specific Plan
  - Northeast Industrial Specific Plan

  - Berg Road Subdivision
  - Berg/Byron Remainder
  - Other small approved projects (refer to Table 3-1, footnote (f) for the full list)
  - Miscellaneous Infill

- Only a small number of existing parks and irrigated areas located close to the recycled water transmission main alignments will be converted to recycled water service.
- Within new developments served by recycled water, 15 percent of gross acreage for Residential – Medium Density, Residential – High Density, Residential – Very High Density, Commercial, Office, Industrial, and Institutional land uses will be irrigated with recycled water. This represents irrigation use for common landscaped areas and roadway medians.
- Within new developments served by recycled water, 11.2 percent[9] of gross acreage for Residential – Very Low Density, Residential – Low Density, and Residential – Medium Density land uses will develop as neighborhood and community parks which will be irrigated with recycled water.
- Front yards of single-family residences in the Residential – Very Low Density and Residential – Low Density will be irrigated with potable water, even in developments served by recycled water.
- UAFW for the recycled water system will be 5 percent (consistent with the 2015 UWMP).

Potable water demand offsets from recycled water use will be accounted for in the projected water demands. Demands from irrigated acreage in development projects with recycled water supply available will be calculated using the recycled water demand factor of 4.0 af/ac/yr.

4.8.6 Projected Buildout Water Demands

Projected water demands for the 2025, 2040, and buildout time frames were calculated by multiplying the adopted unit water demand factors (refer to Table 4-15) by the additional future dwelling units or gross acreage projected to occur. As discussed in Chapter 3, data regarding the additional future dwelling units and gross acreage to be developed was provided by the City's Planning Division or referenced from available planning documents.

The resulting future water demand projections from the projected future developments were adjusted to account for UAFW and then added to the existing water demands to provide a projection of the total water production required for each of the evaluated time frames. Refer to Appendix A for detailed land use assumptions and water demand calculations.

[9] Consistent with assumption in Appendix D of the 2012 WSMP. A comparison of the future parks area calculated using this assumption and the projection of required park area from the City's 2013 Parks Master Plan showed them to be within 1 percent of each other.

Table 4-16 summarizes the projected potable and recycled water production for the City at the 2025, 2040, and buildout time frames. As shown in Table 4-16, even with the use of recycled water, the City's potable water production is projected to almost double at buildout (from 17,800 af/yr to 33,500 af/yr). Most of the increase in water demand is associated with new development within the City's specific plans and future service areas. Approximately 70 percent of the increase in potable water demands and 65 percent of the increase in recycled water demands are projected to occur by 2040.

The estimated buildout potable water production is approximately 8 percent lower than the previous estimate of 36,300 af/yr, as presented in the City's 2012 WSMP. Although many of the unit water demand factors have been decreased by 10 to 15 percent compared to those used in the 2012 WSMP, the projected buildout potable water production did not decrease substantially because:

- The current buildout land use projections include approximately 5,600 more dwelling units than what was assumed in the 2012 WSMP. Although the projected buildout acreage for non-residential land uses (primarily Commercial and Industrial) has decreased since the 2012 WSMP, residential developments typically use more water than non-residential developments; and
- The potable water UAFW factor was increased from the 7.5 percent factor used in the 2012 WSMP to 9.6 percent.

The estimated buildout recycled water production is approximately 16 percent lower than the previous estimate of 7,500 af/yr as presented in the City's 2012 WSMP. This is because:

- The 2012 WSMP included the Gateway Exchange Program, in which recycled water service would be extended to most of the existing parks and large irrigated areas in the City to offset the potable water demands from the Gateway development (now called Westside). The Gateway Exchange Program is no longer being considered, and it is projected that only a few existing parks and irrigated areas will receive recycled water supply;
- The Tracy Hills Specific Plan previously included a large golf course which was to be irrigated with recycled water. The golf course area is now projected to remain un-irrigated open space instead; and
- The recycled water UAFW factor was decreased from the 7.5 percent factor used in the 2012 WSMP to 5.0 percent.

Table 4-16. Summary of Future Projected Water Production[a,b,c]

Demand Category	2025 (Near Term)		2040		Buildout	
	Potable Water, af/yr	Recycled Water, af/yr	Potable Water, af/yr	Recycled Water, af/yr	Potable Water, af/yr	Recycled Water, af/yr
Future	3,000	900	10,900	4,100	15,700	6,200
Existing - City[d]	17,800	100	17,800	100	17,800	100
Total to be Met by City Water Supply Contracts and Rights	**20,800**	**1,000**	**28,700**	**4,200**	**33,500**	**6,300**
Existing - PPBP Wheeled Water[e]	600	0	600	0	600	0
Total to be Delivered by City Distribution System	**21,400**	**1,000**	**29,300**	**4,200**	**34,100**	**6,300**

(a) Refer to Appendix A for detailed water demand calculations.
(b) Includes UAFW.
(c) Totals rounded to the nearest hundred.
(d) Includes water delivered to existing buildings in the IPC.
(e) Does not include water delivered to existing buildings in IPC.

It should be noted that the potable water demand projections presented in the City's 2020 UWMP are slightly different than those presented in Table 4-16 above. The difference is due to the 2020 UWMP using water demand projections from a previous draft of this Citywide Water System Master Plan Update, which have since been revised due to revisions in the 2040 and Buildout land use assumptions, as well as the 2020 UWMP, which included an estimate of passive conservation due to water savings which resulted primarily from: (1) the natural replacement of existing plumbing fixtures with water-efficient models required under current plumbing code standards, and (2) the installation of water-efficient fixtures and equipment in new buildings and retrofits as required under CALGreen Building Code Standards. Overall, these differences are minor, with the 2020 UWMP projecting a 2025 potable water demand of 20,509 af/yr, a 2040 potable water demand of 28,403 af/yr, and a 2045 (Buildout) potable water demand of 33,079 af/yr.

As the City continues to develop, potable water consumption between customer classes is expected to shift due to changes in the City's projected land use composition. Table 4-17 compares the historical average and projected potable water consumption by customer class. As shown in Table 4-17, the residential customer classes are expected to decrease their overall potable water consumption proportion as water use shifts towards non-residential customer classes. Although, as discussed above, the ratio of projected non-residential to residential development has decreased since the 2012 WSMP, the planned development within the City's SOI will still shift towards more non-residential land use. This trend is primarily due to large industrial developments such as Cordes Ranch, West Side Industrial, East Side Industrial, UR 3, and Tracy Hills Phase 5, among others.

Irrigation water use is projected to be a much smaller proportion of the City's potable water use at buildout because (1) many new development areas will be served by the recycled water system at buildout, and (2) some of the City's existing irrigated areas will be converted to recycled water use.

Table 4-17. Historical and Projected Potable Water Consumption by Customer Class

Customer Class	Historical Average Annual Consumption[a], %	Projected Annual Consumption in 2025[b], %	Projected Annual Consumption in 2040[b], %	Projected Annual Consumption at Buildout[b], %
Single-Family Residential[c]	60.1	58.0	54.0	53.3
Multi-Family Residential[d]	6.7	7.6	6.9	8.5
Residential Subtotal	66.8	65.6	60.9	61.7
Commercial[e]	15.4	13.5	14.2	14.2
Industrial	4.9	9.3	16.4	17.6
Irrigation[f]	12.9	11.6	8.4	6.5
Total	**100**	**100**	100	100

(a) Refer to Table 4-4.
(b) Includes existing and projected future potable demands.
(c) Includes projected future residential demands (excluding irrigation) for Residential - Very Low Density, Residential - Low Density, and Residential - Medium Density land use types.
(d) Includes projected future residential demands (excluding irrigation) for Residential - High Density and Residential - Very High Density land use types.
(e) Includes projected future demands (excluding irrigation) for Commercial, Office, and Institutional land use types.
(f) Includes projected future irrigation demands to be served by potable water. Accounts for planned conversions of irrigation services to recycled water use.

4.9 FUTURE PER CAPITA WATER USE PROJECTIONS

The projected potable water demands shown in Table 4-16 were used in combination with population projections to evaluate the City's projected future per capita water use.

Table 4-18 shows the population projections and projected per capita potable water use for the 2040 and buildout time frames. Population projections for 2040 and buildout were estimated by the City's Planning Division based on the planned future development and California Department of Finance data for the number of people per household. Based on these assumptions, the City is projected to have a total future population of approximately 186,000 at buildout, with an overall per capita water use of 161 gpcd.

Table 4-18. Projected Population and Per Capita Potable Water Use

Time Frame	Projected Potable Water Demand, af/yr[a,b]	Projected Population[c]	Per Capita Potable Water Use, gpcd
2040	28,700	170,152	151
Buildout	33,500	185,961	161

(a) Totals rounded to the nearest hundred.
(b) From Table 4-16.
(c) Population projection from the City Planning Division.

CHAPTER 5
Existing and Future Water Supplies

5.1 OVERVIEW

The purpose of this chapter is to provide an updated evaluation of the availability and reliability of the City's existing and additional planned future water supply sources to meet the projected buildout water demands for the City as described in Chapter 4. This chapter includes the following sections:

- Changes to the City's Water Supplies Since the Completion of the 2012 Citywide Water System Master Plan and the 2015 UWMP
- Existing Potable Water Supplies
- Future Potable Water Supplies
- Existing Non-Potable Water Supplies
- Reliability of the City's Water Supplies
- Sufficiency of the City's Water Supplies
- Summary of Water Supply Recommendations

5.2 CHANGES TO THE CITY'S WATER SUPPLIES SINCE THE COMPLETION OF THE 2012 CITYWIDE WATER SYSTEM MASTER PLAN AND THE 2015 URBAN WATER MANAGEMENT PLAN

The 2012 WSMP evaluated the sufficiency of the City's water supplies to meet the then-projected buildout water demands. The City's 2015 UWMP, adopted by the City in July 2016, evaluated the City's existing and future water supplies, together with the City's water conservation programs, and their ability to meet projected future water demands and comply with SB X7-7. Since those documents were completed, significant new residential and commercial development has occurred in the City and planning for future developments has been refined (as described in Chapter 3).

During this same time, the availability and reliability of the City's water supplies have been impacted by drought conditions and associated unprecedented cutbacks in surface water supply deliveries. The City's 2020 UWMP, adopted in June 2021, addresses these changes in water supply availability and reliability. In addition, new legislation has been passed which will further impact future water use and future water supply availability and reliability, including the following:

- Comprehensive groundwater legislation contained in SBs 1168 and 1319, and AB 1739, which are collectively referred to as the Sustainable Groundwater Management Act (SGMA), was approved in September 2014 and became effective on January 1, 2015. The legislative intent of SGMA is to provide sustainable management of groundwater basins, enhance local management of groundwater, establish minimum standards for sustainable groundwater management, and provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater.

- SB 606 and AB 1668 were passed in May 2018 and established new statewide water use efficiency standards for indoor residential water use, outdoor residential water use, commercial, industrial and institutional irrigation of landscaped areas and water loss. A primer entitled "Making Water Conservation a California Way of Life" was developed to be a reference document for the implementation of the complex 2018 legislation.
- In 2018, the SWRCB adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) which restrict the use of flows from the Lower San Joaquin River and its tributaries (the Stanislaus, Tuolumne and Merced Rivers) to improve conditions for fish and wildlife. Specifically, the Bay-Delta Plan Amendment restricts the use of flows until 40 percent of unimpaired flows are rededicated for water quality and instream fisheries. This restriction could potentially significantly impact the availability of the City's water supplies from the SSJID. However, due to the uncertainty surrounding the implementation of the Bay-Delta Plan Amendment, SSJID's 2020 UWMP assumed that the Bay-Delta Plan Amendment would not be implemented. In its 2020 UWMP, the City also presents the SSJID reliability assuming that the Bay-Delta Plan Amendment is not implemented, but the City's 2020 UWMP also provided a parallel analysis of reliability assuming that the Bay-Delta Plan Amendment is implemented.

5.3 EXISTING POTABLE WATER SUPPLIES

The City currently receives water supplies from the following sources:

- Untreated surface water from the DMC (CVP) (treated at the City's JJWTP)
- Untreated surface water from BBID pre-1914 rights (treated at the City's JJWTP)
- Treated surface water from the Stanislaus River via the South County Water Supply Project (SCWSP) (treated and delivered to the City by the SSJID)
- Groundwater pumped from eight groundwater wells located within the City

Table 5-1 provides a summary of the City's existing water supply agreements and contracts. A discussion of each of these water supplies and their anticipated availability and reliability is provided below.

Table 5-1. Existing Water Supplies

Supply Source	Existing Water Agreements/Contracts (Supply Quantity, af/yr)
Potable Water Supplies	
Surface Water Supplies	
USBR CVP Contract with M&I Reliability (treated at City's JJWTP)	10,000[a]
USBR CVP Contract with Ag Reliability (treated at City's JJWTP)	10,000[b]
BBID Pre-1914 rights for use in Tracy Hills (treated at City's JJWTP)	3,330[c]
SSJID South County Water Supply Project	11,120[d]
Groundwater	Up to 9,000[e]
Semitropic Water Storage Bank	Up to 3,500[f]
ASR	Up to 1,000[g]
Non-Potable Water Supplies[h]	
Recycled Water Exchange	7,500
Recycled Water (for non-potable uses)	6,300

(a) M&I-reliability CVP water. Assumes the terms of the long-term renewal contract with the USBR are consistent with those of the interim renewal contract entered into between the City and USBR in February 2016.
(b) Assignments from Banta-Carbona Irrigation District (BCID) and West Side Irrigation District (WSID).
(c) Up to 4,500 af/yr, but no more than the potable water demand for Tracy Hills (3,330 af/yr). This water is only available for use in the portion of Tracy Hills that lies within BBID Raw Water Service Area 2 the CVP Consolidated Place of Use, so the quantity of supply is limited to potable water demand in this area. Therefore, the maximum BBID supply delivered to this area is reduced to 3,330 af/yr.
(d) Includes the 10,000 af/yr allocation and the additional 1,120 af/yr obtained through the 2013 Lathrop-Tracy Purchase, Sale, and Amendment Agreement. Does not include the interim purchase from Escalon.
(e) The City is able to withdraw up to 9,000 af/yr of groundwater from the Tracy Subbasin. However, due to the aging infrastructure and water quality issues in the City's groundwater supplies, the City is projecting to be able to withdraw up to 2,500 af/yr in normal years. During dry years, the City anticipates increasing its groundwater production on a short-term basis from the normal year production of 2,500 af/yr to 4,500 af/yr.
(f) The City has purchased 10,500 af of water storage in the Stored Water Recovery Unit, which allows the City to withdraw up to 3,500 af/yr for three consecutive years.
(g) Supplies from ASR are assumed to be dry year supplies. During normal years, the City will not withdraw ASR water. In single dry years and multiple dry years, this water supply is considered to be 100 percent reliable. The City estimates that up to 1,000 af/yr of groundwater can be extracted from buffer storage in the Lower Tulare Formation aquifer associated with the City's current ASR Program.
(h) While the City's Wastewater Treatment Plant is currently capable of providing recycled water supply, additional infrastructure will be required to provide for its beneficial use (see additional information in this chapter and in Chapter 9).

Each of these existing supplies is described below. A summary table listing the City's existing and future water supplies under various hydrologic conditions is provided following the discussion of the City's future water supplies.

The City's historical use of these water supplies is shown on Figure 5-1. As shown, the City's highest annual water use occurred in 2007 and totaled 19,176 af/yr. Since then, water use has decreased with downturns resulting from the 2008 Great Recession which slowed development growth for several years and the 2011 to 2017 California drought which prompted mandatory statewide water conservation in 2015 and 2016. Since the end of the drought, water use has rebounded (increased) somewhat but is still below the highest historical use in 2007. Also shown on Figure 5-1 is the City's population since 1980. As shown, while the City's population has more than quadrupled since 1980, water use has only a little more than doubled. The relatively low

increase in water demand as compared to population growth results from the reduction of overall per capita water use from over 300 gpcd in the early 1980s to less than 180 gpcd in recent years as described in Chapter 4.

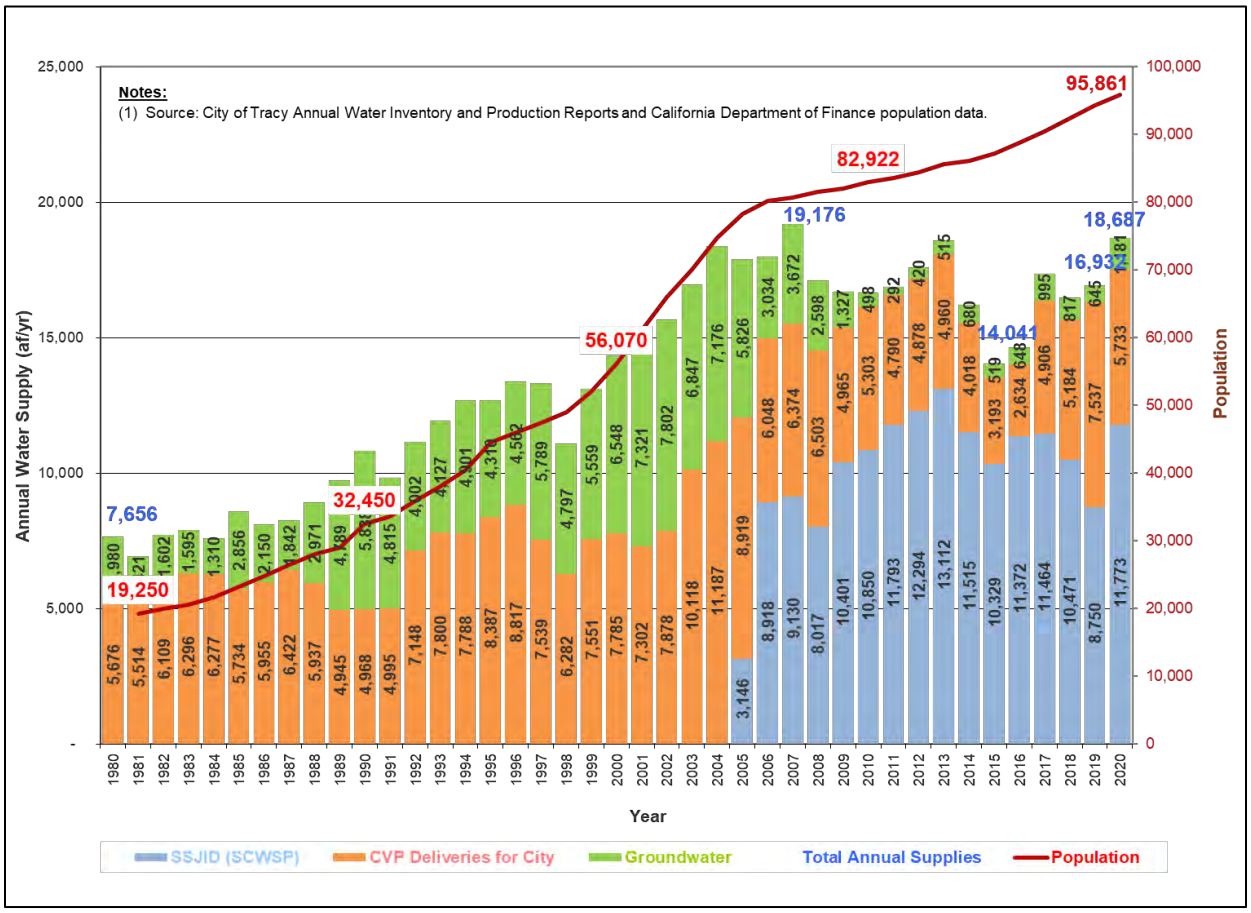


Figure 5-1. Historical Water Supplies

5.3.1 Central Valley Project Water via the Delta-Mendota Canal

5.3.1.1 M&I-Reliability Supplies from the CVP

In 1974, the City entered into a 40-year contract with the USBR for an annual entitlement of 10,000 af/yr of surface water from the CVP via the DMC. The original contract expired in 2014; however, since December 2013, the City and USBR have entered into a series of two-year interim renewal contracts to provide water service to the City while the terms of the long-term contract renewal are negotiated and the associated environmental documentation is prepared. The most recent interim renewal contract term begins March 1, 2020 and ends February 28, 2022. The City anticipates on-going contract renewals for this source.

Allocations for the Municipal and Industrial (M&I)-reliability CVP water since 2010 are summarized in Table 5-2.

Table 5-2. Historical Annual CVP M&I Allocations (South of Delta)

Year	Annual CVP M&I Allocation (percent of contractual amount unless otherwise noted)
2010	75 percent
2011	100 percent
2012	75 percent
2013	70 percent
2014	50 percent
2015	Public health and safety needs or at least 25 percent of historical use, whichever is greater
2016	55 percent of historical use
2017	100 percent of contract amount
2018	Public health and safety needs or at least 75 percent of historical use, whichever is greater
2019	100 percent of historical use
2020	Public health and safety needs or at least 70 percent of historical use, whichever is greater

In February 2017, new guidelines and procedures went into effect associated with the updated CVP M&I Water Shortage Policy. In general, the policy provides for the following:

- When M&I contractor allocations are at 100 percent, the allocation of M&I water will be based on Contract Total.
- When M&I contractor allocations are below 100 percent, the allocation of M&I water will be based on a contractor's historical use of CVP M&I water.
- An M&I contractor's historical use will be determined by calculating the average quantity of CVP water put to beneficial use within the service area during the last three years of water deliveries that were unconstrained by the availability of CVP water.

It should be noted that before allocation of M&I water to a contractor will be reduced, allocation of irrigation water will be reduced below 75 percent of Contract Total. When allocation of irrigation water has been reduced below 75 percent and still further water supply reductions are necessary, both the M&I and irrigation allocations will be reduced by the same percentage increment. The M&I allocation will be reduced until it reaches 75 percent of historical use, and the irrigation allocation will be reduced until it reaches 50 percent of irrigation Contract Total. The M&I allocation will not be further reduced until the irrigation allocation is reduced to below 25 percent of Contract Total. When allocation of irrigation water is reduced below 25 percent of Contract Total, USBR will reassess both the availability of CVP water supply and CVP water demand.

According to the policy, USBR will strive to deliver CVP water to M&I water service contractors at not less than the amount needed to meet public health and safety needs, taking into consideration contractors' CVP allocations and available non-CVP supplies, provided CVP water is available.

For this Citywide Water System Master Plan Update, consistent with the City's 2020 UWMP, the following assumptions have been made with regards to delivery of M&I-reliability supplies from the CVP under the various hydrologic conditions:

- Normal Years: 75 percent of historical use
- Single Dry Years: 25 percent of historical use
- Multiple Dry Years: 40 percent of historical use

5.3.1.2 Ag-Reliability Supplies from the CVP

In 2004, the USBR approved the assignment of 5,000 af/yr of Ag-reliability CVP contract entitlement to the City from the BCID. Also in 2004, the USBR approved the assignment of an additional 2,500 af/yr of Ag-reliability CVP contract entitlement water to the City from the WSID with the option to purchase an additional 2,500 af/yr of CVP contract entitlement from the WSID. The purchase of the additional 2,500 af/yr was approved in December 2013, increasing the City's assignment of WSID water to 5,000 af/yr.

Deliveries of Ag-reliability water can vary significantly, and during severe water shortages supply may be reduced as much as 100 percent, as they were in 2014 and 2015. Allocations for the Ag-reliability CVP water since 2010 are summarized in Table 5-3.

Table 5-3. Historical Annual CVP Ag Allocations (South of Delta)

Year	Annual CVP Ag Allocation, percent of contractual amount
2010	45
2011	80
2012	40
2013	20
2014	0
2015	0
2016	5
2017	100
2018	50
2019	75
2020	20

For this Citywide Water System Master Plan Update, consistent with the City's 2020 UWMP, the following assumptions have been made with regards to delivery of Ag-reliability supplies from the CVP:

- Normal Years: 50 percent of annual entitlement
- Single Dry Years: 0 percent of annual entitlement (based on actual allocation in 2015)
- Multiple Dry Years: 0 percent of annual entitlement (based on the average allocations for 2014, 2015 and 2016; 1.67 percent rounded down to 0 percent)

5.3.1.3 Treatment and Use of CVP Surface Water Supplies

The City's CVP surface water supplies received via the DMC are treated at the City's JJWTP, which was originally constructed in 1979, expanded in 1988, and then expanded again in 2008. The JJWTP is located adjacent to the Delta-Mendota Canal in the southern portion of the City. The current treatment capacity of the JJWTP is 30 mgd.

The City's annual combined M&I and Ag CVP surface water supplies used by the City since 2010 are shown in Table 5-4.

Table 5-4. Historical Annual CVP Surface Water Supplies

Year	Annual CVP Surface Water Supplies, af[(a)]
2010	5,303
2011	4,790
2012	4,878
2013	4,960
2014	4,018
2015	3,193
2016	2,634
2017	4,906
2018	5,184
2019	7,537
2020	5,733

(a) Does not include CVP supplies which are treated and wheeled for the Patterson Pass Business Park (see Table 5-5 below).

The City also treats and serves relatively small quantities of CVP/DMC water purchased by others through a "treatment and wheeling agreement" for use at the Patterson Pass Business Park only. The Patterson Pass Business Park is now built out. The City's deliveries through the Patterson Pass Business Park Booster Pump Station since 2010 are shown in Table 5-5. A comparable quantity of BBID CVP/DMC water is anticipated to be available for annual delivery to the Patterson Pass Business Park in the future.

Table 5-5. Historical Annual Deliveries to Patterson Pass Business Park

Year	Deliveries to Patterson Pass Business Park, af
2010	420
2011	527
2012	538
2013	558
2014	590
2015	585
2016	707[(a)]
2017	796[(a)]
2018	948[(a)]
2019	740[(a)]
2020	840[(a)]

(a) Deliveries shown for 2016 to 2019 may include demands in the International Park of Commerce (Cordes Ranch) due to the metering configuration in place during those years.

5.3.2 Surface Water from BBID Pre-1914 Water Rights

Part of the proposed Tracy Hills Specific Plan area was annexed into the BBID and is entitled to water service from BBID, using BBID's pre-1914 appropriative water rights. This water is delivered to the City via the DMC and is treated at the City's JJWTP before delivery to the Tracy Hills Project. The City anticipates that up to 4,500 af/yr of pre-1914 water rights water could be provided by BBID on a year-round basis to serve the Tracy Hills Project in the BBID service area. However, the volume of water available to the City through this agreement is limited to the demand in the BBID service area portion of the Tracy Hills Project. The projected potable water demand in this area is estimated to be 3,330 af/yr at buildout. Because the water supply is based on pre-1914 appropriative rights, the supply has historically been considered to be firm and well-established.[1]

[1] It should be noted that in August 2021, following the June 2021 adoption of the City's 2020 UWMP, the SWRCB issued an initial order imposing water right curtailment and reporting requirements in the Sacramento-San Joaquin Delta watershed that included the curtailment of pre-1914 appropriative water right claims in the San Joaquin River watershed. Based on this August 2021 order, the reliability of BBID's pre-1914 appropriative water rights may be uncertain.

5.3.3 Stanislaus River Water

The City, in partnership with the cities of Manteca, Lathrop and Escalon, and the SSJID, have constructed a surface water treatment plant near Woodward Reservoir in Stanislaus County and a transmission pipeline to deliver treated surface water to each city. The project is called the South County Water Supply Project (SCWSP). This water supply is based on SSJID's senior pre-1914 appropriative water rights to the Stanislaus River, coupled with an agreement with the USBR to store water in New Melones Reservoir.

As part of the SCWSP, the City was initially allocated up to 10,000 af/yr of water. In 2006, the City entered into a temporary contract with Escalon to purchase Escalon's allocation of 2,015 af/yr of SCWSP supply until Escalon constructs the necessary infrastructure to convey the SCWSP water; this contract is anticipated to sunset in 2025. In August 2013, the City purchased an additional 1,120 af/yr of SCWSP entitlement from the City of Lathrop. Thus, the City's current contractual amount of SCWSP water is 13,135 af/yr in total. Once the agreement with Escalon sunsets (anticipated to occur in 2025), the City's contractual allocation will be reduced to 11,120 af/yr.

Treated water deliveries of SCWSP water commenced in July 2005, and deliveries have been essentially uninterrupted since then (see Figure 5-1). In some years, SCWSP deliveries were less than the City's full project allotment; however, during these years the City did not require its full SCWSP allotment, even though the full contract amount was available from SCWSP. However, since 2010, the City has actually received more than its allotment in some years. Historical deliveries from the SCWSP to the City since 2010 are shown in Table 5-6.

Table 5-6. Historical Deliveries from the SCWSP to the City of Tracy

Year	SCWSP Deliveries, af
2010	10,850
2011	11,793
2012	12,294
2013	13,112
2014	11,515
2015	10,329
2016	11,372
2017	11,464
2018	10,471
2019	8,750
2020	11,773

The SCWSP was expected to have high reliability as a result of its senior pre-1914 rights. SSJID's 2015 UWMP, adopted by SSJID in June 2016, indicated that it would meet 98.2 to 99.9 percent of urban demands in normal years (the percent of urban demand met increases in the future as agricultural demands decrease), 73.6 to 75.3 percent of urban demands in single dry years, and 85.1 to 87.1 percent of urban demand in multiple dry years. In the City's 2015 UWMP, supplies from the SCWSP were assumed to have high reliability with normal year allocations at 100 percent of the City's contractual entitlement, and single dry year and multiple dry year allocations at 85 percent of the City's contractual entitlement.

However, in December 2018, the SWRCB released amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) with significant changes to the previous Bay-Delta Water Quality Control Plan. The Bay-Delta Plan Amendment requires releases of approximately 40 percent of what would naturally flow in watersheds tributary to the San Joaquin River (including the Stanislaus River) during the February to June period. This means that surface water users on those watersheds would be restricted from using and storing water until 40 percent of unimpaired flows are rededicated for water quality and instream fishery purposes. For the Stanislaus River, the resulting surface water cutbacks would be significant. However, there is much uncertainty surrounding the implementation of the Bay-Delta Plan Amendment.

In its 2020 UWMP, SSJID presented a water reliability analysis assuming that the Bay-Delta Plan Amendment will not be implemented given its uncertainties. As an SSJID retail agency customer, the City relies on SSJID for the reliability projections for the Stanislaus River water supply. Consistent with SSJID's approach, the City's 2020 UWMP assumes that the Bay-Delta Plan Amendment will not be implemented. However, to fully assess the potential impacts of the Bay-Delta Plan Amendment and better plan for the potential shortfalls, the City conducted a parallel set of reliability analyses assuming that the Bay-Delta Plan Amendment will be implemented and included it as Appendix G of its 2020 UWMP.

For purposes of this Citywide Water System Master Plan Update, the reliability of the SCWSP supply has been revised to be consistent with the City's 2020 UWMP. Allocations will be assumed to be as follows:

- Normal Years: Allocations will be assumed to be 100 percent of the City's contractual entitlement.
- Single Dry Years: Allocations will be assumed to be 56 to 76 percent of the City's contractual entitlement.
- Multiple Dry Years: Allocations will be assumed to be 56 to 100 percent of the City's contractual entitlement.

5.3.4 Groundwater

5.3.4.1 City Wells

The City overlies a portion of the San Joaquin Valley Groundwater Basin-Tracy Subbasin (Tracy Subbasin). The City currently operates eight groundwater production wells and one ASR well. Four wells (Production Wells 1, 2, 3 and 4) are located near the City's JJWTP and pump directly into the JJWTP clearwells, where the groundwater is blended with treated surface water. Four other wells (Lincoln Well, Lewis Manor Well (Well 5), Park and Ride Well (Well 6), and Ball Park Well (Well 7) are located throughout the City and pump water directly into the distribution system after disinfection. The City's newest well, Well 8, located near the intersection of Tracy Boulevard and 6th Street, is an ASR Well, and is capable of injecting treated surface water into the aquifer for storage and extracting it for later use (see additional discussion in Section 5.3.5 below).

5.3.4.2 Groundwater Yield

A 1990 Kennedy/Jenks/Chilton (K/J/C) study estimated a perennial groundwater yield of 6,700 af/yr in the Tracy Subbasin within the Tracy Study Area. However, in 2001, to determine if additional groundwater resources were available in the Tracy Study Area, the City conducted an updated groundwater analysis. The Estimated Groundwater Yield Study, prepared by Bookman-Edmonston Engineering, provided an evaluation of potential groundwater yield and determined that a 2,300 af/yr increase of the average annual operational groundwater yield above the groundwater yield recommended in the 1990 K/J/C study could be provided within the estimated sustainable yield of the Tracy Subbasin in the Tracy Study Area, without adverse impact to groundwater resources or quality in the Tracy Study Area over a 50-year timeframe. This expansion of groundwater usage to 9,000 af/yr would be within the City's estimated share of the aquifer's sustainable yield of 22,000 af/yr of the 28,000 af/yr total (which includes groundwater usage within West Side Irrigation District, Naglee-Burk Irrigation District, Plain View Water District (now part of the BBID), and BCID). It was also estimated that this expansion of groundwater usage would result in a groundwater level drop of 10 feet but would stabilize at this level.

In 2015, the City hired GEI Consultants (GEI) to perform an assessment on what the effects would be if the City were to pump between 16,000 and 22,000 af/yr for a single year to meet its demands during a drought emergency when no surface water supplies were available. The assessment considered potential impacts on groundwater levels, groundwater quality, and land subsidence. GEI's approach to this assessment was to estimate drawdown beneath the City, including drawdown caused by well interference, under scenarios wherein all of the City's wells were pumped for a single year at rates needed to meet the above stated demands. Drawdown estimates were made using analytical methods and aquifer hydraulic property data from pumping tests performed at two of the City's wells. Results showed that the City does have capacity to pump its wells to meet these single dry year demands, but that drawdown in the City wells and at locations proximate to the City would exceed that which has been historically observed. GEI (2015) estimated that groundwater levels would recover from their drawdown within approximately seven years.

5.3.4.3 Groundwater Quality

Groundwater quality in the Tracy Subbasin varies spatially and with depth. In general, the northern part of the Tracy Subbasin is characterized by a sodium water type, and the southern part of the Tracy Subbasin is characterized by calcium-sodium type water. The northern part of the Tracy Subbasin is also characterized by a wide range of anionic water types, including bicarbonate; chloride; and mixed bicarbonate-chloride. Major anions in the southern part of the Tracy Subbasin include sulfate-chloride and bicarbonate-chloride.

One water quality concern that the City actively manages is Total Dissolved Solids (TDS). The City's groundwater supply typically meets the primary maximum contaminant level (MCL) of 1,000 milligrams per liter (mg/L) but frequently exceeds the secondary MCL of 500 mg/L. In 2019, the City's groundwater supply ranged from 386 to 876 mg/L of TDS, with an average concentration of 752 mg/L. Because the TDS concentrations are significantly higher in the groundwater supply than in the City's other water supply sources, in order to meet the secondary MCL in its overall water supply, the City typically scales back its groundwater production from its estimated sustainable yield of 9,000 af/yr, particularly in normal rainfall years.

5.3.4.4 Groundwater Management

5.3.4.4.1 City Groundwater Management Policy and Mitigated Negative Declaration for City Groundwater Production of 9,000 af/yr

On a local level, in 2001, the City adopted a Groundwater Management Policy, and prepared a Groundwater Management Policy Mitigated Negative Declaration. The Groundwater Management Policy and the Groundwater Management Policy Mitigated Negative Declaration are described below.

Pursuant to the findings of the 2001 Bookman-Edmonston study (discussed above in Section 5.3.4.2), the Tracy City Council adopted a Groundwater Management Policy in 2001 that established the City's maximum annual groundwater extraction rate of 9,000 af/yr. To comply with CEQA and to evaluate the potential negative effects of increased groundwater extraction on water quality, water levels, and subsidence, the City also prepared a Groundwater Management Policy Mitigated Negative Declaration. The Groundwater Management Policy Mitigated Negative Declaration specifies the frequency and type of monitoring and reporting the City must conduct to evaluate the sustainability of the increased groundwater extraction rate.

Consistent with the Groundwater Management Policy Mitigated Negative Declaration, the City has maintained groundwater production rates well below the estimated sustainable yield of 9,000 af/yr.

5.3.4.4.2 Compliance with the 1992 Groundwater Management Act (AB 3030)

The 1992 Groundwater Management Act (AB 3030) established provisions by which local water agencies could develop and implement groundwater management plans (GMPs). GMPs are generally designed to prevent local and regional aquifer overdraft, which reduces available groundwater resources and which, under certain conditions, can lead to degradation of water quality and to land subsidence.

The City, BBID, BCID, and San Joaquin County formed a Groundwater Advisory Committee to facilitate the development of a regional groundwater management plan (GWMP) for the Tracy Subbasin. The planning area of the Tracy GWMP encompassed the portion of the Tracy Subbasin underlying San Joaquin County. The Tracy GWMP was adopted in 2007.

The key results of the Tracy GWMP included the following:

- Developed a general consensus among stakeholders regarding the characterization of the area's water problems, current and future demands, and groundwater conditions;
- Documented the region's groundwater management goals and establishing basin management objectives to help measure progress in attaining the goals;
- Developed specific solutions and common programs for the basin; and
- Provided an implementation plan to direct future groundwater management activities.

The Tracy GWMP concluded that the Tracy Subbasin is full, but experiences groundwater quality issues in portions of the basin associated with nitrate, boron, sulfate, chloride, and total dissolved solids (TDS). As such, many of the groundwater management options that were recommended focused on creating available storage and managing pumping in order to increase water quality within the Tracy Subbasin.

San Joaquin County is the designated Monitoring Entity under the California Statewide Groundwater Elevation Monitoring (CASGEM) program for the portion of the Tracy Subbasin underlying the county. However, upon submission of the Groundwater Sustainability Plan, the CASGEM program will be superseded by the SGMA monitoring efforts.

5.3.4.4.3 Tracy Regional Groundwater Management Plan

In addition to participating in the development of the Tracy Subbasin GMP, in 2005 the City was awarded a DWR grant for approximately $185,000 to prepare a Tracy Regional Groundwater Management Plan (Tracy Regional GMP) for the portion of the Tracy Subbasin that underlies the City of Tracy. The Tracy Regional GMP was completed in March 2007. A key objective of the Tracy Regional GMP was the development of Basin Management Objectives (BMOs) for groundwater levels, groundwater quality, and land subsidence in the region.

5.3.4.4.4 Compliance with the 2014 Sustainable Groundwater Management Act

On August 29, 2014, the California Legislature passed comprehensive groundwater legislation contained in SBs 1168 and 1319, and AB 1739, which are collectively referred to as SGMA. This legislation was signed by Governor Brown on September 16, 2014 and it became effective on January 1, 2015. The legislative intent of SGMA is to provide sustainable management of groundwater basins, enhance local management of groundwater, establish minimum standards for sustainable groundwater management, and provide local groundwater agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater.

The Tracy Subbasin is designated by DWR as a medium priority basin. As such, the Tracy Subbasin is subject to the requirements of SGMA, which include the formation of a one or more Groundwater Sustainability Agencies (GSAs) and the development and implementation of one or more Groundwater Sustainability Plans (GSPs) by January 31, 2022. If the statutory deadline is not met for GSP development and/or implementation, the State has the authority to intervene and manage groundwater within non-compliant subbasins. SGMA requires that adopted GSPs result in sustainable groundwater management which avoids undesirable results.

The Tracy Subbasin contained areas of San Joaquin, Contra Costa and Alameda Counties. The Banta-Carbona Irrigation District, Byron-Bethany Irrigation District, City of Tracy, City of Lathrop, Stewart Tract, West Side Irrigation District, and San Joaquin County are GSAs within the Tracy Subbasin. The GSAs recognize that developing and adopting a single GSP for the subbasin would be the most efficient way of achieving sustainability and preventing State intervention into local groundwater management.

Working with San Joaquin County and the Tracy Subbasin GSAs, a Memorandum of Agreement (MOA) has been developed for the development of the San Joaquin County GSP for the Tracy Subbasin. Under the terms of the MOA, San Joaquin County is designated as the lead entity to enter into an agreement with the City of Brentwood to coordinate the allocation of grant funds.

The City, BCID, BBID[2], City of Lathrop, San Joaquin County, and Stewart Tract are the six GSAs formed in the Tracy Subbasin and are working cooperatively to develop a single GSP. The Tracy Subbasin GSAs were awarded a DWR grant to develop the GSP. Pursuant to the Grant Agreement, each GSA designated an appointee to form the GSP Coordination Committee, and the San Joaquin County was appointed as the Grant Administrator. The Grant Administrator or any two appointees may call meetings of the GSP Coordination Committee as needed to in the GSP development process.

The GSP for the Tracy Subbasin has been adopted by the GSAs and was submitted to DWR by the statutory deadline of January 31, 2022. The Final GSP is available on the Tracy Subbasin website: https://tracysubbasin.org.

As one of the six GSAs that are managing the Tracy Subbasin., the City has been actively involved in GSP development activities and will continue to be involved throughout SGMA implementation. The City has one appointee (and an alternate) on the Tracy Subbasin GSP Coordination Committee, which meets quarterly, and the Technical Committee, which meets monthly.

[2] The West Side Irrigation District officially merged with Byron-Bethany Irrigation District in September 2020, which occurred later than the release of the draft GSP chapters.

5.3.4.5 Historical Groundwater Use

As discussed previously, the City currently operates eight groundwater extraction wells and one ASR well. The total production capacity of all of the wells combined is 28.2 mgd, which would equate to a total annual production capability of about 31,600 af/yr if the wells were pumped continuously; however, as described above, the City's maximum annual groundwater extraction rate has been established to be 9,000 af/yr. Key characteristics of the City's wells are listed in Table 5-7.

Table 5-7. Groundwater Well Characteristics

City Well Name/Number	Year Drilled	Total Well Depth (Casing Depth), feet	Casing Diameter, inches	Depth of Perforated Zone, feet[(a)]	Design Capacity, gpm	Production Capacity, mgd
Well 1	1986	1,010 (1,000)	16"	450-550 580-980	1,500	2.2
Well 2	1989	990 (870)	16"	420-850	2,000	2.9
Well 3	1989	1,020 (900)	16"	420-890	2,000	2.9
Well 4	1989	1,020 (950)	16"	380-940	2,000	2.9
Lincoln Well	1990	1,000 (1,000)	16"	490-980	2,500	3.6
Well 5[(b)] (Lewis Manor Well)	2000	1,015 (1,000)	18"	410-480 601-630 650-670 805-830 900-930 965-990	2,500	3.6
Well 6 (Park & Ride Well)	2001/02	1,250 (1,216)	18"	550-598 610-636 656-678 738-754 774-796 966-982 1,014-1,122 1,176-1,196	2,000	2.9
Well 7 (Ball Park Well)	2002	1,070 (894)	18"	550-598 570-732 850-874	2,500	3.6
Well 8[(c)]	2004	850 (850)	18"	370-460 510-640 680-820	2,500	3.6

(a) Source: GEI Consultants, Summary of Groundwater Conditions November 2007 through November 2008, dated January 23, 2009.
(b) Data shown is for the Lewis Manor Replacement Well constructed in 2000.
(c) Well 8 went into operation in September 2010, initially as an extraction well and then as a permitted ASR Well.

It should be noted that only Wells 1, 2, 3, 4 and 8 currently have provisions for ammonia addition. It is recommended that provisions for ammonia addition be added to the City's other wells to provide maximum flexibility in the operation of the wells in conjunction with the City's surface water supplies which are disinfected through chloramination.

The City's annual groundwater production since 2010 is shown in Table 5-8.

Table 5-8. Historical Groundwater Production by the City of Tracy

Year	Annual Groundwater Production, af
2010	498
2011	292
2012	420
2013	515
2014	680
2015	519
2016	648
2017	995
2018	817
2019	645
2020	1,181

5.3.4.6 Projected Future Groundwater Use

As discussed in Section 5.3.4.2, the City may sustainably pump up to 9,000 af/yr from the local groundwater basin. Since the hard, high TDS groundwater is of lower quality than the City's surface water sources, the City has scaled back its groundwater extraction in most years. However, the City will continue to rely on groundwater for peaking and drought and emergency water supply.

The City anticipates that total extraction during a normal year will be 2,500 af/yr. By reducing groundwater extraction on an average annual basis, the City will: (1) increase the overall quality of its drinking water, thus increasing customer satisfaction and reducing system maintenance and repair caused by the lower-quality groundwater; and (2) recharge the underlying aquifer, effectively increasing the availability of groundwater during a drought or emergency condition (i.e., effectively "banking" groundwater).

The projected use of groundwater during dry years is about 4,500 af/yr and is consistent with the City's Groundwater Management Policy. In the event that the City is unable to secure additional high-quality surface water supplies in the future, the City is able to expand groundwater production up to 9,000 af/yr. In the event of a severe water supply shortage or emergency, the City has the ability to increase production dramatically, up to 22,000 af/yr.

5.3.5 Aquifer Storage and Recovery

The City's ASR Program allows the City to optimize conjunctive use of its water supplies through injection of surplus treated (potable) drinking water into selected aquifer zones within the groundwater subbasin for storage when surplus supplies are available, and recovery of that potable water from the aquifer to optimize water quality and meet seasonal peak demands during drought periods, or when emergency or disaster scenarios preclude the use of imported water supplies.

In January 2004, the City constructed a new well (Well 8) that was designed to allow for both injection and extraction of water supplies in conjunction with the City's proposed ASR Program. In early 2009, the City contracted to construct the above-ground well facilities (including the pump house, pump, motor, SCADA, electrical, telemetry, chemical feed systems, *etc.*) to have Well 8 operational in September 2010, initially as an extraction well, and in the future as part of the City's proposed ASR Program. In addition, the City installed two monitoring wells for use in the demonstration project monitoring and testing for the proposed ASR Program.

The City obtained regulatory approval from the Central Valley Regional Water Quality Control Board (RWQCB) to conduct an ASR Demonstration Testing Program. The Phase 1 ASR Demonstration Testing was conducted between January 2011 and September 2011 and involved the injection of 233 acre-feet (76 million gallons) of treated SSJID potable water, storage in the confined aquifer, and subsequent extraction of 340 acre-feet (111 million gallons) of water[3]. The Phase 2 ASR Testing was initiated in late December 2011 and was completed in September 2012 with injection of 700 acre-feet. The Tracy City Council approved and adopted a CEQA Negative Declaration (SCH No. 2012102013) for the permanent ASR Program on December 4, 2012.

Injection of treated SSJID water into the ASR well occurs during the winter months (i.e., November through April), when City demands are low and when the City's JJWTP and groundwater wells can be shut down such that only treated SSJID water is injected per the City's ASR permit. Extraction occurs primarily in the summer months to meet increased demands associated with irrigation needs, and as needed during droughts and water shortage emergencies. It is estimated that between 685 and 915 af/yr of potable water could be injected into the aquifer, assuming a 5-month continuous injection rate of 1.5 to 2.0 mgd at Well 8. The City's current strategic plan for ASR operations involves injecting up to 1,000 af/yr over six months during the winter and extracting 75 percent of the injection volume during the following summer. These operations would result in net injection into the Lower Tulare Formation aquifer, which will gradually create a "buffer supply" that the City can utilize in dry years or during water shortage emergencies.

Net annual ASR injection and extraction amounts from Well 8 since 2013 are shown in Table 5-9.

[3] Interim (Final) Status Report for Well 8 ASR Demonstration Program, Memorandum prepared for City of Tracy by Pueblo Water Resources, dated December 7, 2011.

Table 5-9. Tracy ASR Well 8 Annual Injection and Extraction	
Year	Net Injection or Extraction, af
2013	415 (injection)
2014	221 (extraction)
2015	322 (injection)
2016	165 (injection)
2017	665 (injection)
2018	2 (injection)
2019	0
2020	190 (injection)

5.3.6 Out-of-Basin Water Banking

The Semitropic Groundwater Storage District Groundwater Storage Bank (Semitropic) is a water storage system that began operation in the early 1990s. Located in Kern County between the California Aqueduct and the DMC, Semitropic is one of eight California groundwater banking agencies. Semitropic works by having its banking partners deliver their surplus water to Semitropic for storage. Then, when requested by the banking partner, Semitropic returns the stored water to the California Aqueduct for use by its partners either by exchanging its entitlement or by reversing the intake facility (known as "pumpback"). Through "pumpback," Semitropic can deliver a maximum of 90,000 af/yr of water into the California Aqueduct. The State would then deliver the water to the banking partners.

The total storage capacity at Semitropic is 1.65 million acre-feet and, as listed below, there is still a significant amount of storage capacity which is uncommitted and available. The current Semitropic banking partners and their reserved/available storage capacities are listed in Table 5-10.

Table 5-10. Semitropic Water Storage District Banking Partners[(a)]	
Partner Agency	Storage Allocation, af
Metropolitan Water District of Southern California	350,000
Valley Water (formerly known as Santa Clara Valley Water District)	350,000
Alameda County Water District	150,000
Zone 7 Water Agency	65,000
Newhall Land & Farming Company	55,000
San Diego County Water Authority	45,000
Poso Creek Water Company	60,000
City of Tracy	**10,500**
Homer, LLC	15,000
Harris Farms, LLC	10,500
Available Capacity	474,750
Unallocated Storage	64,250
Total Storage Capacity	**1,650,000**
(a) Source: Semitropic Water Storage District website (www.semitropic.com) as of February 12, 2020.	

In June 2006, the City entered into a pilot agreement with Semitropic for 1,000 acre-feet of water storage at Semitropic, which allowed for an annual withdrawal of up to 333 af/yr (e.g., 1,000 acre-feet divided by 3). The pilot agreement was intended to establish the procedures for water deposits and withdrawals by the City of Tracy and was terminated when the Permanent Agreement with Semitropic was implemented (see below).

On June 5, 2012, the Tracy City Council approved a long-term agreement with Semitropic for 3,500 units of water storage. One unit of water storage allows for a withdrawal of up to 1 af/yr for three years; hence, the agreement would allow for withdrawal of 3,500 af/yr for three years (10,500 af total). To store water in Semitropic, the City would not withdraw its share of CVP water from the DMC, but instead allow this water to continue to move through the DMC and California Aqueduct systems for delivery to and use by Semitropic. This is called "in lieu storage." Upon request by the City, in accordance with the contract, Semitropic would pump the stored water into the California Aqueduct and a like amount of water would be made available to the City directly from the DMC.

Though the City could utilize this supply in any year, it is most valuable during extended drought years when the City's surface water supplies are reduced. The City anticipates that banking water at Semitropic will increase the reliability of the City's water supply and help close the potential future gap between supply and demand during drought conditions or other water supply shortage emergencies. If the City uses water from the Semitropic water bank in any given year, it would manage its supplies during subsequent years such that it could refill the water bank for future use. The City plans to actively maintain storage in Semitropic as feasible.

As of December 2020, the City currently has 6,887 acre-feet of water in storage at Semitropic.

5.4 FUTURE POTABLE WATER SUPPLIES

The City is currently anticipating the following potential future potable water supplies:

- Additional ASR wells
- Additional CVP water supplies from USBR available through a recycled water exchange agreement
- Additional CVP water supplies from BBID
- Additional SCWSP water supplies

These potential future potable water supplies are described below.

5.4.1 Additional ASR Wells

As described above, the City currently has one ASR well (Well 8) which allows the City to inject excess SCWSP water supplies into the groundwater basin for later extraction when needed. The current injection and extraction capacity is 700 af/yr. The City is planning to expand the ASR program with the installation of additional ASR wells. The City's ASR Program will be expanded to provide up to 1,000 af/yr of water supplies from the existing and new ASR wells by 2040. The ASR supply will be used to meet demands during dry years, thereby increasing the reliability of

the City's water supply and helping to close the potential gap between supply and demand during drought conditions or water shortage emergencies.

One constraint with the City's ASR Program is that the permit only allows for SCWSP water to be injected. This means that the City has to shut down the JJWTP and the groundwater wells during the injection period so that only SCWSP supplies are being utilized. The City is considering requesting an amendment to its ASR permit to allow for the use of treated CVP supplies for ASR injection, in addition to the SCWSP water supplies. This would provide more operational flexibility for ASR injection and allow the City to optimize the storage of surface water supplies in wet years for later extraction in dry years. A potential alternative, if the City's ASR permit cannot be modified to allow for other water supplies to be injected, would be to construct a dedicated SCWSP water pipeline to the ASR well(s). Future expansion of the ASR program will need to fully evaluate these operational restrictions and potential alternatives.

5.4.2 Additional CVP Water Supplies from USBR Available Through a Recycled Water Exchange Program

The City is evaluating the potential for indirect reuse of its available recycled water through an exchange agreement with the USBR whereby a portion of the City's tertiary-treated wastewater (recycled water) would be discharged to the DMC and a like amount of water (i.e., a one-to-one exchange) could then be diverted from the DMC by the City for treatment at the City's JJWTP for potable use. Such supplies would be 100 percent reliable and would not be subject to drought cutbacks.

The benefits of such an exchange agreement include the following:

- Provides for the beneficial use of recycled water: Recycled water (tertiary treated wastewater) is currently discharged by the City into the Delta with minimal beneficial use.
- Provides an additional potable water supply for the City: Through indirect reuse, it provides an additional potable water supply for City residents and enhances water supply reliability for the community.
- Provides enhanced water supply reliability: Recycled water is a "drought proof" water supply.
- Reduces the City's dependence on CVP water supply: CVP water has become increasingly unreliable due to drought, climate change and environmental impacts. Indirect reuse of recycled water would reduce the City's dependence on CVP water supplies.
- Builds on existing infrastructure: Operations under the exchange agreement would utilize the existing wastewater treatment facilities and recently constructed recycled water pump station and pipelines.
- Reduces salt loading in the Delta: Recycled water has a total dissolved solids content of approximately 660 milligrams per liter. Water of this quality is suitable for reuse but does not meet Delta salinity standards. This results in the USBR having to release additional water from New Melones Reservoir to attain Delta salinity standards.

The project would require development of a project description, NEPA/CEQA review, approval of an exchange agreement and then design and construction of a recycled water pipeline to discharge recycled water to the DMC downstream of the City's JJWTP intake. If such a project is approved and implemented, the City anticipates that it would initially provide up to 5,900 af/yr of additional potable water supplies to the City, with future expansion as needed to meet future demands.

5.4.3 Additional CVP Water Supplies from BBID

Additional BBID DMC/CVP water supplies may be available to the City as agricultural land is converted to M&I uses. The land area that could potentially provide this additional water supply includes the portion of BBID's service area that falls within the City's planning areas (excluding the BBID Raw Water Service Area 2). Eligible land area is estimated to be approximately 2,600 acres. While the exact quantity of water that would be available is unknown, a contractual entitlement equal to 3.4 af/yr/acre may be available, resulting in a total supply of up to 8,800 af/yr (2,600 acres x 3.4 af/yr/acre). However, it should be noted that the additional water supplies would have agricultural reliability similar to the City's Ag-reliability CVP supplies described in Section 5.3.1.2 above and therefore would be subject to significant cutbacks in dry years. Agreements between Tracy and BBID, as well as environmental review, would need to occur before such a transaction could take place.

However, because of the uncertainty associated with the availability and reliability of this supply source, especially in dry years, for purposes of this Citywide Water System Master Plan Update, it is assumed that this future water supply will not be available to the City in the future.

5.4.4 Additional SCWSP Water Supplies

The City previously anticipated that an additional 1,880 af/yr of treated water supplies may be available from the SCWSP in the future through a Conserved Water Amendment Agreement. This additional supply would have the same reliability as the supply that the City is currently receiving from the SCWSP, including that recently purchased from the City of Lathrop. Delivery of these additional supplies to the City would be through the same, existing facilities currently delivering the City's existing SCWSP supplies. Delivery of these additional supplies would be subject to approval and environmental review.

However, because of the current uncertainty associated with the availability and reliability of this supply source, especially in dry years as a result of the Bay-Delta Plan Amendment, for purposes of this Citywide Water System Master Plan Update, it is assumed that this future water supply will not be available to the City in the future.

5.5 EXISTING NON-POTABLE WATER SUPPLIES

5.5.1 Recycled Water

In 2002, the City adopted a Recycled and Non-Potable Water Ordinance requiring all new subdivisions, to the extent practicable, to install the required infrastructure (such as dual-distribution pipelines) to provide recycled water to meet non-potable water demands at parks, golf courses, athletic fields, schools, median island landscapes, and industrial sites. The ordinance was codified into the Tracy Municipal Code as Chapter 11.30 "Recycled and Non-Potable Water."

In March 2013, the City adopted Ordinance 1183 amending Chapter 11.30 of the Tracy Municipal Code to update the City's recycled water requirements to be consistent with State, regional and local standards, including the California SB X7-7, 2010 California Green Building Standards Code, California Model Water Efficient Landscape Ordinance, and the City of Tracy Sustainability Action Plan. Approvals and permits for the production, distribution and use of recycled water will be required from the RWQCB and the SWRCB Division of Drinking Water.

Both the 2012 WSMP and Tracy Wastewater Master Plan included recommended capital improvement projects for the development of the City's recycled water system, including pump station and pipeline facilities to deliver recycled water within the City's service area for use for landscape irrigation and other non-potable uses. To date, the City has spent approximately $85 million on improvements to the City's WWTP to allow for the production of tertiary-treated wastewater meeting Title 22 requirements for recycled water use for landscape irrigation and other non-potable uses. In December 2013, the City adopted Development Impact Fees to fund recycled water infrastructure improvements. In 2015, the City received a $18 million Proposition 84 grant from DWR to fund construction of pump stations and pipelines to distribute recycled water. In March 2019, the City received an amended order from the SWRCB approving the change in place of use of its treated wastewater. The order allows for the City to change the point of discharge and place of use of treated wastewater by a reduction in discharge to Old River of up to 8.1 mgd, with a maximum annual limit of 5,900 af/yr and use the treated wastewater for industrial and irrigation purposes within the service areas of the City's Sphere of Influence, BBID within the City's Sphere of Influence and WSID.

The City recently completed construction of a recycled water pump station at the City's WWTP and a recycled water pipeline from the WWTP west to Lammers Road and south to Kimball High School. A second phase of construction will include a second pump station and additional recycled water pipeline to further extend the distribution of recycled water supplies within the City.

As described in Chapter 4, at buildout of the City's General Plan, it is estimated that the recycled water demand for landscape irrigation will be approximately 6,300 af/yr.

5.5.2 Shallow Non-Potable Groundwater

As discussed above, the Tracy Subbasin underlying the City has two aquifers: semi-confined and confined. The uppermost semi-confined aquifer is primarily comprised of alluvial and flood basin formations. The underlying confined aquifer is primarily comprised of the Tulare Formation and it is overlain by the Corcoran Clay, which separates the upper semi-confined aquifer from the underlying confined aquifer. The City's production wells draw from the confined aquifer only and

the average annual operational groundwater yield of 9,000 af/yr described in previous sections applies only to the confined aquifer. The City does not currently pump any groundwater from the semi-confined aquifer.

The shallow semi-confined groundwater is considered to be suitable for agricultural irrigation purposes. However, due to the poor water quality associated with the shallow groundwater supply, the use of this supply to meet the non-potable demands within the City's SOI is not recommended and is not discussed further in this Citywide Water System Master Plan Update.

5.6 RELIABILITY OF THE CITY'S WATER SUPPLIES

5.6.1 Potable Water Supply Reliability

The projected reliability for each of the City's supply sources under normal, single dry and multiple dry year conditions are described below.

5.6.1.1 Normal Years

Normal or wet water years are those that match or exceed median rainfall and runoff levels. The reliability of each of Tracy's existing and future water supplies and their projected availability during normal and wet years is described below:

- The City's contract with the USBR for 10,000 af/yr of DMC/CVP water is subject to M&I reliability. Based on the historical record, the City's long-term average allocation of DMC/CVP water pursuant to this contract is anticipated to be at least 85 percent of the total entitlement. However, due to recent environmental concerns in the Delta and potential future impacts due to climate change, the normal year supply of DMC/CVP M&I water is assumed to be 75 percent of the City's historical use. Based on a historical use of 5,930 af/yr (i.e., the average quantity of CVP water put to beneficial use by the City during the last three years of water deliveries that were unconstrained by the availability of CVP water), the projected normal year supply is 4,448 af/yr.
- The City has received acquired assignments from Banta-Carbona Irrigation District (BCID; 5,000 af/yr) and West Side Irrigation District (WSID; 5,000 af/yr) for a total entitlement of 10,000 af/yr of DMC/CVP water. These supplies are subject to Ag-reliability. The City is conservatively estimating that it will receive 50 percent of its Ag-reliability contractual entitlement, or 5,000 af/yr, in normal years.
- The City has acquired up to 4,500 af/yr of pre-1914 appropriative water rights water from BBID. These supplies are restricted in their place of use, and therefore the supply is anticipated to be equal to the projected demand within that place of use (i.e., the Tracy Hills area) ranging from 800 af/yr in 2025 to 3,300 af/yr in 2045. The City anticipates being able to receive 100 percent of this supply in normal years.

- The City has a total contractual entitlement of 13,135 af/yr of Stanislaus River water provided through the SCWSP, including 10,000 af/yr from its original contract with SSJID, 1,120 af/yr purchased from Lathrop, and 2,015 af/yr purchased on an interim basis from Escalon. The agreement between Tracy and Escalon is assumed to terminate after 2025. Based on information provided by SSJID, the City expects to receive 100 percent of its SCWSP water supply allocation during a normal water year. As such, the City anticipates being able to receive 13,135 af/yr of SCWSP supply in 2025 and 11,120 af/yr afterwards, assuming normal year conditions.
- The City is able to withdraw up to 9,000 af/yr of groundwater from the Tracy Subbasin. However, due to the aging infrastructure and water quality issues in the City's groundwater supplies, the City is projecting to be able to withdraw up to 2,500 af/yr in normal years. This groundwater supply is considered to be 100 percent reliable.
- The City does not anticipate using its Semitropic water or ASR water in normal years.
- The City anticipates that a Recycled Water Distribution Network and Exchange agreement will be executed with the USBR by 2030 to provide additional CVP supplies to the City in exchange for the City discharging a like amount of tertiary-treated recycled water to the DMC. The City assumes that the Recycled Water Distribution Network and Exchange will be implemented as needed to meet future demand conditions and is currently projected to supply an amount ranging from 1,925 af/yr in 2030 to 7,500 af/yr in 2045. This water supply is considered to be 100 percent reliable.
- The City's recycled water supply is expected to be 100 percent reliable. Based on the projected non-potable demands and assuming that the City makes investments in infrastructure and permitting, the City estimates that they will have access to 1,000 af/yr of recycled water supply in 2025, increasing to 6,300 af/yr in 2045.

The reliability of each of the City's existing and additional planned future water supplies and their projected availability during normal years at buildout is shown in Table 5-11.

Table 5-11. Projected Existing and Additional Planned Future Water Supplies Available in Normal Years at Buildout

Supply	Percent Allocation/ Entitlement	Projected Available Supplies, af/yr
Existing Water Supplies		
USBR CVP - Tracy Contract[(a)]	75	4,448
USBR CVP - BCID Contract	50	2,500
USBR CVP - WSID Contract	50	2,500
	Total CVP Supplies	**9,448**
BBID (pre-1914 to meet Tracy Hills demand)	100	3,300
SCWSP (SSJID) (pre-1914)	100	11,120
Groundwater	100	2,500
Semitropic Water Storage Bank[(b)]	0	0
	Total Existing Potable Supplies	**26,368**
Additional Planned Future Water Supplies[(a)]		
Additional USBR CVP (BBID contract)	0	0
Aquifer Storage and Recovery[(b)]	0	0
Recycled Water Exchange	100	7,500
Recycled Water (non-potable)	100	6,300
	Total Additional Planned Future Potable Supplies	**7,500**
	Total Potable Supplies	**33,868**
	Total Additional Planned Future Non-Potable Supplies	**6,300**
	TOTAL WATER SUPPLY	**40,168**

Source: City of Tracy 2020 UWMP, Table 7-2, June 2021.

(a) Percent of historical use
(b) Not used in normal years.

5.6.1.2 Single Dry Years

During a single dry year, all of the City's existing surface water allotments are subject to some level of reduction. Assumed reductions are based on actual reductions in CVP deliveries experienced in the recent drought and the new USBR M&I Reliability Policy adopted in 2017. The actual reductions will vary with the severity of the regional water supply shortage and climatic conditions, and the consideration of contract agreements.

The following describes the availability and reliability of the City's existing and additional planned future water supplies under single dry year conditions:

- The City's contract with the USBR for 10,000 af/yr of DMC/CVP water is subject to M&I reliability. During a single dry year, the City estimates to receive 25 percent of the City's historical use. Based on the historical use of 5,930 af/yr, the projected supply is 1,483 af/yr.

- The City has a total entitlement of 10,000 af/yr of DMC/CVP Ag-reliability water. The City anticipates receiving 0 percent of its DMC/CVP Ag-reliability water in a single dry year.
- The City has acquired up to 4,500 af/yr of pre-1914 appropriative water rights water from BBID. This supply is restricted with regard to the place of use (Tracy Hills). The City anticipates being able to receive 85 percent of its contractual entitlement in a single dry year (3,825 af/yr). As the projected demand is 3,300 af/yr in 2045 and is lower than the 3,825 af/yr of available supply, the reduction in reliability does not result in a reduction to actual amount of water used. Therefore, the supply in a single dry year is anticipated to be equal to the projected demand within the Tracy Hills area, ranging from 800 af/yr in 2025 to 3,300 af/yr in 2045.
- The City has a total contractual entitlement of 13,135 af/yr of Stanislaus River water provided through the SCWSP. Based on information provided by SSJID, the City expects to receive 76 percent of its SCWSP water supply allocation during 2025, 2030, and 2035 and 56 percent during 2040 and 2045. In addition, the SCWSP water transferred from Escalon is assumed to be unavailable after 2025. As such, the City estimates 9,974 af/yr of SCWSP supply in 2025, 8,444 af/yr in 2030 and 2035, and 6,177 af/yr afterwards.
- During a single dry year, the City anticipates increasing its groundwater production on a short-term basis from the normal year production of 2,500 af/yr to 4,500 af/yr. The groundwater supply is considered to be 100 percent reliable.
- The City anticipates that 700 af/yr of water will be available for use in a single dry year through operation of its ASR well. An additional 300 af/yr is estimated to be available by 2040 for a total of 1,000 af/yr. This water supply is considered to be 100 percent reliable assuming that the City is consistently able to refill the ASR storage during non-drought years to maintain at least 1,000 af in storage at the beginning of a single dry year.
- The City has acquired 10,500 af/yr of storage in Semitropic, which allows the City to withdraw up to 3,500 af/yr for three consecutive years. Due to the difficulties experienced by the City in accessing stored water via the DMC on a short timeframe, the City has conservatively assumed that the Semitropic water will not be available in a single dry year.
- The City anticipates that a Recycled Water Distribution Network and Exchange agreement will be executed with the USBR by 2030 to provide additional CVP supplies to the City in exchange for the City discharging a like amount of tertiary-treated recycled water to the DMC. The City assumes that the Recycled Water Distribution Network and Exchange will be implemented as needed to meet future demand conditions and is currently projected to supply an amount ranging from 1,925 af/yr in 2030 to 7,500 af/yr in 2045. This water supply is considered to be 100 percent reliable.
- The City's recycled water supply is expected to be 100 percent reliable. Based on the projected non-potable demands and assuming that the City makes investments in infrastructure and permitting, the City estimates that they will have access to 1,000 af/yr of recycled water supply in 2025, increasing to 6,300 af/yr in 2045.

The reliability of each of the City's existing and additional planned future water supplies and their projected availability during a single dry year at buildout is shown in Table 5-12.

Table 5-12. Projected Existing and Additional Planned Future Water Supplies Available in Single Dry Years at Buildout

Supply	Percent Allocation/ Entitlement	Projected Available Supplies, af/yr
Existing Water Supplies		
USBR CVP - Tracy Contract[a]	25	1,483
USBR CVP - BCID Contract	0	0
USBR CVP - WSID Contract	0	0
	Total CVP Supplies	**1,483**
BBID (pre-1914 to meet Tracy Hills demand)	100	3,300
SCWSP (SSJID) (pre-1914)[b]	56	6,177
Groundwater[c]	100	4,500
Semitropic Water Storage Bank	0	0
	Total Existing Potable Supplies	**15,460**
Additional Planned Future Water Supplies		
Additional USBR CVP (BBID contract)	0	0
Aquifer Storage and Recovery[c] [d]	100	1,000
Recycled Water Exchange[c]	100	7,500
Recycled Water (non-potable)[c]	100	6,300
	Total Additional Planned Future Potable Supplies	**8,500**
	Total Potable Supplies	**23,960**
	Total Additional Planned Future Non-Potable Supplies	**6,300**
	TOTAL WATER SUPPLY	**30,260**

Source: City of Tracy 2020 UWMP, Table 7-3, June 2021.

(a) Percent of historical use.
(b) Percentage of contract entitlement is based on information from SSJID for 2040 and later.
(c) Groundwater and recycled water volumes assume the City invests in infrastructure and/or permitting.
(d) ASR volumes assume surplus supplies are available in wet years to inject and store, as well as additional investment in ASR construction and operation.

5.6.1.3 Multiple Dry Years

During multiple dry years, the City's surface water supplies (from both the CVP and SCWSP) may be significantly reduced. Thus, in the event of drought, the City will have to depend more heavily on conservation efforts, groundwater, and the proposed future supply projects.

The following describes the availability and reliability of the City's existing and additional planned future water supplies under multiple dry year conditions:

- The City's contract with the USBR for 10,000 af/yr of DMC/CVP water is subject to M&I reliability. During multiple dry years, the City estimates that it will receive 40 percent of the City's historical use. Based on the historical use of 5,930 af/yr, the projected supply is 2,372 af/yr.

- The City has a total entitlement of 10,000 af/yr of DMC/CVP Ag-reliability water. The City anticipates receiving 0 percent of its DMC/CVP Ag-reliability water in multiple dry years.
- The City has acquired up to 4,500 af/yr of pre-1914 appropriative water rights water from BBID. This supply is restricted with regard to the place of use (Tracy Hills). The City anticipates being able to receive 85 percent of its contractual entitlement in multiple dry years (3,825 af/yr). As the projected demand is 3,300 af/yr in 2045 and is lower than the 3,825 af/yr of available supply, the reduction in reliability does not result in a reduction to actual amount of water used. Therefore, the supply in multiple dry years is anticipated to be equal to the projected demand within the Tracy Hills area, ranging from 800 af/yr in 2025 to 3,300 af/yr in 2045.
- The City has a total contractual entitlement of 13,135 af/yr of Stanislaus River water provided through the SCWSP. Based on information provided by SSJID, the City's SCWSP water supply reliability during multiple dry years range from 56 to 100 percent. In addition, the SCWSP water transferred from Escalon is assumed to be unavailable after 2025.
- During multiple dry years, the City anticipates increasing its groundwater production on a short-term basis from the normal year production of 2,500 af/yr to 4,500 af/yr. The groundwater supply is considered to be 100 percent reliable.
- The City anticipates that 700 af of water will be available for use in multiple dry years through operation of its ASR well. An additional 300 af is estimated to be available by 2040 for a total of 1,000 af. The City is assumed to be unable to refill the ASR storage during multiple dry years. Therefore, the annual ASR supply available is assumed to equal one fifth of the total stored volume (i.e., 140 af/yr between 2025 and 2035 and 200 af/yr between 2040 and 2045). This water supply is considered to be 100 percent reliable assuming that the City is consistently able to refill the ASR storage in non-drought years to maintain at least 1,000 af in storage at the beginning of a multiple dry year sequence.
- The City has acquired 10,500 af/yr of storage in Semitropic, which allows the City to withdraw up to 3,500 af/yr for three consecutive years. Due to the difficulties experienced by the City in accessing stored water via the DMC on a short timeframe, the City has conservatively estimated that the 0 percent of the City's storage will be available in the first year of a five-consecutive-year drought, and 100 percent will be available over the following four years. Based on the City's current storage at Semitropic of 6,887 af, the amount available in the second to fifth year of a five-consecutive-year drought is assumed to be 1,722 af/yr (6,887 af divided by four). A similar reliability estimate is provided for all dry-year sequences under the assumption that the City is consistently able to re-fill the water bank in non-drought years to maintain at least 7,000 af/yr in storage at the beginning of a multiple dry year sequence.

- The City anticipates that a Recycled Water Distribution Network and Exchange agreement will be executed with the USBR by 2030 to provide additional CVP supplies to the City in exchange for the City discharging a like amount of tertiary-treated recycled water to the DMC. The City assumes that the Recycled Water Distribution Network and Exchange will be implemented as needed to meet future demand conditions and is currently projected to supply an amount ranging from 1,925 af/yr in 2030 to 7,500 af/yr in 2045. This water supply is considered to be 100 percent reliable.
- The City's recycled water supply is expected to be 100 percent reliable. Based on the projected non-potable demands and assuming that the City makes investments in infrastructure and permitting, the City estimates that they will have access to 1,000 af/yr of recycled water supply in 2025, increasing to 6,300 af/yr in 2045.

The reliability of each of the City's existing and additional planned future water supplies and their projected availability during a five-consecutive-dry year (multiple dry year) period at buildout is shown in Table 5-13.

Table 5-13. Projected Existing and Additional Planned Future Water Supplies Available Five-Consecutive-Dry Years at Buildout

Supply	Percent Allocation/ Entitlement	Projected Available Supplies, af/yr				
		Year 1	Year 2	Year 3	Year 4	Year 5
Existing Water Supplies						
USBR CVP - Tracy Contract[a]	40	2,372	2,372	2,372	2,372	2,372
USBR CVP - BCID Contract	0	0	0	0	0	0
USBR CVP - WSID Contract	0	0	0	0	0	0
Total CVP Supplies		**2,372**	**2,372**	**2,372**	**2,372**	**2,372**
BBID (pre-1914 to meet Tracy Hills demand)	100	3,300	3,300	3,300	3,300	3,300
SCWSP (SSJID) (pre-1914)	*See Note (b)*	11,120	11,120	6,177	6,177	11,120
Groundwater[c]	100	4,500	4,500	4,500	4,500	4,500
Semitropic Water Storage Bank	100	0	1,722	1,722	1,722	1,722
Total Existing Potable Supplies		**21,292**	**23,014**	**18,071**	**18,071**	**23,014**
Additional Planned Future Water Supplies						
Additional USBR CVP (BBID contract)	0	0	0	0	0	0
Aquifer Storage and Recovery[c][d]	100	200	200	200	200	200
Recycled Water Exchange[c]	100	7,500	7,500	7,500	7,500	7,500
Recycled Water (non-potable)[c]	100	6,300	6,300	6,300	6,300	6,300
Total Additional Planned Future Potable Supplies		**7,700**	**7,700**	**7,700**	**7,700**	**7,700**
Total Potable Supplies		**28,992**	**30,714**	**25,771**	**25,771**	**30,714**
Total Additional Planned Future Non-Potable Supplies		**6,300**	**6,300**	**6,300**	**6,300**	**6,300**
TOTAL WATER SUPPLY		**35,292**	**37,014**	**32,071**	**32,071**	**37,014**

Source: City of Tracy 2020 UWMP, Tables 7-4 and 7-5, June 2021.

(a) Percent of historical use.

(b) Information provided by SSJID. SSJID's reliability estimates for a five consecutive year drought were based on the historical supplies available for the SCWSP during the 2012 to 2016 drought period. During 2012, 2013, and 2016 (the first, second, and fifth years), SSJID was able to provide the full allocation to SCWSP participants, whereas during 2014 and 2015 (the third and fourth years), SSJID was only able to provide 75 percent of the full allocation to SCWSP participants.

(c) Groundwater and recycled water volumes assume the City invests in infrastructure and/or permitting.

(d) ASR volumes assume surplus supplies are available in wet years to inject and store, as well as additional investment in ASR construction and operation.

5.6.2 Emergency Water Supply Conditions

During the recent drought conditions in California, water supply deliveries from the SWP and CVP (and other surface water supply sources throughout California) were severely reduced and even the availability of pre-1914 water rights was challenged. Many water supply agencies, including the City, implemented their Water Shortage Contingency Plans, including mandatory water conservation measures, to reduce water use. Even with 0 percent deliveries from the City's USBR CVP agricultural supplies in 2014, the diversity of the City's water supply portfolio together with water conservation efforts by the City's customers allowed the City to meet all water demands. If the recent drought were to re-occur, and deliveries of surface water supplies are reduced further, the City's Water Shortage Contingency Plan would be enacted as needed.

The City's Water Shortage Contingency Plan includes shortage response actions for six water shortage levels up to greater than 50 percent shortage due to foreseeable or unforeseeable events. The City's Water Shortage Contingency Plan is included in Appendix H of the 2020 UWMP. The City may implement demand reduction actions, supply augmentation, mandatory restrictions, and other actions as appropriate for the shortage level to reduce the gap between supply and demand.

Further, the City has prepared a Water System Emergency Response Plan which provides a framework for emergency response by the City's Utilities Department by describing the department's emergency management organization, roles, and responsibilities and emergency policies and procedures. The Water System Emergency Response Plan provides action plans to be implemented to address the emergency.

5.6.3 Non-Potable Water Supply Reliability

Recycled water supplies are generally regarded as being highly reliable water supplies, even during drought conditions. This is because wastewater flows are primarily generated from interior water uses which generally remain about the same throughout the year and during drought conditions (reductions in water use during drought conditions are primarily the result of reduced exterior water uses which generally do not become wastewater flows). For this reason, it is assumed that recycled water supplies will be 100 percent reliable under all hydrologic conditions.

5.7 SUFFICIENCY OF THE CITY'S WATER SUPPLIES

5.7.1 Potable Water Supply Availability

Table 5-14 summarizes the projected availability of the City's existing and planned future potable water supplies compared with projected water demands in normal, single dry and multiple dry years at buildout.

To be conservative, water demands were assumed to be at normal levels. With future planned projects implemented, the results of the assessment show that water supply is sufficient during normal years. However, during a single dry year or a multiple dry year period, the City must depend more heavily on conservation efforts, groundwater, and the proposed future supply projects to overcome the gap between supply and demand. As described in the City's 2020 UWMP, these findings are primarily due to projected reduced reliability of the City's CVP supplies and SSJID supplies in dry years.

Table 5-14. Summary of Buildout Total Water Supply Versus Demand During Hydrologic Normal, Single Dry, and Multiple Dry Years[a]

Hydrologic Condition		Supply and Demand Comparison, af/yr
Normal Year[b]		
Available Total Water Supply		40,168
Total Water Demand		39,800
	Potential Surplus (Deficit)	368
	Percent Shortfall of Demand	-
Single Dry Year[c]		
Available Total Water Supply		30,259
Total Water Demand		39,800
	Potential Surplus (Deficit)	(9,541)
	Percent Shortfall of Demand	24%
Multiple Dry Years[d]		
Year 1	Available Total Water Supply[e]	35,292
	Total Water Demand	39,800
	Potential Surplus (Deficit)	(4,508)
	Percent Shortfall of Demand	11.3%
Year 2	Available Total Water Supply	37,014
	Total Water Demand	39,800
	Potential Surplus (Deficit)	(2,786)
	Percent Shortfall of Demand	7.0%
Year 3	Available Total Water Supply	32,071
	Total Water Demand	39,800
	Potential Surplus (Deficit)	(7,729)
	Percent Shortfall of Demand	19.4%
Year 4	Available Total Water Supply	32,071
	Total Water Demand	39,800
	Potential Surplus (Deficit)	(7,729)
	Percent Shortfall of Demand	19.4%
Year 5	Available Total Water Supply	37,014
	Total Water Demand	39,800
	Potential Surplus (Deficit)	(2,786)
	Percent Shortfall of Demand	7.0%

(a) Water demands are from Table 4-16.
(b) Normal Year supplies are from Table 5-11
(c) Single Dry Year supplies are from Table 5-12.
(d) Multiple Dry Year supplies are from Table 5-13
(e) Assumes 0 percent of the City's storage in Semitropic is available for the first year.

To close the gap between supply and demand during dry years, the City will need to implement its Water Shortage Contingency Plan to reduce water demands and implement future water supply projects. This includes full implementation of the proposed Recycled Water Distribution Network and Exchange Program and expansion of the ASR Program. Delays in implementing these projects could result in greater water supply shortages and the need for additional water conservation to meet demands. Investments in wet year water supplies will also be needed to refill storage in Semitropic and expand the City's ASR program.

The dry year shortfalls presented in Table 5-14 include water supply and demand projections with numerous uncertainties and the situation is dynamic and discussed in Section 7 of the 2020 UWMP. The City continues to work on strategies and actions to address the projected water supply shortfall. Uncertainties are itemized below:

- The Bay-Delta Plan Amendment implementation is under negotiation. The SSJID and others are continuing negotiations with the SWRCB on implementation of the Bay-Delta Plan Amendment for water supply cutbacks, particularly during droughts. This is a dynamic situation and the projected drought cutback allocations may need to be revised before the next (i.e., 2025) UWMP depending on the outcome of ongoing negotiations. The City has considered a conservative estimate of the potential impacts of the Bay-Delta Plan Amendment on the SCWSP (and therefore the City), which is provided in Appendix G of its 2020 UWMP.
- The supply yield of the City's development of additional ASR and recycled water supplies are accounted for in current supply projections. However, implementation of these projects will require significant investment by the City. Similarly, investments in wet years supplies will be needed to refill storage in Semitropic and expand the City's ASR program.
- The City continues to work closely with the USBR and SSJID on their rationing policies to ensure that M&I needs can be met. Rationing policies may potentially be revised.
- The City's projected water demands are subject to change in the future based on water conservation policies and regulations for current and future development, and the pace and extent of development.
- Frequency and duration of cutbacks and, therefore, the shortfalls are also uncertain. In addition to the supply volumes, the above listed uncertainties would also impact the projected frequency and duration of shortfalls.

5.7.2 Recycled Water Supply Availability

Recycled water will be treated to a tertiary level in accordance with Title 22 requirements at the City's WWTP and will be distributed to recycled water use areas within the City's SOI for use for landscape irrigation and other non-potable uses and will be used as part of the Recycled Water Distribution Network and Exchange Program. It is anticipated that with expansion of the City's WWTP adequate recycled water supplies will be available on an annual basis to meet the projected recycled water demands at buildout of the City's General Plan.

The projected future use of recycled water supplies to meet non-potable water demands such as landscape irrigation within the City's service areas is critical to reduce potable water demands and reserve the City's available potable water supplies for their most important uses and to ensure that the City has adequate water supplies to meet future water demands. Without this future recycled water use within the City's service areas, and without the Recycled Water Distribution Network and Exchange Program, the City would have inadequate potable water supplies to meet anticipated future water demands.

5.8 WATER MANAGEMENT STRATEGIES AND OPTIONS

The City has developed strategies and actions to address the projected supply shortfalls. These are discussed in the City's 2020 UWMP and summarized below.

5.8.1 Recycled Water for Non-Potable Use

The City continues to develop recycled water supplies as discussed in Section 5.5.1. Recycled water is planned to augment non-potable demands that would otherwise be supplied with potable water. Buildout potable water demands could be less than the current projections and therefore the resultant supply shortage will likely to be smaller.

5.8.2 Future Water Supply Projects

The City continues to evaluate the expansion of its existing supply and to obtain new supply sources, including the ASR Program and Recycled Water Distribution Network and Exchange Program. Other potential supply options, such as direct potable reuse of recycled water, are also being considered.

The City has also recently entered discussions with the Contra Costa Water District (CCWD) and the San Luis & Delta-Mendota Water Authority to explore the City's potential participation in the Phase 2 Los Vaqueros Reservoir Expansion Project. Los Vaqueros Reservoir is an offstream storage facility located in the coastal foothills west of the Sacramento-San Joaquin Delta. CCWD completed construction of the Los Vaqueros Project in 1997 with an original storage capacity of 100,000 acre-feet. CCWD stores water in Los Vaqueros Reservoir that is diverted from the Delta when water quality is favorable for later release and blending when Delta water quality is degraded. An initial expansion, Phase 1, to 160,000 acre-feet was completed in 2012 to address seasonal water quality degradation and drought needs. The reservoir also provides important emergency water supply storage, recreation, and flood management. The proposed Phase 2 expansion project builds upon the successful Phase 1 expansion completed in 2012. The proposed project will include a regional intertie (the Transfer-Bethany Pipeline), improved pump stations and pipelines and could increase the reservoir's capacity up to 275,000 acre-feet. The Transfer-Bethany Pipeline is currently anticipated to be completed in 2025/2026, with the reservoir expansion to be completed by 2030. The City's participation in the project would increase the City's water supply reliability by providing storage of supplies for use in dry years. The estimated cost for 5,000 acre-feet of storage for the City will be approximately $10 million plus an additional $1.5 million for implementation. In October 2021, the Tracy City Council authorized staff to initiate the process to participate in the project and authorized the City Manager to execute the project activity agreement.

The City is also participating in the proposed B.F. Sisk Dam Raise & Reservoir Expansion Project. The proposed B.F. Sisk Dam Raise & Reservoir Expansion by the USBR and the San Luis Delta Mendota Water Authority provides a reliable option for storage of excess water during the wet season and use during drought conditions when needed. The B.F. Sisk Dam and Reservoir, located approximately 50 miles south of the City, is a major storage facility of the Central Valley Project from which the City receives surface water. The project's environmental document has already been prepared for expansion of the reservoir. The proposed project will add 130,000 acre-feet of additional storage capacity in the reservoir. The project's feasibility study is in its final stages of completion and total cost of the expansion project is estimated at $1 billion. If the City participates in the project, water will be delivered to the City's JJWTP from the DMC through an exchange agreement with the USBR and other participating agencies. The estimated cost for 5,000 acre-feet of storage for the City will be approximately $38 million. In June 2022, the Tracy City Council authorized staff to initiate the process to participate in the project and authorized the City Manager to execute the project activity agreement.

5.8.3 Implementation of Demand Management Measures

The City has an active water conservation program and continues to implement the demand management measures described in Section 9 of the City's 2020 UWMP. Further, in response to the anticipated future shortfalls, the City has developed a robust Water Shortage Contingency Plan that systematically identifies ways in which the City can reduce water demands. The Water Shortage Contingency Plan is included in Section 8 of the City's 2020 UWMP.

5.8.4 Policy-Based Water Efficiency Tools

The City is currently exploring other policy-based water efficiency tools that other supply-constrained agencies across California have implemented. These policy-based tools are often bundled together and referred to as Water Demand Offset (WDO) or Water Neutrality policies. Through these policies, project developers are generally required to offset the new demand anticipated by the development through some combination of demand mitigation options, such as:

- **On-site retrofits.** Project developer with existing property reduces total projected water demand by retrofitting existing property with efficient water fixtures. If projected water demand is reduced below baseline for existing property, no off-site WDOs are required. If not, offsite WDOs are required.
- **Off-site retrofits.** Project developer coordinates and pays for installation of water efficient fixtures at other properties or converts existing irrigation systems to recycled water for other off- site properties, typically those owned by other entities.
- **On-site reuse.** Larger scale developments are required to implement on-site reuse of water, including rainwater, greywater, stormwater, and blackwater, as has recently been implemented by the Cities of San Francisco and Menlo Park.
- **Supply augmentation.** Project developer secures its own water supply to serve the development, either through direct provision of water to the development or through an agreement to transfer rights to the water supplier.

- **WDO fees.** Project developer pays fees to implementing entity based on the amount of water offset, and the agency uses the fees to fund water conservation programs. Such conservation programs could include system water loss mitigation projects (e.g., capital improvement, Advanced Metering Infrastructure [AMI] meters, etc.), purchase of water efficient equipment (e.g., NO-DES hydrant flushing machine to recycle water used to flush mains), and recycled water system infrastructure, as well as fixture rebate or retrofit and education-based conservation programs.

Such policies could be designed as a "net neutral" policy wherein the new development is required to offset all new demands associated with the development project and minimize the overall supply reliability impacts for the existing customers.

5.9 SUMMARY OF WATER SUPPLY RECOMMENDATIONS

The following summarizes recommendations related to the City's water supplies:

- Provisions for ammonia addition should be added to the City's existing Lincoln Well, Lewis Manor Well, Park & Ride Well and Ball Park Well, and any future wells, to provide maximum flexibility for the City's use of groundwater in conjunction with the City's surface water supplies which are disinfected through chloramination.
- The City's ASR Program should be expanded in the future to provide up to 1,000 af/yr of supply. The City is considering requesting an amendment to its ASR permit to allow for the use of treated CVP supplies for ASR injection, in addition to the SCWSP water supplies. This would provide more operational flexibility for ASR injection and allow the City to optimize the storage of surface water supplies in wet years for later extraction in dry years. An evaluation of potential ASR options and operational scenarios should be conducted as additional ASR wells are planned to determine if dedicated SSJID supply pipelines to the ASR wells will be required if the City's ASR permit cannot be modified to allow for other supplies to be injected. See Chapter 8 for additional discussion about the City's future ASR wells.
- The City should continue discussions with the Contra Costa Water District for the City's participation in the Phase 2 Los Vaqueros Reservoir Expansion Project. The City's participation in the project would increase the City's water supply reliability by providing storage of supplies for use in dry years.
- The proposed Recycled Water Distribution Network and Exchange Program should be developed as soon as possible to provide for the exchange of recycled water supplies for surface water supplies which can be treated and used to meet the City's potable water demands. The City's 2020 UWMP assumes an exchange quantity of 7,500 af/yr; however, if this amount could be increased, projected water shortages may be reduced. Subsequent revisions to the projected potable water demand and/or the water supply availability and reliability assumptions may change the required quantities and timing of the proposed Recycled Water Distribution Network and Exchange Program.

- Development the Recycled Water Distribution Network and Exchange Program will require an expansion of the City's WWTP to be able to produce the recycled water required for the exchange and the design and construction of a recycled water pipeline to discharge recycled water to the DMC downstream of the City's JJWTP intake. Additional discussion of the pipeline required for the Recycled Water Distribution Network and Exchange Program is provided in Chapter 9.
- The City's recycled water system should continue to be developed to the maximum extent possible to allow for irrigation demands to be met with recycled water supplies to offset the demand for potable water supplies. The quantity required is estimated to be 6,300 af/yr by buildout based on the recycled water use assumptions described in Chapter 4.

As described in this Citywide Water System Master Plan Update, and in the City's 2020 UWMP, water supply conditions continue to change in California, and the availability and reliability of the City's water supplies may continue to change in the coming years. City staff are continuously monitoring water supply conditions and making adjustments to water system operations as needed. Additional ASR wells and/or other infrastructure improvements may be needed to serve developments which rely on water supplies with agricultural rights under various agreements with the City. The water supply recommendations described above, and their associated costs, may need to be refined in the future as water supply conditions change.

CHAPTER 6
System Performance and Operational Criteria

6.1 OVERVIEW

The purpose of this chapter is to define the recommended performance and operational criteria for the City's potable and recycled water distribution systems. For the potable water system, these criteria include recommendations for the required fire flow and flow duration, definitions of "emergency events", and recommendations for surface water treatment capacity, system storage capacity (operational, fire flow, and emergency components), system pumping capacity, minimum and maximum system pressures, and maximum pipeline velocity and head loss. The recycled water system performance and operational criteria includes recommendations for recycled water treatment capacity, system storage capacity (seasonal and operational components), system pumping capacity, minimum and maximum system pressures, and maximum pipeline velocity and head loss.

The City currently uses the City Design Standards (dated February 2020) and City Standard Plans and Specifications (dated February 2020) for the planning and design of its potable and recycled water distribution systems. The City Design Standards and City Standard Plans and Specifications should be referenced for specific design information for water system facilities as applicable.

Key water system design criteria and operational standards from the City Design Standards and City Standard Plans and Specifications documents are incorporated into this chapter; however, additional explanation and discussion have been added to further describe various system recommendations. The following sections of this chapter present the recommended performance and operational criteria for the City's potable and recycled water systems:

Potable Water System

- General Potable Water System Reliability and Recommendations
- Fire Flow Requirements
- Potable Water System Capacity During High Demand Periods
- Water Treatment Capacity
- Potable Water Storage Capacity
- Potable Water Pumping Facility Capacity
- Potable Water Critical Supply Facilities
- Potable Water Transmission and Distribution Pipeline Sizing and Recommended System Pressures

Recycled Water System

- Recycled Water Demand Condition Evaluation
- Recycled Water Treatment Capacity
- Recycled Water Storage Capacity
- Recycled Water Pumping Facility Capacity
- Recycled Water Transmission Pipeline Sizing and Recommended System Pressures

6.2 POTABLE WATER SYSTEM

Components of the recommended performance and operational criteria for the City's potable water system are discussed below.

6.2.1 General Potable Water System Reliability and Recommendations

Attention to enhancing the reliability of the system under all conditions is an important part of maintaining high quality water service. Water system reliability is achieved through a number of system features including: (1) appropriately sized storage facilities, (2) redundant or "firm" pumping, transmission, and treatment facilities where required, and (3) alternate power supplies. Reliability and water quality are also improved by designing looped water distribution pipelines and avoiding dead-end distribution mains whenever possible. Looping pipeline configurations reduces the potential for stagnant water and the associated problems of poor taste and low chlorine residuals. In addition, proper valve placement is also necessary to maintain reliable and flexible system operation under normal and abnormal operating conditions.

6.2.1.1 Water Quality Standards

Water quality standards largely pertain to protecting public health and consistently delivering a satisfactory product to the customer. The U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board Division of Drinking Water (DDW) are the agencies responsible for establishing water quality standards. The EPA and DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The City, as water purveyor, is responsible for ensuring that the applicable water quality standards and regulations are met at all times.

6.2.1.2 Recommendations for New Developments

Various policies to reduce water use and comply with water efficiency standards were recommended in Chapter 2 for future service areas and new developments within the City. These policies were recommended to assist the City with achieving its water conservation goals and maintaining the long-term sustainability of its water resources. As new developments are integrated into the City's existing water system, the recommended policies discussed in Chapter 2 should be reviewed for compliance. In addition, proposed water system facilities located in the future service areas and new developments within the City should also meet the recommended system performance criteria (e.g., minimum and maximum system pressures) discussed in the following sections and more specifically under *Section 6.2.8 Potable Water Transmission and Distribution Pipeline Sizing and Recommended System Pressures.*

6.2.2 Fire Flow Requirements

The City's Public Works Department operates and maintains the water distribution system within the City, but the City's Fire Department (Fire Department) is concerned with the availability of adequate water supply for firefighting purposes. Consequently, the Fire Department establishes minimum water flows and residual system pressures during a fire fighting event that the City is responsible for providing from the potable water system.

The Fire Department uses the California Fire Code (CFC) Table B150.1 *Minimum Required Fire Flow and Flow Duration for Buildings,* to assist them in establishing minimum fire flows and durations for individual structures. The recommended fire flow requirements for the City based on various land use designations are presented in Table 6-1. These fire flow requirements were developed based on discussions with the Fire Department's Fire Marshal and will be used for the evaluation of the existing and future water system.

For planning purposes, the minimum fire flows identified in Table 6-1 are to be met concurrently with maximum day demand conditions while maintaining a minimum residual system pressure of 20 pounds per square inch (psi) throughout the water system. This criterion has been decreased from the 2012 WSMP, which used 30 psi as the minimum residual system pressure during a single fire flow event. For this Citywide Water System Master Plan, the criterion has been adjusted for consistency with the Fire Department's requirements and typical industry standards.

For large pressure zones, the City's water system should also have the capability to meet a system demand condition equal to the occurrence of a maximum day demand with two simultaneous fire flow events within that pressure zone while maintaining a minimum residual system pressure of 20 psi throughout the water system[1]. This conservative assumption of two simultaneous fire flow demands will help stress the City's water system and determine if the water system can provide reliable service during high demand conditions. Additionally, as discussed in subsequent sections of this chapter, fire flows presented in Table 6-1 and their expected duration will also be used to establish the City's storage capacity requirements.

[1] It is assumed that these two fire flow events will consist of one smaller single family residential fire flow combined with another larger industrial fire flow.

Table 6-1. Recommended Fire Flow Requirements[a,b]

Land Use Designation	Non-Sprinklered[c]			Sprinklered[c,d]		
	Fire Flow, gpm	Duration, hours	Recommended Storage, MG	Fire Flow, gpm	Duration, hours	Recommended Storage, MG[j]
Single Family Residential[e]	1,500	2	0.18	1,500	2	0.18
Multi Family Residential[f]	2,500	2	0.30	2,500	2	0.30
Commercial/Office[g]	6,000	4	1.44	3,500 [i]	4	0.72
Industrial	8,000	4	1.92	4,500 [i]	4	0.96
Institutional[h]	8,000	4	1.92	4,500 [i]	4	0.96

(a) Construction type and fire flow calculation area are not generally known during the development of a master plan; consequently, fire flow requirements set forth in this table are based on previous estimates for these land use types and similar communities.

(b) Unique projects or projects with alternate materials may require higher fire flows and should be reviewed by the Fire Marshal on a case-by-case basis (e.g., proposed commercial/industrial areas and schools).

(c) Specific fire flows were determined from Table B105.1 of the 2016 CFC, and depend on construction type and fire flow calculation area. Refer to Section 903 of the 2016 CFC and Section 9.06.060 of the City of Tracy Municipal Code for automatic sprinkler system requirements.

(d) As stated in the City of Tracy Design Standards (February 2020), the Fire Marshal normally allows up to a 50 percent reduction in fire flow if a building is provided with an automatic sprinkler system. However, the CFC also requires that no fire flow be less than 1,000 gpm for single family residential or 1,500 gpm for all other building types. For a more conservative fire flow estimate, requirements for sprinklered Single Family and Multiple Family Residential buildings were not reduced for this Citywide Water Master Plan.

(e) Single Family Residential includes Very Low and Low Density Residential land uses.

(f) Multi Family Residential includes Medium, High, and Very High Density Residential land uses.

(g) Commercial/Office includes Commercial, Office, Motel/Hotel and Mixed Use land uses.

(h) Institutional includes Medical, Public Facilities, School, Airport, Church, and Cemetery land uses.

(i) Fire flow includes a 500 gpm demand for on-site sprinkler flow.

(j) Recommended storage volumes do not include volume associated with 500 gpm sprinkler flow.

6.2.3 Potable Water System Capacity During High Demand Periods

Maximum day demand plus fire flow and peak hour demand conditions will be used to assess the adequacy of the City's potable water system during high demand periods. Adopted peaking factors for maximum day and peak hour demands are discussed in Chapter 4. The following sections discuss the assumptions and recommended criteria for each demand condition.

6.2.3.1 Maximum Day Demand plus Fire Flow

In accordance with typical industry standards, the City's water system should have the capability to meet a system demand condition equal to the occurrence of a maximum day demand concurrent with either one or two simultaneous fire flow event(s) while meeting the recommended system performance criteria (e.g., minimum and maximum system pressures) discussed under *Section 6.2.8 Potable Water Transmission and Distribution Pipeline Sizing and Recommended System Pressures.*

Maximum day demand plus fire flow should be met from a combination of supply sources (i.e., treated surface water from the JJWTP and SSJID supplies plus groundwater) and treated water storage reservoirs. The analysis of specific fire flow evaluations will be conducted assuming the largest booster pump at each pump station is offline (i.e., firm booster pumping capacity). In addition, the City's groundwater well system (well pumps) will be assumed to pump at firm capacity (i.e., firm groundwater pumping capacity) during a specific fire flow evaluation. Firm groundwater pumping capacity assumes that 20 percent of the City's groundwater wells will be out of service at any given time due to maintenance or operational issues.

These conservative assumptions ensure the reliability and flexibility of the system to provide sufficient flow during emergency fire flow conditions. It is also assumed that the pump stations with only one booster pump or without back-up power capability (either an on-site generator or adaptor for a plug-in generator) will not be available during an emergency fire flow analysis.

6.2.3.2 Peak Hour Demand

Peak hour demand should be met from a combination of supply sources (i.e., treated surface water from the JJWTP and SSJID supplies plus groundwater) and treated water storage reservoirs. Assumptions regarding firm pumping capacity will also apply during a peak hour demand condition. During a peak hour demand condition, the City's water system should be able to meet the recommended system performance criteria (e.g., minimum and maximum system pressures) discussed under *Section 6.2.8 Potable Water Transmission and Distribution Pipeline Sizing and Recommended System Pressures.*

6.2.4 Water Treatment Capacity

Sufficient water treatment capacity from a combination of the existing and/or expanded JJWTP, the City's treated surface water supplies from SSJID, and groundwater wells should be available to meet the City's maximum day demand condition. In addition, the City's goal is to meet maximum day demands without relying on groundwater. Sufficient treated water pumping capacity should also be available to assist in meeting a maximum day demand condition.

6.2.5 Potable Water Storage Capacity

The total potable water storage capacity required will be based on the following three components within each pressure zone:

- Operational Storage
- Fire Storage
- Emergency Storage

A discussion of these three storage components, along with a discussion of "credits" for groundwater supply and treated surface water supply, follows.

6.2.5.1 Operational Storage

Over any 24-hour period, water demands will vary. Typically, higher water demands will occur during the early morning hours when people are irrigating landscape and getting ready to go to work or school. Water demands will then decline to some nominal baseline level (depending on the proximity to water use patterns of adjacent commercial/industrial areas), and will then begin to increase again depending on outside water needs (and corresponding temperature), until it reaches a higher water demand in the early evening hours as people return home from work or school. Throughout the year, the peaks of this cycle will vary according to customer needs; thereby, creating maximum day and peak hour demands.

Typically, water treatment plants, supply turnouts, and/or wells are operated at a constant rate over a 24-hour period (baseline) and augmented by additional flow from storage tanks, and/or wells during high demand periods, as needed. Storage tanks are normally refilled when demands drop below the baseline water production flow rate. The storage volume used to meet these peak demand periods is called operational storage.

The operational storage requirements should be calculated based on the diurnal demand in a particular pressure zone or service area. If sufficient data is not available to develop a diurnal demand, then the recommended volume of water to be held in reserve for operational storage should be at least equal to 30 percent of the total volume of water used on a maximum day demand condition.

6.2.5.2 Fire Storage

As discussed above, fire flow requirements are identified in the CFC. These requirements are based on flow (in gpm), size of building (in square feet), and type of construction (wood frame, metal, masonry, installation of sprinklers, etc.). After a fire flow requirement is established, it is multiplied by the required fire flow duration to produce an estimate of the total volume of fire flow storage required. Table 6-1 presents the recommended fire flow criteria and associated required fire flow storage.

Sufficient fire flow storage should be available for the following simultaneous fire flow events in larger pressure zones (i.e., Zones 1 and 2):

- A Single Family Residential fire flow of 1,500 gpm for a duration of two hours. The resulting volume required for fire flow storage is 0.18 MG.
- An Industrial fire flow of 4,000 gpm for a duration of four hours (if sprinklered). The resulting volume required for fire flow storage is 0.96 MG[2].

If unavailable by gravity storage, the fire flow must be supplied with a National Fire Protection Association (NFPA) rated fire pump. If an NFPA rated fire pump is not used, then a pump(s) and motor(s) combination with a backup power source of sufficient capacity to meet the required maximum fire flow and minimum residual pressure requirements, as determined by the Fire Marshal, will be required.

6.2.5.3 Emergency Storage

A reserve of stored water is also required to meet demands during an emergency. An emergency is defined as an unforeseen or unplanned event that may degrade the quality or quantity of potable water supplies available to serve customers. There are three types of emergency events that a water utility typically prepares for:

- Minor emergency. A fairly routine, normal, or localized event that affects a few customers, such as a pipeline break, malfunctioning valve, hydrant break, or a brief power loss. Utilities plan for minor emergencies and typically have staff and materials available to correct them quickly.
- Major emergency. A disaster that affects an entire, and/or large, portion of a water system, lowers the quantity and quality of the water, or places the health and safety of the community at risk. Examples include water treatment plant failures, raw water contamination or major power grid outages. Water utilities infrequently experience major emergencies.
- Natural disaster. A disaster caused by natural forces or events that create water utility emergencies. Examples include earthquakes, forest or brush fires, hurricanes, tornados or high winds, floods, and other severe weather conditions such as freezing or drought that damage or cause water system facilities to not be able to operate.

Determination of the required volume of emergency storage is a policy decision based on the assessment of the risk of failures and the desired degree of system reliability. The amount of required emergency storage is a function of several factors including the diversity of the supply sources, redundancy and reliability of the production facilities, and the anticipated length of the emergency outage. In developing an emergency storage requirement for the City, typical industry standards were used.

[2] Recommended storage does not include volume associated with 500 gpm sprinkler flow (refer to Table 6-1). Assumes a 50 percent reduction in the required fire flow due to the installation of fire sprinklers.

The American Water Works Association (AWWA) states that no formula exists for determining the amount of emergency storage required, and that the decision will be made by the utility based on a judgment about the perceived vulnerability of the system. For this Citywide Water System Master Plan, it has been assumed that the emergency storage requirement will be based on minor emergencies and *specific* major emergency criteria. The 2012 WSMP used an emergency storage volume requirement of two (2) times the average day demand. After reviewing emergency storage criteria for other similar water systems within the region, and taking into account the City's redundant sources of supply (JJWTP, SSJID, and groundwater), it is recommended that the City reduce the minimum quantity of emergency storage volume required to 1.5 times the average day demand for this Citywide Water System Master Plan Update.

6.2.5.4 Groundwater Credit

Based on the City's available groundwater wells, groundwater storage can account for a portion of the recommended emergency storage. The following must be true to use the groundwater supply to offset the need to provide surface storage:

- Groundwater supply is of potable water quality and can be reliably accessed (i.e., wells are equipped with on-site emergency generators).
- Groundwater supply is not already being relied upon to meet the City's average day demand requirements.
- Sufficient water distribution facilities are available to distribute this water to demand areas.

It will be assumed that only the firm groundwater supply will be available for a groundwater credit to offset the City's emergency storage requirement (i.e., 20 percent of wells could be out of service at any given time).

6.2.5.5 Treated Surface Water Supply Credit

Because the City currently has two independent sources of treated surface water supply (JJWTP and SSJID supplies), some quantity of treated surface water supply capacity can account for a portion of the City's recommended emergency storage. For this Citywide Water System Master Plan, it will be assumed that the smaller of the treated surface water supply sources (SSJID) will be available to offset a portion of the emergency storage requirement. However, the following must be true to use treated surface water supply to offset the need to provide surface storage:

- Treated surface water supply can be reliably accessed (i.e., treated surface water supply facility is equipped with on-site emergency generator).
- Sufficient treated surface water booster pumping facilities are available to distribute this water to demand areas.

6.2.5.6 Total Storage Capacity Recommended

The City's recommended potable water storage capacity should be the sum of the following components:

- Operational: Volume of water necessary to meet diurnal peaks observed throughout the day, assumed to be equivalent to at least 30 percent of the maximum day demand.
- Fire Flow: Volume of water necessary to supply two simultaneous fire flow events in larger pressure zones (i.e., Zones 1 and 2).
- Emergency: Volume of water necessary to provide 1.5 times an average day demand.
- Groundwater Credit: Equal to the firm groundwater supply that can be reliably accessed (facilities equipped with auxiliary power).
- Treated Surface Water Supply Credit: Equal to the smaller of the available treated surface water supply sources (SSJID).

It should be noted that the sum of groundwater and treated surface water supply credits cannot be greater than the recommended emergency storage volume. The amount of total system storage and system peaking capacity required to meet these criteria will change over time as the City continues to grow and potable water demands increase.

6.2.6 Potable Water Pumping Facility Capacity

Sufficient firm water system pumping capacity should be provided to meet the greater of the following two demand conditions within each pressure zone and any additional pressure zone(s), which are provided service from this particular pressure zone.

1. A maximum day demand with two simultaneous fire flow events in larger pressure zones (i.e., Zones 1 and 2 should assume one smaller single family residential fire flow combined with another larger industrial fire flow) with booster pumps and well pumps assumed to operate at firm pumping capacity.
2. A peak hour demand with booster pumps and well pumps assumed to operate at firm pumping capacity.

The highest demand requirement between these two demand conditions sets the water system pumping capacity requirement. However, sufficient pumping capacity should also be provided so that the maximum day demand within each pressure zone can be supplied using firm pumping capacity with no assistance from storage reservoirs.

6.2.7 Potable Water Critical Supply Facilities

Critical pumping facilities are defined as those facilities that provide service to pressure zone(s) and/or service area(s) which do not have sufficient emergency storage available (see *Section 6.2.5.3 Emergency Storage*) and that meet the following criteria:

- The largest pumping facility that provides water to a particular pressure zone and/or service area.
- A facility that provides the sole source of water to single or multiple pressure zones and/or service areas.
- A pumping facility that provides water from a supply turnout.
- A pumping facility that provides water from key groundwater supply wells (depends on capacity, quality and location).

All critical pumping facilities should be equipped with an on-site, back-up power generator. At less critical facilities, a plug-in adapter will be used to allow interconnection to a portable generator, which will be brought to the site by City staff during a prolonged power outage. In addition, portable generator booster connections will be configured at all tank/booster pump locations.

The City should also consider the following policies to make operations of the City's pumping facilities more efficient:

- Install solar power systems, or alternative power sources, at existing and new pump stations and other water system facilities, as feasible, to reduce electrical power consumption.
- Increase the frequency of routine O&M activities for existing pump stations and wells to maintain pump efficiencies and reduce power demands.

6.2.8 Potable Water Transmission and Distribution Pipeline Sizing and Recommended System Pressures

The following criteria will be used as guidelines for sizing new transmission and distribution pipelines. However, the City's existing system will be evaluated on a case–by-case basis. For example, if an existing pipeline experiences head loss in excess of the criteria described below during a maximum day plus fire flow event, this condition, by itself, does not necessarily indicate a deficiency as long as the minimum system pressure criterion is satisfied.

Consequently, the City's existing system will be evaluated using pressure as the primary criterion; and secondary criteria, such as pipeline velocity, head loss, age, and material type, will be used as indicators to locate where water system improvements may be needed.

New transmission and distribution pipelines to serve the City's future service areas should be located within designated utility corridors wherever possible. These designated utility corridors should be within public rights-of-way to minimize or eliminate the need for utility easements within private property.

6.2.8.1 Potable Water Transmission System

Transmission pipelines are generally 18-inches in diameter or larger and should be designed based on the criteria described below for average day, maximum day, and peak hour demand conditions. The criteria reflect industry standards and West Yost's experience working with the City's existing water system.

- Average Day Demand
  - Pressures should be maintained between a maximum of 100 psi[3] and a minimum of 40 psi.
  - Maximum velocity within transmission pipelines should be 3 fps.
  - Head losses within the transmission system pipelines should be limited to 3 feet per thousand feet (ft/kft) of pipeline.
- Maximum Day Demand
  - Pressures should be maintained between a maximum of 100 psi[4] and a minimum of 40 psi.
  - The maximum velocity within the transmission system pipelines should be 6 fps.
  - Head losses within the transmission system pipelines should be limited to 3 ft/kft of pipeline.
- Peak Hour Demand
  - Pressures should be maintained between a maximum of 100 psi[4] and a minimum of 40 psi.
  - The maximum velocity within the transmission system pipelines should be 6 fps
  - Head losses within the transmission system pipelines should be limited to 3 ft/kft of pipeline.

6.2.8.2 Potable Water Distribution System

Distribution pipelines are generally less than 18-inches in diameter and should be sized based on the criteria described below for average day, maximum day plus fire flow, and peak hour demand conditions. The criteria reflect industry standards and West Yost's experience working with the City's existing water system.

- Average Day Demand
  - Service pressures should be maintained between a maximum of 80 psi[4] and a minimum of 40 psi.
  - The maximum velocity within the distribution system pipelines should be 6 fps.

[3] A pressure reducing valve will be required on all water services with a static pressure greater than 80 psi.

[4] A pressure reducing valve will be required on all water services with a static pressure greater than 80 psi.

  - Head losses within the distribution system pipelines should be limited to 7 ft/kft of pipeline

- Maximum Day Demand plus Fire Flow
  - The minimum allowable residual pressure should be 20 psi at the flowing fire hydrant during the occurrence of a single fire flow event for smaller pressure zones.
  - The minimum allowable residual pressure should be 20 psi at the flowing fire hydrants during the occurrence of two simultaneous fire flow events for larger pressure zones.
  - The maximum velocity within the distribution system pipelines should be 12 fps, or the head losses within the distribution system pipelines should be limited to 10 ft/kft of pipeline, whichever criteria is more conservative given the specific hydraulic/system condition.

- Peak Hour Demand
  - Service pressures should be maintained between a maximum of 80 psi[5] and a minimum of 40 psi.
  - The maximum velocity within the distribution system pipelines should be 8 fps, or the head losses within the distribution system pipelines should be limited to 7 ft/kft of pipeline, whichever criteria is more conservative given the specific hydraulic/system condition.

A summary of the recommended potable water system performance and operational criteria is presented in Table 6-2 and reflect typical water system industry standards including the California Safe Drinking Water Act and related laws, and AWWA standards.

[5] A pressure reducing valve will be required on all water services with a static pressure greater than 80 psi.

Table 6-2. Summary of Recommended Potable Water System Performance and Operational Criteria

Component	Criteria	Remarks / Issues
Fire Flow Requirements (flow [gpm] @ duration [hours])		
Single Family Residential	1,500 gpm @ 2 hrs	Existing development will be evaluated on case-by-case basis because of the historical varying standard.
Multi Family Residential	2,500 gpm @ 2 hrs	
Commercial/Office	3,500 gpm @ 4 hrs (with approved automatic sprinkler system)	
Industrial	4,500 gpm @ 4 hrs (with approved automatic sprinkler system)	
Institutional	4,500 gpm @ 4 hrs (with approved automatic sprinkler system)	
Water System Capacity		
Maximum Day Demand plus Fire Flow	Provide firm capacity equal to maximum day demand plus fire flow	Assume two simultaneous fire flow events in larger pressure zones (i.e., Zones 1 and 2).
Peak Hour Demand	Provide firm capacity equal to peak hour demand	
Water Treatment Capacity		
Treated Water Supply Capacity	Provide capacity equal to maximum day demand	--
Treated Surface Water Supply Capacity	Provide capacity equal to maximum month demand	--
Treated Water Pumping Capacity	Provide capacity equal to maximum day demand	--
Water Storage Capacity		
Operational	30 percent of maximum day demand	
Fire	Assume one Single Family Residential fire flow concurrent with a larger Industrial fire flow in larger pressure zones (i.e., Zones 1 and 2)	1,500 gpm @ 2 hrs = 0.18 MG 2,500 gpm @ 2 hrs = 0.30 MG 3,000 gpm @ 4 hrs = 0.72 MG 4,000 gpm @ 4 hrs = 0.96 MG
Emergency	1.5 x average day demand	--
Groundwater Credit (GWC)	Equal to the firm groundwater supply that can be reliably accessed (facilities equipped with auxiliary power)	The maximum combined emergency storage credit is equal to the recommended emergency storage capacity.
Treated Surface Water Credit (TSWC)	Equal to the smaller of the available treated surface water supply sources	
Total Water Storage Capacity	Operational + Fire + Emergency - GWC - TSWC	If possible, total storage should be evaluated by pressure zone.
Pumping Facility Capacity		
Pumping Capacity	Provide the greater of maximum day with two concurrent fire flows in larger pressure zones (i.e., Zones 1 and 2) or peak hour demand within each pressure zone	Assume firm pumping capacity. Sufficient pumping capacity should also be provided so that the maximum day demand can be supplied using firm pumping capacity with no assistance from storage reservoirs.
Backup Power	Equal to the firm capacity of the pumping facility	On-site generator for critical stations.[(a)] Plug-in portable generator for less critical stations.
Water Transmission Line Sizing		
Diameter	18-inches in diameter or larger	Locate new transmission pipelines within designated utility corridors wherever possible.
Average Day Demand Condition	--	Criteria based on requirements for new development, existing transmission mains will be evaluated on case-by-case basis. Evaluation will include review of age, material type, velocity, head loss, and/or pressure.
Minimum Pressure [psi]	40 psi	
Maximum Pressure [psi]	100 psi	
Maximum Head loss [ft/kft]	3 ft/kft	
Maximum Velocity [fps]	3 fps	
Maximum Day Demand Condition	--	
Minimum Pressure [psi]	40 psi	
Maximum Head loss [ft/kft]	3 ft/kft	
Maximum Velocity [fps]	6 fps	
Peak Hour Demand Condition	--	
Minimum Pressure [psi]	40 psi	
Maximum Head loss [ft/kft]	3 ft/kft	
Maximum Velocity [fps]	6 fps	
Hazen Williams "C" Factor	130	For consistency in hydraulic modeling.
Pipeline Material	Ductile Iron	
Water Distribution Line Sizing		
Diameter	Less than 18-inches in diameter	Must verify pipeline size with maximum day plus fire flow analysis. Locate new distribution pipelines within designated utility corridors wherever possible.
Average Day Demand Condition	--	Criteria based on requirements for new development, existing distribution mains will be evaluated on case-by-case basis. Evaluation will include review of age, material type, velocity, head loss, and/or pressure.
Minimum Pressure [psi]	40 psi	
Maximum Pressure [psi]	80 psi	
Maximum Head loss [ft/kft]	7 ft/kft	
Maximum Velocity [fps]	6 fps	
Maximum Day w/ Fire Flow Demand Condition	--	
Minimum Pressure [psi]	20 psi for a single fire flow event in smaller pressure zones; 20 psi for two simultaneous fire flow events in larger pressure zones	
Maximum Head loss [ft/kft]	10 ft/kft	
Maximum Velocity [fps]	12 fps	
Peak Hour Demand Condition	--	
Minimum Pressure [psi]	40 psi	
Maximum Head loss [ft/kft]	7 ft/kft	
Maximum Velocity [fps]	8 fps	
Minimum Pipeline Diameter	--	--
General	8-inches	--
Industrial	12-inches	--
Distribution to cul-de-sac / dead-end street	6-inches	Permanent dead end runs shall be no longer that 250 feet unless in a cul-de-sac.
Distribution to fire hydrants	8-inches	--
Hazen Williams "C" Factor	130	For consistency in hydraulic modeling.
Pipeline Material	Ductile Iron	
Maximum Water Service Pressure	80 psi	Install PRV if service pressure is greater than 80 psi.

(a) A pumping facility is defined as critical if it provides service to pressure zone(s) and/or service area(s) which do not have sufficient emergency storage, and that meet the following criteria:

- The largest facility that provides water to a particular pressure zone and/or service area;
- A facility that provides the sole source of water to single or multiple pressure zones and/or service areas;
- A facility that provides water from a supply turnout; or
- A facility that provides water from key groundwater supply wells (depends on capacity, quality and location).

6.3 RECYCLED WATER SYSTEM

Components of the recommended performance and operational criteria for the City's backbone recycled water system are discussed below.

6.3.1 Recycled Water Demand Condition Evaluation

A peak hour demand condition during an 8-hour irrigation period will be used to assess the adequacy of the City's recycled water system.

6.3.2 Recycled Water Treatment Capacity

Sufficient recycled water treatment capacity should be available to meet the City's maximum day recycled water demand condition.

6.3.3 Recycled Water Storage Capacity

The total recycled water storage capacity required will be based on the following components:

- Seasonal Storage
- Operational Storage

A discussion of these two storage components follows.

6.3.3.1 Seasonal Storage

As described in Chapter 4, landscape irrigation demands are highest during the summer months (when plant evapotranspiration rates are high) and very low during the winter months. Demand for recycled water supplies to meet these seasonally varying demands will also vary month to month, depending on the specific climatic conditions that are occurring. Therefore, some seasonal storage may have to be provided to store recycled wastewater generated during low irrigation demand periods for use during the high summer demand periods. The actual quantity of seasonal storage required, if any, will be determined using an annual water balance between total recycled water supply available and the total seasonal recycled water demand.

6.3.3.2 Operational Storage

Sufficient operational storage should be provided to supply the demands of an eight-hour irrigation period during a maximum summer month demand condition, with a 10 percent demand increase occurring for one hour (i.e., peak hour) during the irrigation period. Due to concerns about water quality, it is recommended that this operational storage be entirely stored within an enclosed reservoir or tank system to limit exposure to potential contaminant sources after treatment, but before distribution and direct use.

6.3.3.3 Total Storage Capacity

The City's recommended recycled water storage capacity should be the sum of the following components:

- Seasonal: Volume of recycled water necessary to balance the required annual recycled water demands with the annual recycled water supply available.
- Operational: Volume of recycled water necessary to supply the demands of an eight-hour irrigation period during a maximum summer month demand condition, with a 10 percent demand increase occurring for one hour.

The amount of total system storage and system peaking capacity required to meet these criteria will change over time as the City continues to grow and recycled water demands increase.

6.3.4 Recycled Water Pumping Facility Capacity

Sufficient pumping capacity should be provided to meet the City's peak hour recycled water demand condition within each pressure zone and any additional pressure zone(s), which are provided service from this particular pressure zone.

6.3.5 Recycled Water Transmission Pipeline Sizing and Recommended System Pressures

Backbone recycled water system transmission pipelines are generally 16-inches in diameter or larger and should be designed based on the criteria described below for a peak hour demand condition.

- Peak Hour Demand
  - Service pressures should be maintained between a maximum of 100 psi and a minimum of 60 psi.
  - The maximum velocity within the transmission system pipelines should be 10 fps; however, a pipeline velocity of 6 fps is desirable.

A summary of the recommended recycled water system performance and operational criteria is presented in Table 6-3.

Table 6-3. Summary of Recommended Recycled Water System Performance and Operational Criteria		
Component	**Criteria**	**Remarks / Issues**
Demand Condition Evaluation		
Peak Hour Demand	Provide capacity equal to peak hour demand during an 8-hour irrigation period	--
Recycled Water Treatment Capacity		
Recycled Water Treatment Capacity	Provide capacity equal to a maximum day demand	--
Recycled Water Storage Capacity		
Seasonal	Equal to volume required to balance the annual demands with the annual supply available	--
Operational	Equal to volume required to supply the demands of an eight-hour irrigation period during a maximum summer month with a 10 percent demand increase occurring for one hour	--
Total Water Storage Capacity	Seasonal + Operational	--
Pumping Facility Capacity		
Pumping Capacity	Provide capacity equal to peak hour demand within each pressure zone	Firm pumping capacity will not be required.
Recycled Water Transmission Line Sizing		
Diameter	16-inches in diameter or larger	--
Peak Hour Demand Condition	--	--
Minimum Pressure [psi]	60 psi	--
Maximum Pressure [psi]	100 psi	--
Maximum Velocity [fps]	10 fps	Pipeline velocity of 6 fps is desirable.
Hazen Williams "C" Factor	130	For consistency in hydraulic modeling.
Pipeline Material	C-900 PVC	

CHAPTER 7
Existing Potable Water System Evaluation

7.1 OVERVIEW

The purpose of this chapter is to first describe the City's existing potable water distribution system, including the corresponding hydraulic model update. Existing water system information was updated through the review of previous reports, maps, plans, record drawings, operation records, GIS files, and other available data provided to West Yost by City staff. Using this information, the City's current hydraulic model was then updated to represent the existing potable water system.

The remainder of the chapter presents an evaluation of the City's existing potable water distribution system and its ability to meet the recommended performance and operational criteria (previously described in Chapter 6) under existing water demand conditions. The evaluation includes an analysis of water storage capacity, pumping capacity, and the existing water system's ability to meet recommended water system performance and operational criteria under peak hour demand and maximum day demand plus fire flow scenarios. This evaluation does not include a condition assessment of the City's existing water system assets and does not cover replacement of existing infrastructure due to age or physical deterioration.

Evaluations, findings, and recommendations for addressing any deficiencies identified within the existing potable water distribution system are included. Recommendations were used to develop a Capital Improvement Program (CIP), which includes an estimate of probable construction costs. The recommended existing potable water system CIP is described further in Chapter 10.

The following sections of this chapter describe the components of the City's existing potable water distribution system evaluation:

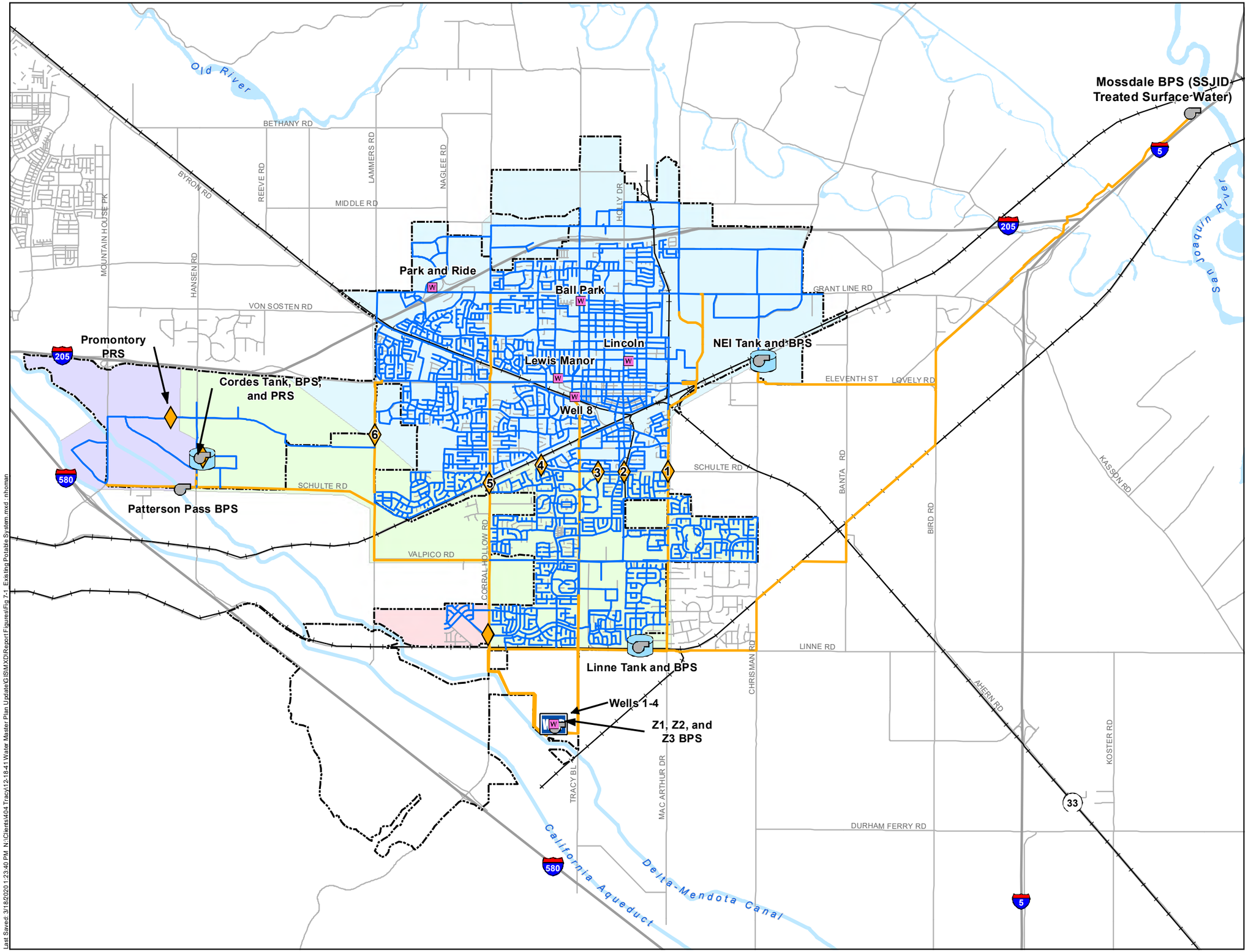
- Description of Existing Potable Water System Facilities
- Hydraulic Model Update
- Existing Potable Water System Evaluation
- Summary of Recommended Existing Potable Water System Improvements

7.2 DESCRIPTION OF EXISTING POTABLE WATER SYSTEM FACILITIES

This section provides a summary of the City's existing potable water system facilities. The City's existing potable water system facilities are located throughout the water service area as shown on Figure 7-1. Additional details regarding each facility are presented below.

7.2.1 John Jones Water Treatment Plant

The City's JJWTP is located just north of the DMC in the southern portion of the City as shown on Figure 7-1. The JJWTP was originally constructed in 1979, expanded in 1988, and then expanded again in 2008. It currently has a treatment capacity of 30 mgd.



Symbology

- Pressure Regulating Station
- Booster Pump Station
- Groundwater Well
- Storage Tank
- WTP John Jones Water Treatment Plant

Pipeline Diameter

- Less than 18-inches
- Greater than or equal to 18-inches

Pressure Zone

- Zone 1
- Zone 2
- Zone 3 (IPC/PPBP)
- Ellis Reduced Zone
- City Limits

Notes:

1. All facilities included in the existing system hydraulic model are shown. Not all existing facilities were included in the model. See Section 7.3.2 for details.
2. Pressure Zones represent the approximate boundaries after the IPC zone split is implemented.
3. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
4. Lewis Manor Well is currently inactive.

TRACY

WEST YOST ASSOCIATES

Figure 7-1

Existing Potable Water System Facilities

City of Tracy
Water System Master Plan Update

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The most recent expansion added treatment through granulated activated carbon and ultraviolet light disinfection. Granulated activated carbon removes dissolved organic compounds contained in the water, and ultraviolet light disinfection provides an additional level of treatment. Several new process upgrades including new flocculation/sedimentation basins, washwater basins, and chemical addition facilities were also added during the expansion. The site plan, process schematic, and hydraulic profile from the JJWTP Expansion Project is provided in Appendix B.

The City operates three surface water intake pumps at the JJWTP with the capacity to pump a total of approximately 27 mgd of raw surface water from the DMC to the JJWTP for treatment. The key characteristics of the existing surface water intake pumps are summarized in Table 7-1.

Table 7-1. Existing Surface Water Intake Pumps[a]

Intake Pump Name	Year Installed	Production Capacity, mgd	Pump Type	Motor Horsepower	Motor Type
Pump No. 1	2008	14[b]	Vertical Turbine	150	VFD[c]
Pump No. 2	2008	14[b]	Vertical Turbine	150	VFD[c]
Pump No. 3	2008	14[b]	Vertical Turbine	150	VFD[c]

(a) Source: JJWTP Expansion Project, Sheet G-8 (Carollo Engineers).
(b) Intake pumps were designed for 15 mgd. However, testing of the installed pumps determined that the actual production capacity of each pump is 14 mgd. In addition, due to the hydraulics of the JJWTP intake, the maximum intake pumping capacity with all three pumps running is 27 mgd.
(c) Variable Frequency Drive.

7.2.2 South County Water Supply Project

The City, in partnership with the cities of Manteca, Lathrop and Escalon, and SSJID, constructed a new surface water treatment plant near Woodward Reservoir in Stanislaus County and new transmission pipelines to deliver treated surface water to each city. The City's treated surface water allocation from the SCWSP is 17 mgd of treatment capacity and 11,120 af/yr of water supply.

Treated surface water from the surface water treatment plant located near Woodward Reservoir is conveyed to the City through a dedicated 36-inch diameter transmission main and pumped to the City by the Mossdale Pump Station located at the intersection of Manthey and Stewart Roads (see Figure 7-1). Water pumped from the Mossdale Pump Station first fills the City's Linne and NEI storage tanks through 18-inch and 30-inch diameter transmission mains before being pumped into the City's distribution system to serve system demands. The Mossdale Pump Station is operated by SSJID.

7.2.3 Groundwater Wells

The City currently has eight groundwater production wells that provide the City's potable water system with groundwater supply. Currently, the Lewis Manor Well is inactive due to high levels of manganese. As discussed in Chapter 5, a ninth well, Well 8, was constructed in 2004 to be used for the City's ASR Program, but can also be used as an extraction well to serve water demands directly under normal and/or emergency conditions.

The groundwater wells located at the JJWTP (Wells 1-4) pump directly into the Chlorine Contact Basin or Clearwell #2, where the groundwater is blended with the finished surface water and chlorinated prior to distribution. Groundwater from the other remaining wells located in Zone 1 is chlorinated at each well site and pumped directly into the distribution system.

The locations of these existing groundwater wells are shown on Figure 7-1. Table 7-2 presents a summary of these existing groundwater well facilities with key characteristics such as design capacity and age.

Table 7-2. Existing Groundwater Wells

Well Name/Number	Well Location/Address	Year Drilled	Total Well Depth (Casing Depth), ft	Casing Diameter, inches	Depth of Perforated Zone, ft[a]	Design Capacity, gpm	Production Capacity, mgd
Well 1	JJWTP	1986	1,010 (1,000)	16"	450-550 580-980	1,500	2.2
Well 2	JJWTP	1989	990 (870)	16"	420-850	2,000	2.9
Well 3	JJWTP	1989	1,020 (900)	16"	420-890	2,000	2.9
Well 4	JJWTP	1989	1,020 (950)	16"	380-940	2,000	2.9
Lincoln Well	Lincoln Park	1990	1,000 (1,000)	16"	490-980	2,500	3.6
Well 5[b] (Lewis Manor Well) (Currently Inactive)	902 Twelfth Street (north of Eleventh Street between Tracy Boulevard and Corral Hollow Road)	2000	1,015 (1,000)	18"	410-480 601-630 650-670 805-830 900-930 965-990	2,500	3.6
Well 6 (Park& Ride Well)	2650 North Naglee Road (North of I-205 adjacent to West Valley Mall)	2001/02	1,250 (1,216)	18"	550-598 610-636 656-678 738-754 774-796 966-982 1,014-1,122 1,176-1,196	2,000	2.9
Well 7 (Ball Park Well)	2001 Bessie Avenue (east of Tracy Boulevard south of Grant Line Road)	2002	1,070 (894)	18"	550-598 570-732 850-874	2,500	3.6
Well 8[c]	Tracy Boulevard and Sixth Street	2004	850 (850)	18"	370-460 510-640 680-820	2,500	3.6

(a) Source: GEI Consultants, Summary of Groundwater Conditions November 2007 through November 2008, dated January 23, 2009.
(b) Well is currently inactive due to high manganese levels.
(c) Well 8 can be operated as an injection/extraction well as part of the City's ASR Program.

7.2.4 Water Storage Facilities

The City currently operates five treated water storage reservoirs (two clearwells and three storage tanks). Table 7-3 presents a summary of these existing storage facilities with key characteristics such as storage capacity and age. As shown, the City currently has a total potable water storage capacity of approximately 16.2 MG. However, Clearwell #1 operates as a chlorine contact basin and cannot be counted as system storage capacity. Therefore, the total available potable water storage capacity is reduced to approximately 15.5 MG. The locations of the City's three storage tanks are shown on Figure 7-1 (the two clearwells are located at the JJWTP).

Table 7-3. Existing Treated Water Storage Facilities

Storage Facility Name	Storage Type	Material	Year Constructed	Storage Capacity, MG
Clearwells				
#1[(a)]	Partially Buried Tank	--	1978	0.66
#2[(b)]	Partially Buried Tank	--	1987	4.0
Storage Tanks				
Linne	Fully Buried Tank	Concrete	2005	7.1
NEI	Partially Buried Tank	Concrete	2002	2.4
Cordes	Partially Buried Tank	Concrete	2015[(c)]	2.0
			Total Storage Capacity, MG	**16.2**
			Total Available Storage Capacity, MG	**15.5[(d)]**

(a) Clearwell #1 has a design capacity of 1.0 MG, but it has been reduced to 0.66 MG due to the weir within Clearwell #1. Also known as the Chlorine Contact Basin.
(b) Clearwell #2 has a design capacity of 5.6 MG, but it has been reduced to 4.0 MG due to the weir within Clearwell #1.
(c) Although it was constructed in 2015, the Cordes Tank was not put into service until November 2019.
(d) Does not include Clearwell #1 as it is operated as a Chlorine Contact Basin and cannot be counted as system storage capacity.

7.2.5 Booster Pump Stations

The City currently has eight booster pump stations.[1] The locations of these existing booster pump stations are shown on Figure 7-1 (Zone 1, Zone 2, and Zone 3 booster pump stations are located at the JJWTP). Table 7-4 presents a summary of the existing booster pump stations with key characteristics such as design capacity and number of booster pumps.

The booster pumps located at the JJWTP pump treated surface water supply (from USBR) stored in Clearwell #2 into the City's potable water system. The booster pumps located at the Linne and NEI storage tanks pump treated surface water supply (from SSJID) stored in their respective storage tanks into the City's potable water system. The Cordes Booster Pump Station (BPS) pumps treated surface water supply from the Cordes Tank and serves customers located in the PPBP and the IPC development.

[1] The Patterson Pass Booster Pump Station is inactive since the Cordes Booster Pump Station is now operating. The Zone 4 Booster Pump Station is operational, but is not included in the existing system evaluation because Zone 4 has just started development.

Table 7-4. Existing Booster Pump Stations

Booster Pump Station Name	Location	Year Installed	Pump 1, gpm	Pump 2, gpm	Pump 3, gpm	Pump 4, gpm	Pump 5, gpm	Pump 6, gpm	Rated Capacity[a], gpm	Firm Capacity[b], gpm	Firm Capacity[b], mgd
Zone 1[c]	JJWTP	2000	12,000	12,000					24,000	12,000	17.3
Zone 2[c]	JJWTP	1987	3,300	6,700	6,700	3,300			20,000	13,300	19.2
Zone 3	JJWTP	2018	2,600	2,600	370				5,570	2,970	4.3
Zone 4[d]	JJWTP	2018	1,225	1,225	1,225	--[e]			3,675	2,450	3.5
Linne[c]	Linne Tank	2005	4,865	4,865	4,865	4,865			19,460	14,595	21.0
NEI[c]	NEI Tank	2001	1,400	1,400	1,400	1,400			5,600	4,200	6.0
Patterson Pass[c,f]	Schulte Road, west of Hansen Road	2010	1,000	1,000	1,000	1,000			4,000	3,000	4.3
Cordes[c]	Cordes Tank	2015[g]	675	675	1,600	1,600	1,600	1,600	7,750	6,150	8.9

(a) Maximum pumping capacity of entire pump station.

(b) Assumes that the largest booster pump at the pump station is offline.

(c) Pumps are equipped with variable frequency drives.

(d) Existing potable water system infrastructure for Zone 4 is not shown on Chapter 7 figures because Zone 4 has just started development and was not included in the existing system evaluation.

(e) The City plans to add a fourth 1,225 gpm pump to the Zone 4 BPS in the future.

(f) Patterson Pass BPS is currently on standby and will eventually be decommissioned.

(g) Although it was installed in 2015, the Cordes BPS was not put into service until November 2019.

7.2.6 Pressure Regulating Stations

The City currently has ten pressure regulating stations (PRS) and two pressure reducing valves (PRV) as shown on Figure 7-1 (Zone 4 PRS and Northington Drive PRV are not shown because the areas served by these facilities have just started development). All of the PRS except the Cordes PRS and Promontory Parkway PRS are currently active. Once the IPC zone split occurs (see Section 7.2.7), these two PRS will be placed into service. The IPC zone split will permanently convert several of the existing buildings in the IPC development to be served directly from Zone 2 (these buildings are currently served by Zone 3 in the interim).

Each PRS contains a valve which is used to regulate flow into the downstream pressure zone or sustain pressure within the upstream pressure zone depending on the system pressures within each pressure zone. Each PRS can operate in two different modes:

- Pressure Sustaining Valve (PSV) – The valve will maintain a specified pressure in the upstream pressure zone. If the pressure increases above the valve's set point, the valve will open and release water into the downstream pressure zone.
- Pressure Reducing Valve (PRV) – The valve will allow flow into the downstream pressure zone if the pressure in the downstream pressure zone falls below a specified set point. When the pressure is below the valve's set point, the valve will remain open until the pressure increases.

Although the stations can operate in two different ways, most stations primarily operate in one of the two modes. The primary function of PRS #1 – #6, the Summit Drive PRS, and the Zone 4 PRS is that of a PSV, while the primary function of the Cordes PRS and the Promontory Parkway PRS will be that of a PRV. The two PRVs (Summit Drive and Northington Drive) can only operate in the pressure reducing mode. Table 7-5 presents a summary of these existing pressure regulating stations and pressure reducing valves with key characteristics such as upstream and downstream pressure zones, valve size, and pressure setting.

Table 7-5. Existing Pressure Regulating Stations and Pressure Reducing Valves

Facility Name	Upstream Pressure Zone	Downstream Pressure Zone	Valve Size, inches	Elevation, ft	Pressure Setting (upstream/ downstream), psi
Pressure Regulating Station					
#1	Zone 2	Zone 1	12	63.67	83/56
#2	Zone 2	Zone 1	8	66.57	79/53
#3	Zone 2	Zone 1	6	71.19	78/52
#4	Zone 2	Zone 1	10	64.53	80/54
#5	Zone 2	Zone 1	12	68.29	79/53
#6	Zone 2	Zone 1	12	69.0	78/54
Summit Drive	Zone 3	Zone 2	10	160.0	100/60
Cordes[(a)]	Zone 3	Zone 2	16	147.8	76/36
Promontory Parkway[(a)]	Zone 3	Zone 2	12	149.0	75.5/35.5
Zone 4[(b)]	Zone 4	Zone 3	8	204.5	105/90
Pressure Reducing Valve					
Summit Drive	Zone 3	Ellis Reduced Zone	12	160.0	--/70
Northington Drive[(c)]	Zone 3	Ellis Reduced Zone	12	164.0	--/70

(a) Cordes PRS and Promontory Parkway PRS are currently inactive. They will be placed into service when the IPC zone split occurs.
(b) Existing potable water system infrastructure for Zone 4 is not shown on Chapter 7 figures because Zone 4 has just started development and was not included in the existing system evaluation.
(c) Northington Drive PRV is not shown on Chapter 7 figures because it was not included in the existing system evaluation.

7.2.7 Pressure Zone Boundaries

The City's existing potable water system consists of four interconnected pressure zones (Zone 1, Zone 2, Zone 3, and Ellis Reduced Zone) which are isolated from each other by pressure regulating stations, pressure reducing valves, and closed system valves. Zone 3 (previously called City-Side Zone 3) is currently split into two isolated portions: one which serves the Ellis Reduced Zone, and one which serves the International Park of Commerce and the Patterson Pass Business Park (Zone 3 - IPC/PPBP). A fifth pressure zone, Zone 4 (previously called Tracy Hills Zone 3), has just started development and is therefore not included in this existing system evaluation. Note that documents produced prior to this WSMP Update refer to these pressure zones using the old nomenclature.

Zone 1 extends from the northern City limits south to Schulte Road and is the most developed of the four pressure zones. Therefore, it has more transmission pipelines to convey water throughout the zone. Zone 1 is primarily served from the 36-inch diameter transmission main in Tracy Boulevard either by gravity or via the Zone 1 BPS, and from the NEI Tank and BPS located

at the eastern edge of Zone 1. There are also two major water transmission mains located on the east and west sides of Zone 1 which help distribute water to the lower elevations of the zone: an 18-inch diameter transmission main in Corral Hollow Road and a 20-inch diameter transmission main in MacArthur Drive. During periods of peak demand or in an emergency, Zone 1 can also be served by the five groundwater wells located within Zone 1 or by Zone 2 facilities via PRS #1-#6.

Zone 2 extends from Schulte Road south to Linne Road and is mostly comprised of residential and light industrial land use. Water demands in Zone 2 are primarily served by the 24-inch diameter transmission main in Corral Hollow Road, which extends from the Zone 2 BPS at the JJWTP north and west towards Patterson Pass BPS and the IPC, and by the Linne Tank and BPS.

The Ellis Reduced Zone currently consists of the Ellis Specific Plan development located south of Valpico Road and west of Corral Hollow Road. The Ellis Reduced Zone is served by the 20-inch diameter Zone 3 transmission main in Corral Hollow Road which extends from the Zone 3 BPS at the JJWTP to the intersection of Middlefield Drive and Corral Hollow Road.

The Zone 3 - IPC/PPBP pressure zone currently includes the PPBP (*i.e.*, Safeway and Costco) and all of the existing IPC development. This zone is currently served by the Cordes BPS, which supplies water from the Cordes Tank. The Cordes Tank is filled by the Zone 2 transmission mains in Schulte Road and Hansen Road. As discussed above, although all of the IPC development is currently served by Zone 3 – IPC/PPBP, several of the existing buildings are located within the Zone 2 elevation range. The City plans to split the existing IPC water distribution system into two portions: one served by Zone 2 and one served by Zone 3 - IPC/PPBP. To accomplish this, the 16-inch diameter pipeline in Promontory Parkway between Hansen Road and Lammers Road, which is currently constructed but not active, will placed into service as a Zone 2 pipeline. The Cordes PRS and Promontory Parkway PRS (both currently inactive) will be activated to provide support to Zone 2 from Zone 3 in the event of an emergency. This IPC zone split is expected to occur in the spring or summer of 2020.

Figure 7-1 shows the approximate boundaries of each pressure zone after the IPC zone split occurs. A schematic of the City's potable water system is provided in Appendix C. Table 7-6 provides a summary of the existing pressure zone boundaries with key characteristics such as service elevations and static pressure ranges.

Table 7-6. Existing Pressure Zone Boundaries

Pressure Zone	Nominal Hydraulic Grade, ft	Nominal Range of Service Elevations, ft	Static Pressure Range, psi	Supply Sources
Zone 1	195	0 - 75	40 - 75	JJWTP via 36-inch Main, NEI Tank, Wells, and Pressure Regulating Stations
Zone 2	270	75 - 150	40 - 85[(a)]	JJWTP via Zone 2 Pumps and Linne Tank
Zone 3 - IPC/PPBP (formerly City-Side Zone 3)	368	150 - 245	55 - 95[(a)]	Cordes Tank via Zone 2
Ellis Reduced Zone	323	140 - 185	60 - 80	JJWTP via Zone 3 Pumps

(a) Per the California Plumbing Code, services which experience pressures exceeding 80 psi are required to be fitted with a pressure reducing valve.

7.2.8 Transmission and Distribution System Pipelines

Based on the City's existing hydraulic model, there are approximately 280 miles of existing pipelines in the City's water service area.[2] Pipelines in the existing potable water distribution system range from 4 to 42-inches in diameter. Pipeline materials consist mainly of asbestos cement (AC), cast iron (CI), and ductile iron (DI). The City's existing transmission and distribution system pipeline network is shown on Figure 7-1[3].

7.2.9 SCADA System

The City has a SCADA (Supervisory Control and Data Acquisition) system installed to provide for remote operation and monitoring of its facilities. Most of the major existing distribution facilities have SCADA installed except for PRS #1-#6. Well 8 has SCADA installed, but cannot be remotely operated by the SCADA system.

7.3 HYDRAULIC MODEL UPDATE

A computer simulation model (hydraulic model) transforms information about the physical system into a mathematical model that solves for various demand conditions. The hydraulic model then generates information on pressure, flow, velocity and head loss that can be used to analyze system performance and identify system deficiencies. A hydraulic model can also be used to verify the adequacy of recommended or proposed system improvements.

The City currently has a hydraulic model developed to simulate its potable water system performance. As part of this Citywide Water System Master Plan Update, an update of the current potable water system hydraulic model was performed to ensure that the hydraulic model accurately reflects the City's existing water system. This section summarizes the tasks completed to update the City's current hydraulic model of its potable water distribution system.

7.3.1 Existing Hydraulic Model Description

The City's current hydraulic model of its existing potable water system was last comprehensively updated for the 2012 Citywide Water System Master Plan. Since then, West Yost has been frequently updating the City's hydraulic model with new and proposed facilities to perform developer studies and other water system analyses requested by the City. The resulting developer hydraulic model contains existing facilities from the 2012 WSMP, existing facilities constructed since the 2012 WSMP was completed, and proposed facilities which have not yet been constructed.

For this Citywide Water System Master Plan Update, West Yost first reviewed the developer hydraulic model and coordinated with the City to determine which system facilities and pipelines

[2] The City's existing hydraulic model is not an all pipes model; therefore, the exact length of existing system pipelines is not known.

[3] Pipelines not included in the existing system evaluation are not shown on Figure 7-1. This includes all existing Zone 4 pipelines as well as some existing pipelines in the IPC and the Ellis Specific Plan developments (these pipelines are included in the future system evaluation which is described in Chapter 8).

have actually been constructed since the 2012 WSMP. Existing facilities which have been constructed since the 2012 WSMP were reviewed to ensure that they accurately represented existing conditions and were incorporated into the existing potable water system model. This task is discussed in more detail below.

7.3.2 Review of Existing Water System Facilities

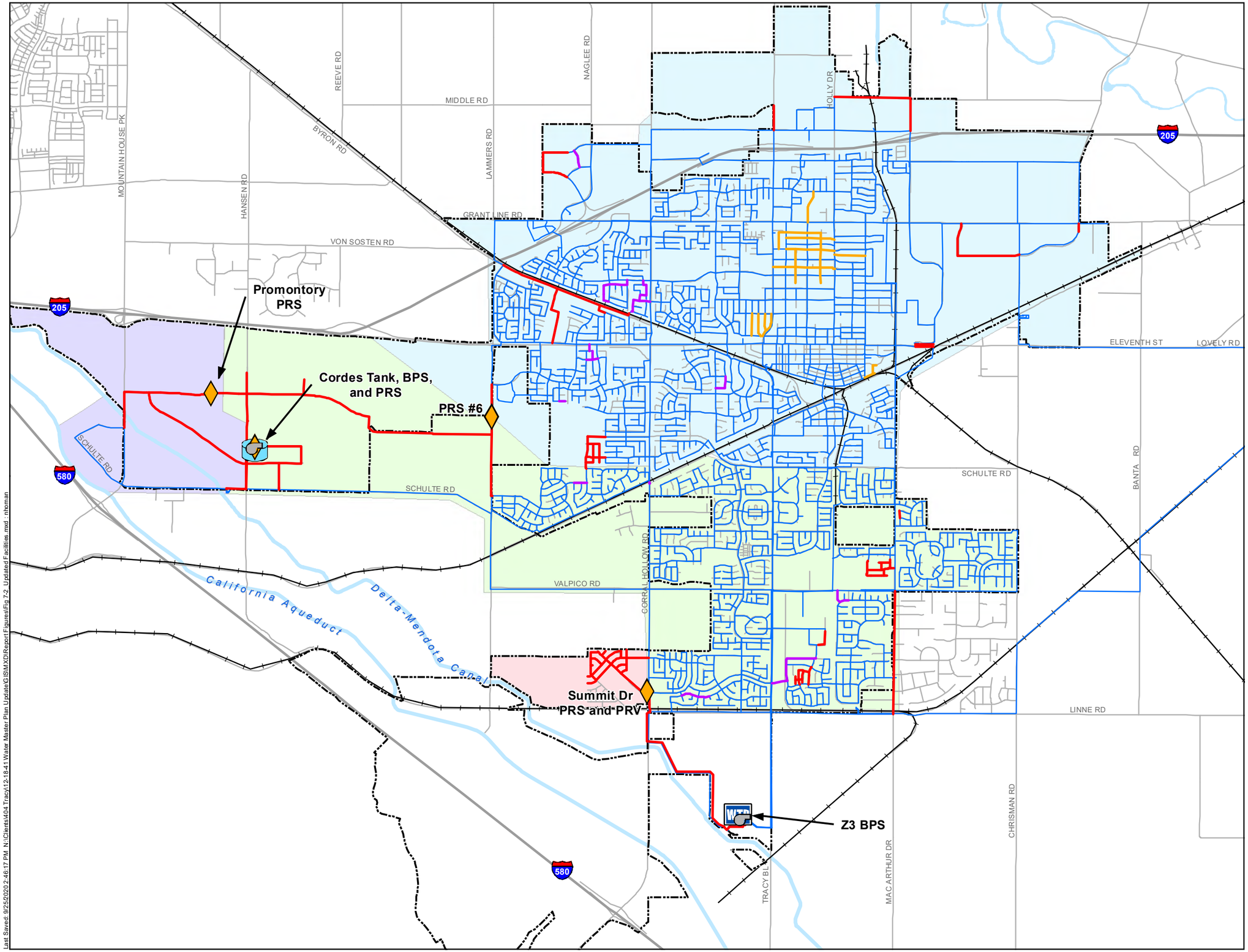
Based on a review of the available facilities data on the existing potable water system, which was provided to West Yost by City staff, the following facilities have been added or revised in the City's existing system hydraulic model since the 2012 WSMP:

- PRS #6 and major 20-inch diameter transmission main in Lammers Road
- 24-inch diameter transmission main in MacArthur Drive
- Cordes Tank, BPS, and PRS
- Major IPC development pipelines
- Promontory Parkway PRS
- Zone 3 BPS
- Zone 3 transmission main in Corral Hollow Road
- Ellis Specific Plan development pipelines
- Summit Drive PRS and PRV
- Other various new pipeline improvements
- Pipelines with incorrect diameters or alignments

As discussed below (see Section 7.4.1), potable water demands for the existing system hydraulic model were allocated based on 2017 meter data. Therefore, some facilities which serve water to areas without demands in 2017 were not included in the existing system hydraulic model (but are included in the future system hydraulic model described in Chapter 8). These facilities include:

- Zone 4 infrastructure, including the Zone 4 BPS, Zone 4 PRS, and major transmission and distribution pipelines
- Northington Drive PRV
- Some pipelines in the IPC development
- Some pipelines in the Ellis Specific Plan development

Figure 7-2 illustrates the locations of the new and revised facilities that were incorporated into the current hydraulic model to accurately represent the City's existing potable water distribution system.



0 2,000 4,000
Scale in Feet

Symbology

- New Pressure Regulating Station
- New Booster Pump Station
- New Storage Tank
- John Jones Water Treatment Plant
- New Pipeline Constructed Since the 2012 WSMP
- Added Pipeline (for Model Refinement)
- Updated Pipeline (for Model Refinement)
- Previously Modeled Pipeline from 2012 WSMP

Pressure Zone

- Zone 1
- Zone 2
- Zone 3 (IPC/PPBP)
- Ellis Reduced Zone
- City Limits

Notes:
1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.

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Figure 7-2

New and Revised Existing System Facilities

City of Tracy
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7.3.3 Review of Existing Water System Operations

The hydraulic model was last calibrated as part of the model update performed for the 2012 WSMP. Recalibration of the model was not considered necessary for this update, since the majority of pipelines added to the hydraulic model since the last update are new pipelines with known roughness factors. However, West Yost coordinated with City operations staff to confirm that the model accurately reflects existing and planned facility operations. Key changes made to facility operations since the 2012 WSMP include the following:

- In the decade after delivery of SSJID water to the City began, the City preferentially used SSJID water over USBR water to supply its customers. During these years, the JJWTP would shut down for long periods in the winter. However, in recent years the City has begun to use a more balanced mix of USBR and SSJID water.
- The Zone 1 BPS at the JJWTP has been seldom used in recent years due to decreased water demands.
- The City's wells are primarily used as backup sources of supply in the summer.
- The Lewis Manor well is inactive due to high manganese levels.
- The Cordes Tank and BPS now serve Zone 3 IPC/PPBP, and the Patterson Pass BPS (which previously served the same area) has been placed on standby.
- The Zone 3 BPS now serves the Ellis Reduced Zone.
- Booster pump station VFD settings have been adjusted since the 2012 WSMP.

Controls in the existing system hydraulic model have been updated to reflect these operational changes.

In addition, controls in the existing system hydraulic model were updated to reflect system operation changes which will occur in the next year (2020) after the planned IPC zone split is implemented. Key changes made to facility operations to reflect the IPC zone split include:

- Activating the 16-inch diameter pipeline in Promontory Parkway between Hansen Road and Lammers Road
- Activating the Cordes PRS and Promontory Parkway PRS
- Closing and opening valves to isolate Zone 2 and Zone 3 – IPC/PPBP from each other

7.4 EXISTING POTABLE WATER SYSTEM EVALUATION

This section presents the evaluation of the City's existing potable water distribution system and its ability to meet the City's recommended performance and operational criteria (previously presented in Chapter 6) under existing demand conditions. This evaluation includes an analysis of existing surface water treatment capacity, storage capacity, pumping capacity, and a hydraulic analysis of the water system's performance under maximum day demand plus fire flow and peak hour demand scenarios. Recommended improvements for addressing any identified existing potable water

distribution system deficiencies are summarized in *Section 7.5 Summary of Recommended Existing Potable Water System Improvements*.

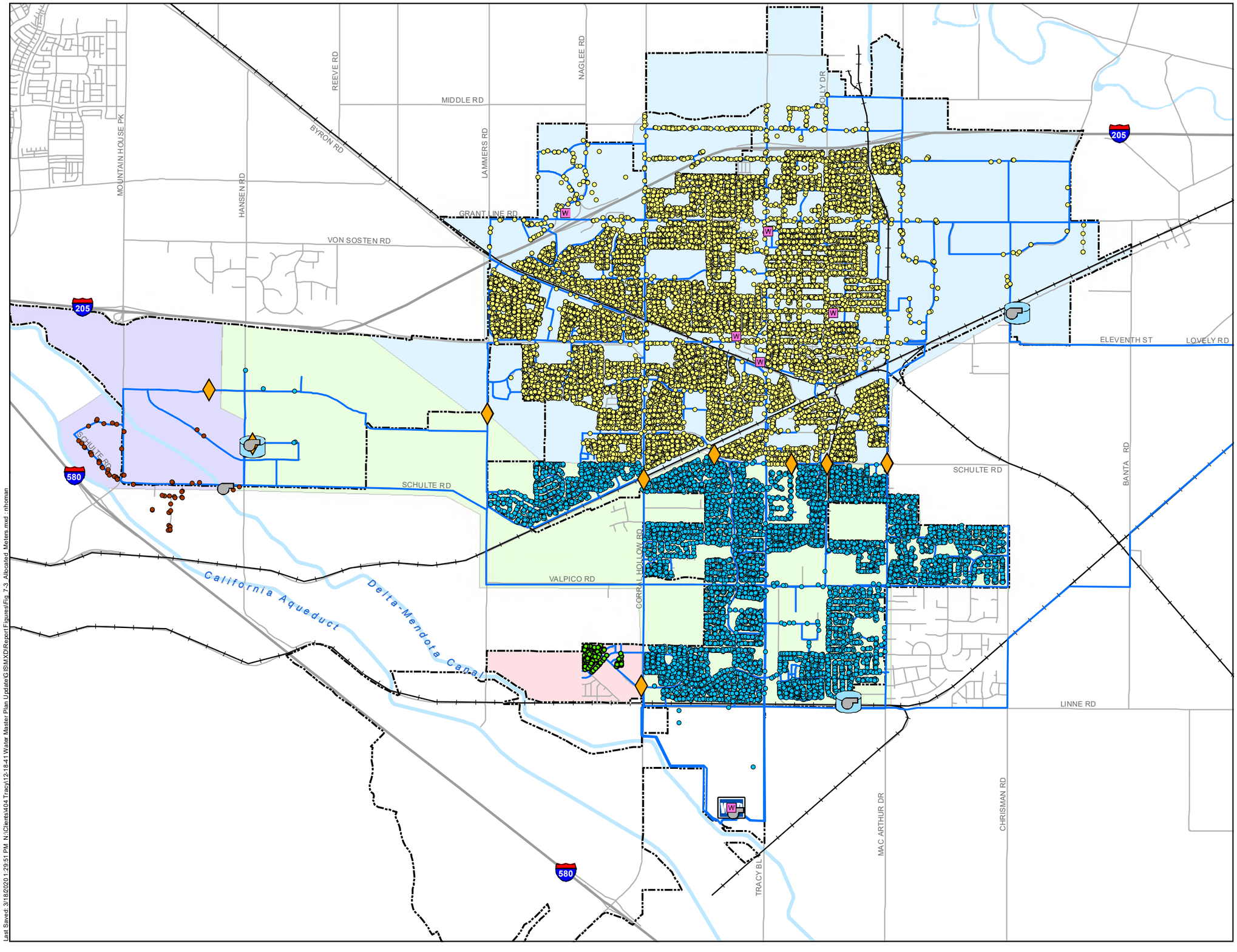
7.4.1 Existing Potable Water Demands

The water demands in the City's water system model were previously allocated based on spatially-located 2006 meter data and scaled up using the City's 2007 water production data. For this Citywide Water System Master Plan Update, the previous water demands were updated based on spatially-located 2017 meter data. The location of allocated water meters is shown on Figure 7-3. Allocated demands located in PPBP and IPC were scaled up to the total recorded flow through the Patterson Pass BPS in 2017 to account for water loss and construction meters. Because this area of the City has been growing rapidly, recent water production data was considered the most representative of existing water use in the PPBP and IPC. Allocated demands in all other areas were scaled up to the City's average water production from 2005 through 2013. Due to the recent drought and associated conservation measures, water production data from 2014 through 2017 were considered less representative of existing water use in these areas. Table 7-7 summarizes the City's existing potable water demands by pressure zone.

Table 7-7. Existing Potable Water Demands by Pressure Zone

Pressure Zone		Average Day Demand[a]		Maximum Day Demand[b]		Peak Hour Demand[c]	
		gpm	mgd	gpm	mgd	gpm	mgd
Zone 1		7,124	10.3	12,111	17.4	20,660	29.8
Zone 2[d]		3,856	5.6	6,555	9.4	11,182	16.1
Zone 3	PPBP[e]	392	0.6	667	1.0	1,138	1.6
	IPC[f]	26	0.04	44	0.1	75	0.1
Ellis Reduced Zone		18	0.03	31	0.0	53	0.1
	Total	**11,417**	**16.4**	**19,408**	**27.9**	**33,108**	**47.7**

(a) Based on spatially located 2017 water meter data. Meters located in PPBP and IPC were scaled up to represent recent (2017) data from the Safeway meter (796 af/yr). All other meters were scaled up to represent the City's average water production from 2005 - 2013 (17,620 af/yr).
(b) Maximum day demand is 1.7 times the average day demand.
(c) Peak hour demand is 2.9 times the average day demand.
(d) Includes water demands from IPC water meters that will be served by Zone 2 after the IPC zone split (FedEx and Medline buildings).
(e) Water demands from PPBP are not included in the City's water production totals because the water supply for this area is purchased by PPBP from the Byron Bethany Irrigation District. However, the City is responsible for providing water treatment and delivery services to PPBP.
(f) Excludes water demands from IPC water meters that will be served by Zone 2 after the IPC zone split. Includes demands from Amazon, Smucker's, and Buildings 3 and 4.



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Scale in Feet

N

Symbology

Allocated Water Meter Location

- Zone 1
- Zone 2
- Zone 3 (IPC/PPBP)
- Ellis Reduced Zone
- Pressure Regulating Station
- Booster Pump Station
- Groundwater Well
- Storage Tank
- John Jones Water Treatment Plant
- Pipeline

Pressure Zone

- Zone 1
- Zone 2
- Zone 3 (IPC/PPBP)
- Ellis Reduced Zone
- City Limits

Notes:
1. Based on water meter shapefile recieved from the City on July 2, 2018.

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Figure 7-3

Allocated Water Meters

City of Tracy
Water System Master Plan Update

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7.4.2 Existing Water System Facilities Evaluation

To evaluate the existing potable water system, analyses addressing the following system facilities were conducted:

- Surface Water Treatment Capacity
- Storage Capacity
- Pumping Capacity
- Critical Supply Facilities

The results from the existing potable water system facilities analyses are discussed below.

7.4.2.1 Water Treatment Capacity

Sufficient water treatment capacity from the existing JJWTP, the City's treated surface water supplies from the South County Water Supply Project, and groundwater wells should be available to meet the City's existing maximum day demand condition. In addition, the City's goal is to have sufficient surface water treatment capacity to meet the existing maximum month demand without relying on groundwater. Table 7-8 indicates that the City has sufficient water treatment and capacity to meet existing maximum day demands and that the City's current surface water treatment capacity is sufficient to meet existing maximum month potable water demands.

Table 7-8. Comparison of Available and Required Water Treatment Capacity, mgd

Demand Condition	JJWTP[(a)]	South County Water Supply Project[(b)]	Groundwater	Total Treated Water Capacity	Existing Maximum Day Demand	Surface Water Capacity Surplus or (Deficit)
Maximum Day	27	17	21.7[(c)]	65.7	28	38
Maximum Month[(d)]	27	17	0.0[(e)]	44.0	25	19

(a) Supplied from Zone 1 36-inch diameter transmission main, Zone 2 BPS, and Zone 3 BPS. Although the JJWTP is designed to supply 30 mgd, the actual maximum pumping capacity of the intake pumps is 27 mgd.
(b) Supplied from Linne Road and NEI Booster Pump Stations.
(c) Equivalent to firm groundwater pumping capacity, assuming that 20 percent of the City's wells would be out of service (*i.e.*, approximately two wells: one in Zone 1, and one at the JJWTP).
(d) Estimated to be 90 percent of maximum day demands.
(e) The City's goal is to meet maximum month demands without relying on groundwater supply.

7.4.2.2 Storage Capacity

The principal advantages that storage provides for the water system are the ability to equalize demands on supply sources, production facilities, and transmission mains; to provide emergency storage in case of supply failure; and to provide water to fight fires. The City's water service area has two sources of available storage: above-ground storage (*i.e.*, clearwells and storage tanks) and storage available through the groundwater basin. Together, these two sources of storage must be

sufficient to meet the City's operational, emergency, and fire flow storage criteria. The volumes required for each of these three storage components are listed below:

- Operational Storage: 30 percent of a maximum day demand
- Emergency Storage: 1.5 times an average day demand
- Fire Flow Storage: The required fire flow rates multiplied by their associated fire flow duration periods, as required by the City's Fire Department. For larger pressure zones (*i.e.*, Zones 1 and 2), two concurrent fire flow events were assumed for the storage capacity analysis. However, the recommended fire flow storage does not include the volume associated with sprinkler flows.

Because the City's potable water supply includes supply from groundwater wells, the groundwater basin can account for a portion of the recommended emergency storage, in the form of a groundwater credit. However, the following criteria must be met to use the groundwater supply to offset the need to provide above-ground storage:

- Groundwater supply is of potable water quality and can be reliably accessed (*i.e.*, wells are equipped with on-site emergency generators).
- Groundwater supply is not already relied upon to meet the City's average day demand requirements.
- Groundwater supply is of firm groundwater supply availability (*i.e.*, assumes 20 percent of wells will be out of service at any given time).
- Sufficient water distribution facilities are available to distribute this water to demand area.

In addition, the City currently has two independent sources of treated surface water supply, and some quantity of the total treated surface water supply capacity can also account for a portion of the recommended emergency storage. The treated surface water credit assumes that the smaller of the treated surface water supply sources can be available to offset a portion of the emergency storage requirement. However, the following criteria must be met to use treated surface water supply to offset the need to provide above-ground storage:

- Treated surface water supply can be reliably accessed (*i.e.*, treated surface water supply facility is equipped with on-site emergency generator).
- Sufficient treated surface water booster pumping facilities are available to distribute water to demand areas.

In summary, the Emergency Storage Credit is equal to the sum of the groundwater and treated surface water supply credits. However, the Emergency Storage Credit can only provide a maximum storage credit equal to the City's required emergency storage volume.

The existing potable water storage facilities, in conjunction with the available Emergency Storage Credit, were evaluated to determine whether the City's existing potable water system has sufficient storage capacity to provide the required operational, emergency, and fire flow storage. Table 7-9 provides a detailed summary of the City's existing available potable water storage capacity, Emergency Storage Credit, and required storage capacity. Table 7-9 indicates that the City currently has a potable water storage capacity surplus of approximately 4.2 MG in Zone 1, Zone 2, and Ellis Reduced Zone, and a 0.7 MG surplus in Zone 3 - IPC/PPBP.

7.4.2.3 Pumping Capacity

The pumping capacity in the City's existing potable water system was evaluated to assess its ability to deliver a reliable firm capacity to the existing water service area. Firm capacity assumes a reduction in total pumping capacity to account for pumps that are out of service at any given time due to mechanical breakdowns, maintenance, water quality, or other operational issues. At each booster pump station, firm booster pumping capacity was defined as the total booster pump station capacity with the largest pump out of service. For groundwater well pumps, the firm groundwater pumping capacity assumed that 20 percent of the wells would be out of service at any given time.

The pumping capacity criterion for the City, described previously in Chapter 6, requires the City's potable water system to have sufficient firm pumping capacity to meet the greater of either a maximum day demand with two simultaneous fire flow events (one fire flow event in smaller pressure zones) or a peak hour demand. In addition, sufficient firm treated water pumping capacity should be available to meet a maximum day demand condition.

Table 7-10 provides a detailed summary of the City's existing available firm pumping capacity at each pump station and provides a comparison between the City's available firm pumping capacity and the requirements stated above. This pumping capacity analysis indicates that the City's existing booster and groundwater pumping capacity can sufficiently meet the pumping capacity criterion for the existing water service area during the governing flow scenario in each pressure zone.

7.4.2.4 Critical Supply Facilities

All critical pumping facilities should be equipped with an on-site, emergency backup power generator to provide pumping capacity during a power outage. Critical pumping facilities are defined as those facilities that provide service to pressure zone(s) and/or service area(s) which do not have sufficient emergency storage, and that meet at least one of the following criteria:

- The largest pumping facility that provides water to a particular pressure zone and/or service area.
- A facility that provides the sole source of water to single or multiple pressure zones and/or service areas.
- A pumping facility that provides water from a supply turnout.
- A pumping facility that provides water from key groundwater supply wells (depends on capacity, quality, and location).

Table 7-9. Comparison of Available and Required Water Storage Capacity

Station	Status	Available Storage Capacity, MG					Required Storage Capacity, MG				Storage Surplus (Deficit), MG
			Emergency Storage Credit								
		Reservoir Capacity	Groundwater Credit[a]	Treated Surface Water Supply Credit[b]	Total Emergency Storage Credit[c]	Total Available Storage	Operational[d]	Emergency[e]	Fire Flow	Total Required Storage	
Zone 1, Zone 2, and Ellis Reduced Zone[f]											
NEI	Active	2.4	--	25.50	23.76	**37.26**	8.08	23.76	1.14[i]	**32.97**	**4.2**
Lincoln Well	Active	--	5.40								
Lewis Manor Well	Inactive	--	--								
Park and Ride Well	Active	--	4.32								
Ball Park Well	Active	--	5.40								
Well 8[g]	Active	--	--								
Linne	Active	7.1	--								
Well 1[h]	Active	--	--								
Well 2[g,h]	Active	--	--								
Well 3[g,h]	Active	--	--								
Well 4[g,h]	Active	--	--								
Clearwell #2	Active	4.0	--								
Zone 3 IPC/PPBP											
Cordes	Active	2.0	--	0.00	0.90[j]	**2.90**	0.31	0.90	0.96[k]	**2.17**	**0.7**

(a) Credit based on 1.5 days of pumping capacity from active groundwater wells with on-site backup power because the required emergency storage capacity is equal to 1.5 times the average day demand. See Table 7-2 for individual well capacity.

(b) Credit based on 1.5 days of available treatment capacity (17 mgd) from the SCWSP because the required emergency storage capacity is equal to 1.5 times the average day demand.

(c) Equal to the sum of the groundwater and treated surface water supply credits; however, the maximum credit is equal to the required emergency storage capacity.

(d) Based on 30 percent of a maximum day demand (see Table 7-7).

(e) Based on 1.5 times the average day demand (see Table 7-7).

(f) The Ellis Reduced Zone is currently isolated from the Cordes Tank and BPS.

(g) Well does not contribute to Groundwater Credit because it does not have on-site backup power.

(h) Well does not contribute to Groundwater Credit because water produced by the well must be blended with chlorinated water from the JJWTP prior to distribution. The JJWTP is assumed to be offline in an emergency.

(i) Based on storage required for two concurrent fire flow events; a Single Family Residential fire flow and an Industrial fire flow (see Table 6-1).

(j) Surplus Treated Surface Water Supply Credit from other pressure zones can be used to provide emergency storage for Zone 3.

(k) Based on storage required for an Industrial fire flow (see Table 6-1).

Table 7-10. Comparison of Available and Required Firm Pumping Capacity

Pump Station	Backup Power	Status	Firm Capacity[a], gpm	Total Firm Pumping Capacity from Supply Sources, gpm[b]	Existing Maximum Day Demand, gpm	Pumping Capacity from Supply Sources Surplus (Deficit), gpm[b]	Total Firm Pumping Capacity, gpm	Existing Maximum Day Demand with Fire Flow Event(s), gpm	Existing Peak Hour Demand, gpm	Pumping Capacity Surplus (Deficit), gpm[b]
Zones 1 and 2										
NEI	✓	Active	4,200	44,106	19,377[d]	24,728	51,095	24,666[e]	31,842	19,253
Zone 1	✓	Active	12,000							
Lincoln Well	✓	Active	2,500							
Lewis Manor Well	✓	Inactive	--							
Park and Ride Well	✓	Active	2,000							
Ball Park Well	✓	Active	2,500							
Well 8		Active	--							
Linne	✓	Active	14,595							
Zone 2	✓	Active	13,300							
Well 1[c]	✓	Active	--							
Well 2[c]		Active	--							
Well 3[c]		Active	--							
Well 4[c]		Active	--							
Zone 3 IPC/PPBP										
Cordes	✓	Active	6,150	NA[g]	NA[g]	NA[g]	6,150	5,211[h]	1,213	939
Patterson Pass[f]	✓	Inactive	--							
Ellis Reduced Zone										
Zone 3	✓	Active	2,970	2,970	31	2,939	2,970	1,531[i]	53	1,439

(a) Firm booster pumping capacity was defined as the total booster pump station capacity with the largest pump out of service and firm groundwater pumping capacity assumed that 20 percent of the City's wells would be out of service (i.e., approximately two wells: one in Zone 1, and one at the JJWTP).

(b) Pumping capacity surplus (deficit) is the total available firm pumping capacity minus the greater of the maximum day demand with required fire flow event(s) or peak hour demand.

(c) Wells 1-4 located at JJWTP pump directly into the Chlorine Contact Basin or Clearwell #2; therefore, these wells do not provide additional pumping capacity to the system.

(d) Includes maximum day demand for Zone 3 IPC/PPBP.

(e) Maximum day demand plus a 1,500 gpm Single Family Residential fire flow and a simultaneous 4,500 gpm Industrial fire flow.

(f) Patterson Pass BPS is inactive since the Cordes BPS is now operating; therefore, it does not provide additional pumping capacity to the system.

(g) Zone 3 IPC/PPBP is supplied treated water via Zone 2 facilities.

(h) Maximum day demand plus a 4,500 gpm Industrial fire flow.

(i) Maximum day demand plus a 1,500 gpm Single Family Residential fire flow.

As shown previously in Table 7-10, most of the City's existing pumping facilities have on-site emergency backup power installed, except for Wells 2 through 4 and Well 8[4]. However, these wells do not meet the criteria listed above and are not considered critical supply facilities. Therefore, the City is currently equipped with sufficient backup power generators to provide pumping capacity during a power outage at its most critical pumping facilities.

7.4.3 Existing Water System Hydraulic Analysis

The system performance criteria recommended for and results of the existing potable water distribution system hydraulic analysis are discussed below.

7.4.3.1 Existing Water System Performance Criteria

Steady state hydraulic analyses using the updated hydraulic model were conducted to help identify areas of the existing potable water system that do not meet the recommended system performance criteria as presented previously in Chapter 6. The results of the existing potable water system evaluation are presented below for the following scenarios:

- Peak Hour Demand—A peak hour flow condition was simulated for the existing water distribution facilities to evaluate their capability to meet a peak hour demand scenario. Peak hour demands are met by the combined supply from treated surface water, storage tanks, and groundwater.
- Maximum Day Demand plus Fire Flow—To evaluate the existing potable water system under the maximum day demand plus fire flow scenario, individual fire flow demands were first assigned and simulated at various locations within the City's water service area. InfoWater's "*Available Fire Flow Analysis*" tool was used to determine the available fire flow while meeting the maximum day demand plus fire flow performance criteria. Additional fire flow simulations were also performed to simulate a condition equal to a maximum day demand with two concurrent fire flow events. Maximum day plus fire flow demands are met by the combined supply from treated surface water and storage tanks.

The recommended system performance criteria for each scenario are discussed in more detail below.

7.4.3.1.1 Peak Hour Demand Scenario

As shown in Table 7-7, the peak hour demand for the existing water service area was calculated to be 33,108 gpm (47.7 mgd). This peak hour demand represents a peaking factor of 2.9 times the average day demand. During a peak hour demand scenario, a minimum pressure of 40 psi must be maintained throughout the water system. In addition, maximum head losses for distribution mains should not exceed 7 ft/kft and maximum velocities should not exceed 8 fps. For transmission mains, maximum head losses should not exceed 3 ft/kft and maximum velocities should not exceed 6 fps.

[4] Well 8 currently has a plug-in adapter installed to allow interconnection to a portable generator.

7.4.3.1.2 Maximum Day Demand plus Fire Flow Scenario

As shown in Table 7-7, the maximum day demand for the existing water service area was calculated to be 19,408 gpm (32.9 mgd). This maximum day demand represents a peaking factor of 1.7 times the average day demand. Fire flow demands were assigned and simulated at various locations within the City's water service area to determine if the minimum residual pressure criterion of 20 psi could be met during a maximum day demand plus fire flow scenario[5]. Fire flow demands were assigned based on General Plan land use designations and are summarized below in Table 7-11.

Table 7-11. Recommended Fire Flow Requirements[(a)]

Land Use Category	Fire Flow, gpm	Duration, hours
Single Family Residential[(b)]	1,500	2
Multi-Family Residential[(c)]	2,500	2
Commercial/Office[(d)]	3,500[(f)]	4
Industrial	4,500[(f)]	4
Institutional[(e)]	4,500[(f)]	4

(a) Specific fire flow requirements were determined from Table B105.1 of the 2016 CFC and depend on construction type and fire flow calculation area. Non-residential fire flow requirements are based on the assumption that an automatic sprinkler system has been installed. See Table 6-1 for further explanation of how the fire flow requirements were developed.
(b) Includes Very Low and Low Density Residential land uses.
(c) Includes Medium and High Density Residential land uses.
(d) Includes Commercial, Office, Downtown, and Village Center land uses.
(e) Includes Medical, Public Facilities, School, Airport, Church, and Cemetery land uses.
(f) Fire flow includes a 500 gpm demand for on-site sprinkler flow, which is not included in the recommended fire flow storage volume.

The City's water system should also have the capability to meet a system demand condition equal to the occurrence of a maximum day demand with two concurrent fire flow events in the larger pressure zones (*i.e.*, Zones 1 and 2). It is assumed that the two fire flow events will consist of one smaller single family residential fire flow combined with another larger industrial fire flow. This conservative assumption of two simultaneous fire flow demands will help stress the City's water system and determine if the existing water system can provide reliable service during high demand conditions. Consequently, two concurrent fire flow demands were simulated at various locations within Zones 1 and 2 during a maximum day demand condition to determine if the minimum residual pressure criterion of 20 psi could be met during simultaneous fire flow events.

[5] The maximum pipeline head loss and maximum pipeline velocity criteria for a maximum day demand plus fire flow scenario were not applied to the City's existing water system. Because fire flow conditions occur infrequently, no improvements for the existing water system would be recommended if a location failed to meet these secondary criteria if the primary pressure criterion was met.

7.4.3.2 Recommended Improvement Criteria

The system performance criteria described above were used to evaluate the existing potable water system during peak hour demand and maximum day demand plus fire flow scenarios. The existing potable water system is expected to deliver peak hour flow and maximum day demand plus fire flow within the acceptable pressure, velocity and head loss ranges as identified in the system performance criteria presented in Chapter 6. However, the system was evaluated using pressure as the primary criterion. If necessary, recommended improvements needed to comply with the system performance criteria were added to the existing potable water system model to fix any deficiencies found and are discussed below.

7.4.3.3 Existing Water System Evaluation Results

The results from the hydraulic model for the peak hour demand and maximum day demand plus fire flow analyses are presented below.

7.4.3.3.1 Peak Hour Demand Scenario

During a peak hour demand scenario, results indicate that the existing potable water system is capable of maintaining the City's minimum pressure criterion of 40 psi at all existing service locations, as shown on Figure 7-4. Under this scenario, system pressures at existing service locations ranged from 40 to 85 psi. It should be noted that, per the California Plumbing Code, services which experience pressures exceeding 80 psi are required to be fitted with a pressure reducing valve.

As shown on Figure 7-5, there are two locations within the existing system where the distribution system pipelines did not meet the maximum velocity criterion of 8 fps during a peak hour demand scenario. The following list details pipelines in the existing potable water system that exceeded the maximum velocity criterion and summarizes any recommended improvements.

- Location #1: The 12-inch diameter discharge pipeline from the Ball Park Well off of Tracy Boulevard had a velocity of 8.3 fps.

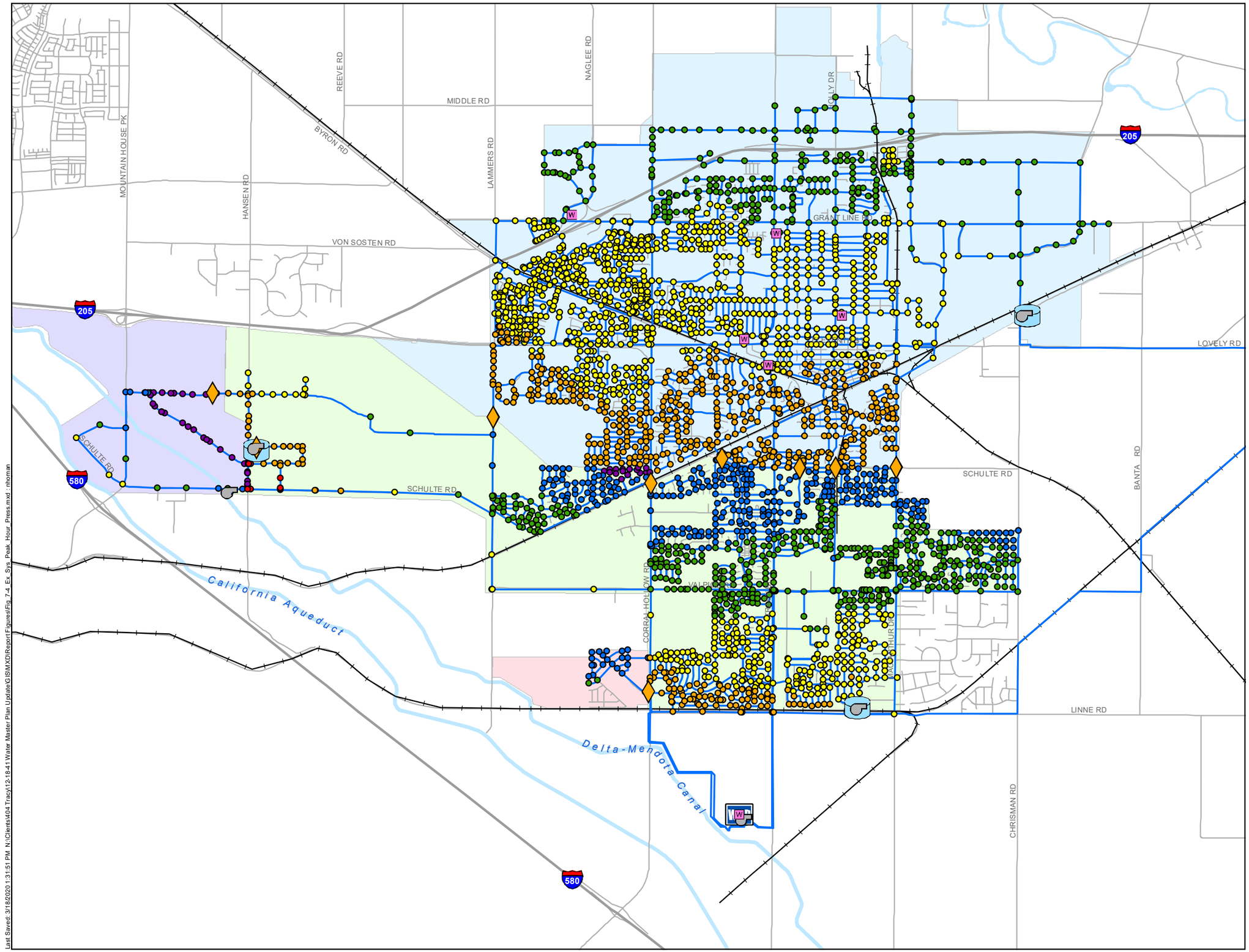
  Recommendation:

  No mitigation is recommended for the 12-inch diameter discharge pipeline from the Ball Park Well, because pipeline velocity is a secondary criterion and no improvements for pipelines exceeding the velocity criterion in the existing potable water system are recommended unless the primary criterion (pressure) is not met.

- Location #2: The 12-inch diameter distribution pipeline located in Sixth Street immediately east of the 36-inch diameter transmission main tie-in had a velocity of 8.3 fps.

  Recommendation:

  No mitigation is recommended for the 12-inch diameter discharge pipeline in Sixth Street immediately east of the 36-inch diameter transmission main tie-in, because pipeline velocity is a secondary criterion and no improvements for pipelines exceeding the velocity criterion in the existing potable water system are recommended unless the primary criterion (pressure) is not met.



Symbology

Peak Hour Pressure

- Less than 40 psi
- 40 psi to 50 psi
- 50 psi to 60 psi
- 60 psi to 70 psi
- 70 psi to 80 psi
- Greater than 80 psi
- Pressure Regulating Station
- Booster Pump Station
- Groundwater Well
- Storage Tank
- John Jones Water Treatment Plant
- Pipeline

Pressure Zone

- Zone 1
- Zone 2
- Zone 3 (IPC/PPBP)
- Ellis Reduced Zone

Notes:
1. The City's existing hydraulic model is not an all pipes model. Therefore, not all existing pipes are shown or evaluated.
2. Per the California Plumbing Code, services which experience pressures exceeding 80 psi are required to be fitted with a pressure reducing valve.

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Figure 7-4

Existing System Pressures Peak Hour Demand

City of Tracy
Water System Master Plan Update

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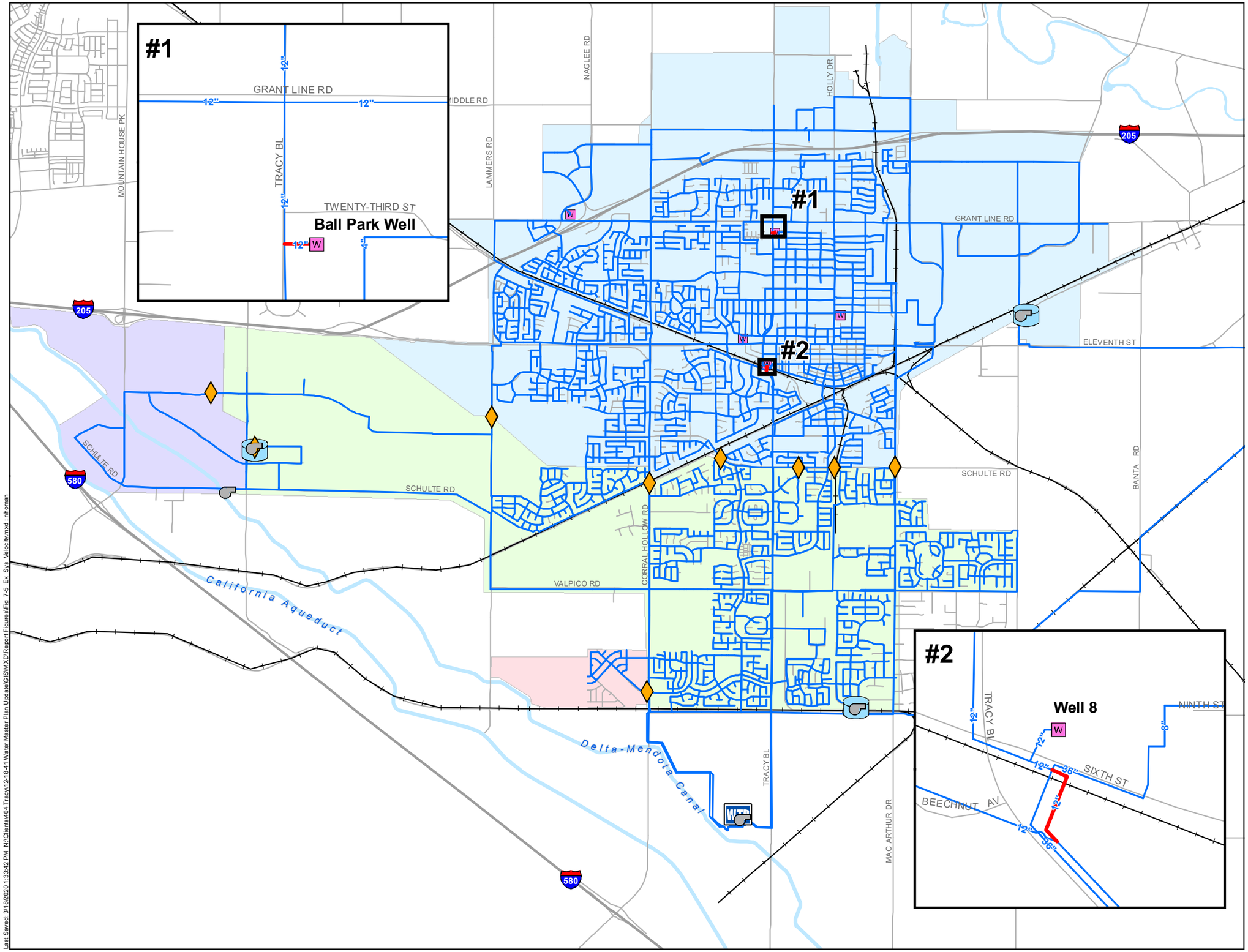

Symbology

Pipeline Diameter ≥ 18-inches

- Velocity ≤ 6 fps
- Velocity > 6 fps

Pipeline Diameter < 18-inches

- Velocity ≤ 8 fps
- Velocity > 8 fps
- Pressure Regulating Station
- Booster Pump Station
- Groundwater Well
- Storage Tank
- John Jones Water Treatment Plant

Pressure Zone

- Zone 1
- Zone 2
- Zone 3 (IPC/PPBP)
- Ellis Reduced Zone

Notes:
1. The City's existing hydraulic model is not an all pipes model. Therefore, not all existing pipes are shown or evaluated.

Figure 7-5

Existing Pipeline Velocities Peak Hour Demand

City of Tracy
Water System Master Plan Update

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7.4.3.3.2 Maximum Day Demand plus Fire Flow Scenario

Fire flow demands were assigned based on Table 7-11 and simulated at various locations within the City's water service area. InfoWater's "*Available Fire Flow Analysis*" tool was used to determine the available fire flow while meeting a minimum residual pressure of 20 psi within the existing water system during a maximum day demand scenario.

As shown on Figure 7-6, the results from the hydraulic model indicate that there are seven fire flow junctions, grouped into four areas, where the available fire flow is less than the minimum required fire flow. The following list details the areas in the existing potable water system that failed to meet the fire flow requirements and summarizes any recommended improvements.

- Location #1: The hydrant at the southern end of Rhonda Way is surrounded by industrial land use, which has a fire flow requirement of 4,500 gpm. This hydrant is served by an 8-inch diameter distribution pipeline in Rhonda Way which terminates at the hydrant. The available fire flow simulated at this hydrant while maintaining a 20 psi minimum residual pressure was approximately 3,640 gpm.

  Recommendation:

  No mitigation is recommended for the hydrant at the southern end of Rhonda Way because the deficient hydrant is located on a short dead-end line. The deficient hydrant is less than 300 ft away from a hydrant at the intersection of Rhonda Way and Larch Road which is capable of providing 4,500 gpm at 20 psi residual pressure.

- Location #2: Four hydrants within the neighborhood located east of Tracy Boulevard, south of Juanita Market, west of Holly Drive, and north of Carlton Way are not capable of meeting minimum fire flow requirements. This neighborhood is located in an older part of the City, and many of the distribution pipelines in the neighborhood are 4-inches or 6-inches in diameter with low C-factors. The northern-most deficient hydrant, at the intersection of Wall Street and 20th Street, was assigned a fire flow requirement of 1,500 gpm, but could only provide approximately 1,230 gpm. The other three deficient hydrants, located at the intersections of Wall Street and Emerson Avenue, Emerson Avenue and Court Drive, and Court Drive and Lowell Avenue, were assigned a fire flow requirement of 2,500 gpm, but could only provide approximately 820 gpm, 1,590 gpm, and 2,350 gpm, respectively.

  Recommendation:

  It is recommended that the existing pipelines in 20th Street between Bessie Avenue and Parker Avenue, Wall Street between Lowell Avenue and 20th Street, Emerson Avenue between Bessie Avenue and Holly Drive, Court Drive between Whittier Avenue and Lowell Avenue, and Lowell Avenue between Parker Avenue and Holly Drive be replaced with new 8-inch diameter pipelines to improve fire flow to this area.

- Location #3: The hydrant at the intersection of School Street and Ninth Street was assigned a fire flow requirement of 2,500 gpm due to the high density residential units located along School Street. This hydrant is currently served by an 8-inch diameter distribution pipeline in School Street which terminates east of the hydrant. The available fire flow simulated at this hydrant while maintaining a 20 psi minimum residual pressure was approximately 2,330 gpm.

  Recommendation:

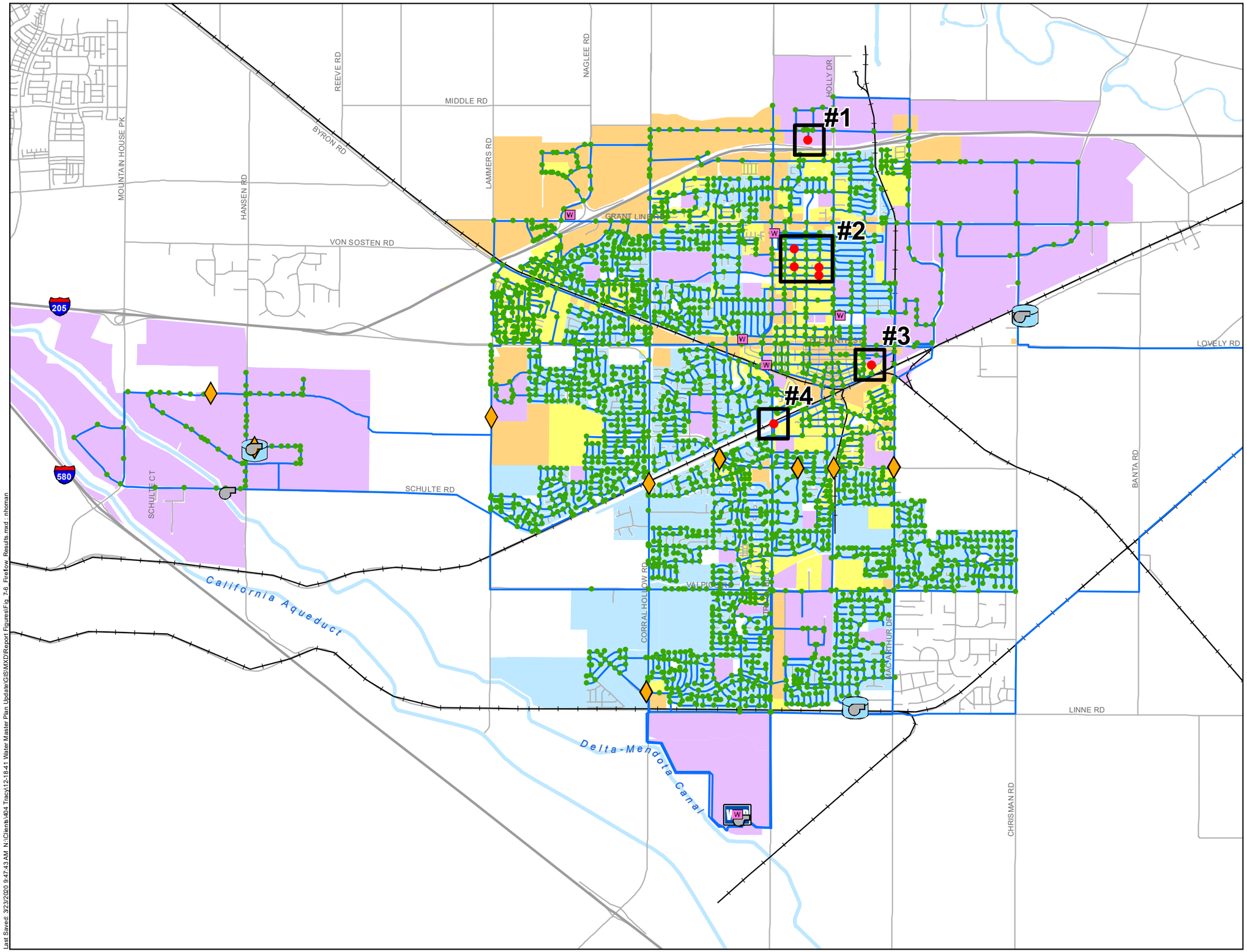
  It is recommended that a new 12-inch diameter pipeline be installed in Ninth Street between School Street and Tenth Street.

- Location #4: The hydrant at the intersection of Tracy Boulevard and Fourth Street was assigned a fire flow requirement of 2,500 gpm due to the medium density residential units located in the vicinity. This hydrant is served by an existing 4-inch diameter pipeline in Tracy Boulevard and an existing 6-inch diameter pipeline in Fourth Street. The available fire flow simulated at this hydrant while maintaining a 20 psi minimum residual pressure was approximately 1,350 gpm.

  Recommendation:

  It is recommended that the existing 4-inch diameter pipeline in Tracy Boulevard north of Mount Diablo Avenue be replaced with a new 12-inch diameter pipeline to improve the fire flow to this area. This improvement was previously recommended in the 2012 WSMP.

Four additional fire flow simulations were performed within the hydraulic model to simulate a condition equal to a maximum day demand with two concurrent fire flow events. Two concurrent fire flow events were simulated during a maximum day demand condition to determine if the minimum residual pressure criterion of 20 psi could be met. Figure 7-7 shows the locations of the additional fire flow simulations. Locations were selected within each pressure zone based on the existing land use designations and spatial distance from supply sources to stress the City's water system. As summarized in Table 7-12, results from the hydraulic model indicate that all four of the concurrent fire flow simulations met the minimum residual pressure criterion of 20 psi.



Symbology

Available Fire Flow

- Does Not Meet Requirement
- Meets Requirement
- Pressure Regulating Station
- Booster Pump Station
- Groundwater Well
- Storage Tank
- John Jones Water Treatment Plant
- Pipeline

Fire Flow Requirement

- 1,500 gpm
- 2,500 gpm
- 3,500 gpm
- 4,500 gpm

Notes:

1. The available fire flow shown is the maximum flow available while maintaining 20 psi residual system pressure.
2. The City's existing hydraulic model is not an all pipes model. Therefore, not all existing pipes are shown or evaluated.

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Figure 7-6

Existing System Available Fire Flow

City of Tracy
Water System Master Plan Update

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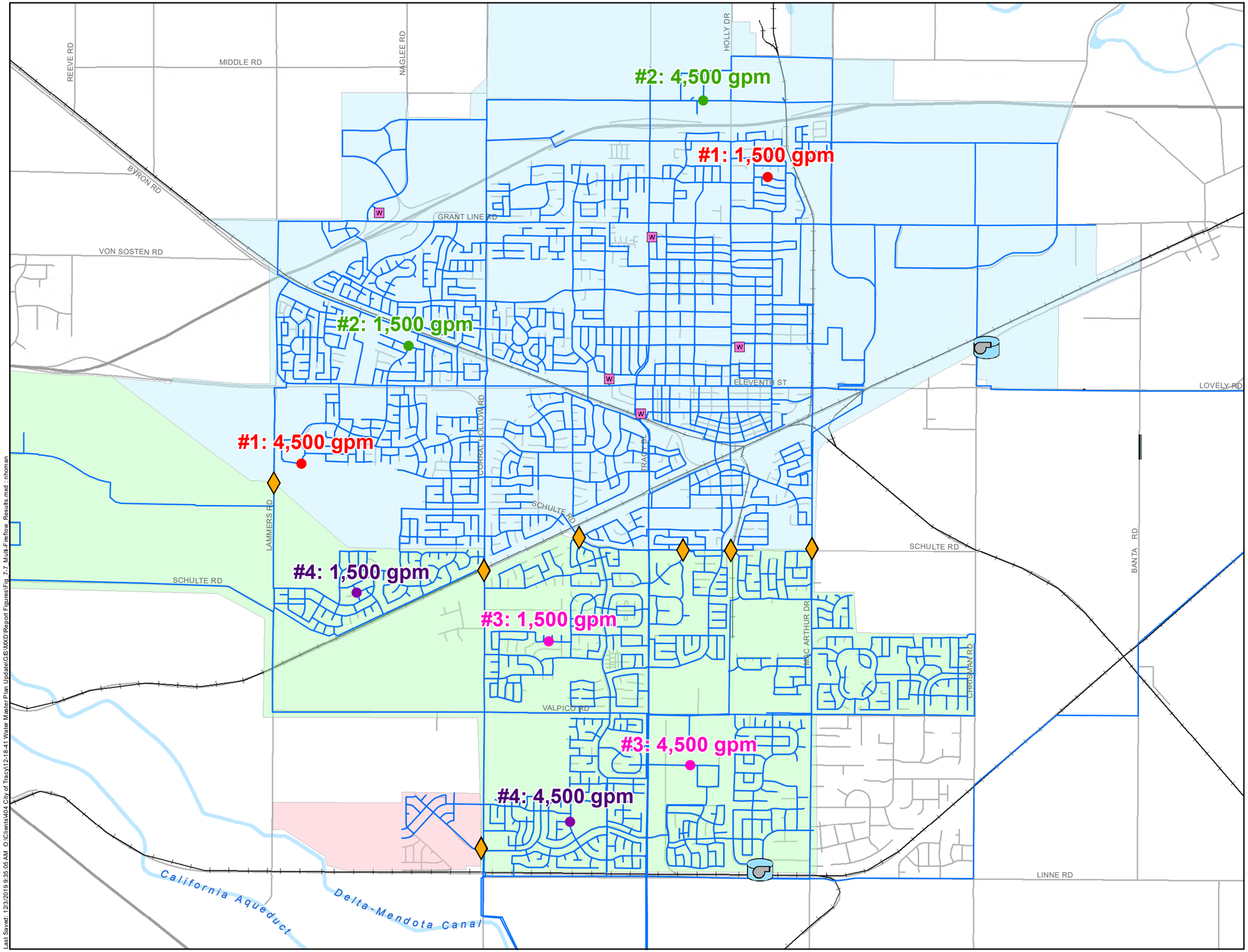

Symbology

Simultaneous Fire Flows

- Location #1
- Location #2
- Location #3
- Location #4
- Pressure Regulating Station
- Booster Pump Station
- Groundwater Well
- Storage Tank
- John Jones Water Treatment Plant
- Existing Pipeline

Pressure Zone

- Zone 1
- Zone 2
- Ellis Reduced Zone

Notes:
1. The City's existing hydraulic model is not an all pipes model. Therefore, not all existing pipes are shown or evaluated.

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Figure 7-7

Locations of Additional Simultaneous Fire Flow Simulations

City of Tracy
Water System Master Plan Update

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Table 7-12. Results of Additional Fire Flow Simulations

Pressure Zone	Location #	Fire Flow Demand, gpm[(a)]	Residual Pressure, psi
Zone 1	1	1,500	51
		4,500	32
	2	1,500	52
		4,500	45
Zone 2	3	1,500	67
		4,500	52
	4	1,500	67
		4,500	32

(a) It is assumed that the two concurrent fire flow events will consist of one smaller Single Family Residential fire flow combined with another larger Industrial fire flow.

7.5 SUMMARY OF RECOMMENDED EXISTING POTABLE WATER SYSTEM IMPROVEMENTS

The recommended hydraulic improvements for the existing potable water distribution system are summarized below. These existing system improvements are recommended based on existing water demands, and are not triggered by future new development. It should be noted that these recommendations only identify facility improvements at a master plan level and do not necessarily include all required on-site infrastructure nor constitute design of improvements. Subsequent detailed design is required to determine the exact sizes and final locations of these proposed improvements. Recommended improvements are based on available information on the City's existing water system and existing water demands as presented in Table 7-7.

It should also be noted that the existing hydraulic model is not an "all pipes" model (*i.e.*, not all smaller diameter pipelines are included); therefore, the hydraulic simulations performed as discussed above may not identify all necessary water system hydraulic improvements. While some small diameter pipelines which were not previously included in the hydraulic model were added in this Citywide Water System Master Plan as part of the model refinement process, there may still be other small diameter pipelines not represented in the hydraulic model. Consequently, it is recommended that City staff review older parts of the water system where smaller diameter pipelines are typically found and consider possible upsizing of these lines as the City plans for future pipeline renewal and replacement projects. Ongoing replacement of older and/or smaller diameter pipelines will improve the available fire flow capacity of the existing potable water system.

Pipeline Hydraulic Capacity Improvements

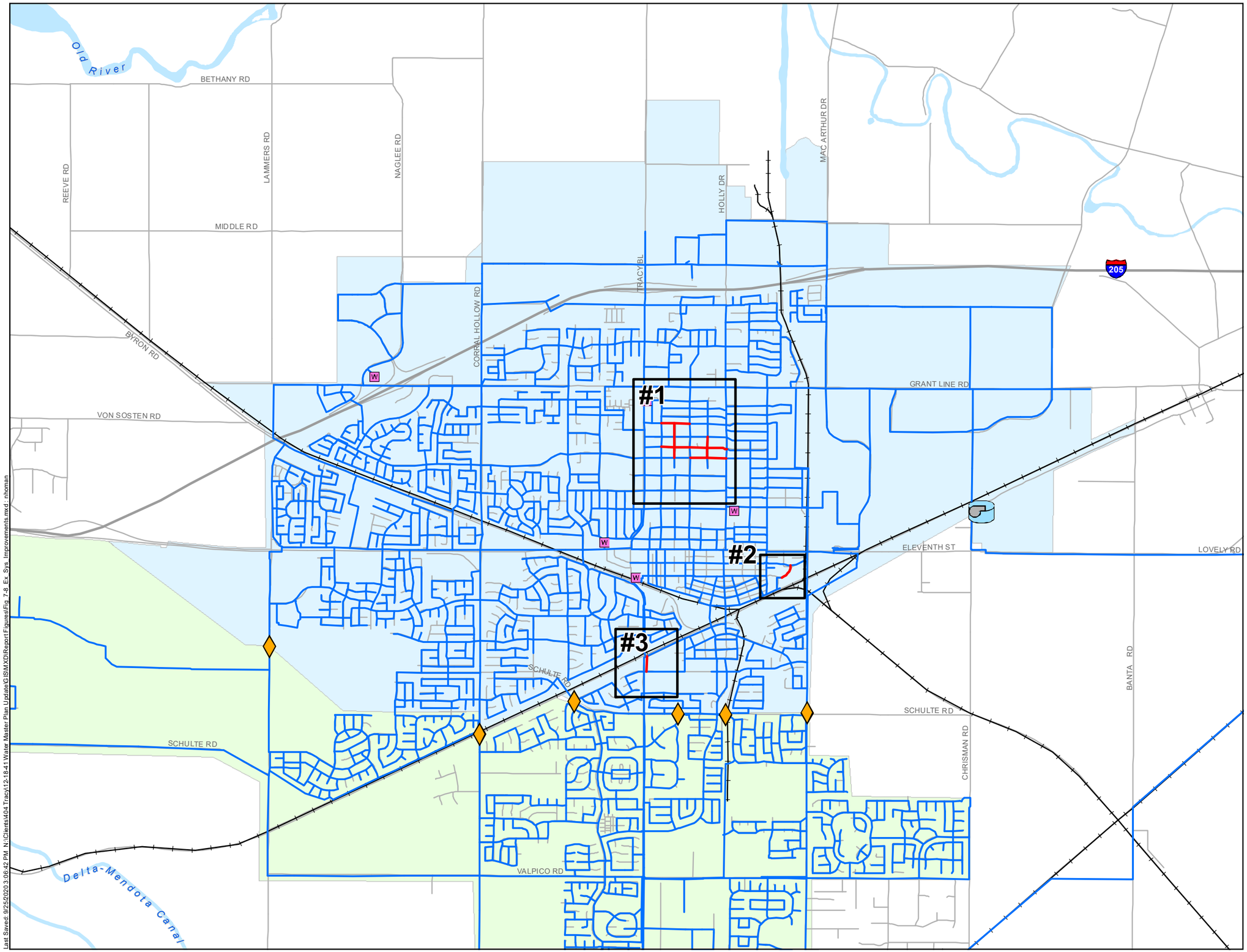
The locations of all recommended pipeline improvements are shown on Figure 7-8.

Several pipeline improvements are recommended to mitigate existing fire flow deficiencies. These fire flow deficiencies are not triggered by projected future water demands from new development. The existing water system infrastructure in the areas listed below is insufficient to meet the fire flow requirements based on existing land use and water demands. As such, planning and design for these improvements should be prioritized. Detailed locations of these improvements are shown on Figure 7-9.

- Improvement #1: Replace the existing pipelines in 20th Street between Bessie Avenue and Parker Avenue, Wall Street between Lowell Avenue and 20th Street, Emerson Avenue between Bessie Avenue and Holly Drive, Court Drive between Whittier Avenue and Lowell Avenue, and Lowell Avenue between Parker Avenue and Holly Drive with approximately 6,000 linear feet (lf) of new 8-inch diameter pipelines.
- Improvement #2: Install approximately 515 lf of 12-inch diameter pipeline in Ninth Street between School Street and Tenth Street.
- Improvement #3: Replace approximately 485 lf of existing 4-inch diameter pipeline in Tracy Boulevard north of Mount Diablo Avenue with new 12-inch diameter pipeline; this improvement was previously recommended in the 2012 WSMP.

7.5.1 Pipeline Renewal and Replacement

As the City's water system ages, older water pipelines will deteriorate and have decreased hydraulic capacity and greater chance of leaking or breaking. To address this, the City should implement a renewal and replacement (R&R) program to proactively replace at-risk water pipelines before they fail. This Citywide Water System Master Plan Update does not include a condition assessment of existing facilities or development of a renewal and replacement (R&R) program. Therefore, it is recommended that the City perform a separate study which evaluates the condition of existing water system assets and develops a prioritized list for asset replacement based on age, material, failure history, and other parameters.



Symbology

- Recommended Improvement from Hydraulic Evaluation
- Existing Pipeline
- Pressure Regulating Station
- Booster Pump Station
- Groundwater Well
- Storage Tank
- John Jones Water Treatment Plant

Pressure Zone

- Zone 1
- Zone 2

Notes:
1. See Figure 7-9 for detailed views of recommended improvements from hydraulic evaluation (areas #1 - #3).

Figure 7-8

Existing System Recommended Improvements

City of Tracy
Water System Master Plan Update

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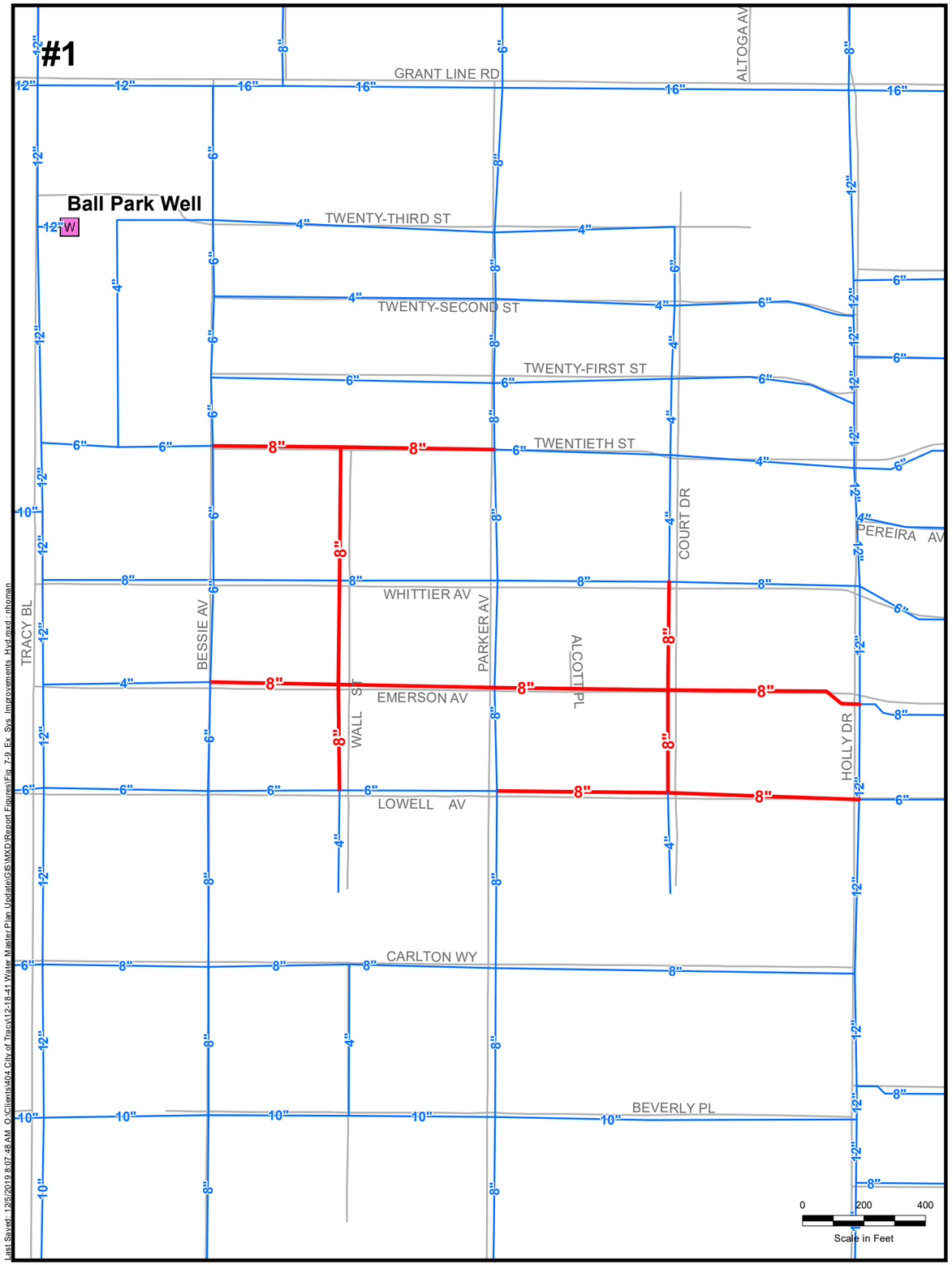

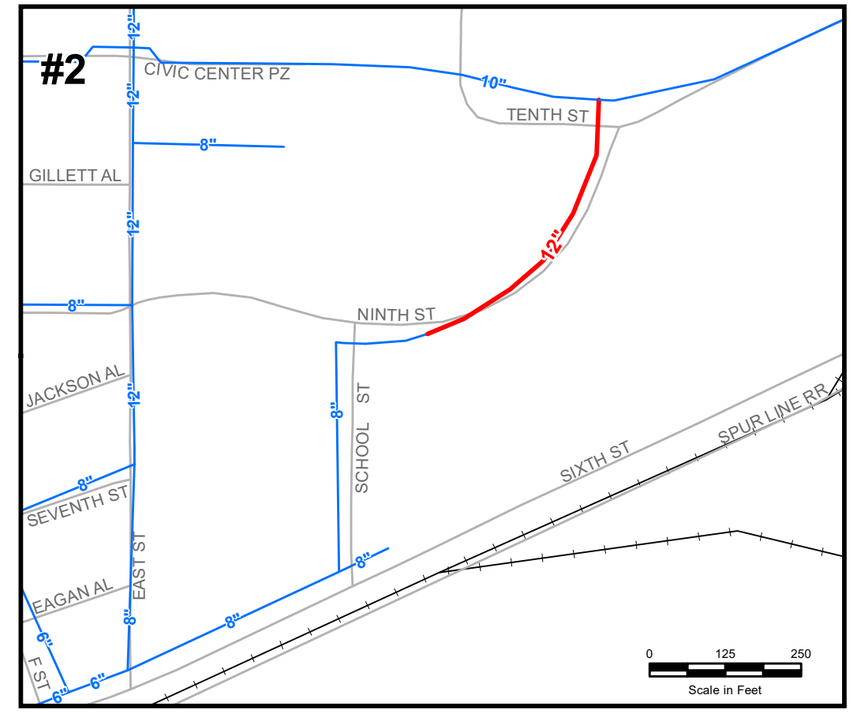

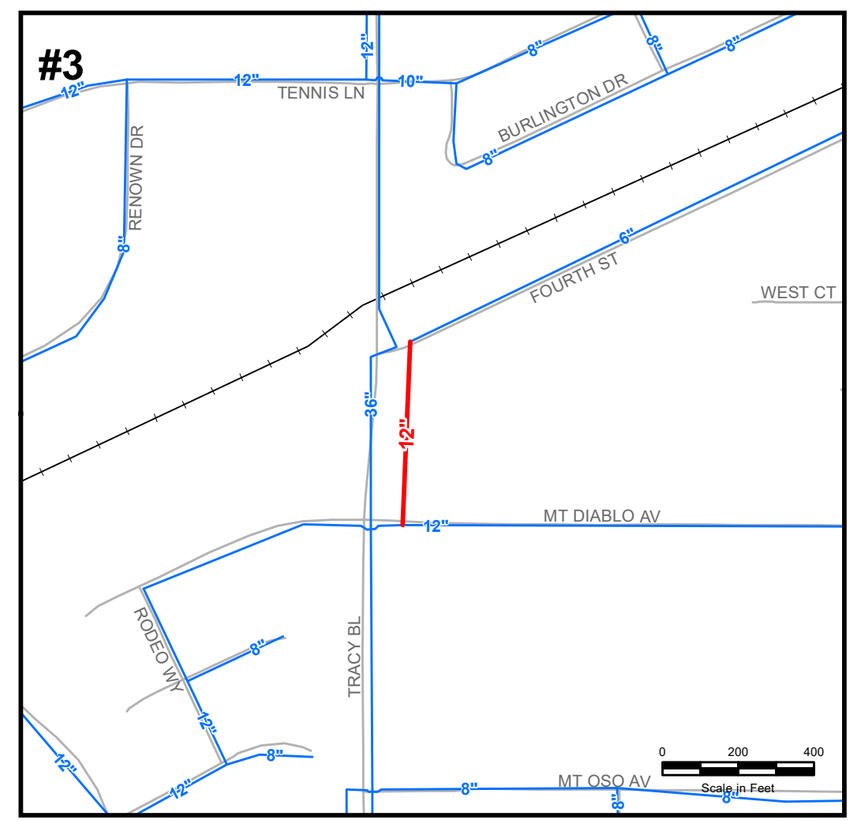

N

Symbology

- W Groundwater Well
- Recommended Improvement from Hydraulic Evaluation
- Existing Pipeline

Notes:
1. See Figure 7-8 for the locations of the recommended improvements.

Figure 7-9

Existing System Recommended Improvements from Hydraulic Evaluation

City of Tracy
Water System Master Plan Update

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CHAPTER 8
Future Potable Water System Evaluation

8.1 OVERVIEW

The purpose of this chapter is to present the development and evaluation of the City's proposed potable water backbone transmission and distribution system for the 2025 and buildout timeframes. This chapter identifies the additional improvements that will be required in addition to the existing potable water system infrastructure improvements (described in Chapter 7) to support the City's projected potable water demands in the future. Development of the future potable water system includes an evaluation of the following: (1) the required future water treatment, storage and pumping capacity; and (2) the future water system's ability to meet recommended water system performance and operational criteria under maximum day demand plus fire flow and peak hour demand scenarios. The future water system was evaluated at both the 2025 and buildout timeframes. The future water system was not evaluated at the 2040 timeframe discussed in Chapters 4 and 5 because new water system facilities should be sized to accommodate buildout demands. Future updates to the WSMP may evaluate the 2040 timeframe as a near-term condition.

Using the City's recommended performance and operational criteria described in Chapter 6, preliminary sizing of major transmission pipelines and facilities required to serve future development projects was developed based on the projected potable water demands presented in Chapter 4. To evaluate the suitability of these preliminary sized facilities to meet the recommended performance and operational criteria, they were subsequently incorporated into the hydraulic model of the existing potable water system (evaluated in Chapter 7). This updated hydraulic model of the future potable water system was then used to evaluate maximum day demand plus fire flow and peak hour demand conditions for the 2025 and buildout timeframes to identify any deficiencies and to refine the preliminary sizing of major transmission pipelines and facilities.

Evaluations, findings, and recommendations for supporting projected future potable water demands and addressing any deficiencies identified within the future potable water backbone transmission and distribution system are included in this chapter. Recommendations were used to develop a CIP, which includes an estimate of probable construction costs for Master Plan Program facilities. The recommended potable water system CIP is described further in Chapter 10.

The following sections of this chapter describe the components of the City's future potable water backbone transmission and distribution system evaluation:

- Pressure Zone Recommendations
- Projected Future Potable Water Demands
- Future Potable Water System Facility Evaluation
- Future Potable Water System Performance Evaluation
- Summary of Recommended Future Potable Water System Improvements

To assist in the evaluation of the City's overall future potable water system, the future infrastructure recommended in this chapter includes the infrastructure required to serve the Tracy Hills development and, for consistency, is based on the adopted water use, peaking factors, and system performance criteria described in previous chapters of this WSMP Update. Although the Tracy Hills development is located within separate and distinct pressures zones from the rest of the City, West Yost has included the Tracy Hills development in the future potable water system evaluation because it will be a part of the City's overall future potable water system operations since it will be served directly from the City's JJWTP. The Tracy Hills Phase 1 water system infrastructure included in this WSMP Update is based on prepared plans and drawings, and the infrastructure for Tracy Hills Phases 2 through 5 is based on the Tracy Hills Water Study prepared by RJA in December 2014. However, projected land use for Tracy Hills used in this WSMP Update is not from the Tracy Hills Water Study, but is instead based on development data provided by the City's Planning Department, as discussed in Chapter 3 and presented in Appendix A. Including the Tracy Hills development in the 2025 and buildout hydraulic model evaluations ensures that the future potable water system will be adequate to serve potable water demands to the entire City (including Tracy Hills) and can provide water service at acceptable system pressures and pipeline velocities. Because planning for future phases of Tracy Hills is subject to change, the sizing of any future water system improvements to serve Tracy Hills should be confirmed based on the latest development plans and associated water demand projections.

8.2 PRESSURE ZONE RECOMMENDATIONS

The City's existing potable water system currently consists of several interconnected pressure zones (Zone 1, Zone 2, Zone 3, and Ellis Reduced Zone). With the exception of the Tracy Hills development, all of the City's future development projects will be located in one of these existing pressure zones. In addition to the planned IPC re-zoning discussed in Chapter 7, there are two planned re-zoning projects which will alter the existing pressure zone boundaries in the 2025 and buildout time frames.

Zone 3 (formerly called City-Side Zone 3) is currently split into two isolated portions: one which serves the Ellis Reduced Zone, and one which serves the International Park of Commerce and the Patterson Pass Business Park. The City plans to connect these two isolated portions by constructing new transmission pipelines and by re-zoning some existing transmission pipeline from Zone 2 to Zone 3. A detailed description of the planned modifications to the City's water system required to fully integrate Zone 3 are provided in Appendix D. The City plans to install new PRVs at the intersection of Schulte Road and Bud Lyons Way and the intersection of Schulte Road and Pavillion Parkway to avoid stagnant water in the dead-end Zone 2 pipelines created by the re-zoning. Once Zone 3 is fully integrated, the Zone 3 BPS will primarily be used to fill the Cordes Tank. The Cordes BPS will serve the integrated Zone 3 and the Ellis Reduced Zone (via several PRVs) when the Cordes Tank is not being filled. For this WSMP Update, it was assumed that this re-zoning project will be complete by 2025.

Another re-zoning project, referred to as "Plan C", will re-zone a small area bounded by Middlefield Drive to the north, Whirlaway Lane to the east, Linne Road to the south, and Corral Hollow Road to the west from Zone 2 to Zone 3. As currently zoned, the Plan C area experiences low pressures because it is located at the top of Zone 2. To improve pressure in the Plan C area, a new Zone 3 transmission pipeline will be constructed. This transmission pipeline will exit the JJWTP from the

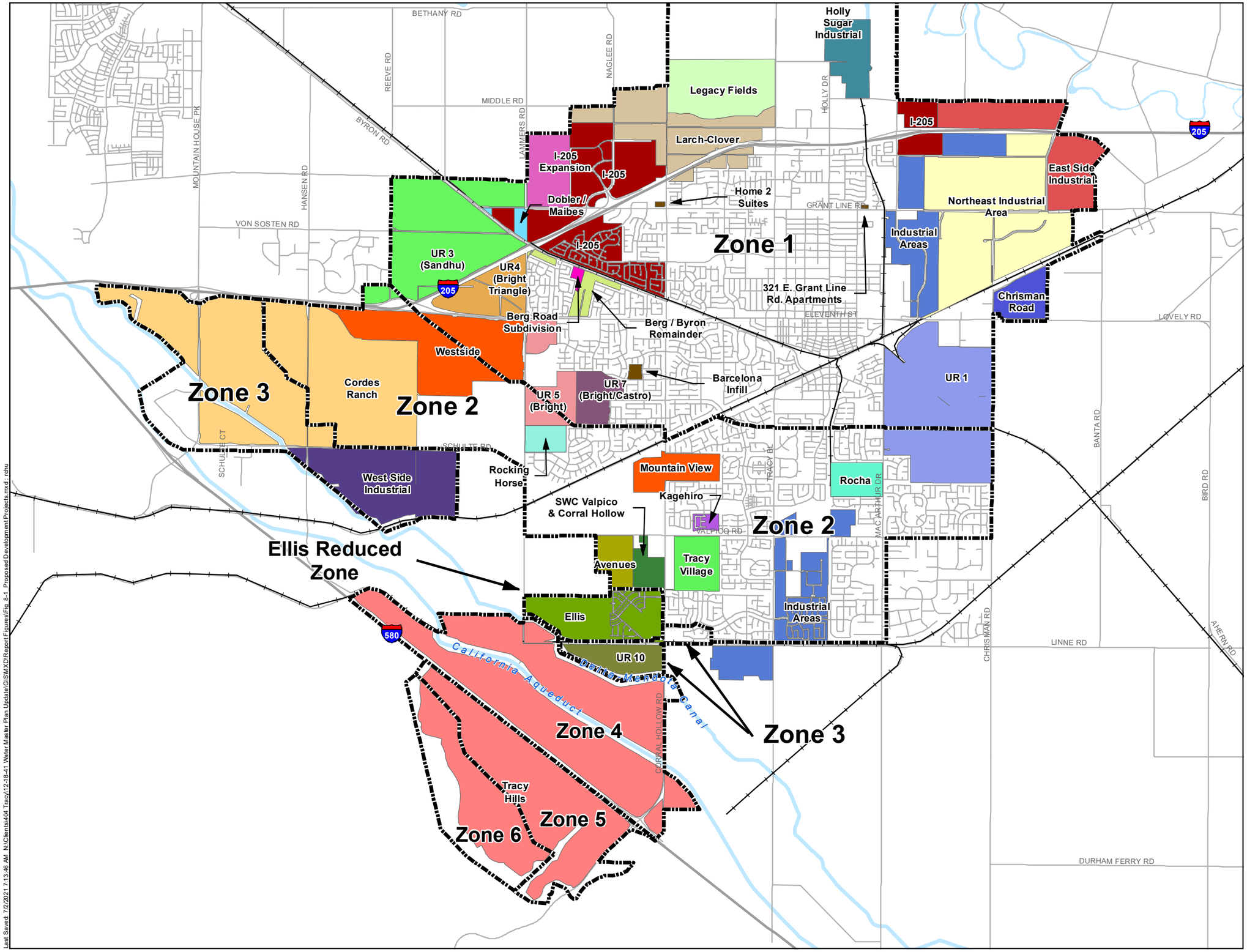
east and tie into the existing pipeline in Linne Road, which will also be re-zoned to Zone 3. This new Zone 3 pipeline will support the Plan C area and provide redundant transmission capacity for Zone 3. To prevent service pressures from exceeding 80 psi in the Plan C area after re-zoning, the City plans to install PRVs at the intersection of Middlefield Drive and Corral Hollow Road and at the Whirlaway pipeline connection to Linne Road. The City also plans to install four new PRVs to separate the Plan C area from the Zone 2 service areas to the north and east. These PRVs will prevent stagnant water from forming in the dead-end pipelines created by the re-zoning. It should be noted that alternative approaches to resolving the stagnant water issue may be possible and should be further evaluated before proceeding with this improvement. It was assumed that the Plan C re-zoning will not occur by 2025 and is therefore only included in the buildout evaluation. Funding for this improvement will be provided through Plan C funds.

In order to serve water demands in the Tracy Hills development, which is located at higher elevations than the City's existing customers, the City plans to add three additional pressure zones onto the existing service area, called Zones 4, 5, and 6. These pressure zones were previously referred to as Tracy Hills Zone 3, Tracy Hills Zone 4, and Tracy Hills Zone 5, respectively. Note that documents produced prior to this Water System Master Plan Update use the old nomenclature. As currently planned, these pressure zones will be exclusive to the proposed Tracy Hills development. Although the service elevations of Zone 3 and Zone 4 partially overlap, the two pressure zones will operate at different hydraulic grades and will be hydraulically separate.

The approximate boundaries of the existing and proposed pressure zones and the locations of future development projects are shown on Figure 8-1. Table 8-1 provides a summary of the existing and proposed pressure zone boundaries with key characteristics such as service elevations and static pressure ranges.

System pressures at some service elevations in the Tracy Hills development are expected to be high (up to 118 psi or more) due to the service elevation ranges proposed for Zones 5 and 6 as developed in the Tracy Hills Water Study (RJA, 2014). To be consistent with the study, the proposed service elevation ranges for Zones 5 and 6 were not adjusted for this Citywide WSMP Update. However, it is recommended that these proposed pressure zones for the Tracy Hills development be reviewed and redefined, if possible, to reduce the occurrence of such high system pressures.

As discussed in Chapter 6, the highest recommended system pressure for the Citywide WSMP Update is 100 psi and any water service connections located in areas with service connection pressures exceeding 80 psi will require the installation of individual PRVs to reduce the pressure below 80 psi.



Symbology

- Pressure Zone

Specific Plans

- I-205 Corridor
- Industrial Areas
- Northeast Industrial Area
- Avenues
- Cordes Ranch
- Ellis
- Tracy Hills
- Tracy Village
- Westside

Other Approved Projects

- Berg Road Subdivision
- Dobler / Maibes
- Kagehiro
- Rocking Horse
- Legacy Fields
- Small Approved Projects

Annexations

- Mountain View Annexation

Additional Planned Development Areas

- Berg / Byron Remainder
- Chrisman Road
- East Side Industrial
- Holly Sugar Industrial
- I-205 Expansion
- Larch-Clover
- Rocha
- SWC Valpico & Corral Hollow
- UR 1
- UR 3 (Sandhu)
- UR 4 (Bright Triangle)
- UR 5 (Bright)
- UR 7 (Bright/Castro)
- UR 10
- West Side Industrial

Notes:

1. Dobler / Maibes is part of the I-205 Specific Plan area, but is accounted for separately in this WSMP.
2. Pressure zone boundaries shown reflect planned re-zoning of areas to take place by buildout.
3. Small Approved Projects include Home 2 Suites, 321 E. Grant Line Road Apartments, and Barcelona Infill.

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WEST YOST ASSOCIATES

Figure 8-1

Proposed Development Areas and Pressure Zone Boundaries

City of Tracy
Water System Master Plan Update

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Table 8-1. Existing and Proposed Pressure Zone Boundaries

Pressure Zone	Nominal Hydraulic Grade, ft	Nominal Range of Service Elevations, ft	Static Pressure Range, psi
Zone 1	195	0 - 75	40 - 75
Zone 2	270	75 - 150	40 - 85[a]
Zone 3 (formerly City-Side Zone 3)	368	150 - 245	55 - 95[a]
Ellis Reduced Zone	323	140 - 185	60 - 80
Zone 4 (formerly Tracy Hills Zone 3)	425	209 - 325	43 - 93[a]
Zone 5 (formerly Tracy Hills Zone 4)[b]	580	305 - 470	47 - 118[a]
Zone 6 (formerly Tracy Hills Zone 5)[b]	735	460 - 630	45 - 118[a]

(a) Per the California Plumbing Code, services which experience pressures exceeding 80 psi are required to be fitted with a pressure reducing valve.
(b) Based on Tracy Hills Water Study prepared by RJA, December 2014.

8.3 PROJECTED FUTURE POTABLE WATER DEMANDS

Future potable water demands were developed based on the additional projected future land use information provided by the City, and the adopted unit water demand factors as described in Chapter 4. Based on the existing and proposed pressure zone boundaries, the projected potable water demands were calculated and categorized by pressure zone. Table 8-2 summarizes the City's 2025 potable water demands (including existing demands) by pressure zone. Table 8-3 summarizes the City's buildout potable water demands (including existing and 2025 demands) by pressure zone. Table 8-4 provides additional detail of the projected average day water demands at buildout for each future development project by pressure zone (not including existing demands).

Table 8-2. 2025 Potable Water Demands by Pressure Zone

Pressure Zone		Average Day Demand[a]		Maximum Day Demand[b]		Peak Hour Demand[c]	
		gpm	mgd	gpm	mgd	gpm	mgd
Zone 1		7,590	10.9	12,903	18.6	22,011	31.7
Zone 2		4,251	6.1	7,227	10.4	12,329	17.8
Zone 3	PPBP[d]	392	0.6	667	1.0	1,138	1.6
	Ellis Reduced Zone	186	0.3	316	0.5	540	0.8
	Other	474	0.7	806	1.2	1,375	2.0
Zone 4		370	0.5	629	0.9	1,074	1.5
	Total	**13,264**	**19.1**	**22,550**	**32.5**	**38,467**	**55.4**

(a) Equal to existing water demands plus projected 2025 water demands presented in Table 4-16.
(b) Maximum day demand is 1.7 times the average day demand.
(c) Peak hour demand is 2.9 times the average day demand.
(d) Water demands from PPBP are not included in the City's water production totals because the water supply for this area is purchased by PPBP from the Byron Bethany Irrigation District. However, the City is responsible for providing water treatment and delivery services to PPBP.

Table 8-3. Buildout Potable Water Demands by Pressure Zone

Pressure Zone		Average Day Demand[a]		Maximum Day Demand[b]		Peak Hour Demand[c]	
		gpm	mgd	gpm	mgd	gpm	mgd
Zone 1		11,249	16.2	19,123	27.5	32,622	47.0
Zone 2		5,816	8.4	9,887	14.2	16,866	24.3
Zone 3	PPBP[d]	392	0.6	667	1.0	1,138	1.6
	Ellis Reduced Zone	342	0.5	582	0.8	993	1.4
	Other	1,286	1.9	2,185	3.1	3,728	5.4
Zone 4		1,187	1.7	2,018	2.9	3,443	5.0
Zone 5		568	0.8	965	1.4	1,646	2.4
Zone 6[e]		309	0.4	526	0.8	897	1.3
	Total	**21,149**	**30.5**	**35,954**	**51.8**	**61,333**	**88.3**

(a) Equal to existing water demands plus projected buildout water demands presented in Table 4-16.
(b) Maximum day demand is 1.7 times the average day demand.
(c) Peak hour demand is 2.9 times the average day demand.
(d) Water demands from PPBP are not included in the City's water production totals because the water supply for this area is purchased by PPBP from the Byron Bethany Irrigation District. However, the City is responsible for providing water treatment and delivery services to PPBP.
(e) Tracy Hills demands were allocated by pressure zone based on recent land use data provided by the City's planning division. The proportion of Tracy Hills demands allocated to Zone 6 in this WSMP is significantly greater than allocated to Zone 6 (formerly Tracy Hills Zone 5) in the Tracy Hills Water Study prepared by RJA (December 2014). Demands should be confirmed using the most recent land use data before development of Zones 5 and 6 begins.

Table 8-4. Summary of Buildout Average Day Potable Water Demands by Development Project[a,b]

Project or Development Area	Zone 1		Zone 2		Zone 3 and Ellis Reduced Zone		Zone 4		Zone 5		Zone 6		Total	
	gpm	percent of total	gpm	percent of total	gpm	percent of total	gpm	percent of total	gpm	percent of total	gpm	percent of total	gpm	percent of total
UR 5 (Bright)	181.79	4.14%		0.00%		0.00%		0.00%		0.00%		0.00%	181.79	1.81%
UR 7 (Bright/Castro)	136.40	3.10%		0.00%		0.00%		0.00%		0.00%		0.00%	136.40	1.36%
Rocking Horse		0.00%	63.37	3.08%		0.00%		0.00%		0.00%		0.00%	63.37	0.63%
Tracy Village		0.00%	183.40	8.91%		0.00%		0.00%		0.00%		0.00%	183.40	1.82%
UR 1	535.24	12.18%	219.02	10.64%		0.00%		0.00%		0.00%		0.00%	754.26	7.50%
Ellis		0.00%		0.00%	324.35	21.10%		0.00%		0.00%		0.00%	324.35	3.23%
Avenues		0.00%	134.59	6.54%		0.00%		0.00%		0.00%		0.00%	134.59	1.34%
UR 10		0.00%		0.00%	87.91	5.72%		0.00%		0.00%		0.00%	87.91	0.87%
Tracy Hills		0.00%		0.00%		0.00%	1,187.29	100.00%	567.61	100.00%	309.45	100.00%	2064.35	20.53%
Westside	389.47	8.87%	389.47	18.92%		0.00%		0.00%		0.00%		0.00%	778.94	7.75%
Cordes Ranch		0.00%	464.82	22.58%	627.36	40.82%		0.00%		0.00%		0.00%	1092.17	10.86%
UR 4 (Bright Triangle)	239.63	5.45%		0.00%		0.00%		0.00%		0.00%		0.00%	239.63	2.38%
UR 3 (Sandhu)	437.60	9.96%	69.79	3.39%		0.00%		0.00%		0.00%		0.00%	507.39	5.05%
I-205 Expansion	325.93	7.42%		0.00%		0.00%		0.00%		0.00%		0.00%	325.93	3.24%
West Side Industrial		0.00%		0.00%	492.57	32.05%		0.00%		0.00%		0.00%	492.57	4.90%
East Side Industrial	280.33	6.38%		0.00%		0.00%		0.00%		0.00%		0.00%	280.33	2.79%
Larch-Clover	402.17	9.15%		0.00%		0.00%		0.00%		0.00%		0.00%	402.17	4.00%
Chrisman Road	89.42	2.04%		0.00%		0.00%		0.00%		0.00%		0.00%	89.42	0.89%
Rocha		0.00%	144.91	7.04%		0.00%		0.00%		0.00%		0.00%	144.91	1.44%
Berg/Byron Remainder	116.54	2.65%		0.00%		0.00%		0.00%		0.00%		0.00%	116.54	1.16%
Berg Road Subdivision	16.84	0.38%		0.00%		0.00%		0.00%		0.00%		0.00%	16.84	0.17%
SWC Valpico & Corral Hollow		0.00%	79.07	3.84%		0.00%		0.00%		0.00%		0.00%	79.07	0.79%
Kagehiro		0.00%	55.70	2.71%		0.00%		0.00%		0.00%		0.00%	55.70	0.55%
Dobler/Maibes	24.13	0.55%		0.00%		0.00%		0.00%		0.00%		0.00%	24.13	0.24%
Holly Sugar Industrial	113.61	2.59%		0.00%		0.00%		0.00%		0.00%		0.00%	113.61	1.13%
Northeast Industrial Area	446.12	10.15%		0.00%		0.00%		0.00%		0.00%		0.00%	446.12	4.44%
Industrial Areas Specific Plan		0.00%	146.92	7.14%		0.00%		0.00%		0.00%		0.00%	146.92	1.46%
I-205 Corridor Specific Plan	46.93	1.07%		0.00%		0.00%		0.00%		0.00%		0.00%	46.93	0.47%
Mountain View		0.00%	54.38	2.64%		0.00%		0.00%		0.00%		0.00%	54.38	0.54%
Legacy Fields	32.44	0.74%		0.00%		0.00%		0.00%		0.00%		0.00%	32.44	0.32%
Small Approved Projects[c]	202.69	4.61%	0.00	0.00%		0.00%		0.00%		0.00%		0.00%	202.69	2.02%
Infill (misc.)	375.96	8.56%	53.02	2.58%	4.87	0.32%		0.00%		0.00%		0.00%	433.85	4.32%
Total	**4,393.25**	**100%**	**2,058.45**	**100%**	**1,537.05**	**100%**	**1,187.29**	**100%**	**567.61**	**100%**	**309.45**	**100%**	**10,053.10**	**100%**

(a) Water demands shown are for new development only and do not include existing potable water demands. See Appendix A for detailed demand calculations by project or development area.

(b) Water demands shown include UAFW.

(c) Includes Home 2 Suites, 321 E. Grant Line Road Apartments, and Barcelona Infill.
Also includes the following identified projects within the I-205 Corridor Specific Plan area: Sierra Hills, Grant Line Road Apartments, Aspire II, Harvest.

8.4 FUTURE POTABLE WATER SYSTEM FACILITY EVALUATION

To develop the future potable water system, analyses addressing the following system facilities were conducted:

- Water Treatment Capacity
- Water Storage Capacity
- Pumping Capacity
- Critical Supply Facilities

The results from the future potable water system facilities analyses are discussed below. Recommendations for supporting projected future potable water demands and addressing any deficiencies identified within the future potable water backbone transmission and distribution system are summarized in *Section 8.6 Summary of Recommended Future Potable Water System Improvements*.

8.4.1 Water Treatment Capacity

Sufficient water treatment capacity from the JJWTP, the South County Water Supply Project, and groundwater wells will be required to meet the City's 2025 and buildout maximum day demand conditions. In addition, the City's goal is to have sufficient surface water treatment capacity to meet the 2025 and buildout maximum month demands without relying on groundwater.

Table 8-5 shows that the City's current water treatment capacity is sufficient to meet 2025 maximum day potable water demands and that the City's current surface water treatment capacity is sufficient to meet 2025 maximum month potable water demands.

Table 8-5. Comparison of Available and Required Water Treatment Capacity in 2025, mgd

Demand Condition	JJWTP[(a)]	South County Water Supply Project[(b)]	Groundwater	Total Treated Water Capacity	2025 Demand	Treated Water Capacity Surplus or (Deficit)
Maximum Day	27	15.5	21.7[(c)]	64.2	32	32
Maximum Month[(d)]	27	15.5	0.0[(e)]	42.5	29	13

(a) Supplied from Zone 1 36-inch diameter transmission main, Zone 2 BPS, Zone 3 BPS, and Zone 4 BPS. Although the JJWTP is designed to supply 30 mgd, the actual maximum pumping capacity of the intake pumps is 27 mgd.
(b) Supplied from Linne Road and NEI Booster Pump Stations. It is anticipated that as Manteca and Lathrop develop, Tracy's share of the deliverable capacity from this source will be reduced to 15.5 mgd.
(c) Equivalent to firm groundwater pumping capacity, assuming that 20 percent of the City's wells would be out of service (i.e., approximately two wells: one in Zone 1, and one at the JJWTP).
(d) Estimated to be 90 percent of maximum day demands.
(e) The City's goal is to meet maximum month demands without relying on groundwater supply.

Table 8-6 shows that the City's current water treatment capacity is sufficient to meet buildout maximum day potable water demands. Although the City's current surface water treatment capacity is not sufficient to meet buildout maximum month potable water demands, the deficit could be made up using 4 mgd of groundwater.

Table 8-6. Comparison of Available and Required Water Treatment Capacity at Buildout, mgd

Demand Condition	JJWTP[(a)]	South County Water Supply Project[(b)]	Groundwater	Total Treated Water Capacity	Buildout Demand	Treated Water Capacity Surplus or (Deficit)
Maximum Day	27	15.5	32.5[(c)]	75.0	52	23
Maximum Month[(d)]	27	15.5	0.0[(e)]	42.5	47	(4)

(a) Supplied from Zone 1 36-inch diameter transmission main, Zone 2 BPS, Zone 3 BPS, and Zone 4 BPS. Although the JJWTP is designed to supply 30 mgd, the actual maximum pumping capacity of the intake pumps is 27 mgd.
(b) Supplied from Linne Road and NEI Booster Pump Stations. It is anticipated that as Manteca and Lathrop develop, Tracy's share of the deliverable capacity from this source will be reduced to 15.5 mgd.
(c) Equivalent to firm groundwater pumping capacity, assuming that 20 percent of the City's wells would be out of service (i.e., approximately three wells: two in Zone 1, and one at the JJWTP). Includes the capacity of recommended wells to be constructed by buildout.
(d) Estimated to be 90 percent of maximum day demands.
(e) The City's goal is to meet maximum month demands without relying on groundwater supply.

Based on discussion with City staff, plans for a future 15 mgd expansion at the JJWTP were already envisioned and integrated into the planning and associated environmental review process during the most recent 15 mgd expansion (from 15 to 30 mgd) completed in 2008. Based on the updated future demand projections, an expansion of the JJWTP would not be required if the City is able to pump groundwater at a sustainable rate to supplement surface water treatment capacity. However, as a part of the City's wastewater permit, the City needs to reduce the use of the groundwater as part of its Salinity Reduction Plan, as well as to comply with the Groundwater Sustainability Plan prepared for compliance with the Sustainable Groundwater Management Act. As such, a future additional 10 mgd expansion of the JJWTP is recommended to provide the City with additional water treatment capacity, as well as operational flexibility and reliability, if the use of groundwater supplies needs to be limited or if there is a supply outage from South County Water Supply Project. The expansion would also include a new administration/maintenance building to accommodate future staffing needs and maintenance activities.

Additional JJWTP treated water storage and pumping facilities are also recommended at buildout. Based on the additional demands in Zone 3 at buildout, it is recommended that a new clearwell be constructed at the JJWTP to provide operational flexibility for the water treatment plant and to provide additional operational and emergency storage capacity to serve future developments. For this Citywide WSMP Update, it was assumed that the new clearwell will have a minimum active (useable) storage capacity of 1.0 MG. Buildout demands will also require new booster pumps to be installed at the JJWTP. *Section 8.4.3 Pumping Capacity* provides additional discussion regarding the additional treated surface water booster pumping capacity required at the JJWTP to serve buildout maximum day demands.

8.4.2 Water Storage Capacity

The principal advantages that storage provides for the water system are the ability to equalize demands on supply sources, production facilities, and transmission mains; to provide emergency storage in case of supply failure; and to provide water to fight fires. The City's water service area has two sources of available storage: above ground storage (i.e., clearwells and storage tanks) and storage available through the groundwater basin. Together, these two sources of storage must be sufficient to meet the City's operational, emergency, and fire flow storage criteria. The volumes required for each of these three storage components are listed below:

- Operational Storage: 30 percent of a maximum day demand.
- Emergency Storage: 1.5 times an average day demand.
- Fire Flow Storage: The required fire flow rates multiplied by their associated fire flow duration periods, as required by the City's Fire Department. For larger pressure zones, two concurrent fire flow events were assumed for the storage capacity analysis.[1] However, the recommended fire flow storage does not include the volume associated with sprinkler flows.

Because the City's potable water supply includes supply from groundwater wells, the groundwater basin can account for a portion of the recommended emergency storage, in the form of a groundwater credit. However, the following must be true to use the groundwater supply to offset the need to provide surface storage reservoirs:

- Groundwater supply is of potable water quality and can be reliably accessed (i.e., wells are equipped with on-site emergency generators).
- Groundwater supply is not already relied upon to meet the City's average day demand requirements.
- Groundwater supply is of firm groundwater supply availability (i.e., assumes 20 percent of wells will be out of service at any given time).
- Sufficient water distribution facilities are available to distribute this water to demand areas.

[1] Two concurrent fire flow events were not simulated in Zones 4, 5 and 6 for the Tracy Hills development because these smaller pressure zones do not justify the use of two simultaneous fire flow events.

In addition, the City currently has two independent sources of treated surface water supply, and some quantity of the total treated surface water supply capacity can also account for a portion of the recommended emergency storage. The treated surface water credit assumes that the smaller of the treated surface water supply sources can be available to offset a portion of the emergency storage requirement. However, the following must be true to use treated surface water supply to offset the need to provide above-ground storage:

- Treated surface water supply can be reliably accessed (i.e., treated surface water supply facility is equipped with on-site emergency generator).
- Sufficient treated surface water booster pumping facilities are available to distribute this water to demand areas.

In summary, the Emergency Storage Credit is equal to the sum of the groundwater and treated surface water supply credits. However, the Emergency Storage Credit can only provide a maximum storage credit equal to the City's required emergency storage volume.

The existing potable water storage facilities (including the Tracy Hills At-Grade Tank, which is currently under construction), in conjunction with the available Emergency Storage Credit, were evaluated to determine whether the City's current potable water system has sufficient storage capacity within each pressure zone to provide the required operational, emergency, and fire flow storage for the 2025 and buildout timeframes.

Table 8-7 provides a comparison of the City's available potable water storage capacity and emergency storage credit with the required 2025 storage capacity. The comparison indicates that the City's existing facilities will be sufficient and that no additional storage facilities need to be constructed by 2025.

Table 8-8 provides a comparison of the City's available potable water storage capacity and emergency storage credit with the required buildout storage capacity. The comparison between the City's available and required storage capacities indicates that the City will have the following potable water storage capacity deficits within each pressure zone at buildout:

- Zones 1 and 2[2]: 0.2 MG
- Zone 3: 1.2 MG
- Zone 4: 0.6 MG
- Zone 5: 2.6 MG
- Zone 6: 1.1 MG

[2] Under existing conditions, Zones 1 and 2 are interconnected through six existing pressure regulating stations (PRS). Therefore, Zones 1 and 2 were evaluated together for the future potable water system facility evaluation.

Table 8-7. Comparison of Available and Required Water Storage Capacity in 2025

[A]	[B]	[C]	[D]	[E]	[F]	[G] = [C] + [F]	[H]	[I]	[J]	[K] = [H] + [I] + [J]	[L] = [G] - [K]
		Available Storage Capacity, MG					Required Storage Capacity, MG				
			Emergency Storage Credit								
Station	Status	Reservoir Capacity	Groundwater Credit[a]	Treated Surface Water Supply Credit[b]	Total Emergency Storage Credit[c]	Total Available Storage	Operational[d]	Emergency[e]	Fire Flow	Total Required Storage	Storage Surplus (Deficit), MG
Zone 1 and Zone 2											
NEI	Active	2.4	--	25.50	25.58	**39.08**	8.70	25.58	1.14[h]	**35.41**	**3.6**
Lincoln Well	Active	--	5.40								
Lewis Manor Well	Inactive	--	--								
Park and Ride Well	Active	--	4.32								
Ball Park Well	Active	--	5.40								
Well 8[f]	Active	--	--								
Linne	Active	7.1	--								
Well 1[g]	Active	--	--								
Well 2[f,g]	Active	--	--								
Well 3[f,g]	Active	--	--								
Well 4[f,g]	Active	--	--								
Clearwell #2	Active	4.0	--								
Zone 3 and Ellis Reduced Zone											
Cordes	Active	2.0	--	0.00	2.27[i]	**4.27**	0.77	2.27	1.14[h]	**4.19**	**0.1**
Zone 4											
Tracy Hills At-Grade	Under Construction	3.8	--	0.00	0.00	**3.75**	0.27	0.80	0.18[j]	**1.25**	**2.5**

(a) Credit based on 1.5 days of pumping capacity from active groundwater wells with on-site backup power because the required emergency storage capacity is equal to 1.5 times the average day demand. See Table 7-2 for individual well capacity.

(b) Credit based on 1.5 days of available treatment capacity (17 mgd) from the SCWSP because the required emergency storage capacity is equal to 1.5 times the average day demand.

(c) Equal to the sum of the groundwater and treated surface water supply credits; however, the maximum credit is equal to the required emergency storage capacity.

(d) Based on 30 percent of a maximum day demand (see Table 8-2).

(e) Based on 1.5 times the average day demand (see Table 8-2).

(f) Well does not contribute to Groundwater Credit because it does not have on-site backup power.

(g) Well does not contribute to Groundwater Credit because water produced by the well must be blended with chlorinated water from the JJWTP prior to distribution. The JJWTP is assumed to be offline in an emergency.

(h) Based on storage required for two concurrent fire flow events; a Single Family Residential fire flow and an Industrial fire flow (see Table 6-1).

(i) Surplus Treated Surface Water Supply Credit from other pressure zones can be used to provide emergency storage for Zone 3.

(j) Based on storage required for a Single Family Residential fire flow (see Table 6-1).

Table 8-8. Comparison of Available and Required Water Storage Capacity at Buildout

[A]	[B]	[C]	[D]	[E]	[F]	[G] = [C] + [F]	[H]	[I]	[J]	[K] = [H] + [I] + [J]	[L] = [G] - [K]
		Available Storage Capacity, MG					Required Storage Capacity, MG				
			Emergency Storage Credit								
Station	Status	Reservoir Capacity	Groundwater Credit[a]	Treated Surface Water Supply Credit[b]	Total Emergency Storage Credit[c]	Total Available Storage	Operational[d]	Emergency[e]	Fire Flow	Total Required Storage	Storage Surplus (Deficit), MG
Zone 1 and Zone 2											
NEI	Active	2.4	--	25.50	36.86	**50.36**	12.53	36.86	1.14[h]	**50.53**	**(0.2)**
Lincoln Well	Active	--	5.40								
Lewis Manor Well	Inactive	--	--								
Park and Ride Well	Active	--	4.32								
Ball Park Well	Active	--	5.40								
Well 8[f]	Active	--	--								
Linne	Active	7.1	--								
Well 1[g]	Active	--	--								
Well 2[f,g]	Active	--	--								
Well 3[f,g]	Active	--	--								
Well 4[f,g]	Active	--	--								
Clearwell #2	Active	4.0	--								
Zone 3 and Ellis Reduced Zone											
Cordes	Active	2.0	--	0.00	3.27[i]	**5.76**	1.48	4.36	1.14[h]	**6.99**	**(1.2)**
Zone 4											
Tracy Hills At-Grade	Under Construction	3.8	--	0.00	0.00	**3.75**	0.87	2.56	0.96[j]	**4.40**	**(0.6)**
Zone 5											
--	--	--	--	0.00	0.00	**0.00**	0.42	1.23	0.96[j]	**2.60**	**(2.6)**
Zone 6											
--	--	--	--	0.00	0.00	**0.00**	0.23	0.67	0.18[k]	**1.08**	**(1.1)**

(a) Credit based on 1.5 days of pumping capacity from active groundwater wells with on-site backup power because the required emergency storage capacity is equal to 1.5 times the average day demand. See Table 7-2 for individual well capacity.

(b) Credit based on 1.5 days of available treatment capacity (17 mgd) from the SCWSP because the required emergency storage capacity is equal to 1.5 times the average day demand.

(c) Equal to the sum of the groundwater and treated surface water supply credits; however, the maximum credit is equal to the required emergency storage capacity.

(d) Based on 30 percent of a maximum day demand (see Table 8-3).

(e) Based on 1.5 times the average day demand (see Table 8-3).

(f) Well does not contribute to Groundwater Credit because it does not have on-site backup power.

(g) Well does not contribute to Groundwater Credit because water produced by the well must be blended with chlorinated water from the JJWTP prior to distribution. The JJWTP is assumed to be offline in an emergency.

(h) Based on storage required for two concurrent fire flow events; a Single Family Residential fire flow and an Industrial fire flow (see Table 6-1).

(i) Surplus Treated Surface Water Supply Credit from other pressure zones can be used to provide emergency storage for Zone 3.

(j) Based on storage required for an Industrial or Institutional fire flow (see Table 6-1).

(k) Based on storage required for a Single Family Residential fire flow (see Table 6-1).

It should be noted that in the period before the future Clearwell #3 is completed, the full storage capacity in Clearwell #2 is not available. During normal operations, the water level in Clearwell #2 is maintained near the maximum water level, at water surface elevation (WSEL) 197.5 feet, approximately 11.5 feet above the floor. This maximum WSEL provides approximately 4 MG of storage in Clearwell #2. Under emergency conditions, the City is able to significantly draw down the WSEL in Clearwell #2 with the Zone 2 pumps. However, because the Zone 4 and Zone 5 pump station suction pipe cannot draw water from Clearwell #2 at a WSEL less than approximately five feet above the floor, the available storage in Clearwell #2 is currently limited to 2.25 MG. Until the Tracy Hills tanks are in service, sufficient operational, emergency, and fire flow storage must be maintained in Clearwell #2 to serve Tracy Hills and prevent dewatering of the Zone 4 and Zone 5 pumps.

Once in service, the Tracy Hills Zone 4 tank will provide sufficient operational, emergency, and fire storage for Zone 4. Similarly, the planned Zone 5 tank will provide sufficient operational, emergency, and fire storage for Zones 5 and 6 once constructed. With these tanks in service, the full volume of Clearwell #2 may be used in an emergency. Although this will dewater the Zone 4 and Zone 5 pumps, the Tracy Hills tanks will provide emergency supply to Zones 4 and 5 until service from the JJWTP can be restored. The water level in Clearwell #2 should still be maintained at greater than five feet above the floor for normal operations.

An additional clearwell (Clearwell #3) is proposed at the JJWTP and will be hydraulically connected to Clearwell #2 and the Zone 4 and Zone 5 pump stations. Once Clearwell #3 is constructed, the suction piping for the Tracy Hills pump stations will be connected to the pump wet well in Clearwell #3 at a low enough elevation to allow the Tracy Hills pump stations to continue in operation as long as volume remains in Clearwell #3, allowing the City to use the full volume of operational, emergency, and fire flow storage in both Clearwell #2 and Clearwell #3 without dewatering the Zone 4 and Zone 5 pumps.

Based on the storage capacity deficits identified in Table 8-8, Table 8-9 summarizes the recommended facility improvements to provide additional buildout storage capacity. The proposed specific facility improvements are based on those presented in the 2012 WSMP and in the Tracy Hills Water Study (RJA, December 2014), but were modified to reflect the reduced buildout storage capacity requirements.

Table 8-9. Comparison of Available, Proposed, and Required Water Storage Capacity at Buildout

[A]	[B]	[C]	[D]	[E]	[F]	[G] = [C] + [F]	[H]	[I]	[J]	[K] = [H] + [I] + [J]	[L] = [G] - [K]
		Available Storage Capacity, MG					Required Storage Capacity, MG				
			Emergency Storage Credit								
Station	Status	Reservoir Capacity	Groundwater Credit[a]	Treated Surface Water Supply Credit[b]	Total Emergency Storage Credit[c]	Total Available Storage	Operational[d]	Emergency[e]	Fire Flow	Total Required Storage	Storage Surplus (Deficit), MG
Zone 1 and Zone 2											
NEI	Active	2.4	--	25.50	36.86	**51.36**	12.53	36.86	1.14[i]	**50.53**	**0.8**
Lincoln Well	Active	--	5.40								
Lewis Manor Well	Inactive	--	--								
Park and Ride Well	Active	--	4.32								
Ball Park Well	Active	--	5.40								
Well 8[f]	Active	--	--								
Linne	Active	7.1	--								
Well 1[g]	Active	--	--								
Well 2[f,g]	Active	--	--								
Well 3[f,g]	Active	--	--								
Well 4[f,g]	Active	--	--								
Clearwell #2	Active	4.0	--								
Westside Tank	Proposed[h]	1.0	--								
Westside ASR Well	Proposed	--	5.40								
Wainwright ASR Well	Proposed	--	5.40								
Larsen Park ASR Well	Proposed	--	5.40								
Zone 3 and Ellis Reduced Zone											
Cordes	Active	2.0	--	0.00	4.86[j]	**7.36**	1.48	4.36	1.14[i]	**6.99**	**0.4**
JJWTP Clearwell #3	Proposed[h]	1.0	--								
Ellis ASR Well	Proposed	--	2.16								
Zone 4											
Tracy Hills At-Grade	Under Construction	3.8	--	0.00	0.00	**3.75**	0.87	2.56	0.96[k]	**4.40**	**(0.6)**
Zone 5											
Gravity Tank[l]	Proposed[h]	3.2	--	0.00	0.00	**3.2**	0.42	1.23	0.96[k]	**2.60**	**0.6**
Zone 6											
Gravity Tank[m]	Proposed[h]	1.1	--	0.00	0.00	**1.10**	0.23	0.67	0.18[n]	**1.08**	**0.0**

(a) Credit based on 1.5 days of pumping capacity from active groundwater wells with on-site backup power because the required emergency storage capacity is equal to 1.5 times the average day demand. See Table 7-2 for the individual capacity of existing wells. Proposed ASR wells in Zone 1 and Zone 2 were assumed to have a capacity of 2,500 gpm. The proposed Ellis ASR Well was assumed to have a capacity of 1,000 gpm.

(b) Credit based on 1.5 days of available treatment capacity (17 mgd) from the SCWSP because the required emergency storage capacity is equal to 1.5 times the average day demand.

(c) Equal to the sum of the groundwater and treated surface water supply credits; however, the maximum credit is equal to the required emergency storage capacity.

(d) Based on 30 percent of a maximum day demand (see Table 8-3).

(e) Based on 1.5 times the average day demand (see Table 8-3).

(f) Well does not contribute to Groundwater Credit because it does not have on-site backup power.

(g) Well does not contribute to Groundwater Credit because water produced by the well must be blended with chlorinated water from the JJWTP prior to distribution. The JJWTP is assumed to be offline in an emergency.

(h) Proposed reservoir capacity is the recommended active and useable reservoir storage capacity and does not include dead and freeboard storage, which will be determined during design.

(i) Based on storage required for two concurrent fire flow events; a Single Family Residential fire flow and an Industrial fire flow (see Table 6-1).

(j) Surplus Treated Surface Water Supply Credit from other pressure zones can be used to provide emergency storage for Zone 3.

(k) Based on storage required for an Industrial or Institutional fire flow (see Table 6-1).

(l) The Tracy Hills Water Study prepared by RJA (December 2014) recommended two Zone 5 (formerly Tracy Hills Zone 4) tanks with a combined capacity of 8.8 MG. Recommended Zone 5 capacity is significantly smaller than previously evaluated due to decrease in demand factors and emergency storage requirement. Sizing of the proposed tanks should be confirmed before development of Zone 5 begins.

(m) Based on previous recommendations from the Tracy Hills Water Study prepared by RJA (December 2014). Sizing of the proposed tank should be confirmed before development of Zone 6 begins.

(n) Based on storage required for a Single Family fire flow (see Table 6-1).

A portion of the buildout storage capacity requirement is met by additional Emergency Storage Credit provided by the new ASR wells recommended in Chapter 5. It was assumed that three of the ASR wells will be located in Zones 1 and 2, while the fourth ASR well will be located in Zone 3. The ASR well in Zone 3 was assumed to have a lower production capacity due to the less ideal aquifer conditions underlying Zone 3. All new wells should be equipped with ammonia addition.

It is recommended that the City construct a 1.0 MG pumped storage tank near the Westside Specific Plan development in Zone 1. In addition to providing additional storage capacity needed to meet the operational storage requirement for Zones 1 and 2, the Westside Tank would provide localized storage for the northwest sector of the City. Localized storage provides supply reliability in the chance that storage from the JJWTP or any other storage facility is unavailable for any reason.

It is recommended that the City construct a Clearwell (Clearwell #3) with a minimum volume of 1.0 MG at the JJWTP to provide additional storage capacity for Zone 3. In addition to providing storage, Clearwell #3 would provide operational flexibility for the JJWTP. Because of the additional operational flexibility that Clearwell #3 would provide, it is recommended that Clearwell #3 be constructed as soon as possible. As noted above, no additional storage facilities are required by 2025, but it is recommended that Clearwell #3 be constructed by no later than 2030.

It is also recommended that the City construct a 3.2 MG gravity storage tank in Zone 5 and a 1.1 MG gravity storage tank in Zone 6. The remaining 0.6 MG storage capacity deficit in Zone 4 is to be provided by Zone 5 via a PRV. It should be noted that the 3.2 MG capacity of the Zone 5 Tank recommended in this WSMP Update is significantly smaller than the 8.8 MG recommended in the Tracy Hills Water Study (RJA, December 2014) for several reasons: (1) since the Tracy Hills Water Study was conducted, the proposed land use plan for Tracy Hills has changed; (2) the water demand factors used to project demands for Tracy Hills in this WSMP Update are lower than those used in the Tracy Hills Water Study; and (3) the emergency storage capacity requirement used in this WSMP Update is lower than that used in the Tracy Hills Water Study. As proposed land use plans may continue to be refined, the size of the Zone 5 and Zone 6 tanks should be confirmed before development of Zones 5 and 6 begins.

8.4.3 Pumping Capacity

The existing and proposed pumping capacity in the City's potable water system was evaluated to assess its ability to deliver a reliable firm capacity to serve the water service area for the 2025 and buildout timeframes. Firm capacity assumes a reduction in total pumping capacity to account for pumps that are out of service at any given time due to mechanical breakdowns, maintenance, water quality, or other operational issues. At each booster pump station, firm booster pumping capacity was defined as the total booster pump station capacity with the largest pump out of service. For groundwater well pumps, the firm groundwater pumping capacity assumed that 20 percent of the wells could be out of service at any given time.

The pumping capacity criterion for the City, described previously in Chapter 6, requires the City's potable water system to have sufficient firm pumping capacity to meet the greater of either a maximum day demand with two simultaneous fire flow events[3] or a peak hour demand. In addition, sufficient firm treated water pumping capacity should be available to meet a maximum day demand condition.

Table 8-10 provides a comparison between the City's available firm pumping capacity and the required 2025 pumping capacity under different water demand conditions. The City's existing pumping facilities are sufficient to meet the 2025 pumping capacity requirements.

Table 8-11 provides a comparison between the City's available and proposed buildout firm pumping capacity for the different water demand scenarios. The proposed pumping facility improvements are based on:

- The necessity to deliver water from proposed storage facilities to the system.
- The necessity to provide treated water pumping capacity to meet buildout maximum day demands (e.g., JJWTP Clearwell #3 pumps).
- The necessity for localized pumping capacity to support system pressure during periods of high demand (fire flow and peak hour).

The pumping capacity analysis indicates that the City's existing and proposed firm booster and groundwater pumping capacity will be sufficient to meet the pumping capacity criterion for the buildout water service area during the governing demand scenario within each pressure zone. It should be noted that Zones 5 and 6 will provide water supply by gravity, rather than by pumping, to meet potable water demands during maximum day plus fire flow and peak hour demand conditions.

It is recommended that the City construct Zone 1 and Zone 2 booster pumps at the proposed Westside Tank. Although the proposed capacity of these booster pumps is more than required to meet the Zone 1 and 2 pumping capacity requirements, the capacity of these pumps is needed to maintain sufficient system pressure during periods of high demand (fire flow and peak hour) in the northwest quadrant of the City.

It is also recommended that the City install additional Zone 3 booster pumps on the proposed Clearwell #3. It is recommended that these pumps have a capacity of at least 1,500 gpm to provide operational flexibility for the Zone 3 BPS.

A new Zone 5 BPS (located at the JJWTP) and a Zone 6 BPS must also be constructed to supply water to Zones 5 and 6, respectively. The Zone 5 BPS was sized based on the Tracy Hills Water Study (RJA, December 2014). The Zone 6 BPS recommended in this WSMP Update is larger than previously recommended in the Tracy Hills Water Study because the proposed land use plan for Tracy Hills has changed since the study was conducted. Sizing of the Zone 6 BPS should be confirmed before development of Zone 6 begins.

[3] Two concurrent fire flow events were not simulated in Zones 4, 5 and 6 for the Tracy Hills development because these smaller pressure zones do not justify the use of two simultaneous fire flow events.

Table 8-10. Comparison of Available and Required Firm Pumping Capacity in 2025

Pump Station	Backup Power	Status	Firm Capacity[a], gpm	Total Firm Pumping Capacity from Supply Sources, gpm[b]	2025 Maximum Day Demand, gpm	Pumping Capacity from Supply Sources Surplus (Deficit), gpm[b]	Total Firm Pumping Capacity, gpm	2025 Maximum Day Demand with Fire Flow Event(s), gpm	2025 Peak Hour Demand, gpm	Pumping Capacity Surplus (Deficit), gpm[c]
Zones 1 and 2										
NEI	✓	Active	4,200	44,106	20,131	23,975	51,095	26,839[e]	34,340	16,755
Zone 1	✓	Active	12,000							
Lincoln Well	✓	Active	2,500							
Lewis Manor Well	✓	Inactive	--							
Park and Ride Well	✓	Active	2,000							
Ball Park Well	✓	Active	2,500							
Well 8		Active	--							
Linne	✓	Active	14,595							
Zone 2	✓	Active	13,300							
Well 1[d]	✓	Active	--							
Well 2[d]		Active	--							
Well 3[d]		Active	--							
Well 4[d]		Active	--							
Zone 3 and Ellis Reduced Zone										
Cordes	✓	Active	6,150	2,970	1,790	1,180	9,120	7,676[e]	3,053	1,330
Patterson Pass[f]	✓	Inactive	--							
Zone 3	✓	Active	2,970							
Zone 4										
Zone 4	✓	Active	2,450	2,450	629	1,821	8,350	2,095[g]	1,074	6,221
Tracy Hills At-Grade	✓	Under Construction	5,900							

(a) Firm booster pumping capacity was defined as the total booster pump station capacity with the largest pump out of service and firm groundwater pumping capacity assumed that 20 percent of the City's wells would be out of service (i.e., approximately two wells: one in Zone 1, and one at the JJWTP).

(b) Maximum day water demands should be met through firm treated water pumping capacity. The firm pumping capacity available from NEI and Linne is limited to 17 mgd based on the available water supply from the SCWSP.

(c) Pumping capacity surplus (deficit) is the total firm pumping capacity minus the greater of the maximum day demand with required fire flow event(s) or peak hour demand.

(d) Wells 1-4 located at JJWTP pump directly into the Chlorine Contact Basin or Clearwell #2; therefore, these wells do not provide additional pumping capacity to the system.

(e) Equal to maximum day demand plus a 1,500 gpm Single Family Residential fire flow and a simultaneous 4,500 gpm Industrial fire flow.

(f) Patterson Pass BPS is inactive since the Cordes BPS is now operating; therefore, it does not provide additional pumping capacity to the system.

(g) Equal to maximum day demand plus a 1,500 gpm Single Family Residential fire flow.

Table 8-11. Comparison of Available, Proposed, and Required Firm Pumping Capacity at Buildout

Pump Station	Backup Power	Status	Firm Capacity[a], gpm	Total Firm Pumping Capacity from Supply Sources, gpm[b]	Buildout Maximum Day Demand, gpm	Pumping Capacity from Supply Sources Surplus (Deficit), gpm[b]	Total Firm Pumping Capacity, gpm	Buildout Maximum Day Demand with Fire Flow Event(s), gpm	Buildout Peak Hour Demand, gpm	Pumping Capacity Surplus (Deficit), gpm[c]
Zones 1 and 2										
NEI	✓	Active	4,200	44,106	29,010	15,096	57,995	35,754[e]	49,487	8,508
Zone 1	✓	Active	12,000							
Lincoln Well	✓	Active	2,500							
Lewis Manor Well	✓	Inactive	--							
Park and Ride Well	✓	Active	2,000							
Ball Park Well	✓	Active	2,500							
Well 8		Active	--							
Linne	✓	Active	14,595							
Zone 2	✓	Active	13,300							
Well 1[d]	✓	Active	--							
Well 2[d]		Active	--							
Well 3[d]		Active	--							
Well 4[d]		Active	--							
Westside Ranch Tank Zone 1	✓	Proposed	4,500							
Westside Ranch Tank Zone 2	✓	Proposed	2,400							
Westside Ranch ASR Well	✓	Proposed	--							
Wainwright ASR Well	✓	Proposed	--							
Larsen Park ASR Well	✓	Proposed	--							
Zone 3 and Ellis Reduced Zone										
Cordes	✓	Active	6,150	4,470	3,435	1,035	10,620	9,590[e]	5,859	1,185
Patterson Pass[f]	✓	Inactive	--							
Zone 3[g] – Clearwell #2 Pumps	✓	Active	2,970							
Zone 3[g] – Clearwell #3 Pumps	✓	Proposed	1,500							
Ellis ASR Well	✓	Proposed	--							
Zone 4										
Zone 4[h]	✓	Active	3,675	3,675	2,018	1,657	11,875	6,432[i]	3,443	5,357
Tracy Hills At-Grade[h]	✓	Under Construction	8,200							
Zone 5										
Zone 5[j]	✓	Proposed	2,410	2,410	1,491[k]	919	NA			
Zone 6										
Zone 6[l]	✓	Proposed	550	550	526	24	NA			

(a) Firm booster pumping capacity was defined as the total booster pump station capacity with the largest pump out of service and firm groundwater pumping capacity assumed that 20 percent of the City's wells would be out of service (i.e., approximately two wells: one in Zone 1, and one at the JJWTP). It was assumed that the proposed ASR wells do not contribute to pumping capacity in a normal hydrologic year.

(b) Maximum day water demands should be met through firm treated water pumping capacity. The firm pumping capacity available from NEI and Linne is limited to 17 mgd based on the available water supply from the SCWSP.

(c) Pumping capacity surplus (deficit) is the total firm pumping capacity minus the greater of the maximum day demand with required fire flow event(s) or peak hour demand.

(d) Wells 1-4 located at JJWTP pump directly into the Chlorine Contact Basin or Clearwell #2; therefore, these wells do not provide additional pumping capacity to the system.

(e) Equal to maximum day demand plus a 1,500 gpm Single Family Residential fire flow and a simultaneous 4,500 gpm Industrial fire flow.

(f) Patterson Pass BPS is inactive since the Cordes BPS is now operating; therefore, it does not provide additional pumping capacity to the system.

(g) Zone 3 pumps on Clearwell #2 and Clearwell #3 are considered a single booster pump station for purposes of determining firm capacity.

(h) Buildout firm capacity includes the capacity of an additional pump to be installed after 2025.

(i) Equal to maximum day demand plus a 4,500 gpm Industrial fire flow.

(j) Based on previous recommendations from the Tracy Hills Water Study prepared by RJA (December 2014). Water demands from Zone 5 (formerly Tracy Hills Zone 4) and Zone 6 (formerly Tracy Hills Zone 5) will be served from a single Zone 5 BPS located at the JJWTP. Water supplied by the Zone 5 BPS will be subsequently boosted by the Zone 6 BPS to serve Zone 6 water demands.

(k) Equal to maximum day demands for Zone 5 and Zone 6.

(l) Recommended firm pump station capacity is larger than previously recommended in Tracy Hills Water Study prepared by RJA (December 2014). Required firm capacity should be confirmed before Zone 6 begins development.

8.4.4 Critical Supply Facilities

All critical pumping facilities should be equipped with an on-site, emergency backup power generator to provide pumping capacity during a power outage. Critical pumping facilities are defined as those facilities that provide service to pressure zone(s) and/or service area(s) which do not have sufficient emergency storage, and that meet the following criteria:

- The largest pumping facility that provides water to a particular pressure zone and/or service area,
- A facility that provides the sole source of water to single or multiple pressure zones and/or service areas,
- A pumping facility that provides water from a supply turnout, or
- A pumping facility that provides water from key groundwater supply wells (depends on capacity, quality, and location).

As shown previously in Table 8-11, most of the City's existing pumping facilities have on-site emergency backup power installed, except for Wells 2 through 4 and Well 8[4]. As shown in Table 8-11, proposed future pumping facilities for the buildout potable water system are assumed to have an on-site backup power generator installed to improve supply reliability.

8.4.5 SCADA System Improvements

As stated in Chapter 7, the City does not have SCADA installed on PRS #1-#6. As the City's water system continues to grow and serve larger water demands, the ability to operate the system efficiently and properly regulate flow between zones will be essential. PRS #1-#6 can provide a significant amount of water supply from Zone 2 to Zone 1 and should be monitored to provide operators with complete real-time system operations data. The addition of SCADA system monitoring at PRS #1-#6 would provide operators with the ability to operate the City's water system more efficiently between the use of the Zone 1 BPS and the pressure regulating stations to maintain pressures in Zone 1. The addition of SCADA system monitoring to PRS #1-#6 would also provide the ability to create diurnal curves that are specific to each zone, which will help provide a better understanding of water demand patterns within each zone. Therefore, it is recommended that SCADA system monitoring of flow and pressure be installed at PRS #1-#6 to provide operators with additional understanding and flexibility in system operations.

Similarly, SCADA improvements at Well 8 to allow remote operation is also a recommended improvement to provide additional operational flexibility as the system continues to grow.

All new booster pump stations, storage tanks, groundwater wells, and PRVs should be equipped with SCADA for remote monitoring and operation.

[4] Well 8 currently has a plug-in adapter installed to allow interconnection to a portable generator. On-site backup power is not recommended due to site constraints.

8.4.6 Update of Future System Facilities in the Hydraulic Model

Facilities recommended based on the future potable water system facility evaluation were incorporated into the existing hydraulic model (including existing system improvements described in Chapter 7) to evaluate the performance of the proposed future potable water system. Major transmission pipelines were also added to distribute water to new demand areas. In addition, some smaller distribution pipelines were added to provide additional detail and system looping. The preliminary locations and sizes of some of the future facilities and pipelines were based on the following previously prepared reports/technical memoranda and/or data provided by the developers:

- Draft Peer Review and Hydraulic Evaluation for Tracy Hills Phase 1B and 1C (May 22, 2019), prepared by West Yost Associates.
- Tracy Hills Water Study Technical Memorandum (December 5, 2014), prepared by Ruggeri-Jensen-Azar.
- Water System Evaluation for the City of Tracy's Initial Pressure Zone 3 Area (June 3, 2013), prepared by West Yost Associates.
- Ellis Specific Plan Water System Analysis - Phase 1 (August 13, 2015), prepared by West Yost Associates.
- Hydraulic Evaluation of Ellis Specific Plan Phase 2 – The Gardens (December 9, 2016), prepared by West Yost Associates.
- Draft Hydraulic Evaluation of Ellis Specific Plan Phase 3 – Town and Country (July 11, 2019), prepared by West Yost Associates.
- Design Recommendations for Lammers Road Pipeline (September 25, 2019), prepared by West Yost Associates.
- Hydraulic Evaluation of International Park of Commerce (IPC) Building 25 (July 28, 2017), prepared by West Yost Associates.
- Hydraulic Evaluation of International Park of Commerce (IPC) Buildings 9, 10, and 14 (May 3, 2018), prepared by West Yost Associates.
- Hydraulic Evaluation of Valpico and MacDonald Apartments (July 16, 2012), prepared by West Yost Associates.
- Hydraulic Evaluation of Tracy Village Specific Plan (February 16, 2018), prepared by West Yost Associates.
- Hydraulic Evaluation of Avenues Specific Plan (April 30, 2018), prepared by West Yost Associates.
- Hydraulic Evaluation of South Lammers Road Development (May 20, 2015), prepared by West Yost Associates.
- Berg Road Properties Development Water Distribution System Analysis (January 14, 2016), prepared by BlackWater Consulting Engineers, Inc.

- Improvement Plans for Kagehiro Phase 1 and Kagehiro Phase 2 (received on September 3, 2019) prepared by VVH Consulting Engineers.
- Water Exhibit of International Park of Commerce for Prologis (received June 2018) provided by Kier and Wright.

The proposed locations and sizing of facilities and pipelines described in the documents listed above were incorporated into the future potable water system hydraulic model. Locations of other future facilities and pipelines were based on the 2012 WSMP and recommendations from City staff. The 2012 WSMP facilities were modified as needed to account for existing potable water system facilities constructed since the 2012 WSMP, updated planning data, and the updated projected future water demands.

It should be noted that the elevations of new junctions that have been added into the hydraulic model were assigned based on their spatial location and the closest corresponding elevation contour.[5] These elevations may not accurately represent the actual elevation of water services since grading will typically occur during the construction of a new development project. However, these preliminary junction elevations are the best estimates of the proposed service elevations at this time. As future development projects are constructed, service elevations for each future development should be confirmed to correspond to the service elevation ranges developed for each pressure zone, as identified in Table 8-1, to meet the minimum and maximum system pressure criteria.

In addition to proposed future facilities, some existing facilities which were not included in the existing system hydraulic model (refer to *Section 7.3.2* for more information) were added to the future water system model. These facilities include:

- Zone 4 infrastructure, including the Zone 4 BPS, Zone 4 PRS, and major transmission and distribution pipelines
- Northington Drive PRV
- Some pipelines in the IPC development
- Some pipelines in the Ellis Specific Plan development

The Tracy Hills At-Grade Tank and BPS, which has been designed and is currently under construction, was also included in the future water system hydraulic model.

[5] Digital topology information was extracted as a GIS shapefile using the software program TopoDepot®. TopoDepot® provides elevation contours generated from the USGS National Elevation Database Digital Elevation Model.

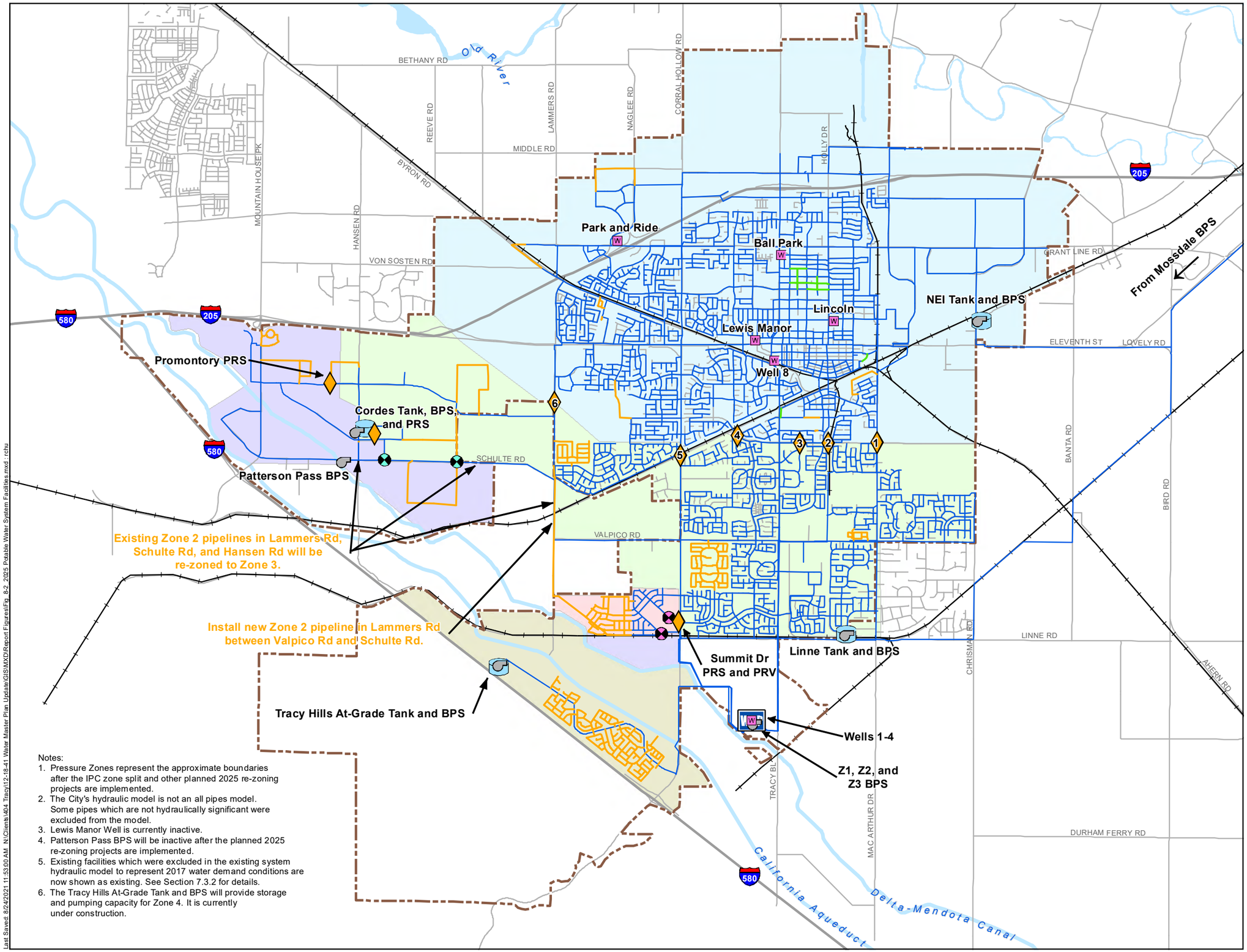
To provide emergency and/or peaking water supply between pressure zones, the following future interconnections are recommended and were incorporated into the hydraulic model to allow for the flow of water between pressure zones[6]:

- Westside PRS – Supplies water from Zone 2 to Zone 1
- Avenues PRV – Supplies water from the Ellis Reduced Zone to Zone 2
- One (1) additional Ellis PRV – Supplies water from Zone 3 to the Ellis Reduced Zone
- Zone 4 PRV – Supplies water from Zone 5 to Zone 4
- Two (2) Zone 5 PRVs – Supply water from Zone 6 to Zone 5

All of the facilities discussed above were included in the buildout water system hydraulic model, however, not all future facilities were needed to serve 2025 demands. The 2025 water system model only includes future pipelines in areas expected to develop by 2025 (refer to Chapter 3 and Appendix A for details). None of the recommended future tanks, pump stations, or interconnections between pressure zones were included in the 2025 water system model. Figure 8-2 illustrates the locations of the proposed 2025 facilities and pipeline alignments.

Figure 8-3 illustrates the locations of the proposed buildout facilities and pipeline alignments. Preliminary pipeline sizes are not shown on Figure 8-2, as they will be refined based on hydraulic evaluations discussed below in *Section 8.5 Future Potable Water System Performance Evaluation*. Recommended pipeline sizes are presented in *Section 8.6 Summary of Recommended Future Potable Water System Improvements*.

[6] Pressure Regulating Stations (PRS) contain a combination of one pressure sustaining valve (PSV) and one pressure reducing valve (PRV) to control the flow of water between pressure zones.



Notes:
1. Pressure Zones represent the approximate boundaries after the IPC zone split and other planned 2025 re-zoning projects are implemented.
2. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
3. Lewis Manor Well is currently inactive.
4. Patterson Pass BPS will be inactive after the planned 2025 re-zoning projects are implemented.
5. Existing facilities which were excluded in the existing system hydraulic model to represent 2017 water demand conditions are now shown as existing. See Section 7.3.2 for details.
6. The Tracy Hills At-Grade Tank and BPS will provide storage and pumping capacity for Zone 4. It is currently under construction.

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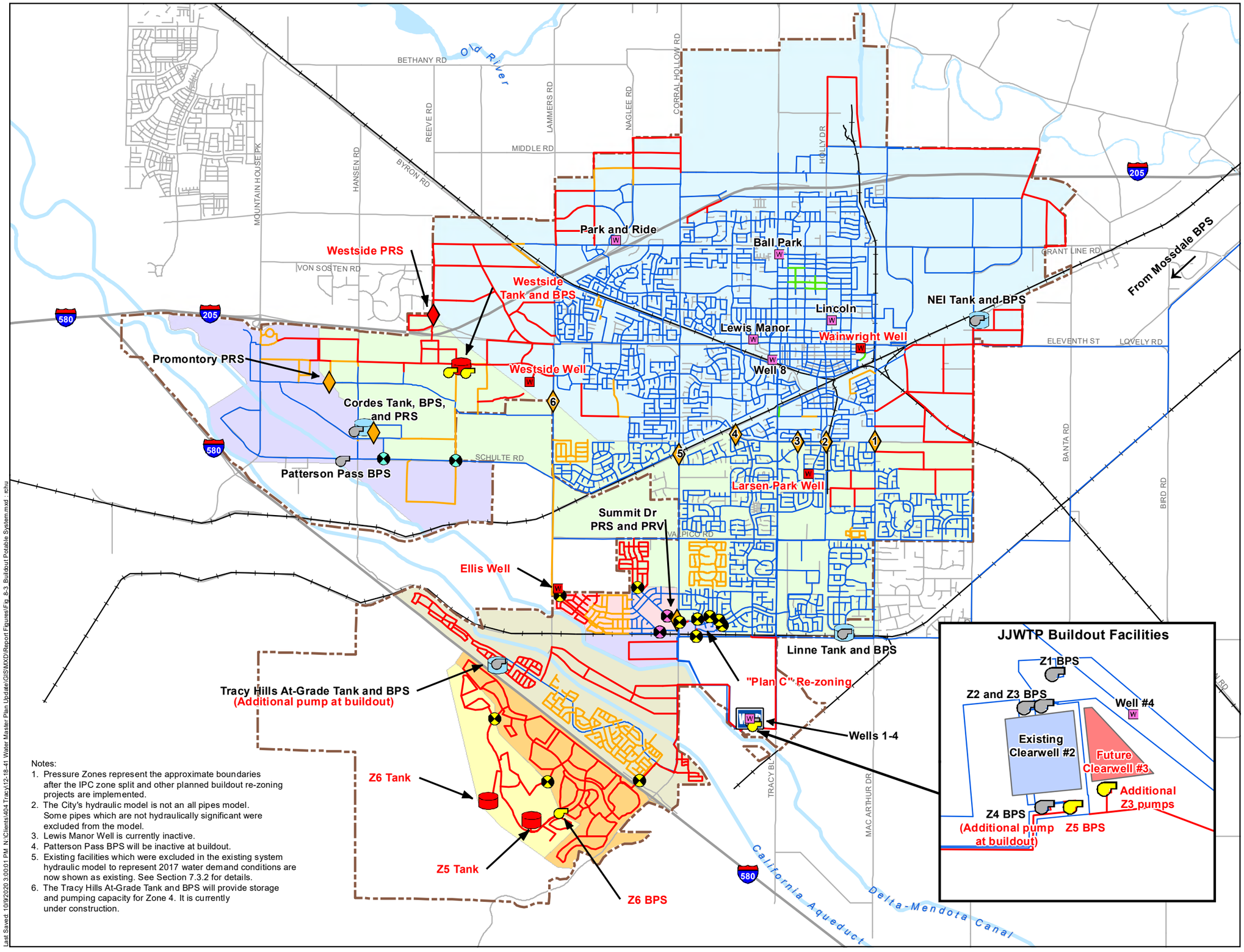
Figure 8-2

2025 Potable Water System Facilities

City of Tracy
Water System Master Plan Update



Notes:
1. Pressure Zones represent the approximate boundaries after the IPC zone split and other planned buildout re-zoning projects are implemented.
2. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
3. Lewis Manor Well is currently inactive.
4. Patterson Pass BPS will be inactive at buildout.
5. Existing facilities which were excluded in the existing system hydraulic model to represent 2017 water demand conditions are now shown as existing. See Section 7.3.2 for details.
6. The Tracy Hills At-Grade Tank and BPS will provide storage and pumping capacity for Zone 4. It is currently under construction.

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Figure 8-3

Buildout Potable Water System Facilities

City of Tracy
Water System Master Plan Update

8.5 FUTURE POTABLE WATER SYSTEM PERFORMANCE EVALUATION

To evaluate the performance of the City's proposed future potable water system, additional projected potable water demands were first allocated into the updated future system hydraulic model (see Tables 8-2 through 8-4). This updated hydraulic model was then used to evaluate the City's 2025 and buildout potable water backbone transmission and distribution systems and their ability to meet the City's recommended performance and operational criteria under future maximum day demand plus fire flow and peak hour demand scenarios.

The performance criteria recommended for and results of the future potable water backbone transmission and distribution system evaluation are discussed below. Recommendations for supporting projected future potable water demands and addressing any deficiencies identified within the future potable water backbone transmission and distribution system are summarized in *Section 8.6 Summary of Recommended Future Potable Water System Improvements*.

8.5.1 Future Water System Performance Criteria

Steady state hydraulic analyses using the updated future potable water system hydraulic model were conducted to help identify areas of the future potable water system that do not meet the recommended system performance criteria as presented previously in Chapter 6. The results of the future potable water system evaluation are presented below for the following potable water demand scenarios:

- Peak Hour Demand—A peak hour flow condition was simulated for the future water distribution facilities to evaluate their capability to meet a peak hour demand scenario. Peak hour demands are met by the combined supply from treated surface water, storage tanks, and groundwater.
- Maximum Day Demand plus Fire Flow—To evaluate the future potable water system under the maximum day demand plus fire flow scenario, individual fire flow demands were first assigned and simulated at various locations within the City's water service area. InfoWater's "*Available Fire Flow Analysis*" tool was used to determine the available fire flow while meeting the maximum day demand plus fire flow performance criteria. Additional fire flow simulations were also performed to simulate a condition equal to a maximum day demand with two concurrent fire flow events in the larger pressure zones. Maximum day plus fire flow demands are met by the combined supply from treated surface water, storage tanks, and groundwater.

The performance criteria and results for each scenario are discussed in more detail below.

8.5.1.1 Peak Hour Demand Scenario

As shown in Tables 8-2 and 8-3, the peak hour demands for the 2025 and buildout water service areas were calculated to be 38,467 gpm (55.4 mgd) and 61,333 gpm (88.3 mgd), respectively. Peak hour demand represents a peaking factor of 2.9 times the average day demand. During a peak hour demand scenario, a minimum pressure of 40 psi must be maintained throughout the water system. In addition, maximum head loss per thousand feet of distribution main should not exceed 7 ft/kft and maximum velocities should not exceed 8 fps. For transmission mains, maximum head loss per

thousand feet of transmission main should not exceed 3 ft/kft and maximum velocities should not exceed 6 fps. Details of the system pressures and pipeline characteristics as simulated in the hydraulic model under the peak hour demand scenario are discussed below.

8.5.1.2 Maximum Day Demand plus Fire Flow Scenario

As shown in Tables 8-2 and 8-3, the maximum day demands for the 2025 and buildout water service areas were calculated to be 22,550 gpm (32.5 mgd) and 35,954 gpm (51.8 mgd), respectively. Maximum day demand represents a peaking factor of 1.7 times the average day demand. Fire flow demands were assigned and simulated at various locations within the City's water service area to determine if the minimum residual pressure criterion of 20 psi could be met during a maximum day demand plus fire flow scenario. Fire flow demands in future development areas were assigned based on proposed land use, and are summarized below in Table 8-12.

Table 8-12. Recommended Fire Flow Requirements[(a)]

Land Use Category	Fire Flow, gpm	Duration, hours
Single Family Residential[(b)]	1,500	2
Multi-Family Residential[(c)]	2,500	2
Commercial/Office[(d)]	3,500[(e)]	4
Industrial	4,500[(e)]	4
Institutional[(f)]	4,500[(e)]	4

(a) Specific fire flow requirements were determined from Table B105.1 of the 2016 CFC, and depend on construction type and fire flow calculation area. Non-residential fire flow requirements are based on the assumption that an automatic sprinkler system has been installed. See Table 6-1 for further explanation of how the fire flow requirements were developed.
(b) Includes Very Low and Low Density Residential land uses.
(c) Includes Medium and High Density Residential land uses.
(d) Includes Commercial, Office, Downtown, and Village Center land uses.
(e) Fire flow includes a 500 gpm demand for on-site sprinkler flow, which is not included in the recommended fire flow storage volume.
(f) Includes Medical, Public Facilities, School, Airport, Church, and Cemetery land uses.

The City's water system should also have the capability to meet a system demand condition equal to the occurrence of a maximum day demand with two concurrent fire flow events in the larger pressure zones (Zone 1, Zone 2, and Zone 3). It is assumed that the two fire flow events will consist of one smaller single family residential fire flow combined with another larger industrial fire flow. This conservative assumption of two simultaneous fire flow demands will help stress the City's water system, and determine if the future water system can provide reliable service during high demand conditions. Consequently, two concurrent fire flow demands were simulated at various locations within the City's water service area during a maximum day demand condition to determine if the minimum residual pressure criterion of 20 psi could be met during simultaneous fire flow events.

8.5.2 Recommended Improvements Criteria

The performance criteria described above was used to evaluate the future potable water system during peak hour demand and maximum day demand plus fire flow scenarios. The future potable water system is expected to deliver peak hour flow and maximum day demand plus fire flow within the acceptable pressure, velocity and head loss ranges as identified in the performance criteria presented in Chapter 6. However, the system was evaluated using pressure as the primary criterion. If necessary, recommended improvements needed to comply with the performance criteria were added to the future potable water system to fix any deficiencies found and are discussed below.

8.5.3 2025 Water System Evaluation Results

The results from the 2025 hydraulic model for the peak hour demand and maximum day demand plus fire flow analyses are presented below.

8.5.3.1 2025 Peak Hour Demand Scenario

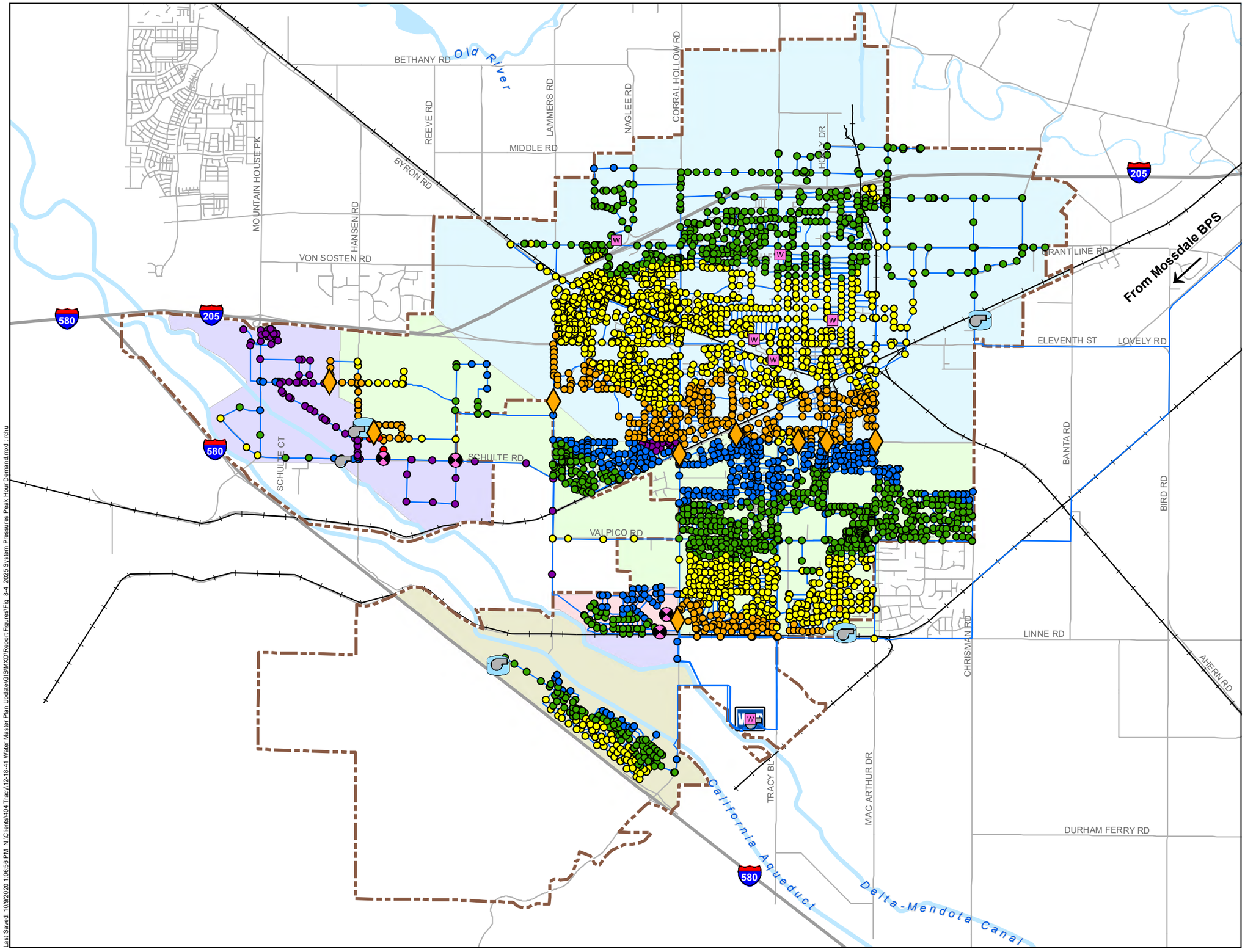
During a peak hour demand scenario, results indicate that the 2025 potable water system could adequately deliver peak hour demands to meet the City's minimum pressure criterion of 40 psi at all existing and future service locations as illustrated on Figure 8-4. Under this scenario, system pressures at service locations ranged from 40 to 113 psi. It should be noted that, per the California Plumbing Code, any individual service connection pressure exceeding 80 psi will require the installation of an individual PRV. As discussed previously, new junction elevations in the hydraulic model may not accurately represent the actual elevation of water services since grading will typically occur during the construction of a new development. Therefore, the system pressures simulated by the hydraulic model are best estimates of the proposed service pressures at this time. It is recommended that as the water system infrastructure for future development projects are designed, the proposed service elevations for each future development project should correspond to the service elevation ranges developed for each pressure zone (see Table 8-1) and that additional hydraulic analyses should be performed to confirm that the recommended minimum and maximum system pressure criteria can be met.

As illustrated on Figure 8-5, there is one location within the 2025 system where the distribution system pipelines did not meet the maximum velocity criterion of 8 fps during a peak hour demand scenario. The following list details pipelines in the 2025 potable water system that exceeded the maximum velocity criterion and summarizes any recommended improvements.

- The existing 12-inch diameter distribution pipelines which cross the railroad tracks between Sixth Street and Tracy Boulevard east of the 36-inch diameter transmission main tie-in had a velocity of 11.4 fps.

  Recommendation:

  It is recommended that the existing 12-inch diameter pipelines located between Sixth Street and Tracy Boulevard east of the 36-inch diameter transmission tie-in be replaced with a new 18-inch diameter pipeline. The recommended diameter of the new pipeline is sized to accommodate buildout demands.



N

0 2,500 5,000

Scale in Feet

Symbology

Peak Hour Pressure

- Less than 40 psi
- 40 psi to 50 psi
- 50 psi to 60 psi
- 60 psi to 70 psi
- 70 psi to 80 psi
- Greater than 80 psi
- Pressure Regulating Station
- Pressure Reducing Valve
- Booster Pump Station
- Groundwater Well
- Storage Tank
- WTP John Jones Water Treatment Plant
- Pipeline

Pressure Zone

- Zone 1
- Zone 2
- Zone 3
- Ellis Reduced Zone
- Zone 4
- Sphere of Influence

Notes:

1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
2. Per the California Plumbing Code, services which experience pressures exceeding 80 psi are required to be fitted with a pressure reducing valve.

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Figure 8-4

2025 System Pressures Peak Hour Demand

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Water System Master Plan Update

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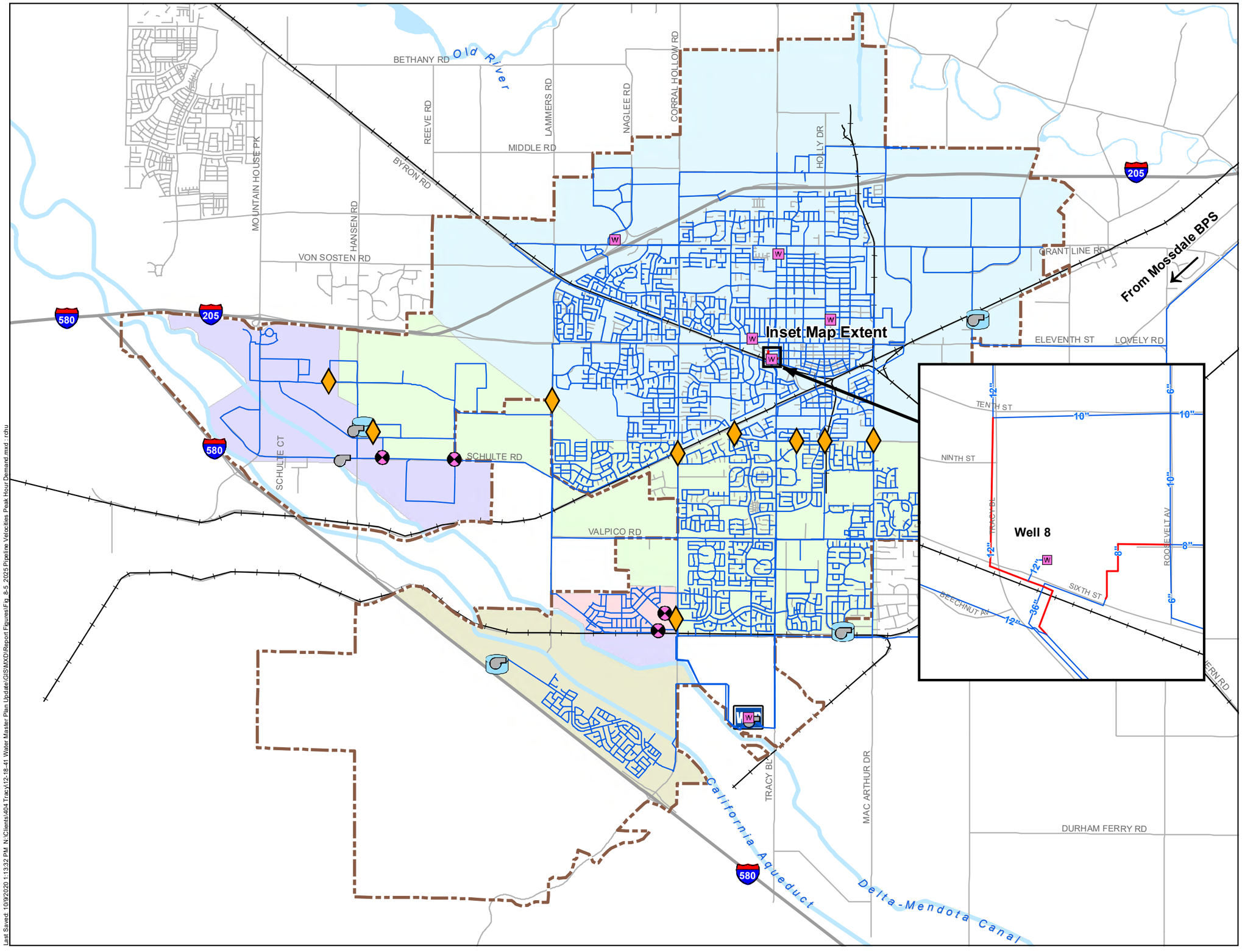

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N

0 2,500 5,000
Scale in Feet

Symbology

Pipeline Diameter ≥ 18-inches

- Velocity > 6 fps
- Velocity ≤ 6 fps

Pipeline Diameter < 18-inches

- Velocity > 8 fps
- Velocity ≤ 8 fps
- Pressure Regulating Station
- Pressure Reducing Valve
- Booster Pump Station
- Groundwater Well
- Storage Tank
- WTP John Jones Water Treatment Plant

Pressure Zone

- Zone 1
- Zone 2
- Zone 3
- Ellis Reduced Zone
- Zone 4
- Sphere of Influence

Notes:
1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.

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Figure 8-5

2025 Pipeline Velocities Peak Hour Demand

City of Tracy
Water System Master Plan Update

- The existing 12-inch diameter distribution pipelines located in Sixth Street west of the 36-inch diameter transmission main tie-in and in Tracy Boulevard between Sixth Street and Tenth Street, had a velocity of 9.4 fps.

  Recommendation:

  It is recommended that the existing 12-inch diameter pipeline in Sixth Street west of the 36-inch diameter transmission main tie-in, the 12-inch diameter pipeline in Tracy Boulevard between Sixth Street and Eleventh Street, and a 40 ft section of existing 12-inch diameter pipeline in Eleventh Street, be replaced with new 24-inch diameter pipeline. The recommended diameter of the new pipeline is sized to accommodate buildout demands.

8.5.3.2 2025 Maximum Day Demand plus Fire Flow Scenario

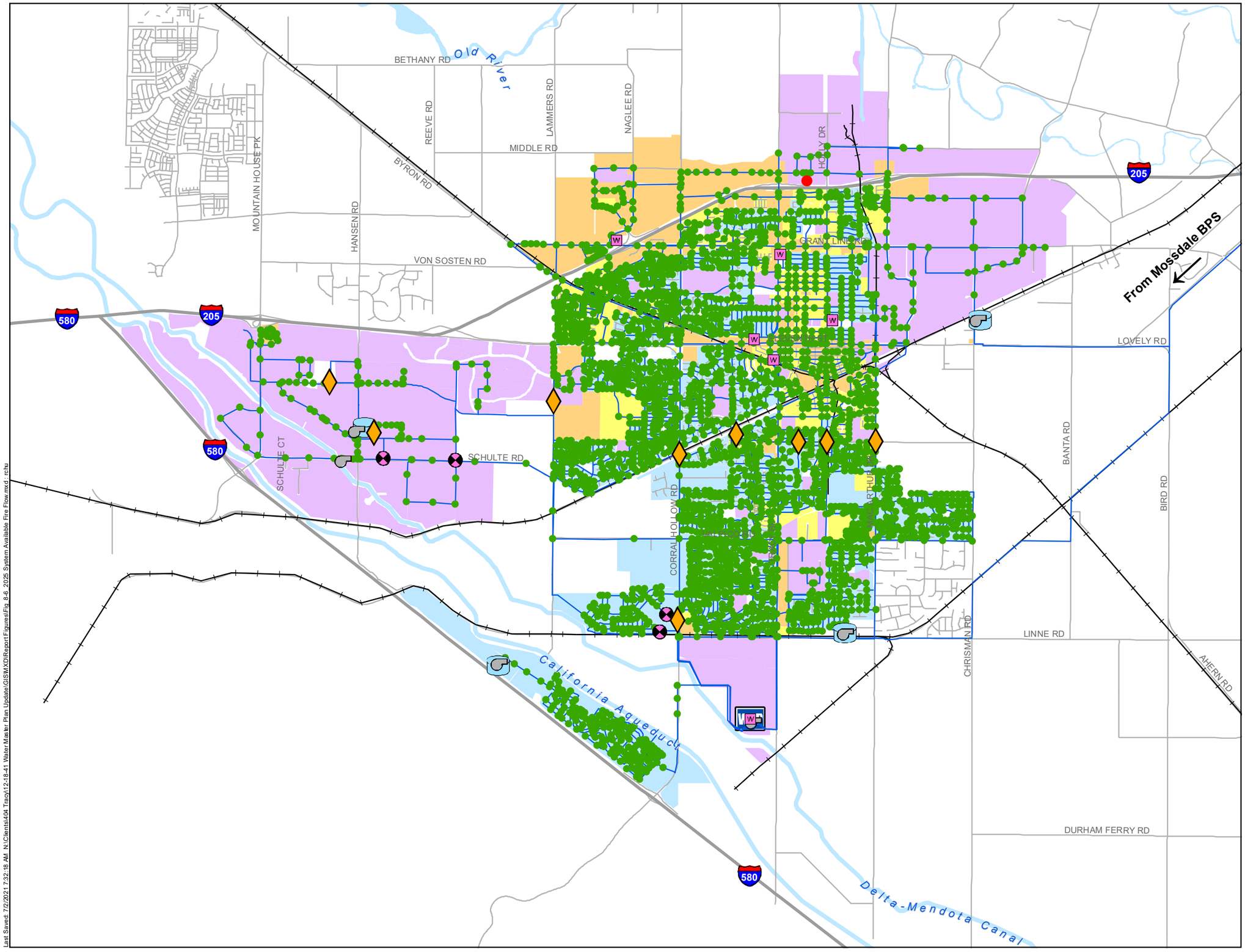
Fire flow demands were assigned based on the fire flow requirements summarized in Table 8-12 and simulated at various locations within the City's 2025 water service area. InfoWater's "*Available Fire Flow Analysis*" tool was used to determine the available fire flow (while meeting the maximum day demand plus fire flow minimum residual pressure of 20 psi and the maximum velocity performance criteria in proposed pipelines of 12 fps) at each fire flow junction within the 2025 water system during a maximum day demand scenario. Figure 8-6 illustrates the results of the 2025 maximum day plus fire flow evaluation. With the exception of the hydrant located at the southern end of Rhonda Way (discussed in Chapter 7), results indicate that all evaluated locations within the model were able to meet the minimum fire flow requirements.

Six additional fire flow simulations were performed within the 2025 system hydraulic model to simulate a condition equal to a maximum day demand with two concurrent fire flow events. Figure 8-7 illustrates the locations of the additional fire flow simulations. Locations were selected within each pressure zone based on the existing and proposed land use designations and spatial distance from supply sources to stress the City's water system. As summarized in Table 8-13, results from the hydraulic model indicate that all six of the concurrent fire flow simulations met the minimum residual pressure criterion of 20 psi.

Table 8-13. Results of Additional Fire Flow Simulations for 2025 System

Pressure Zone	Location #	Fire Flow Demand, gpm[(a)]	Residual Pressure, psi
Zone 1	1	1,500	48
		4,500	30
	2	1,500	50
		4,500	44
Zone 2	3	1,500	67
		4,500	52
	4	1,500	66
		4,500	33
	5	1,500	60
		4,500	26
Zone 3	6	1,500	48
		4,500	31

(a) It is assumed that the two concurrent fire flow events will consist of one smaller Single Family Residential fire flow combined with another larger Industrial fire flow.



N

0 2,500 5,000

Scale in Feet

Symbology

Available Fire Flow

- Does Not Meet Requirement
- Meets Requirement
- Pressure Regulating Station
- Pressure Reducing Valve
- Booster Pump Station
- Groundwater Well
- Storage Tank
- WTP John Jones Water Treatment Plant
- Pipeline

Fire Flow Requirement

- 1,500 gpm
- 2,500 gpm
- 3,500 gpm
- 4,500 gpm

Notes:

1. The available fire flow shown is the maximum flow available while maintaining 20 psi residual system pressure and velocities of less than 12 fps in proposed pipelines.
2. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.

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Figure 8-6

2025 System Available Fire Flow

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Water System Master Plan Update

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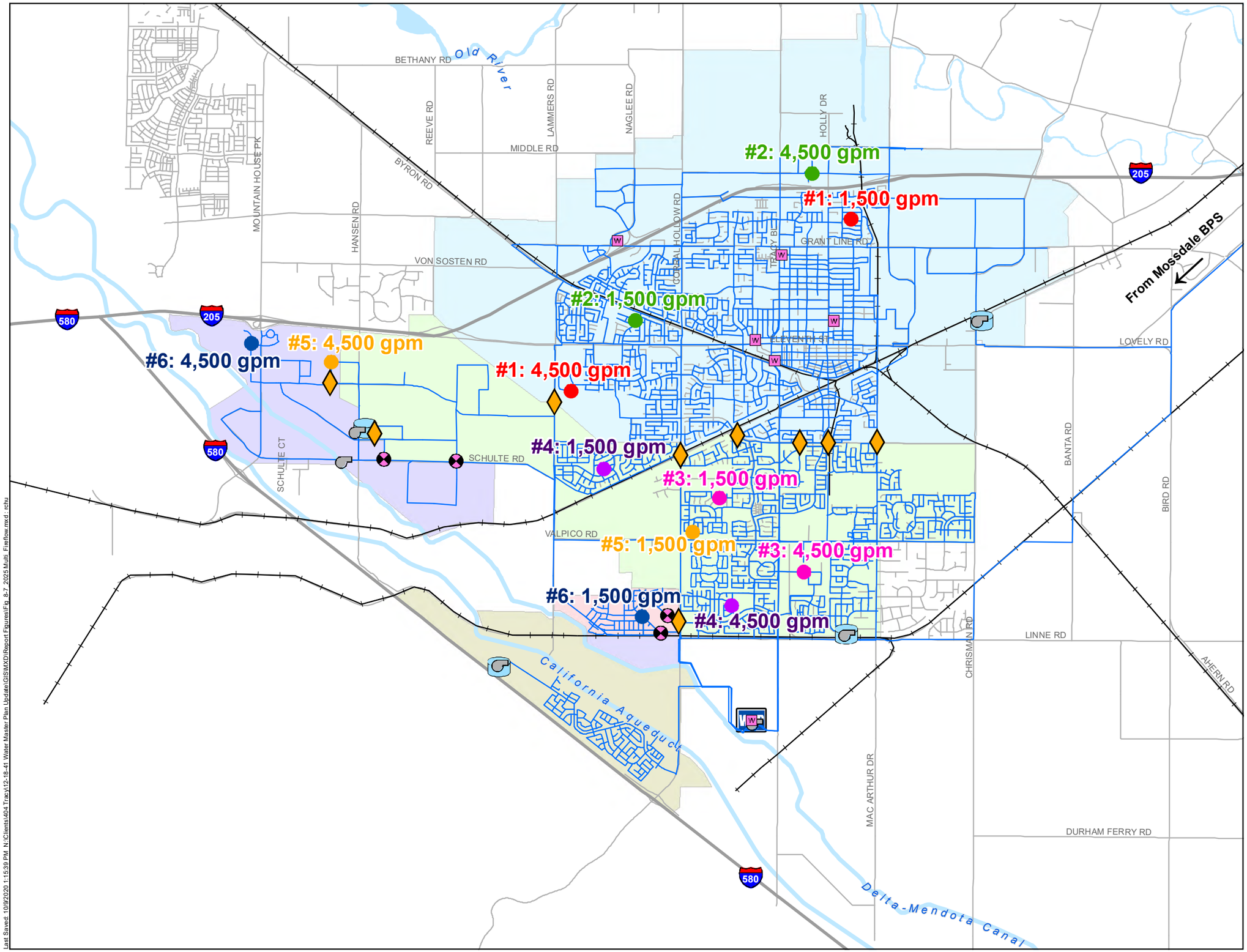

N

0 2,500 5,000

Scale in Feet

Symbology

Simultaneous Fire Flows

- Location #1
- Location #2
- Location #3
- Location #4
- Location #5
- Location #6
- Pressure Regulating Station
- Pressure Reducing Valve
- Booster Pump Station
- Groundwater Well
- Storage Tank
- WTP John Jones Water Treatment Plant
- Pipeline

Pressure Zone

- Zone 1
- Zone 2
- Zone 3
- Ellis Reduced Zone
- Zone 4

Notes:
1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.

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Figure 8-7

2025 System Locations of Additional Simultaneous Fire Flow Simulations

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Water System Master Plan Update

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8.5.4 Buildout Water System Evaluation Results

The results from the buildout hydraulic model for the peak hour demand and maximum day demand plus fire flow analyses are presented below. The results assume that the recommended 2025 pipeline replacements discussed in *Section 8.5.3.1 2025 Peak Hour Demand Scenario* are constructed before buildout.

8.5.4.1 Buildout Peak Hour Demand Scenario

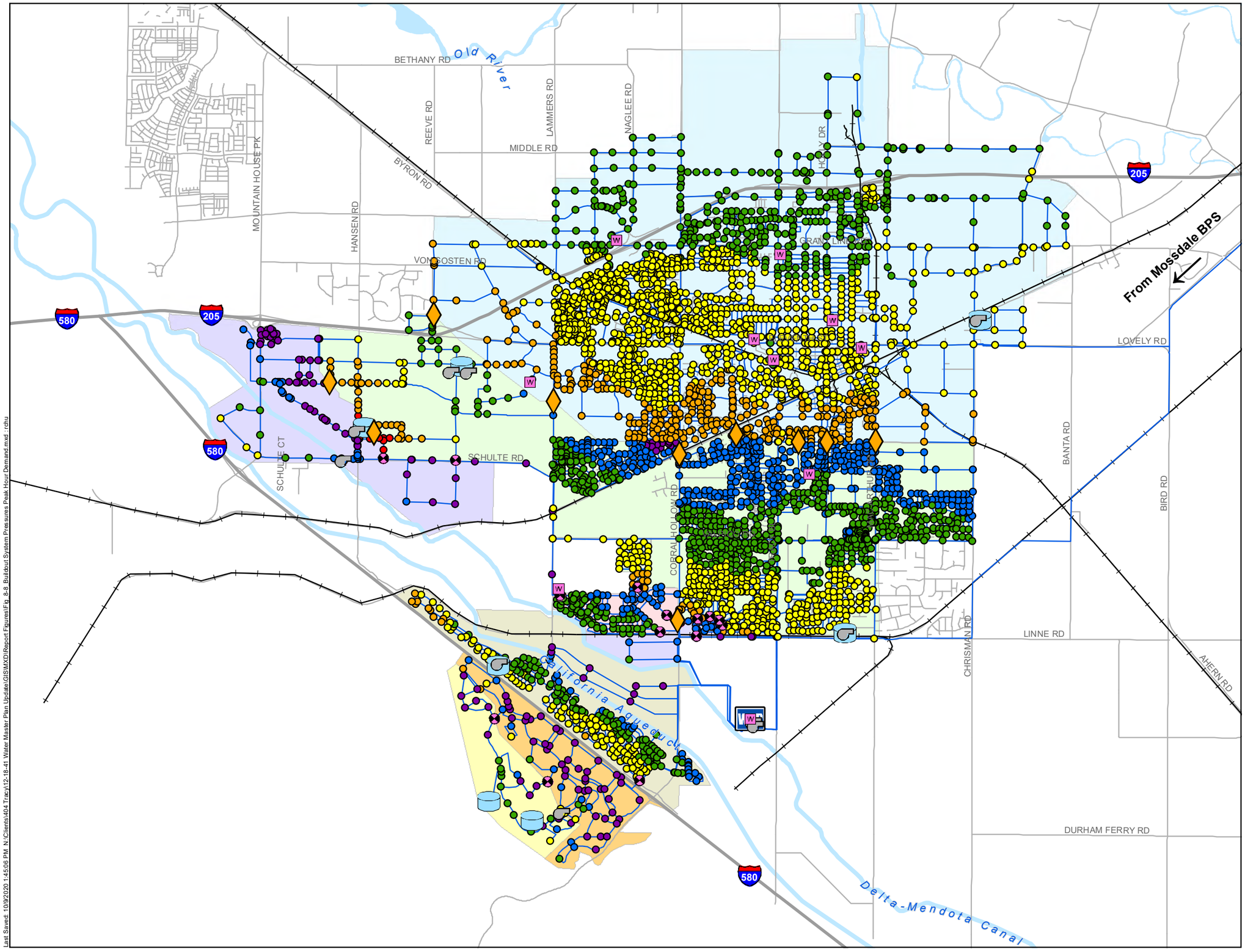
During a peak hour demand scenario, results indicate that the buildout potable water system could adequately deliver peak hour demands to meet the City's minimum pressure criterion of 40 psi at all existing and future service locations as illustrated on Figure 8-8. Under this scenario, system pressures at service locations ranged from 40 to 118 psi. It should be noted that, per the California Plumbing Code, any individual service connection pressure exceeding 80 psi will require the installation of an individual PRV. As discussed previously, new junction elevations in the hydraulic model may not accurately represent the actual elevation of water services since grading will typically occur during the construction of a new development. Therefore, the system pressures simulated by the hydraulic model are best estimates of the proposed service pressures at this time. It is recommended that as the water system infrastructure for future development projects are designed, the proposed service elevations for each future development project should correspond to the service elevation ranges developed for each pressure zone (see Table 8-1) and that additional hydraulic analyses should be performed to confirm that the recommended minimum and maximum system pressure criteria can be met.

As illustrated on Figure 8-9, there is one location within the buildout system where the transmission system pipelines did not meet the maximum velocity criterion of 6 fps during a peak hour demand scenario. The following list details pipelines in the buildout potable water system that exceeded the maximum velocity criterion and summarizes any recommended improvements.

- The existing 18-inch diameter transmission pipeline in Tracy Boulevard between Linne Road and Windsong Drive had velocities ranging from 6.0 fps to 6.5 fps.

  Recommendation:

  No mitigation is recommended for the 18-inch diameter pipeline in Tracy Boulevard because the simulated velocities are only slightly higher than the maximum criterion of 6 fps. In addition, upsizing this pipeline does not provide a significant improvement in system pressures.



0 2,500 5,000
Scale in Feet

Symbology

Peak Hour Pressure

- Less than 40 psi
- 40 psi to 50 psi
- 50 psi to 60 psi
- 60 psi to 70 psi
- 70 psi to 80 psi
- Greater than 80 psi
- Pressure Regulating Station
- Pressure Reducing Valve
- Booster Pump Station
- Groundwater Well
- Storage Tank
- WTP John Jones Water Treatment Plant
- Pipeline

Pressure Zone

- Zone 1
- Zone 2
- Zone 3
- Ellis Reduced Zone
- Zone 4
- Zone 5
- Zone 6

Notes:
1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
2. Per the California Plumbing Code, services which experience pressures exceeding 80 psi are required to be fitted with a pressure reducing valve.

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Figure 8-8

Buildout System Pressures Peak Hour Demand

City of Tracy
Water System Master Plan Update

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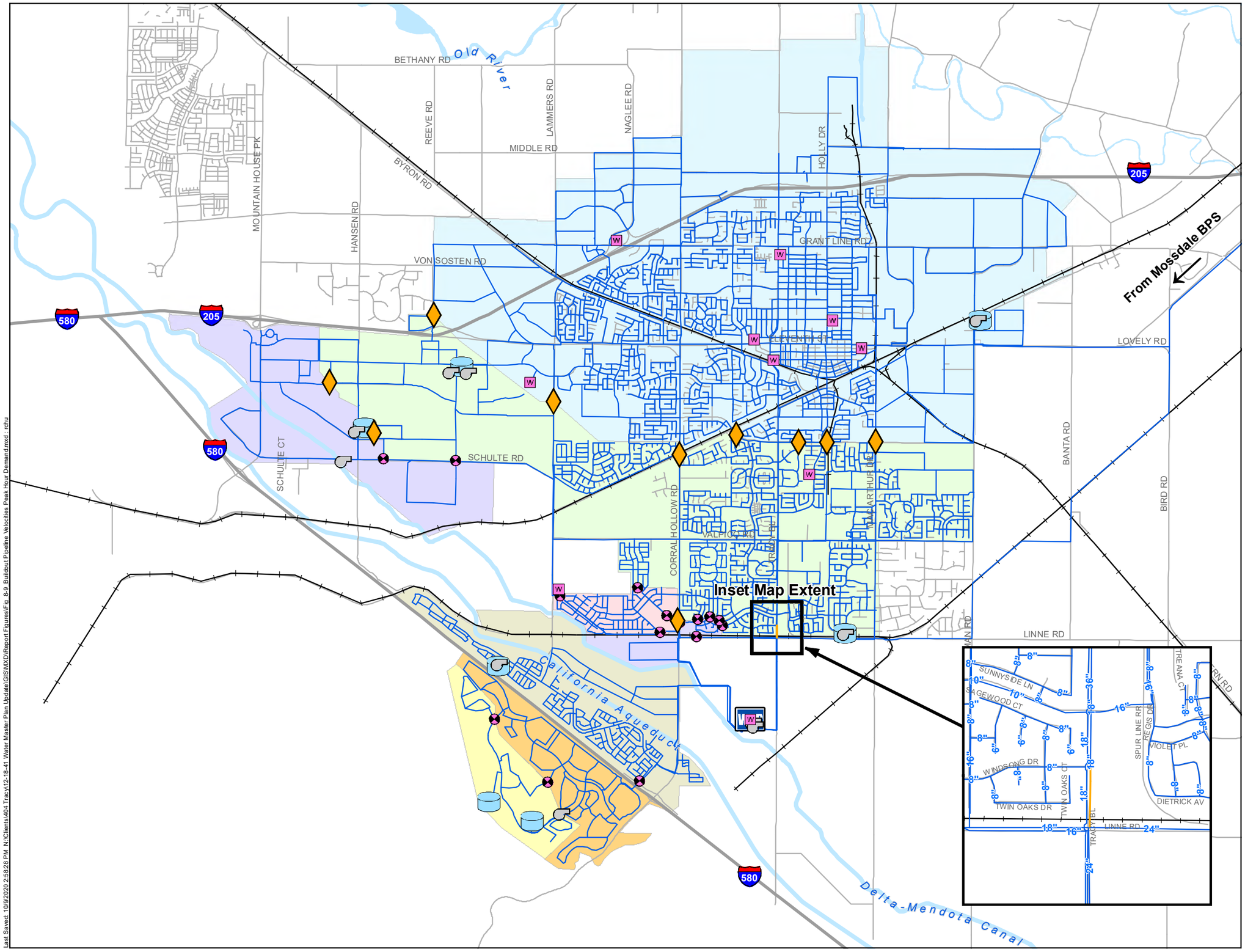

N

0 2,500 5,000

Scale in Feet

Symbology

Pipe Diameter ≥ 18-inches

- Velocity > 6 fps
- Velocity ≤ 6 fps

Pipe Diameter < 18-inches

- Velocity > 8 fps
- Velocity ≤ 8 fps
- Pressure Regulating Station
- Pressure Reducing Valve
- Booster Pump Station
- Groundwater Well
- Storage Tank
- WTP John Jones Water Treatment Plant

Pressure Zone

- Zone 1
- Zone 2
- Zone 3
- Ellis Reduced Zone
- Zone 4
- Zone 5
- Zone 6

Notes:
1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.

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Figure 8-9

Buildout Pipeline Velocities Peak Hour Demand

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Water System Master Plan Update

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8.5.4.2 Buildout Maximum Day Demand plus Fire Flow Scenario

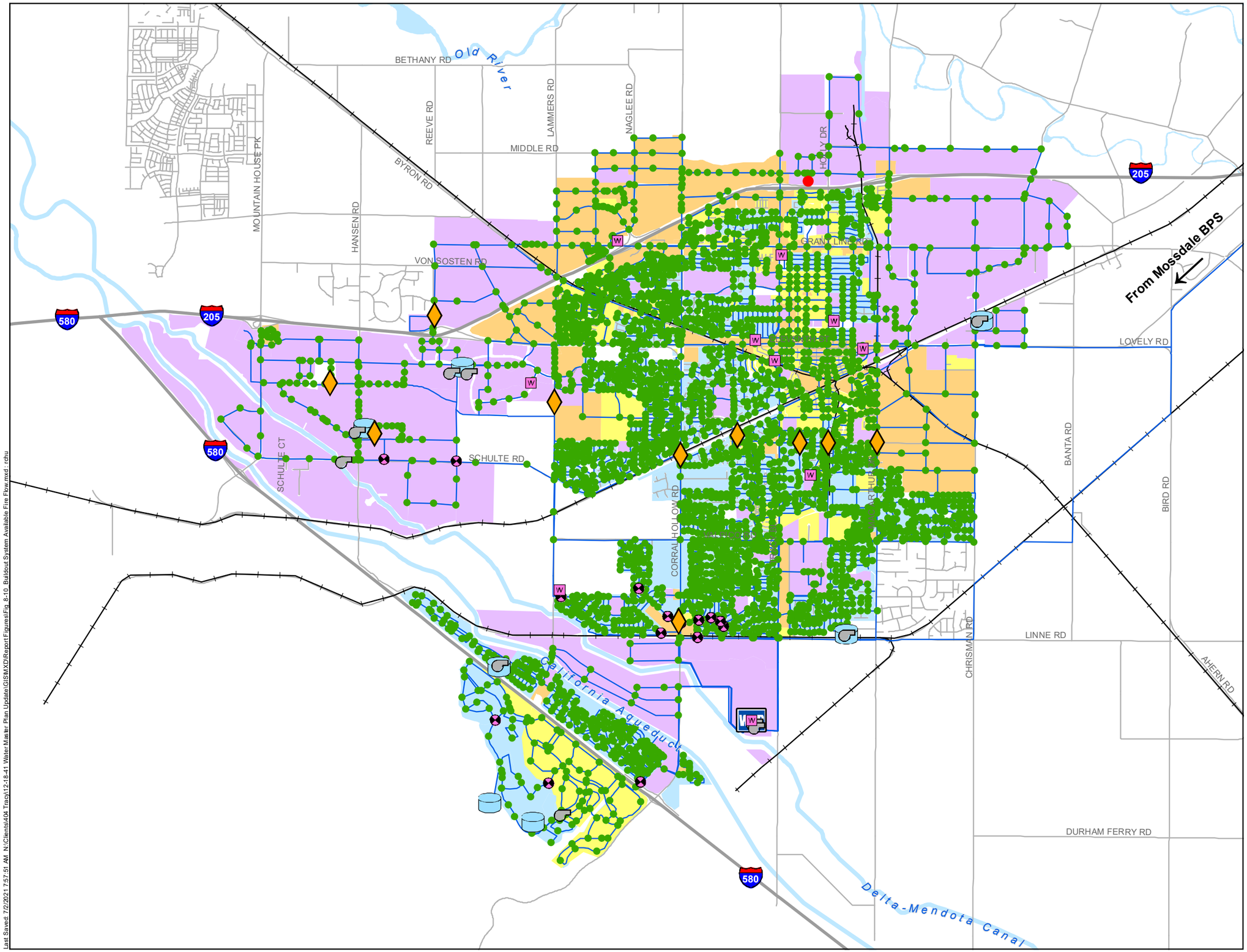
Fire flow demands were assigned based the fire flow requirements summarized in Table 8-12 and simulated at various locations within the City's buildout water service area. InfoWater's "*Available Fire Flow Analysis*" tool was used to determine the available fire flow (while meeting the maximum day demand plus fire flow minimum residual pressure of 20 psi and the maximum velocity performance criteria in proposed pipelines of 12 fps) at each fire flow junction within the buildout water system during a maximum day demand scenario. Figure 8-10 illustrates the results of the buildout maximum day plus fire flow evaluation. With the exception of the hydrant located at the southern end of Rhonda Way (discussed in Chapter 7), results indicate that all evaluated locations within the model were able to meet the minimum fire flow requirements.

Seven additional fire flow simulations were performed within the buildout system hydraulic model to simulate a condition equal to a maximum day demand with two concurrent fire flow events. Figure 8-11 illustrates the locations of the additional fire flow simulations. Locations were selected within each pressure zone based on the existing and proposed land use designations and spatial distance from supply sources to stress the City's water system. As summarized in Table 8-14, results from the hydraulic model indicate that all seven of the concurrent fire flow simulations met the minimum residual pressure criterion of 20 psi.

Table 8-14. Results of Additional Fire Flow Simulations for Buildout System

Pressure Zone	Location #	Fire Flow Demand, gpm[(a)]	Residual Pressure, psi
Zone 1	1	1,500	54
		4,500	40
	2	1,500	56
		4,500	50
	7	1,500	43
		4,500	39
Zone 2	3	1,500	68
		4,500	55
	4	1,500	68
		4,500	34
	5	1,500	61
		4,500	31
Zone 3	6	1,500	70
		4,500	60

(a) It is assumed that the two concurrent fire flow events will consist of one smaller Single Family Residential fire flow combined with another larger Industrial fire flow.



Symbology

Available Fire Flow

- Does Not Meet Requirement
- Meets Requirement
- Pressure Regulating Station
- Pressure Reducing Valve
- Booster Pump Station
- Groundwater Well
- Storage Tank
- WTP John Jones Water Treatment Plant
- Pipeline

Fire Flow Requirement

- 1,500 gpm
- 2,500 gpm
- 3,500 gpm
- 4,500 gpm

Notes:

1. The available fire flow shown is the maximum flow available while maintaining 20 psi residual system pressure and velocities of less than 12 fps in proposed pipelines.
2. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
3. The buildout storage and pumping capacity analysis include a maximum fire flow requirement of 4,500 gpm in Zone 5 to account for the potential construction of a school in Zone 5. However, because the location of this potential school is unknown, fireflow requirements were limited to 2,500 gpm in Zone 5 in the hydraulic analysis. Once the location of the school is known, additional analysis should be performed to determine which pipelines must be upsized to accomodate the higher fire flow requirement.

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Figure 8-10

Buildout System Available Fire Flow

City of Tracy
Water System Master Plan Update

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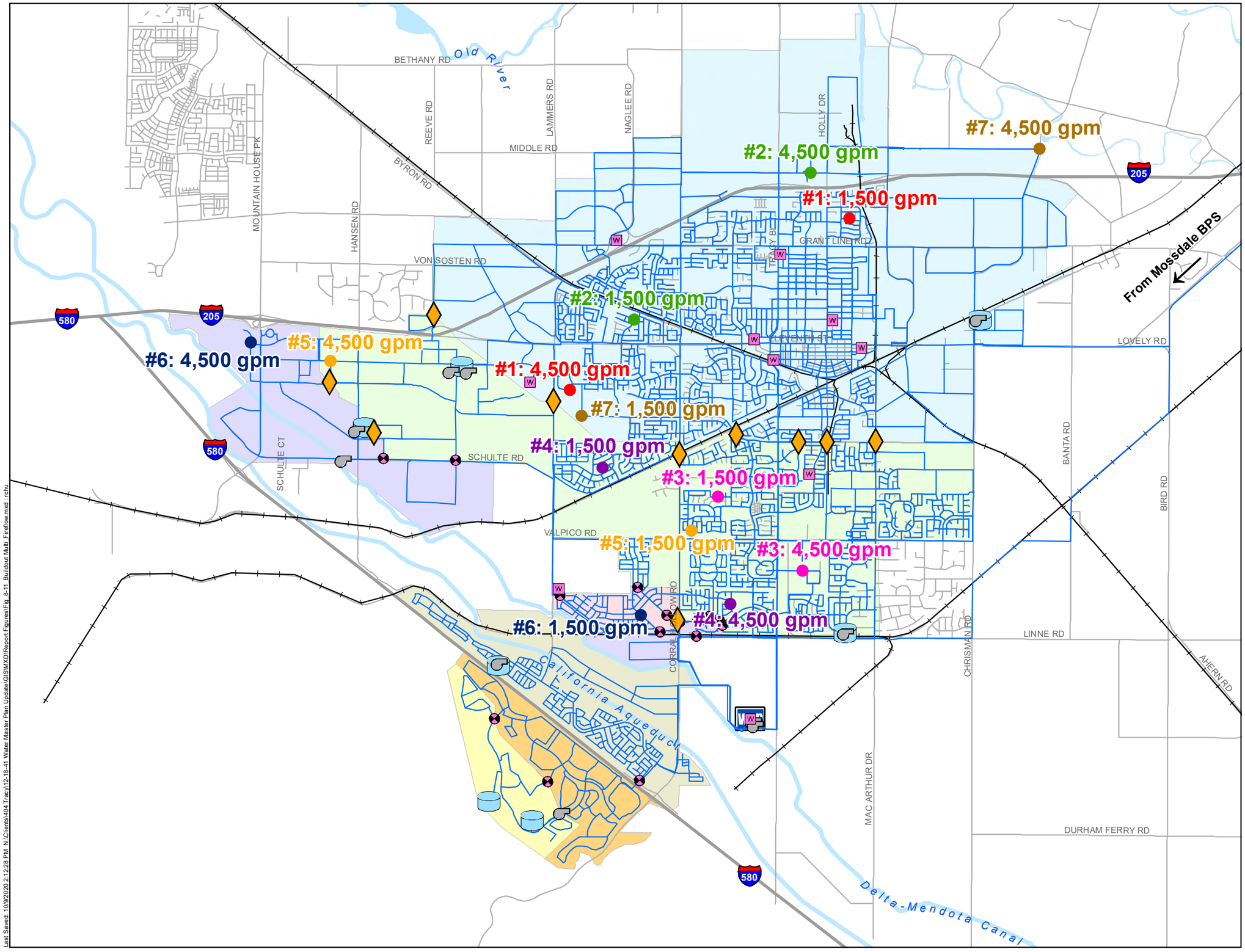

Notes:
1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.

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Figure 8-11

Buildout System Locations of Additional Simultaneous Fire Flow Simulations

City of Tracy
Water System Master Plan Update

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8.6 SUMMARY OF RECOMMENDED FUTURE POTABLE WATER SYSTEM IMPROVEMENTS

The recommended backbone potable water system improvements required to serve future potable water demands are summarized below and shown on Figure 8-12 and Figure 8-13. These future system improvements are triggered by additional demands from new development, unlike the improvements discussed in Chapter 7. It should be noted that these recommendations only identify facility improvements at a master plan level and do not necessarily include all required on-site infrastructure nor constitute design of improvements. Subsequent detailed design is required to determine the exact sizes and final locations of these proposed facility improvements.

The evaluation of the City's future water system is dependent on:

- Projected future development projects and land use data (refer to Chapter 3)
- Adopted water use factors (refer to Chapter 4)
- Adopted peaking factors (refer to Chapter 4)
- Characteristics and capabilities of existing water supply facilities (refer to Chapter 5)
- City water system performance criteria (refer to Chapter 6)

If any of these are significantly altered, the recommendations listed below may need to be reevaluated and revised.

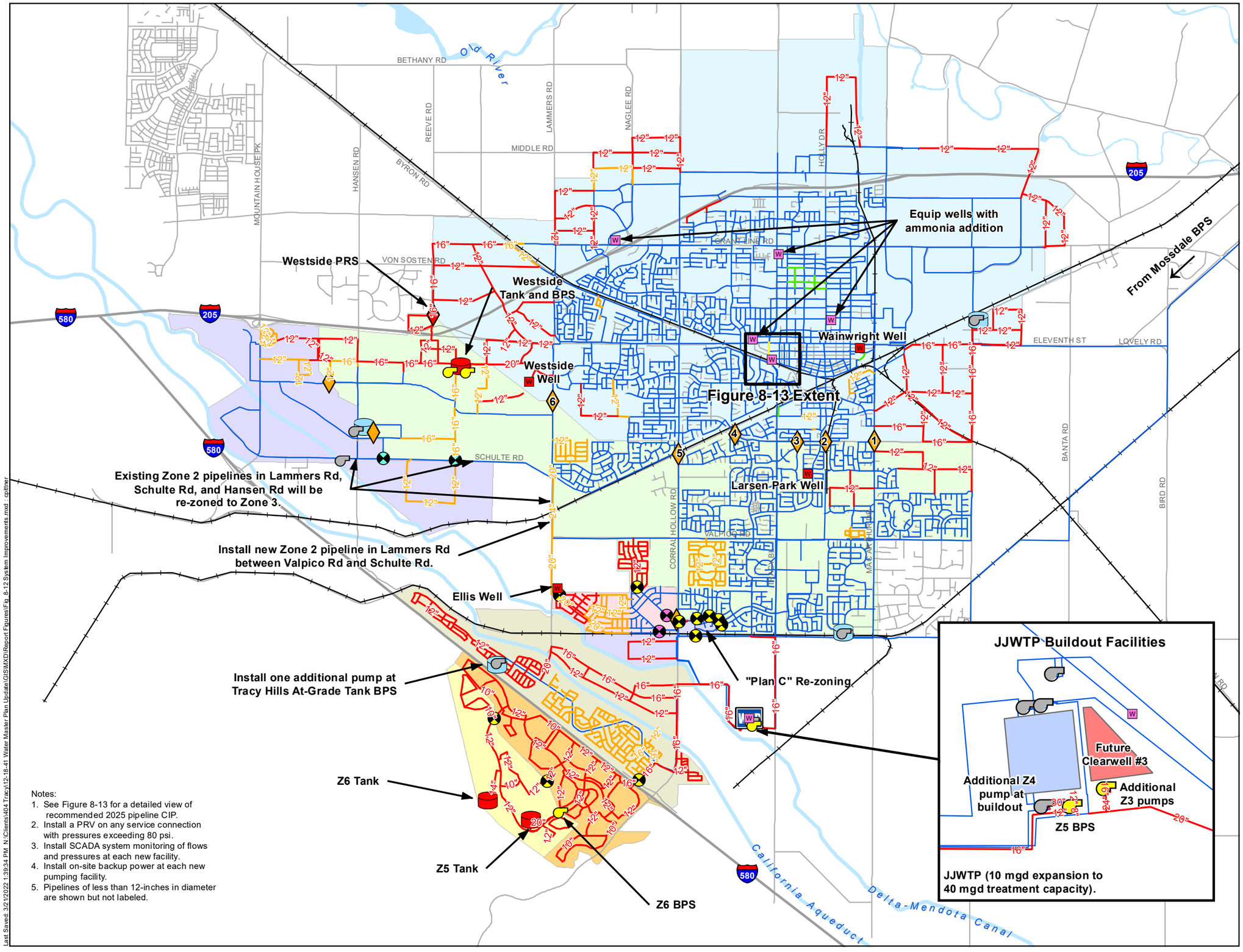
It should also be noted that the future hydraulic model is not an "all pipes" model (i.e., not all smaller diameter pipelines are included); therefore, the hydraulic simulations performed as discussed above may not identify all necessary water system improvements. Consequently, it is recommended that further hydraulic evaluations be performed as additional details are provided for each future development project.

8.6.1 2025 System Improvements

The recommended backbone potable water system improvements required to serve 2025 potable water demands are summarized below. Planning and design for these improvements should be conducted so that these improvements are constructed and operational by 2025.

8.6.1.1 Pipelines

- To serve 2025 water demands, install approximately 73,020 linear feet of new pipelines ranging in diameter from 12 to 24 inches as shown on Figure 8-12.
- To serve 2025 water demands, install additional new pipelines of 10 inches in diameter or less within individual development projects; the length of small diameter pipelines needed to serve 2025 water demands is unknown, as not all 2025 development areas have detailed water system infrastructure plans prepared.
- To serve 2025 water demands, upsize approximately 1,390 linear feet of existing pipelines as shown on Figure 8-13.



Notes:
1. See Figure 8-13 for a detailed view of recommended 2025 pipeline CIP.
2. Install a PRV on any service connection with pressures exceeding 80 psi.
3. Install SCADA system monitoring of flows and pressures at each new facility.
4. Install on-site backup power at each new pumping facility.
5. Pipelines of less than 12-inches in diameter are shown but not labeled.

Symbology

Proposed Buildout Facilities
- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Buildout System Pipeline

Proposed 2025 Facilities
- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Existing System Facilities
- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- John Jones Water Treatment Plant
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

Pressure Zone
- Zone 1
- Zone 2
- Zone 3
- Ellis Reduced Zone
- Zone 4
- Zone 5
- Zone 6

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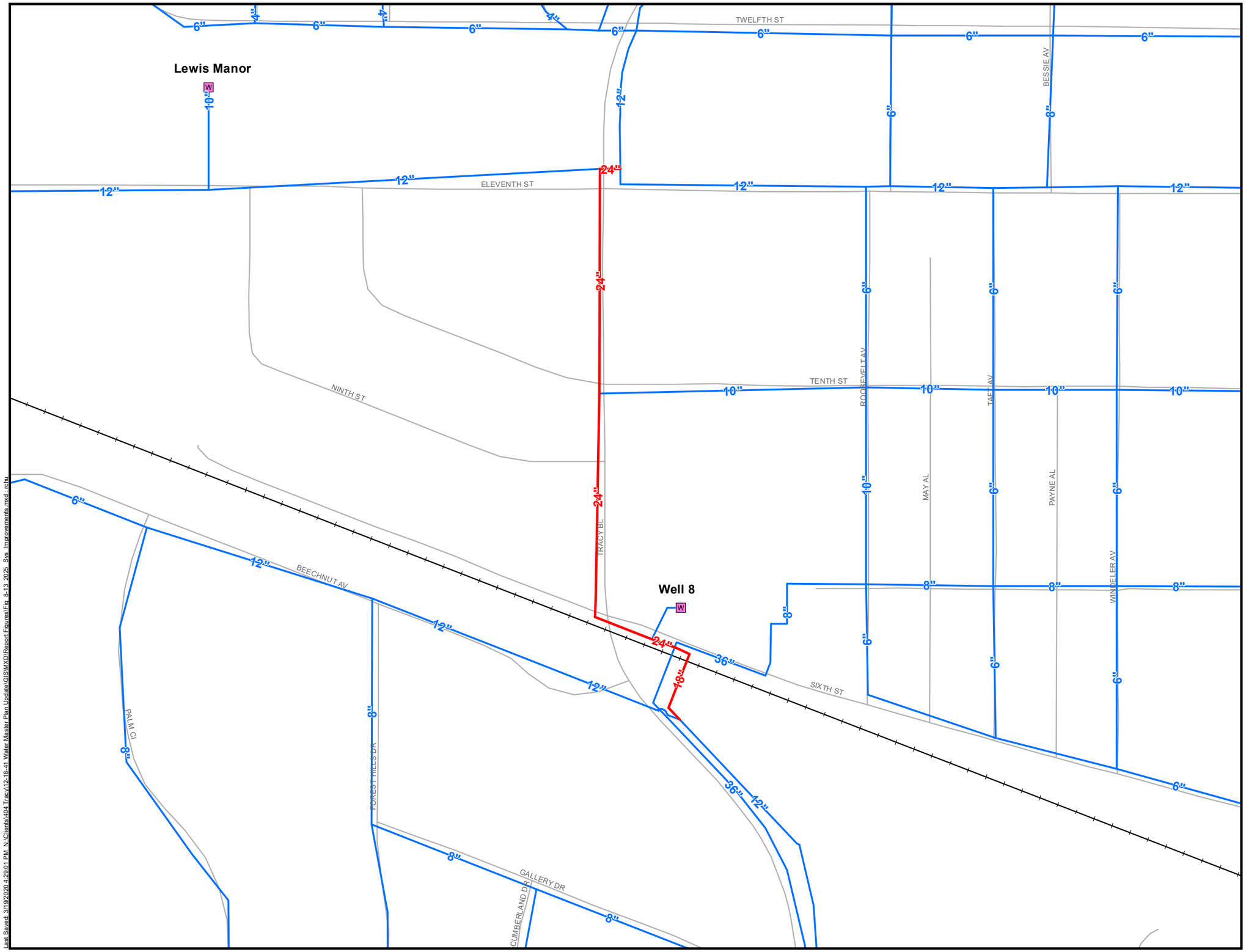
Figure 8-12

Proposed Future Water System Recommended Improvements

City of Tracy
Water System Master Plan Update

Last Saved: 3/21/2022 1:39:34 PM N:\Clients\404 Tracy\12-18-41 Water Master Plan Update\GIS\MXD\Report Figures\Fig. 8-12 System Improvements.mxd - gpitner



Symbology

- Recommended 2025 Improvement
- Existing Pipeline
- Groundwater Well

Notes:
1. See Figure 8-12 for the location of the recommended improvements.

Figure 8-13

2025 System Recommended Pipeline CIP

City of Tracy
Water System Master Plan Update

Last Saved: 3/19/2020 4:29:01 PM N:\Clients\404 Tracy\12-18-41 Water Master Plan Update\GIS\MXD\Report Figures\Fig 8-13 2025 Sys Improvements.mxd rchu

8.6.1.2 Interconnections

- Install two new mainline PRVs before the transmission main in Schulte Road is re-zoned to Zone 3.
- Install an individual PRV on any water service connection with a static pressure exceeding 80 psi.

8.6.1.3 Re-Zoning

- Re-zone the existing transmission mains in Lammers Road, Schulte Road, and Hansen Road from Zone 2 to Zone 3 as described in Appendix D.

8.6.1.4 Groundwater Wells

- Provide ammonia addition for existing City wells (Lincoln Well, Lewis Manor Well, Park & Ride Well and Ball Park Well) (as noted below under Buildout System Improvements, all future wells are also recommended to be equipped with ammonia addition).
- A feasibility study is recommended to develop an implementation plan for future ASR expansion (see additional discussion in Chapter 5).

8.6.2 Buildout System Improvements

The recommended backbone potable water system improvements required to serve buildout potable water demands are summarized below.

8.6.2.1 Storage Facilities

Planning and design of these new storage facilities should be conducted so that the proposed facilities are constructed and operational in time to serve their respective service areas (e.g., Westside, Zone 5 or Zone 6). Because of the additional operational flexibility that Clearwell #3 would provide, it is recommended that Clearwell #3 be constructed as soon as possible. As noted above, no additional storage facilities are required by 2025, but it is recommended that Clearwell #3 be constructed by no later than 2030.

Note: Because the actual dimensions of each proposed storage facility have not been determined, the storage facility sizes below do not include dead and freeboard storage requirements, which will be determined during design.

- Westside Tank: Install a new storage tank with a minimum active storage capacity of 1.0 MG.
- JJWTP Clearwell #3: Install a new clearwell at the JJWTP with a minimum active storage capacity of 1.0 MG.
- Zone 5 Tank: Install a new storage tank with a minimum active storage capacity of 3.2 MG. Sizing of this tank should be confirmed before development of Zone 5 begins.

- Zone 6 Tank: Install a new storage tank with a minimum active storage capacity of 1.1 MG. Sizing of this tank should be confirmed before development of Zone 6 begins.

8.6.2.2 Groundwater Wells

Planning and design of these new groundwater wells should be phased so that the City's ASR Program can be expanded as needed to meet the City's water supply needs, particularly in dry years. As described in Chapter 5, a feasibility study for the expansion of the City's ASR Program is recommended, and is included above with the recommended 2025 System Improvements, to develop an implementation plan for ASR expansion.

- Westside ASR Well: Install a new ASR well with a minimum firm pumping capacity of 2,500 gpm and equipped with ammonia addition.
- Wainwright ASR Well: Install a new ASR well with a minimum firm pumping capacity of 2,500 gpm and equipped with ammonia addition.
- Larsen Park ASR Well: Install a new ASR well with a minimum firm pumping capacity of 2,500 gpm and equipped with ammonia addition.
- Ellis ASR Well: Install a new ASR well with a minimum firm pumping capacity of 1,000 gpm and equipped with ammonia addition.

8.6.2.3 Booster Pumping Facilities

Planning and design of these new booster pumping facilities should be coordinated with the construction of other related facilities (e.g., associated storage tanks) and the timing of new development. As of early 2022, the Zone 5 BPS design is complete.

- JJWTP: Increase the firm treated surface water pumping capacity at the JJWTP to meet buildout maximum day water demands.
  - Zone 3 BPS: Install additional Zone 3 booster pumps with a minimum pumping capacity of 1,500 gpm.
  - Zone 5 BPS: Install a new Zone 5 booster pump station with a minimum firm pumping capacity of 2,410 gpm.
- Zone 6 BPS: Install a new booster pump station with a minimum firm pumping capacity of 550 gpm (sizing of this pump station should be confirmed before development of Zone 6 begins).
- Westside Tank: Install a new Zone 1 booster pump station with a minimum firm pumping capacity of 4,500 gpm.
- Westside Tank: Install a new Zone 2 booster pump station with a minimum firm pumping capacity of 2,400 gpm.

8.6.2.4 Pipelines

Planning and design of these new pipelines should be coordinated with the timing of new development.

- To serve buildout water demands, install approximately 308,270 linear feet of new pipelines (in addition to the proposed 2025 pipelines) ranging in diameter from 12 to 30 inches as shown on Figure 8-12.
- To serve buildout water demands, install additional new pipelines of 10 inches in diameter or less within individual development projects; the length of small diameter pipelines needed to serve buildout water demands is unknown, as most buildout development areas do not have detailed water system infrastructure plans prepared.

8.6.2.5 Interconnections

Planning and design of these new interconnections should be coordinated with the timing of new development in the respective pressure zones.

- Install the following interconnections between pressure zones to provide supply during peak demands and/or emergency conditions:
  - Westside PRS (from Zone 2 into Zone 1)
  - Ellis PRV #3 (from Zone 3 into Ellis Reduced Zone)
  - Avenues PRV (from Ellis Reduced Zone into Zone 2)
  - Zone 4 PRV (from Zone 5 into Zone 4)
  - Two (2) Zone 5 PRVs (from Zone 6 into Zone 5)
  - Install six new mainline PRVs before the Plan C area is re-zoned to Zone 3 (to be funded through Plan C funds)
- Install an individual PRV on any water service connection with a static pressure exceeding 80 psi.

8.6.2.6 Re-Zoning

Planning and design of this rezoning should be coordinated with the timing of the new Zone 3 pipeline from the JJWTP.

- Re-zone the Plan C area from Zone 2 to Zone 3 (to be funded through Plan C funds)

8.6.2.7 SCADA System/Backup Power

Planning and design of the recommended SCADA system improvements and backup power should be prioritized and completed as soon as possible, as these improvements will improve operational flexibility and reliability.

- Install SCADA system monitoring of flows and pressures at PRS #1-#6 to provide operators with additional understanding and flexibility in system operations.

- Add remote operation of Well 8 from the SCADA system to provide additional operational flexibility.
- Install SCADA system monitoring of flows and pressures at each new water supply facility to provide operators with real-time system data and flexibility in system operations.
- Install on-site backup power to any proposed buildout system pumping facility to improve supply reliability.

8.6.2.8 JJWTP Expansion

A future additional 10 mgd expansion of the JJWTP (for a total treatment capacity of 40 mgd) is recommended to provide the City with additional water treatment capacity, as well as operational flexibility and reliability, if the use of groundwater supplies needs to be limited or if there is a supply outage from South County Water Supply Project. The expansion would also include a new administration/maintenance building to accommodate future staffing needs and maintenance activities.

It is recommended that the JJWTP expansion be constructed by no later than 2030, in coordination with the new JJWTP Clearwell #3.

8.6.2.9 Participation in Phase 2 Los Vaqueros Reservoir Expansion Project

As described in Chapter 5, the City's participation in the Phase 2 Los Vaqueros Reservoir Expansion Project would increase the City's water supply reliability by providing storage of supplies for use in dry years. The estimated cost for 5,000 acre-feet of storage for the City will be approximately $10 million plus an additional $1.5 million for implementation and will be shared by existing rate payers and new development. In October 2021, the Tracy City Council authorized staff to initiate the process to participate in the project and authorized the City Manager to execute the project activity agreement.

8.6.2.10 Water Master Plan Updates

Regular updates of this Citywide Water System Master Plan are recommended to evaluate potable water and recycled water infrastructure needs to reflect any changes in future development plans, water use trends and patterns, and water supply availability and reliability, as well as new regulations and operational needs as new potable water and recycled water system infrastructure is constructed. It is recommended that updates be prepared at least once every 10 years, or more often if changing conditions warrant more frequent updates. For purposes of this Citywide Water System Master Plan Update, three future updates are planned.

CHAPTER 9
Recycled Water System Evaluation

9.1 OVERVIEW

The purpose of this chapter is to describe the City's existing recycled water system and the recommended future recycled water system at buildout of the City's SOI. The recycled water infrastructure recommended in this chapter is based on the adopted water use and peaking factors described in Chapter 4 and system performance criteria described in Chapter 6 of this Citywide Water System Master Plan Update.

The City's existing WWTP on Holly Drive currently collects and treats wastewater to a Title 22 Disinfected Tertiary standard. The construction of a recycled water system to distribute this water to various non-potable use areas began in 2018; currently the only service connection is for the Legacy Fields sports complex. In the future, the City will extend the recycled water system and use recycled water to meet irrigation and other non-potable demands in existing service areas (thus offsetting some existing potable water use) and future service areas.

The topics discussed in this chapter include:

- Description of Existing Recycled Water System
- Existing Recycled Water System Demands
- Recommended Buildout Recycled Water System
- Recycled Water System Criteria
- Recycled Water System Evaluation Results
- Summary of Recommended Future Recycled Water System Improvements

To assist in the evaluation of the City's overall recycled water system at buildout, the recycled water infrastructure recommended in this chapter includes the infrastructure required to serve the Tracy Hills development and, for consistency, is based on the adopted water use, peaking factors, and system performance criteria described in previous chapters of this Citywide Water System Master Plan. Although the Tracy Hills development is located within separate and distinct recycled water pressures zones from the rest of the City, West Yost has included the Tracy Hills development in the future recycled water system evaluation because it will be served by pipelines, tanks, and booster pump stations in other pressure zones which need to be sized to account for the demands in Tracy Hills. Including the Tracy Hills development in the buildout hydraulic model evaluation ensures that the City's buildout recycled water system is integrated and sufficient to serve the recycled water demands of the entire City (including Tracy Hills). Because planning for future phases of Tracy Hills is subject to change, the sizing of any future water system improvements to serve Tracy Hills should be confirmed based on the latest development plans and associated water demand projections.

9.2 DESCRIPTION OF EXISTING RECYCLED WATER SYSTEM

This section provides a summary of the City's existing recycled water system facilities. Construction of the City's recycled water distribution system began in 2018. Currently, the recycled water distribution system consists of the Zone A booster pump station (Zone A BPS) at the City's Wastewater Treatment Plant, and approximately 7.6 miles of 30-inch diameter and 24-inch diameter transmission mains on the north and west side of the City, as shown on Figure 9-1. Additional details regarding each facility are presented below.

9.2.1 Wastewater Treatment Plant

The City's WWTP is located on Holly Drive, just north of the I-205 freeway as shown on Figure 9-1. The WWTP currently has a permitted average dry weather flow treatment capacity of 10.8 mgd. The WWTP treats domestic and industrial wastewater using a combination of primary clarification, an advanced activated sludge process with anoxic denitrification, tertiary filtration, and chlorination. The chlorinated effluent meets Title 22 requirements for recycled water use for landscape irrigation and other non-potable uses.

9.2.2 Booster Pump Stations

The City currently has one recycled water booster pump station, as shown on Figure 9-1. The Zone A BPS is located at the WWTP, and supplies water from the post-aeration basin to the recycled water distribution system. Table 9-1 presents a summary of the existing recycled water booster pump station with key characteristics such as design capacity and number of booster pumps.

Table 9-1. Existing Recycled Water Booster Pump Station

Booster Pump Station Name	Location	Year Installed	Pump 1, gpm	Pump 2, gpm	Pump 3, gpm	Pump 4, gpm	Pump 5, gpm	Rated Capacity[(a)], gpm	Firm Capacity[(b)], gpm	Firm Capacity[(b)], mgd
Zone A[(c)]	WWTP	2019	1,736	1,736	1,736	1,736	1,736	8,680	6,944	10.0

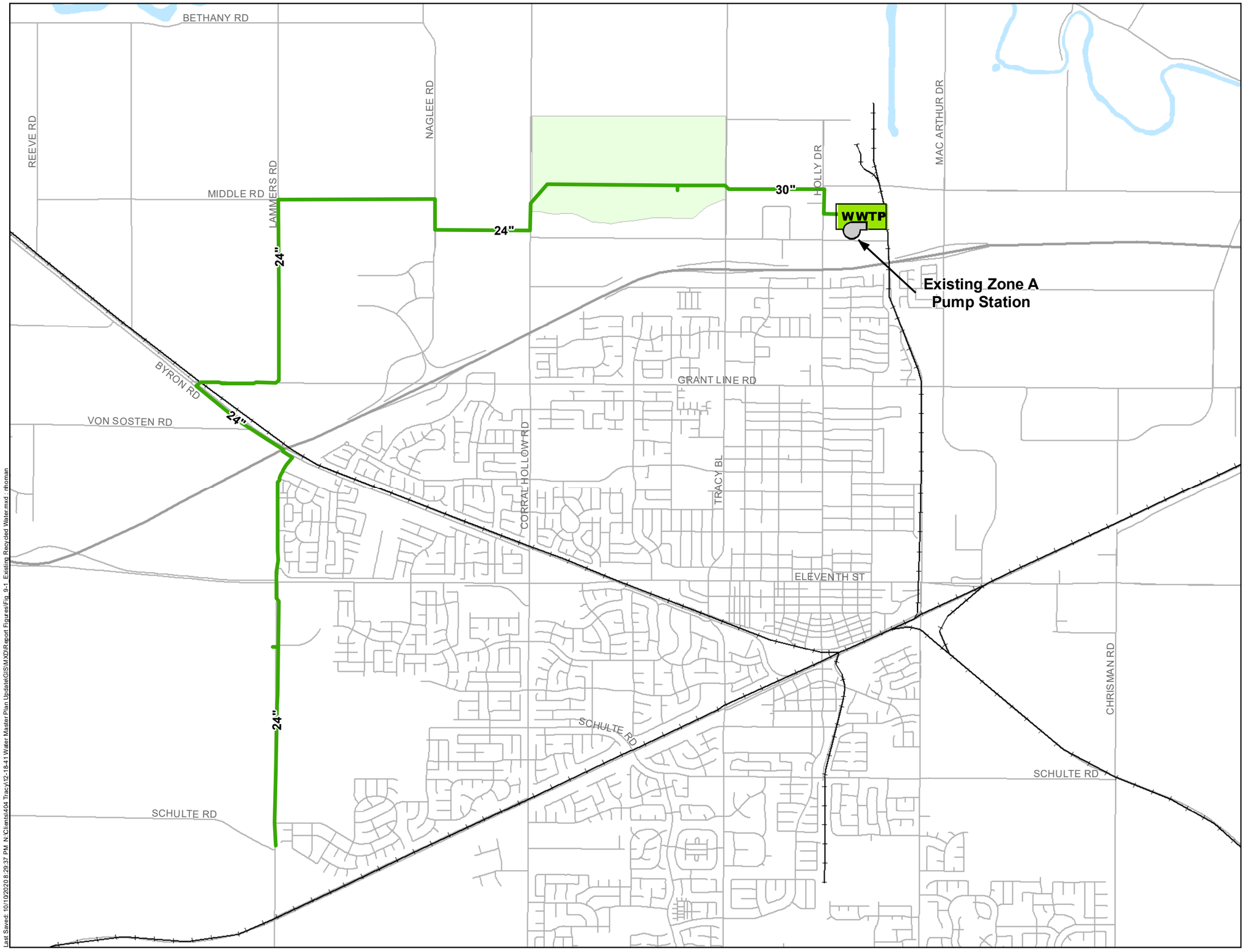
(a) Maximum pumping capacity of entire pump station.
(b) Assumes that the largest booster pump at the pump station is offline.
(c) Pumps are equipped with variable frequency drives.

9.2.3 Pressure Zone Boundaries

The City's existing recycled water system consists of a single pressure zone, Zone A. Pressure zone boundaries at buildout of the recycled water system are discussed in *Section 9.4.2 Pressure Zone Recommendations*.

9.2.4 Transmission and Distribution Pipelines

The City's existing recycled water transmission system pipeline network is shown on Figure 9-1. The only recycled water pipelines currently in service are 7.6 miles of 30-inch diameter and 24-inch diameter transmission mains from the WWTP west to Lammers Road and south to Kimball High School.



N

0 1,250 2,500

Scale in Feet

Symbology

- Existing Booster Pump Station
- WWTP Wastewater Treatment Plant
- Existing Transmission Pipeline (Diameter >16 inches)
- Legacy Fields

Notes:

1. The City's recycled water hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
2. Existing recycled water pipelines which are not yet in service are not shown.

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Figure 9-1

Existing Recycled Water System Facilities

City of Tracy
Water System Master Plan Update

Last Saved: 10/19/2020 8:29:37 PM N:\Clients\404 Tracy\12-18-41 Water Master Plan Update\GIS\MXD\Report Figures\Fig. 9-1 Exeting Recycled Water.mxd rhoman

Recycled water distribution pipelines have also been installed by developers in several future service areas, including Cordes Ranch, Ellis Specific Plan Phase 1, and Tracy Hills Phase 1. However, because no source of recycled water is currently available in these areas, these pipelines are currently connected to the potable water system via backflow prevention devices and are delivering potable water to serve irrigation demands. Once recycled water service is extended to these areas, the recycled water mains will be connected to the recycled water system and the temporary connections to the potable water system will be removed.

9.2.5 SCADA System

The Zone A BPS is integrated into the City's SCADA (Supervisory Control and Data Acquisition) system for the WWTP. This integration provides for remote operation and monitoring of the Zone A BPS, as well as automated shut down of the pump station if chlorinated effluent from the WWTP does not meet Title 22 standards at a given time.

9.3 EXISTING RECYCLED WATER DEMANDS

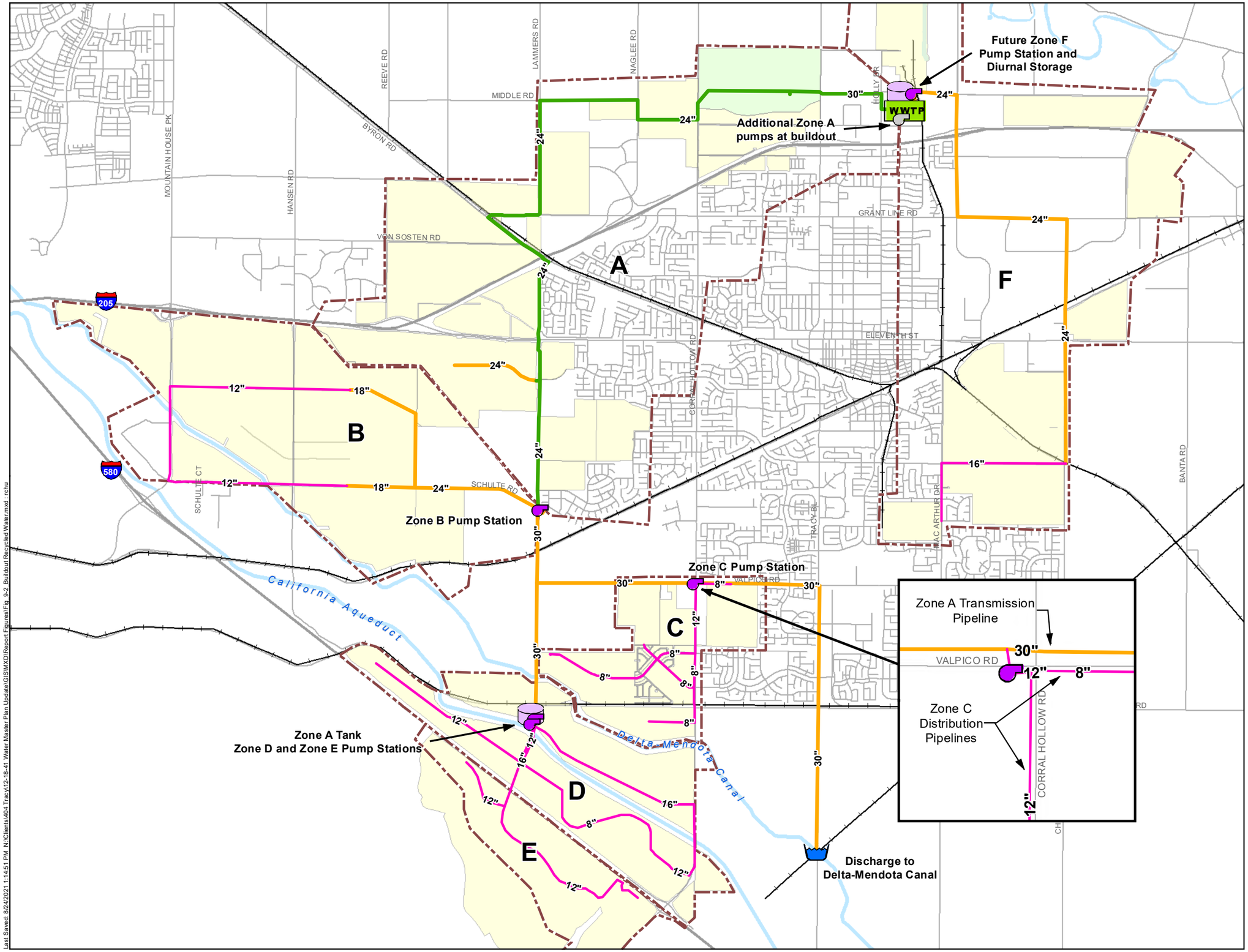
The City's only active recycled water service connection is the Legacy Fields sports complex.

9.4 RECOMMENDED BUILDOUT RECYCLED WATER SYSTEM

The City intends to expand the existing recycled water system to serve non-potable water demands to most future development areas, help offset some existing potable water irrigation demands, and reduce treated effluent discharges to Old River. One integrated recycled water system is proposed and will serve and distribute recycled water throughout the entire SOI.

In addition to serving non-potable water demands, the future recycled water system must also be capable of delivering recycled water to the DMC for the City's proposed Recycled Water Exchange Program with the USBR. As discussed in Chapter 5, this exchange agreement would allow the City's recycled water to be discharged to the DMC and a like amount of raw water to be diverted from the DMC by the City for treatment at the JJWTP for potable use. This exchange agreement is an essential part of the City's projected future water supply portfolio. Future recycled water system infrastructure was sized to account for the additional flow which must be conveyed through the recycled water system from the WWTP to the DMC. It should be noted that the quantity of recycled water required for the exchange agreement is assumed to be up to about 9,000 af/yr. This is higher than the exchange amount assumed in the City's 2020 UWMP and described in Chapter 4 (7,500 af/yr), and reflects an approximate upper bound for the recycled water exchange program. Subsequent revisions to the projected potable water demand and/or the water supply availability and reliability assumptions may change the required quantities and timing of the proposed Recycled Water Exchange Program.

Recommendations for the buildout recycled water system were developed based on previous studies of the recycled water system, projected recycled water demands, the requirements of the planned recycled water exchange program, and the recycled water system performance criteria. A hydraulic model was used to confirm that these recommendations meet the City's recycled water system performance criteria described in Chapter 6. The recommended buildout recycled water system is shown on Figure 9-2.



N

0 2,000 4,000
Scale in Feet

Symbology

Proposed Future Facilities

- Future Booster Pump Station
- Future Storage Tank
- Delta Mendota Canal Discharge Point
- Future Distribution Pipeline (Diameter ≤ 16 inches)
- Future Transmission Pipeline (Diameter > 16 inches)

Existing System Facilities

- Existing Booster Pump Station
- WWTP Wastewater Treatment Plant
- Existing Transmission Pipeline (Diameter >16 inches)
- Legacy Fields
- Future Recycled Water Use Area
- Recycled Water Pressure Zone

Notes:
1. Pressure Zones represent approximate boundaries.
2. The City's recycled water hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
3. Existing recycled water pipelines which are not yet in service are shown as future pipelines.

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Figure 9-2

Buildout Recycled Water System Facilities

City of Tracy
Water System Master Plan Update

Last Saved: 8/24/2021 1:14:51 PM N:\Clients\404 Tracy\12-18-41 Water Master Plan Update\GIS\MXD\Report Figures\Fig 9-2 Buildout Recycled Water.mxd : rchu

9.4.1 Future Recycled Water Demand Areas

The demand areas to be served by the future recycled water system are shown on Figure 9-2. For this Citywide WSMP Update, the following assumptions were made regarding the areas served by the recycled water system:

- Most large development projects located on the west side of the City will be served by the recycled water system by 2025, except for Cordes Ranch, West Side Industrial, and Tracy Hills.
- Recycled water service will be extended to Cordes Ranch, West Side Industrial, and Tracy Hills by 2040; it is expected that this will occur after 2025, but much sooner than 2040.
- Future recycled water service areas on the east side of the City (East Side Industrial, Chrisman Road, UR 1, and Rocha), will be served by a separate recycled water transmission main which will not be constructed until after 2040.
- Recycled water service will not be extended to developments in the following areas due to the isolated locations and relatively small individual potential recycled water demands within them:
  - I-205 Corridor Specific Plan
  - Industrial Areas Specific Plan
  - Northeast Industrial Specific Plan
  - Berg Road Subdivision
  - Berg/Byron Remainder
  - Other small, approved projects (refer to Table 3-1, footnote (f) for the full list)
  - Miscellaneous Infill
- Only a small number of existing parks and irrigated areas located close to the recycled water transmission main alignments will be converted to recycled water service; it should be noted that the previously proposed Gateway Exchange Program, under which recycled water service would be extended to most existing parks and large irrigated areas in the City to offset potable water demands from the Gateway development (now called Westside), is no longer being considered.

9.4.2 Pressure Zone Recommendations

The proposed recycled water pressure zones developed in the 2012 WSMP mimicked the potable water distribution system pressure zones. However, the recent Recycled Water Optimization Evaluation[1] (Optimization Study) recommended adjustments to the proposed pressure zones to minimize parallel pipelines and reduce the cost of the system. The recycled water pressure zones proposed in this WSMP Update are generally consistent with those recommended in the Optimization Study:

- Zone A will extend west and south from the City's WWTP to Schulte Road and the western boundary of the Westside Specific Plan. The existing 30-inch diameter and 24-inch diameter transmission main on the north side of the City and in Lammers Road will serve Zone A.
- Zone B will extend west from the western boundary of Zone A, and will include Cordes Ranch, Westside Industrial Area, and portions of the Westside Specific Plan. It will be served by a 24-inch diameter transmission main in Schulte Road.
- Zone C will include the Ellis Specific Plan, Avenues, Tracy Village, UR 10, and SWP & Valpico service areas. Due to the relatively small demands from these areas and the compact nature of this pressure zone, no pipelines greater than 12-inch diameter are recommended to serve it.
- Zones D and E will be located southwest of the DMC and will exclusively serve Tracy Hills. Each pressure zone will be served by dedicated 12-inch and 16-inch diameter distribution mains. Because the elevation and configuration of the Tracy Hills development favors a pressure zone break where Interstate 5 crosses the property, the Tracy Hills pressure zones have not been adjusted from the pressure zones recommended in the 2000 Tracy Hills Master Plan.
- Zone F will extend east and south from the City's WWTP to include the recycled water service areas on the east side of the City. This pressure zone will be served by a 24-inch diameter and 16-inch diameter transmission main. This pressure zone was not included in the Optimization Study, which only considered the recycled water system for the west side of the City. The 2012 WSMP assumed that the east side developments would be served by the same pressure zone(s) as the west side developments. However, because the east side backbone transmission main is no longer planned to connect to the rest of the system, it is recommended that the east side developments be served by a separate pressure zone with a hydraulic grade selected to better serve the specific elevation range of the east side service area. This will require the construction of a separate booster pump station at the WWTP dedicated to serving Zone F.

The proposed ground elevation ranges and the modeled hydraulic grade ranges for each pressure zone are presented in Table 9-2.

[1] "Recycled Water Optimization Evaluation", CH2M Hill Engineers, Inc, January 2017.

Table 9-2. Recycled Water Distribution Pressure Zones

Pressure Zone	Nominal Hydraulic Grade, ft	Expected Range of Service Elevations, ft	Static Pressure Range, psi
A	375	10 - 91	122 - 157
B	410	105 - 230	77 - 131
C	360	100 - 185	75 - 112
D	470	209 - 310	69 - 112
E	550	305 - 400	64 - 105
F	264	19 - 96	72 - 105

psi = pounds per square inch

Ground elevations and hydraulic grades were chosen to provide a system pressure range of 60 psi to 100 psi where possible, as defined in the recycled water system evaluation criteria. The nominal hydraulic grades shown in Table 9-2 are based on the design head of existing pumps (Zone A), planned pumps (Zone B), or on the pump design head necessary to maintain a minimum of 60 psi service pressure within the pressure zone under peak hour conditions (all other zones). Nominal hydraulic grade was calculated at the pump discharge. Because of friction losses in the distribution system during operations, system pressure near the pump stations can exceed 100 psi. The highest expected pressure in the proposed recycled water system is 178 psi on the discharge side of the Zone A BPS.

9.4.3 Allocation of Future Recycled Water Demands

The projected recycled water demands were previously discussed in Chapter 4. The maximum day and peak hour peaking factors were also presented previously in Chapter 4 and are summarized below in Table 9-3.

Table 9-3. Recycled Water Demand Peaking Factors

Parameter	Value
Maximum Month Demand, percent of annual demand[(a)]	17.6%
Maximum Day Peaking Factor[(b)]	6.4
Peak Hour Peaking Factor[(c)]	7.0

(a) Based on 2017 monthly potable water use for dedicated landscape irrigation accounts.
(b) Multiply the average day demand times the peaking factor to obtain maximum day demand. Maximum Day Demand Peaking Factor = Maximum Month Demand (percent) / 30 days x 365 x (24/8).
(c) Multiply the average day demand times the peaking factor to obtain peak hour demand. Assumed to be 110 percent of Maximum Day Demand, refer to Chapter 4.

Projected buildout recycled water average day, maximum day, and peak hour demands (including existing demands) are summarized in Table 9-4. Additional detail of the projected average day recycled water demands at buildout for each future development project by pressure zone (not including existing demands) is provided in Table 9-5.

Table 9-4. Buildout Recycled Water Demands by Pressure Zone

Pressure Zone	Average Day Demand[a]		Maximum Day Demand[b]		Peak Hour Demand[c]	
	gpm	mgd	gpm	mgd	gpm	mgd
Zone A	1,534	2.2	9,818	14.1	10,739	15.5
Zone B	876	1.3	5,605	8.1	6,131	8.8
Zone C	242	0.3	1,547	2.2	1,692	2.4
Zone D	388	0.6	2,484	3.6	2,717	3.9
Zone E	264	0.4	1,690	2.4	1,848	2.7
Zone F	620	0.9	3,968	5.7	4,340	6.2
Total	**3,924**	**5.7**	**25,112**	**36.2**	**27,466**	**39.6**

(a) Equal to existing water demands plus projected buildout water demands presented in Table 4-16.
(b) Maximum day demand is 6.4 times the average day demand.
(c) Peak hour demand is 7.0 times the average day demand.

9.4.4 Recycled Water Exchange Program Seasonality

For purposes of this Citywide Water System Master Plan Update, it has been assumed that the future recycled water system would be designed to deliver up to about 9,000 af/yr of recycled water to the DMC as part of the City's planned recycled water exchange agreement with the USBR. This is more than the 7,500 af//yr assumed in the City's 2020 UWMP and described in Chapter 4 of this Citywide Water System Master Plan Update, but reflects an approximate upper bound for the recycled water exchange program. Because recycled water demands from City customers vary significantly with the season, the time of year in which exchange recycled water is discharged to the DMC has a significant effect on the sizing of recycled water system facilities. For example, the volume of water the system can discharge to the DMC during a maximum day demand condition in the summer will be significantly less than the volume the system can discharge to the DMC in the winter, when recycled water demands are low.

It is assumed that the City will be able to optimize the timing of recycled water discharge to the DMC so that the majority of the exchange takes place in off-peak months. During a maximum day demand condition in a single dry year at buildout, it was assumed that the recycled water system would only have to deliver 4.1 mgd to the DMC. In a single dry year, the recycled water system should be capable of delivering as much as 13.8 mgd to the DMC on a winter day with negligible recycled water demands from City customers.

Table 9-5. Summary of Buildout Average Day Recycled Water Demands by Development Project[a,b]

Project or Development Area	Zone A		Zone B		Zone C		Zone D		Zone E		Zone F		Total	
	gpm	percent of total	gpm	percent of total	gpm	percent of total	gpm	percent of total	gpm	percent of total	gpm	percent of total	gpm	percent of total
UR 5 (Bright)	49.51	3.37%		0.00%		0.00%		0.00%		0.00%		0.00%	49.51	1.28%
UR 7 (Bright/Castro)	44.52	3.03%		0.00%		0.00%		0.00%		0.00%		0.00%	44.52	1.15%
Rocking Horse	6.26	0.43%		0.00%		0.00%		0.00%		0.00%		0.00%	6.26	0.16%
Tracy Village		0.00%		0.00%	98.28	40.67%		0.00%		0.00%		0.00%	98.28	2.55%
UR 1		0.00%		0.00%		0.00%		0.00%		0.00%	263.48	42.47%	263.48	6.83%
Ellis		0.00%		0.00%	66.93	27.70%		0.00%		0.00%		0.00%	66.93	1.74%
Avenues		0.00%		0.00%	12.01	4.97%		0.00%		0.00%		0.00%	12.01	0.31%
UR 10		0.00%		0.00%	45.42	18.80%		0.00%		0.00%		0.00%	45.42	1.18%
Tracy Hills		0.00%		0.00%		0.00%	388.09	100.00%	264.08	100.00%		0.00%	652.18	16.91%
Westside	271.46	18.50%		0.00%		0.00%		0.00%		0.00%		0.00%	271.46	7.04%
Cordes Ranch		0.00%	600.42	68.56%		0.00%		0.00%		0.00%		0.00%	600.42	15.57%
UR 4 (Bright Triangle)	61.87	4.22%		0.00%		0.00%		0.00%		0.00%		0.00%	61.87	1.60%
UR 3 (Sandhu)	254.46	17.34%		0.00%		0.00%		0.00%		0.00%		0.00%	254.46	6.60%
I-205 Expansion	79.63	5.43%		0.00%		0.00%		0.00%		0.00%		0.00%	79.63	2.06%
West Side Industrial		0.00%	254.51	29.06%		0.00%		0.00%		0.00%		0.00%	254.51	6.60%
East Side Industrial		0.00%		0.00%		0.00%		0.00%		0.00%	144.09	23.23%	144.09	3.74%
Larch-Clover	159.91	10.90%		0.00%		0.00%		0.00%		0.00%		0.00%	159.91	4.15%
Chrisman Road		0.00%		0.00%		0.00%		0.00%		0.00%	44.25	7.13%	44.25	1.15%
Rocha		0.00%		0.00%		0.00%		0.00%		0.00%	28.89	4.66%	28.89	0.75%
SWC Valpico & Corral Hollow		0.00%		0.00%	19.00	7.86%		0.00%		0.00%		0.00%	19.00	0.49%
Dobler/Maibes	9.01	0.61%		0.00%		0.00%		0.00%		0.00%		0.00%	9.01	0.23%
Holly Sugar Industrial		0.00%		0.00%		0.00%		0.00%		0.00%	55.99	9.03%	55.99	1.45%
Tracy Combined Cycle Power Plant		0.00%	20.88	2.38%		0.00%		0.00%		0.00%		0.00%	20.88	0.54%
Legacy Fields	246.68	16.81%		0.00%		0.00%		0.00%		0.00%		0.00%	246.68	6.40%
Parks RW Conversion (west side)	283.94	19.35%		0.00%		0.00%		0.00%		0.00%		0.00%	283.94	7.36%
Parks RW Conversion (east side)		0.00%		0.00%		0.00%		0.00%		0.00%	83.69	13.49%	83.69	2.17%
Total	**1,467.24**	**100%**	**875.81**	**100%**	**241.64**	**100%**	**388.09**	**100%**	**264.08**	**100%**	**620.39**	**100%**	**3,857.26**	**100%**

(a) Water demands shown are for new development only and do not include existing recycled water demands. See Appendix A for detailed demand calculations by project or development area.

(b) Water demands shown include UAFW.

9.4.5 Seasonal and Diurnal Storage Facilities

The projected average monthly demands and available flow from the City's WWTP are summarized in Table 9-6. As shown in the table, there will be an excess amount of recycled water available from the Holly Drive WWTP in all months and therefore seasonal storage is not required.

Table 9-6. Projected Buildout Recycled Water Supply and Demand

Month	Available Wastewater Flow[(a)], af	Recycled Water Demand, af[(b)]	Exchange Program Discharge to DMC, af[(c)]	Remaining Amount, af[(d)]
January	1,501	70	1,154	277
February	1,356	44	1,186	127
March	1,501	50	1,074	378
April	1,453	213	886	355
May	1,501	515	776	210
June	1,453	910	519	24
July	1,501	1,103	376	22
August	1,501	935	447	119
September	1,453	1,112	322	19
October	1,501	793	537	171
November	1,453	437	778	238
December	1,501	148	895	458
Total	**17,676**	**6,329**	**8,947**	**2,400**

(a) Based on Average Dry Weather Flow value of 15.78 mgd received from Carollo by e-mail on June 9, 2020.
(b) Monthly recycled water demand distribution based on 2017 City irrigation water use pattern.
(c) Monthly discharge to DMC based on availability of wastewater and the capacity of the proposed recycled water system facilities.
(d) Remaining Amount = Available Wastewater Flow - (Recycled Water Demand + Exchange Program Discharge)

Diurnal storage tanks were sized based on the volume of storage needed to supply peak hour demands and to reduce the required size of recycled water pump stations and pipelines. It is recommended that the City construct a 5.7 MG recycled water storage tank just north of the California Aqueduct on Lammers Road. The location of this tank is consistent with that recommended in the Optimization Study. This tank will supply Zone A via gravity, and Zones D and E via pumping, during the 8-hour irrigation period. It is recommended that the City construct the Zone A Tank before other recycled water storage facilities. The Zone A Tank should meet the City's recycled water storage requirements through 2040.

An additional 2.6 MG of diurnal storage may be needed at the WWTP at buildout. This value may change depending on the actual WWTP effluent diurnal flow. It is recommended that the City re-evaluate the required diurnal storage at the WWTP by performing a diurnal flow study in 2040. Table 9-7 summarizes the recommended distribution of diurnal storage in the buildout recycled water system.

Table 9-7. Diurnal Storage Distribution

Storage Location	Storage Volume, MG
Diurnal Storage at WWTP	2.6[(a)]
Zone A Tank	5.7
Total	**8.3**

(a) Volume may be reduced depending on Holly Drive WWTP effluent recycled water diurnal flow rate. May go to zero if low flow period exceeds combined Zones A and F maximum pumping rate.

9.4.6 Booster Pump Stations

As the recycled water system develops, additional booster pump stations will be required to move water from Zone A into higher pressure zones, and to pump water from the WWTP into Zone F. With the exception of the Zone C BPS, the locations of the recommended booster pump stations are based on the Optimization Study, which modified the booster pump station recommendations in the 2012 WSMP.

The Zone A BPS will require an additional 3,472 gpm of pumping capacity at buildout. It was assumed that this will be provided by two new pumps with characteristics similar to those of the existing pumps.

The recommended location of the Zone C BPS was moved from Lammers Road to the corner of Valpico Road and Corral Hollow Road. The Zone C BPS cannot be located on the west side of the Ellis Specific Plan, as the headloss through the existing and planned 8-inch diameter pipes in the Ellis would be too great to maintain 60 psi residual pressure in the majority of Zone C. Assuming that the DMC transmission pipeline will be constructed in Valpico Road and Tracy Boulevard (see *9.2.6 Recycled Water Pipeline Alignment* below), it is recommended that the Zone C BPS be located at the corner of Valpico Road and Corral Hollow Road so as to draw water from this transmission pipeline. If the Alternative B alignment is selected for the DMC transmission pipeline, the Zone C BPS could be constructed at the intersection of Corral Hollow Road and Linne Road instead. If the Alternative C alignment is selected for the DMC transmission pipeline, the Zone C BPS could be constructed in several locations, but additional Zone A or Zone C pipelines would need to be constructed to connect Zone C to the rest of the system.

The Tracy Hills Master Plan recommended that both the Zone D and Zone E booster pump stations be constructed adjacent to the Tracy Hills storage tank, instead of having the Zone E BPS constructed as a booster station in Zone D. West Yost concurs with this recommendation, and the logic behind this is three-fold. First, the distribution system is small enough so that the additional pipeline length is not substantial. Second, an emergency pressure reducing valve station was proposed so that some reduced flow could be delivered to Zone D through Zone E, if necessary. Third, having both pump stations at the same location makes it easier for the City to operate and maintain these pump stations.

A summary of the proposed booster pump station design characteristics is shown in Table 9-8.

Table 9-8. Recycled Water Distribution System Pump Station Design Criteria

Pump Station	Design Flow Rate, gpm[(a)]	Design Total Dynamic Head, feet
Zone A	12,152[(b)]	362
Zone B	5,780[(c)]	181
Zone C	1,700[(c)]	125
Zone D	2,700[(c)]	225
Zone E	2,000[(c)]	305
Zone F	4,400[(c)]	250

(a) Total pump station capacity assumes all pumps at pump station are in service.
(b) Pump station capacity required to fill Zone A Tank and supply exchange water to Delta Mendota Canal during a maximum day. Assumes two new pumps with properties similar to existing pumps are installed by buildout.
(c) Based on peak hour demands.

These proposed booster pump stations should supply a minimum design pressure of 60 psi in all zones to meet the design criteria described in Chapter 6.

9.4.7 Recycled Water Pipeline Alignments

Where possible, future recycled water pipeline alignments were based on existing recycled water pipelines which have been constructed but are not yet in service, or on planned recycled water pipelines for near-term developments. The alignment of the future Zone A transmission pipeline in Lammers Road is consistent with the Optimization Study, as is the alignment of the Zone B transmission pipeline in Schulte Road. It is expected that the alignment of these pipelines when constructed will not differ significantly from Figure 9-2. However, the alignment of the DMC exchange program transmission pipeline and the Zone F transmission pipeline may vary from the alignments shown on Figure 9-2.

Three alignment alternatives were considered for the DMC exchange pipeline, as illustrated on Figure 9-3. It should be noted that all three alignments assume that the discharge of recycled water to the DMC will be required to occur downstream of the City's JJWTP intake per initial discussions with the SWRCB and the USBR. Alternative (shorter) pipeline alignments may be possible if the location for the discharge of recycled water to the DMC can be relocated to a location upstream of the City's JJWTP intake.

The three alignment alternatives are described as follows:

- The Alternative A pipeline would tie into the Zone A transmission pipeline in Lammers Road at the intersection of Lammers Road and Valpico Road. It would consist of approximately 23,700 feet of pipeline constructed in Valpico Road, Corral Hollow Road, Linne Road, and Tracy Boulevard. The Alternative A pipeline would be Zone A. Although Alternative A is the longest of the three alignment alternatives, the entire alignment for Alternative A is within existing streets.

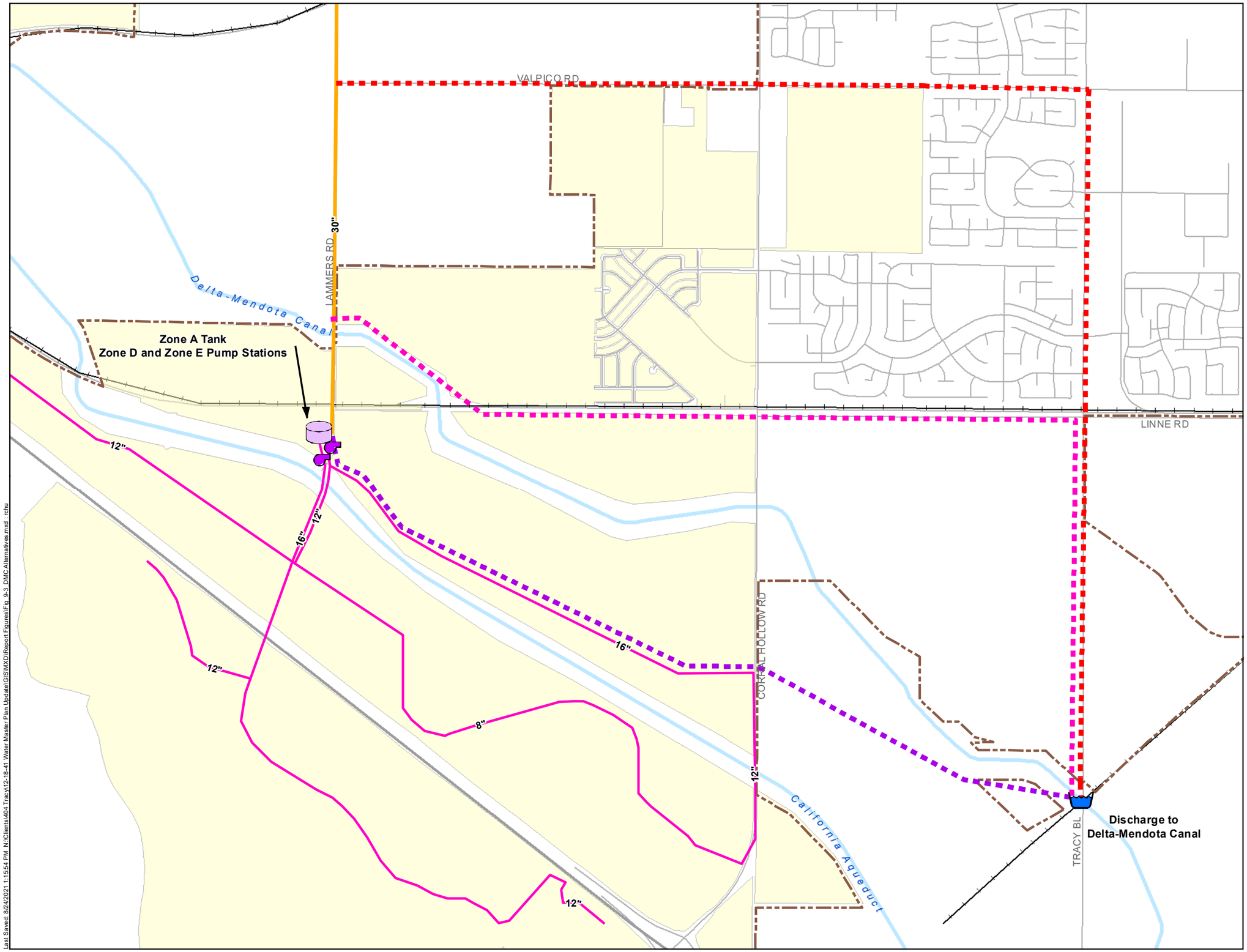
- The Alternative B pipeline would tie into the Zone A transmission pipeline in Lammers Road just north of the DMC, and would consist of approximately 19,100 feet of pipeline running along the south edge of the Ellis Specific Plan, in Linne Road, and in Tracy Boulevard. The Alternative B pipeline would be Zone A. Part of the alignment for Alternative B is along the south edge of the Ellis Specific Plan, not within an established right-of-way, and may require an easement.
- The Alternative C pipeline would be supplied directly from the Zone A reservoir, and would consist of approximately 14,200 feet of pipeline running through Tracy Hills Phase 5 and land currently used for mining. Alternative C may require a dedicated pump station to ensure sufficient head in the exchange pipeline for discharge to the DMC. Part of the alignment for Alternative C is not within an established right-of-way and passes through a quarry, which may require an easement and possibly difficult construction conditions.

For this WSMP Update, it was assumed that Alternative A will be selected as it follows existing street alignments and therefore would likely be the most straight-forward in terms of design and construction, although it is the longest of the three pipeline alignment alternatives. Because it is the longest alignment it is also the most conservative alternative for budgeting purposes.

Similarly, the alignment of the Zone F transmission pipeline depicted on Figure 9-2 was selected to provide a conservative cost estimate. It is recommended that detailed pipeline alignment alternative studies be conducted before either the DMC exchange program transmission pipeline or the Zone F transmission pipeline are constructed.

9.4.8 Recycled Water Pipeline Sizes

The proposed recycled water backbone distribution system pipelines range in size from a minimum of 8-inch diameter to a maximum of 30-inch diameter. A Hazen-Williams friction “C” factor of 130 was used in the hydraulic model. This “C” factor was used for PVC pipelines (16-inch diameter or smaller) and lined ductile iron or steel pipelines (24-inch diameter or larger). Pipeline diameters were based on those recommended in the optimization study, with adjustments to meet the system performance criteria outlined in Chapter 6.



N

0 750 1,500

Scale in Feet

Symbology

- Future Booster Pump Station
- Future Storage Tank
- Delta Mendota Canal Discharge Point
- Future Distribution Pipeline (Diameter ≤ 16 inches)
- Future Transmission Pipeline (Diameter > 16 inches)

Delta Mendota Canal Pipeline Alternatives

- A
- B
- C
- Future Recycled Water Use Area
- Sphere of Influence

Notes:
1. Future facilities for Zone C not shown on this figure, as the configuration of this zone is dependent on the Delta Mendota Canal pipeline alternative selected for construction.

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Figure 9-3

DMC Exchange Pipeline Alternatives

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Water System Master Plan Update

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9.5 RECYCLED WATER SYSTEM CRITERIA

Evaluation of the proposed Citywide recycled water distribution system utilizes criteria that are different from the criteria used to evaluate the potable water system. The proposed evaluation criteria developed for the recycled water system are described in Chapter 6. In summary, because maximum day recycled water demands typically occur during approximately an eight hour per day period between 10:00 pm and 6:00 am (instead of the typical 24-hour period of the potable water system), and peak hour demands are only slightly greater than maximum day demands as described in Chapter 4, recycled water pipeline water velocity must be lower than in potable water systems to help reduce energy/power costs, thus lowering operational costs.

As described in Chapter 6, the desired recycled water system delivery pressure ranges from a minimum of 60 psi to a maximum of 100 psi. Recycled water pipeline water velocity must be less than 10 feet per second (fps) to avoid potential damage to pipelines, and velocity less than 6 fps is preferred. Pipeline velocities greater than 6 feet per second would cause excess friction pressure loss and would require larger pump station power requirements and greater pipeline pressure near the pump stations.

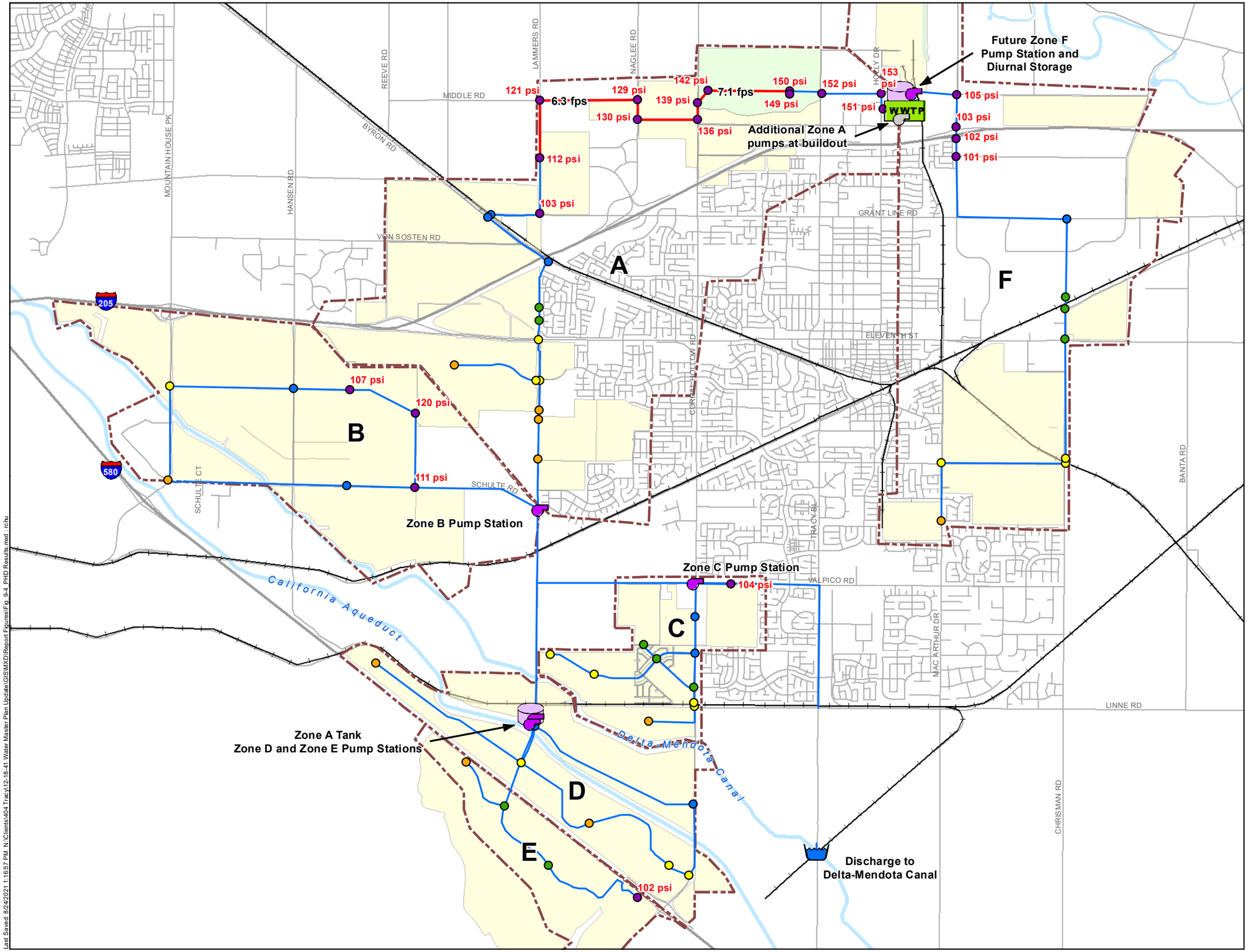
9.6 RECYCLED WATER SYSTEM EVALUATION RESULTS

Typical recycled water systems must deliver the greatest flow during a peak hour demand condition, which coincides with the middle of an assumed 8-hour irrigation period. However, due to the planned recycled water exchange program, in some portions of the City's planned recycled water system, the flow during the remaining 16 hours of the day (the "fill period") may exceed that of the peak hour. Therefore, the City's recycled water hydraulic model was used to evaluate the buildout recycled water system under peak hour demand and fill period conditions.

9.6.1 Peak Hour Demand Scenario

During a peak hour demand scenario, evaluation results indicate that the buildout recycled water system could adequately deliver peak hour demands to meet the City's minimum pressure criterion of 60 psi at all existing and future recycled water service locations as illustrated on Figure 9-4. It should be noted that many locations in the recycled water system will experience pressures greater than 100 psi during a peak hour demand condition; the pressures at these locations are labeled on Figure 9-4. Some locations in Zone A near the WWTP may experience pressures as high as 153 psi, during a peak hour demand condition and even higher pressures during tank fill periods as described below. Service connections in these areas should be fitted with individual PRVs as needed.

As illustrated on Figure 9-4, some of the existing Zone A transmission pipelines will experience velocities exceeding 6 fps during a peak hour demand condition. However, the velocity in these pipelines is well below the maximum allowable velocity of 10 fps, and therefore no mitigation is recommended.



N

0 2,000 4,000

Scale in Feet

Symbology

Peak Hour Pressure

- Less than 60 psi
- 60 psi to 70 psi
- 70 psi to 80 psi
- 80 psi to 90 psi
- 90 psi to 100 psi
- Greater than 100 psi

Pipeline Velocity

- Velocity ≤ 6 fps
- Velocity > 6 fps

Proposed Future Facilities

- Future Booster Pump Station
- Future Storage Tank
- Delta Mendota Canal Discharge Point

Existing System Facilities

- Existing Booster Pump Station
- WWTP Wastewater Treatment Plant
- Legacy Fields
- Future Recycled Water Use Area
- Recycled Water Pressure Zone

Notes:
1. Pressure Zones represent approximate boundaries.
2. The City's recycled water hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
3. Pressures not shown for locations with no expected recycled water services.

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Figure 9-4

Buildout Recycled Water Peak Hour Demand

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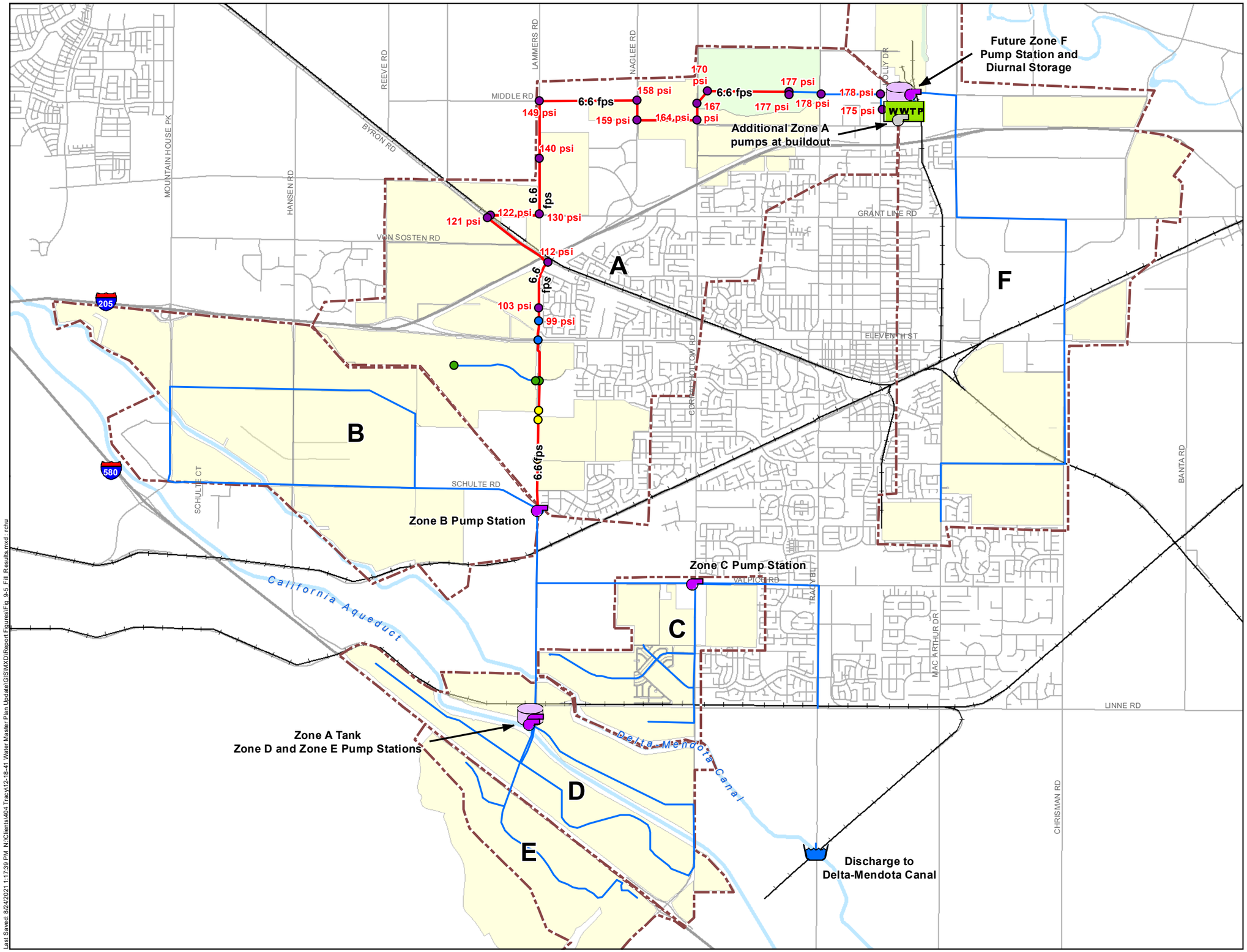
9.6.2 Fill Period Scenario

During a fill period on a maximum demand day, results indicate that the buildout recycled water system could adequately re-fill the Zone A Tank while supplying 4.1 mgd to the DMC for the recycled water exchange program. As shown on Figure 9-5, some locations in the recycled water system will experience pressures greater than 100 psi during a fill period; some locations in Zone A near the WWTP may experience pressures as high as 178 psi. The pressures at these locations are labeled on Figure 9-5. Service connections in these areas should be fitted with individual PRVs as needed.

The feasibility of operating the planned Zone B Pump Station as an in-line booster station to assist in refilling the tank and supplying the DMC during the maximum day fill period was investigated. If feasible, this would reduce the high pressures in Zone A near the WWTP. However, the planned capacity of the Zone B Pump Station is insufficient to supply the required flow and therefore cannot reduce the high pressures in Zone A.

As illustrated on Figure 9-5, some of the existing Zone A transmission pipelines will experience velocities exceeding 6 fps during a fill period. However, the velocity in these pipelines is well below the maximum allowable velocity of 10 fps, and therefore no mitigation is recommended.



0 2,000 4,000
Scale in Feet

Symbology

Zone A Pressure

- Less than 60 psi
- 60 psi to 70 psi
- 70 psi to 80 psi
- 80 psi to 90 psi
- 90 psi to 100 psi
- Greater than 100 psi

Pipeline Velocity

- Velocity ≤ 6 fps
- Velocity > 6 fps

Proposed Future Facilities

- Future Booster Pump Station
- Future Storage Tank
- Delta Mendota Canal Discharge Point

Existing System Facilities

- Existing Booster Pump Station
- WWTP Wastewater Treatment Plant
- Legacy Fields
- Future Recycled Water Use Area
- Recycled Water Pressure Zone

Notes:
1. Pressure Zones represent approximate boundaries.
2. The City's recycled water hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
3. Pressures shown for Zone A service locations only.

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Figure 9-5

Buildout Recycled Water Fill Period

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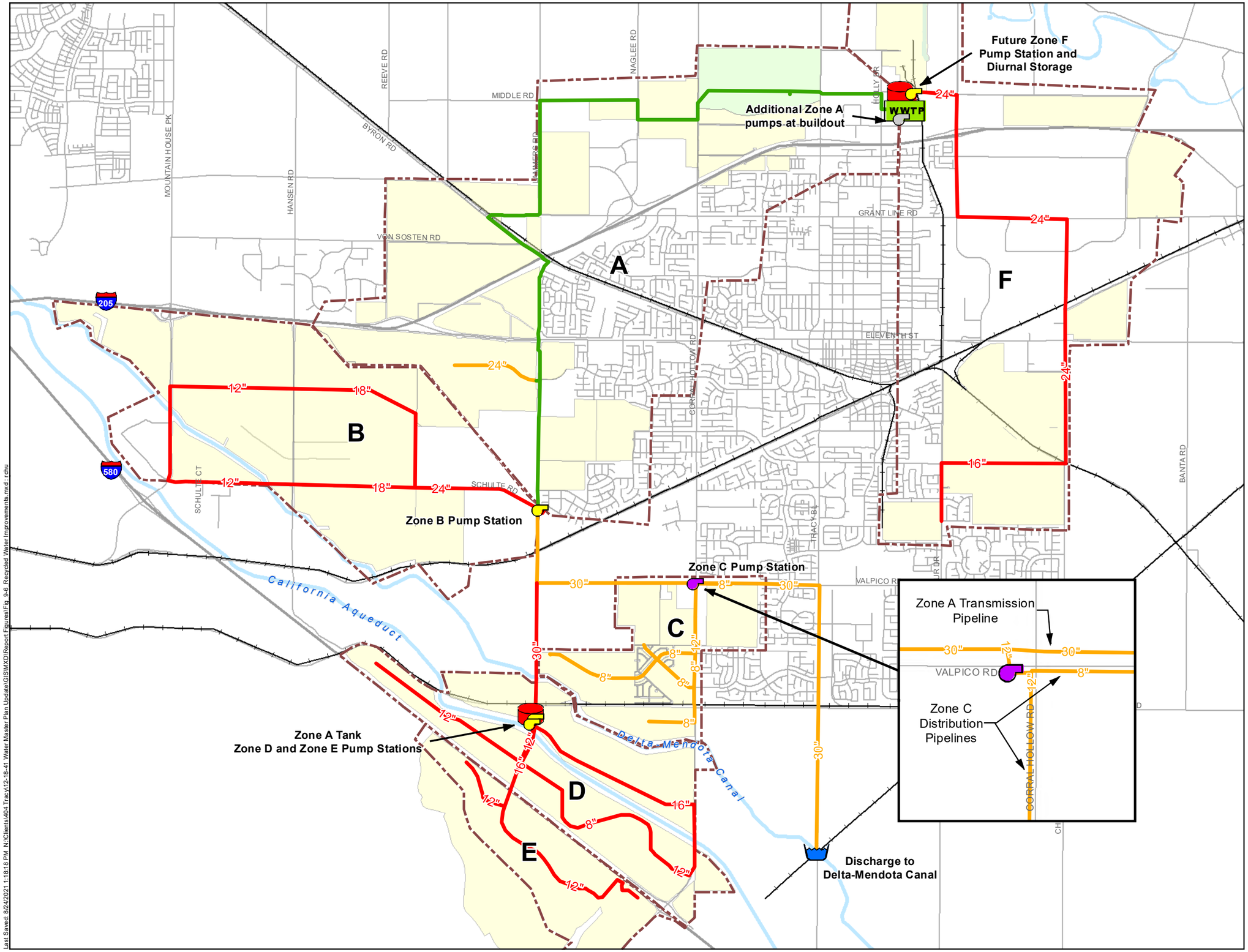
9.7 SUMMARY OF RECOMMENDED FUTURE RECYCLED WATER SYSTEM IMPROVEMENTS

The recommended backbone recycled water system improvements required to serve future recycled water demands and the recycled water exchange program are summarized below and illustrated on Figure 9-6. It should be noted that these recommendations only identify facility improvements at a master plan level and do not necessarily include all required on-site infrastructure nor constitute design of improvements. Subsequent detailed design is required to determine the exact sizes and final locations of these proposed facility improvements.

Because the City's recycled water program is still in its infancy, many planning factors used to size the system were based on industry averages or standard practice, due to the lack of data specific to the City of Tracy. As the recycled water system continues to expand and serve more customers, and as more data becomes available, the recommendations in this chapter should be periodically reviewed and revised to better fit the needs of the City's recycled water use profile.

It should also be noted that the future hydraulic model is not an "all pipes" model (i.e., not all smaller diameter pipelines are included); therefore, the hydraulic simulations performed as discussed above may not identify all necessary water system improvements. Consequently, it is recommended that further hydraulic evaluations be performed as additional details are provided for each future development project.



Symbology

Proposed Buildout Facilities

- Buildout Booster Pump Station
- Future Storage Tank
- Buildout System Pipeline

Proposed 2025 Facilities

- 2025 Booster Pump Station
- 2025 System Pipeline
- Delta Mendota Canal Discharge Point

Existing System Facilities

- Existing Booster Pump Station
- WWTP Wastewater Treatment Plant
- Existing Transmission Pipeline (Diameter >16 inches)
- Legacy Fields
- Future Recycled Water Use Area
- Recycled Water Pressure Zone

Notes:
1. Install a PRV on any service connection with peak hour or fill period pressures exceeding 100 psi.
2. Install SCADA system monitoring of flows and pressures at each new facility.

Figure 9-6

Proposed Future Recycled Water System Improvements

City of Tracy
Water System Master Plan Update

Last Saved: 8/24/2021 1:18:18 PM N:\Clients\404 Tracy\12-18-41 Water Master Plan Update\GIS\MXD\Report Figures\Fig. 9-6 Recycled Water Improvements.mxd - rdhu

9.7.1 2025 System Improvements

The recommended backbone recycled water system improvements required to serve 2025 recycled water demands are summarized below and shown on Figure 9-6. Planning and design for these improvements should be conducted so that these improvements can be constructed and operational by 2025.

9.7.1.1 Booster Pumping Facilities

- Zone C BPS: Install a new booster pump station with a minimum pumping capacity of 1,700 gpm.

9.7.1.2 Pipelines

- To serve 2025 recycled water demands, install approximately 33,810 linear feet of new pipelines ranging in diameter from 12 to 30 inches; included in these pipelines is the pipeline needed to discharge recycled water to the DMC as part of the recycled water exchange program (as described above, the exchange program is an essential part of the City's projected future water supply portfolio and should be implemented as soon as possible).
- To serve 2025 recycled water demands, install additional new pipelines of 16 inches in diameter or less within individual development projects; the total length of pipelines needed to serve 2025 recycled water demands is unknown, as not all 2025 development areas have detailed recycled water system infrastructure plans prepared.

9.7.1.3 Interconnections

- Install an individual PRV on any recycled water service connection with a peak hour or fill period pressure exceeding 100 psi.

9.7.1.4 SCADA System

- Install SCADA system monitoring of flows and pressures at each new water supply facility to provide operators with real-time system data and flexibility in system operations.

9.7.2 Buildout System Improvements

The recommended backbone recycled water system improvements required to serve buildout recycled water demands are summarized below and shown on Figure 9-6. Planning and design for these improvements should be conducted so that these improvements can be constructed and operational as soon as possible, as funding is available, so that recycled water supplies can be used to meet landscape irrigation and other non-potable water demands to minimize the use of potable water supplies for these uses.

9.7.2.1 Storage Facilities

Note: Because the actual dimensions of each proposed storage facility have not been determined, the storage facility sizes below do not include dead and freeboard storage requirements, which will be determined during design.

- Zone A Tank: Install a new storage tank with a minimum active storage capacity of 5.7 MG.
- WWTP Diurnal Storage: Install a new storage tank with a minimum active storage capacity of 2.3 MG; the need for this storage will depend on WWTP diurnal flow patterns, and it is recommended that the City re-evaluate the required diurnal storage at the WWTP by performing a diurnal flow study in 2040.

9.7.2.2 Booster Pumping Facilities

- Zone A BPS Expansion: Install additional Zone A booster pumps with a minimum pumping capacity of 3,472 gpm.
- Zone B BPS: Install a new booster pump station with a minimum pumping capacity of 5,780 gpm; note that it is expected this booster pump station will be constructed after 2025, but well before 2040.
- Zone D BPS: Install a new booster pump station with a minimum pumping capacity of 2,700 gpm.
- Zone E BPS: Install a new booster pump station with a minimum pumping capacity of 2,000 gpm.
- Zone F BPS: Install a new booster pump station with a minimum pumping capacity of 4,400 gpm.

9.7.2.3 Pipelines

- To serve buildout recycled water demands, install approximately 109,300 linear feet of new pipelines (in addition to the proposed 2025 pipelines) ranging in diameter from 12 to 30 inches.
- To serve buildout recycled water demands, install additional new pipelines of 16 inches in diameter or less within individual development projects; the total length of pipelines needed to serve buildout recycled water demands is unknown, as most buildout development areas do not have detailed recycled water system infrastructure plans prepared.

9.7.2.4 Interconnections

- Install an individual PRV on any recycled water service connection with a peak hour or fill period pressure exceeding 100 psi.

9.7.2.5 SCADA System

- Install SCADA system monitoring of flows and pressures at each new water supply facility to provide operators with real-time system data and flexibility in system operations.

CHAPTER 10
Recommended Capital Improvement Program

10.1 OVERVIEW

This chapter presents the recommended capital improvement program (CIP) for the City's existing and future potable water systems and proposed future recycled water system to support the City's projected future potable and recycled water demands, respectively. Recommended improvements to the existing and future potable water systems were described in Chapters 7 and 8, respectively. In addition, infrastructure recommendations for the proposed future recycled water system were described in Chapter 9. It should be noted that the recommended CIP only identifies improvements at a Master Plan level and does not necessarily include all required on-site infrastructure or constitute design of improvements. Subsequent detailed design is required to determine the exact sizes and locations of these proposed improvements.

This chapter provides a summary of the recommended capital improvement projects, along with estimates of probable construction costs. Probable construction cost estimates have been developed for each proposed improvement project, and will then allocated to existing rate payers and new development based on the need for and benefit provided by the proposed improvement. For example, the cost for a pipeline improvement to increase the fire flow availability in the existing potable water system will be allocated to existing rate payers, but a new pipeline required to serve buildout potable water demands will be allocated to new development. An additional analysis to evaluate the potential development impact fees that will be required to fund the buildout potable and recycled water system capital improvement costs will be provided in a separate memorandum.

Construction costs are presented in 2020 dollars and were developed based on bids from other municipal water facility design projects and standard cost estimating guides. Consistent with the 2012 WSMP, the total CIP cost includes mark-ups equal to 40 percent of the estimated base construction costs to allow for general contingency, design and planning, construction management, and program administration as listed below:

- General Contingency: 15 percent
- Design and Planning: 10 percent
- Construction Management: 10 percent
- Program Administration: 5 percent

For this Citywide Water System Master Plan Update, it is assumed that land for buildout potable and recycled water facilities, if required, will be acquired at $190,000 per acre. Costs for land acquisition will only be added to major facilities (e.g., tank sites), where a large parcel is required. Consequently, land acquisition costs do not include right-of-way acquisition costs for transmission and distribution mains. In addition, the proposed construction costs do not include costs for acquisition of additional surface water supplies, supply reliability, or for annual operation and maintenance. A complete description of the assumptions used in the development of the estimated probable construction costs is provided in Appendix E.

This CIP excludes non-backbone facilities that only serve a specific development area, as costs associated with those facilities will be borne solely by the corresponding developers. For example, while facilities to serve specific development areas were evaluated as part of the overall buildout potable and recycled water system operations, costs for facilities recommended for specific development areas are not included in the CIP. Costs for development-specific infrastructure will be evaluated in conjunction with separate planning efforts prepared for those developments.

This Citywide Water System Master Plan Update only includes costs for backbone system facilities with more widespread system benefit, henceforth known as program facilities. Costs for program facilities will be allocated to new developments proportionally based on projected demand. These cost allocations will be evaluated and presented in a separate report.

The following sections of this chapter describe the components of the potable and recycled water system capital improvement program developed for this Citywide Water System Master Plan Update:

- Recommended Potable Water System Capital Improvement Program
- Recommended Recycled Water System Capital Improvement Program
- Capital Improvement Program Implementation

10.2 RECOMMENDED POTABLE WATER SYSTEM CAPITAL IMPROVEMENT PROGRAM

Summaries of the recommended capital improvement projects for the existing, 2025, and buildout potable water systems are presented below in *Section 10.2.1 Existing Potable Water System Improvements, Section 10.2.2 2025 Potable Water System Improvements*, and *Section 10.2.3 Buildout Potable Water System Improvements,* respectively. Each section contains a table with preliminary capital cost estimates for the recommended potable water system improvements for the corresponding time horizon. *Section 10.2.4 Water Treatment Plant Expansion Costs* discusses how the costs for the 2008 JJWTP expansion are to be allocated amongst future developments. All potable water system costs are summarized in *Section 10.2.5 Summary of Recommended Potable Water System CIP Costs*, which also discusses the proposed cost allocation between existing rate payers and new development.

10.2.1 Existing Potable Water System Improvements

Chapter 7 evaluated the ability of the City's existing potable water system to meet the recommended water system operational and design criteria described in Chapter 6. Based on the existing potable water system evaluation, improvements were recommended to eliminate existing system hydraulic capacity deficiencies, as listed in the following section. These improvements are recommended based on existing water system demands, and are not triggered by projected future water demands from new development. These improvements should be completed as soon as possible to eliminate existing system deficiencies.

- Pipeline Improvement[1]
  - Replace the existing pipelines in 20th Street between Bessie Avenue and Parker Avenue, Wall Street between Lowell Avenue and 20th Street, Emerson Avenue between Bessie Avenue and Holly Drive, Court Drive between Whittier Avenue and Lowell Avenue, and Lowell Avenue between Parker Avenue and Holly Drive with approximately 6,000 linear feet (lf) of new 8-inch diameter pipelines.
  - Install approximately 515 lf of 12-inch diameter pipeline in Ninth Street between School Street and Tenth Street.
  - Replace approximately 485 lf of existing 4-inch diameter pipeline in Tracy Boulevard north of Mount Diablo Avenue with new 12-inch diameter pipeline. This improvement was previously recommended in the 2012 WSMP.

The locations of the recommended existing potable water system improvement projects are shown on Figure 10-1. Preliminary capital cost estimates for the recommended existing potable water system improvements are presented in Table 10-1.

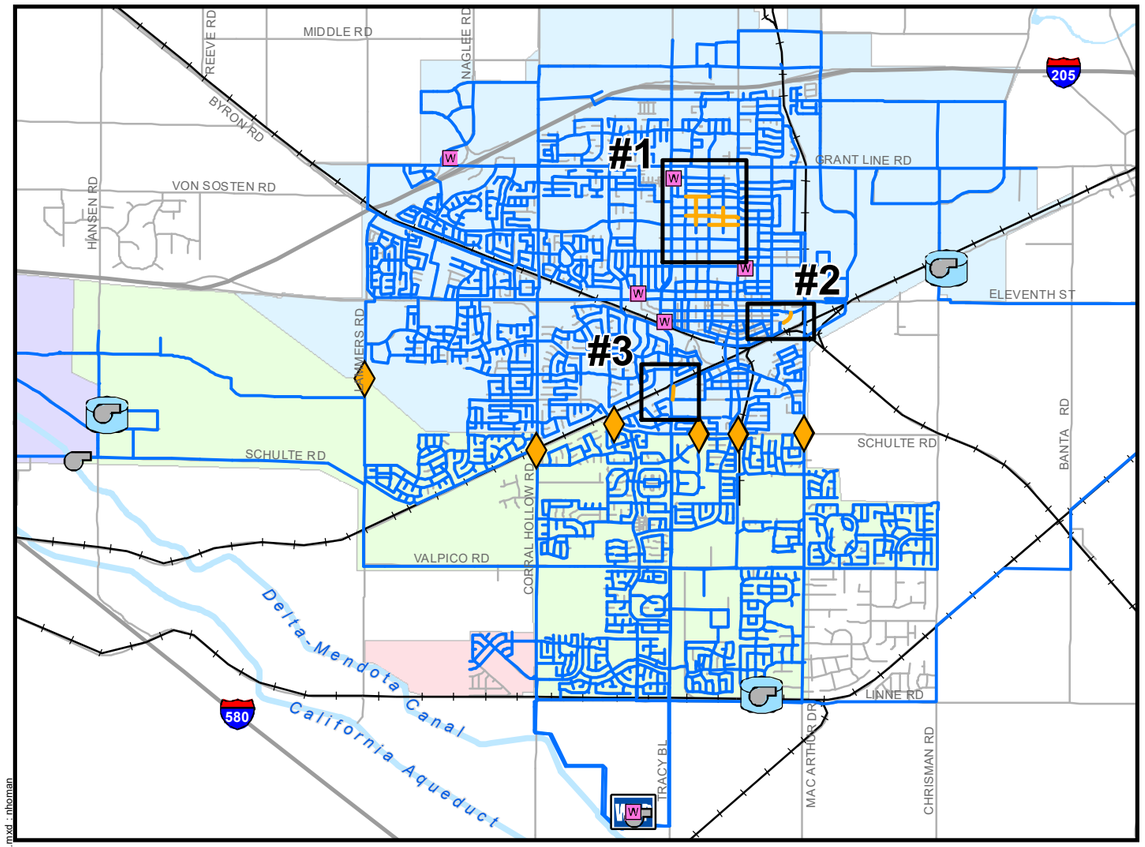
It is also recommended that the City implement a renewal and replacement (R&R) program to proactively replace aging and deteriorating water pipelines before they fail. This Citywide Water System Master Plan Update does not include costs for replacement of aging infrastructure. Therefore, it is recommended that the City perform a separate study which evaluates the condition of existing water system assets and develops a prioritized list and annual budget for asset replacement based on age, material, failure history, and other parameters.

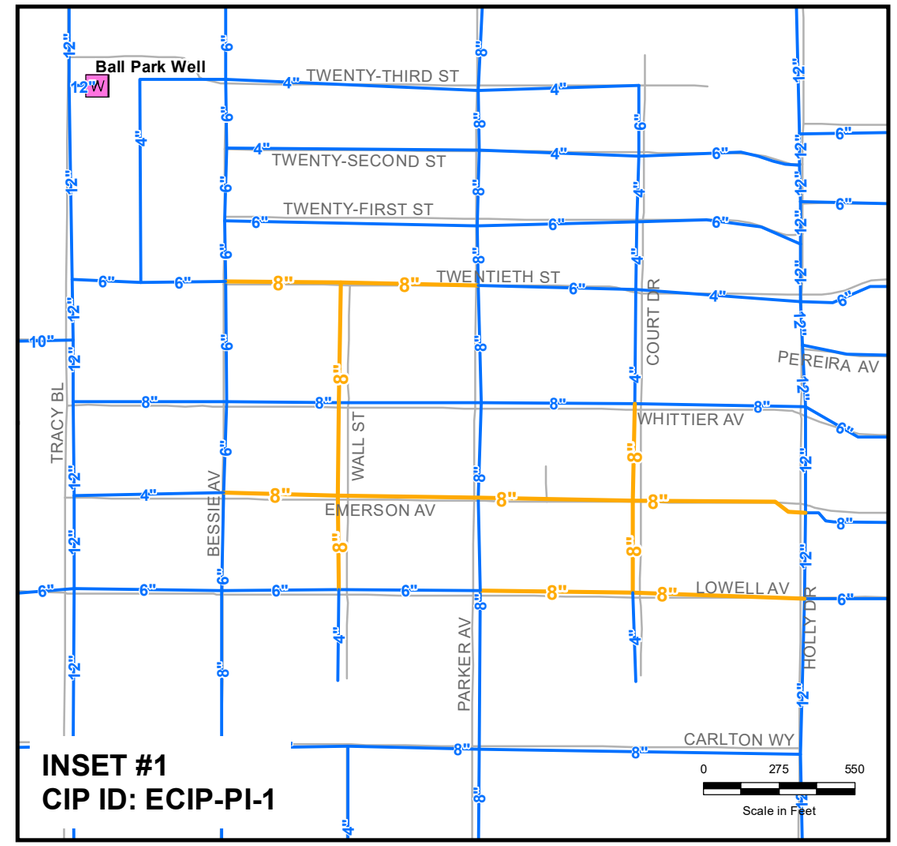
[1] The existing hydraulic model is not an "all pipes" model; therefore, the hydraulic simulations performed may not identify all necessary water system improvements. Consequently, it is recommended that City staff review older parts of the water system, where smaller diameter pipelines are typically found and consider possible upsizing of these pipelines, as the City plans for future pipeline renewal and replacement projects.

Table 10-1. Probable Construction Costs for Recommended Existing Potable Water System CIP[a]

Improvement Type	Improvement Description	CIP ID	Quantity		Estimated Construction Cost, dollars[b]	CIP Cost, dollars (includes mark-ups)[c,d]
Pipeline Improvement	Replace existing pipelines in 20th Street between Bessie Avenue and Parker Avenue, Wall Street between Lowell Avenue and 20th Street, Emerson Avenue between Bessie Avenue and Holly Drive, Court Drive between Whittier Avenue and Lowell Avenue and Lowell Avenue between Parker Avenue and Holly Drive with 8-inch diameter pipe.	ECIP-PI-1	6,000	lf	1,140,000	1,596,000
Pipeline Improvement	Install 12-inch diameter pipe in Ninth Street between School Street and Tenth Street	ECIP-PI-2	515	lf	133,900	187,000
Pipeline Improvement	Replace existing 4-inch diameter pipes on Tracy Boulevard, between Fourth Street and Mt. Diablo Avenue with 12-inch diameter pipes	ECIP-PI-3	485	lf	126,100	177,000
					Total	**$ 1,960,000**

(a) Costs shown are presented in 2020 dollars.
(b) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.
(c) Costs include mark-ups equal to 40 percent (General Contingency: 15 percent; Design and Planning: 10 percent; Construction Management: 10 percent; and Program Administration: 5 percent).
(d) Total rounded to nearest $1,000.



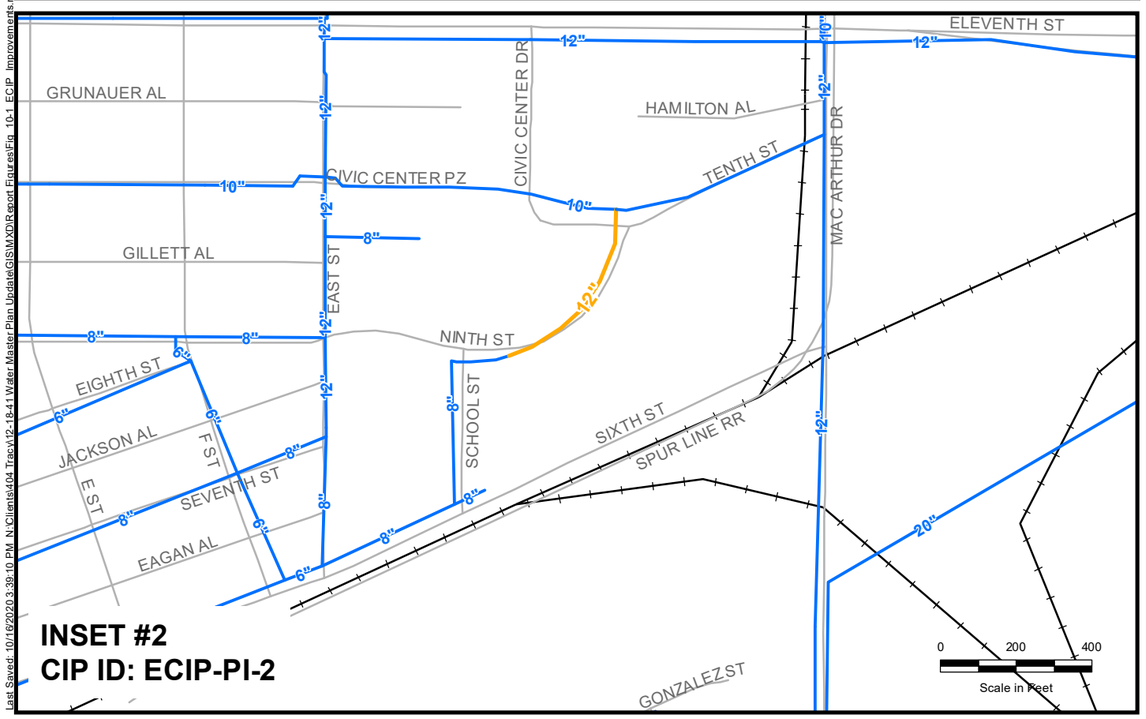


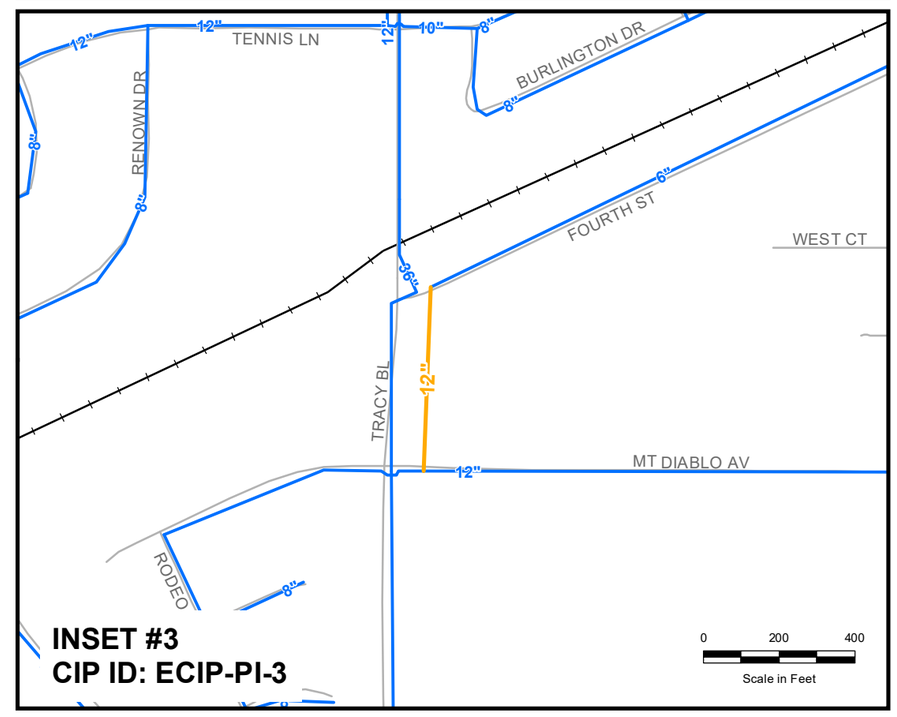
Symbology

- Existing Pipeline
- Pipeline Improvement
- Pressure Regulating Station
- Booster Pump Station
- Groundwater Well
- Storage Tank
- WTP John Jones Water Treatment Plant

Pressure Zone

- Zone 1
- Zone 2
- Zone 3 (IPC/PPBP)
- Ellis Reduced Zone





Notes:
1. The City's existing hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.

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Figure 10-1

Recommended Existing Potable Water System Improvements

City of Tracy
Water System Master Plan Update

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10.2.2 2025 Potable Water System Improvements

Chapter 8 summarized the evaluation of the City's 2025 potable water system and its ability to meet the recommended water system operational and design criteria described in Chapter 6. Based on the 2025 potable water system evaluation, the following backbone water system improvements were recommended to meet projected 2025 potable water demands. **Only program facilities are listed below; the complete list of recommended 2025 potable water system improvements (including non-program facilities) and their recommended timing can be found in Chapter 8.**

- Pipeline Improvements[2]
  - To serve 2025 potable water demands, replace existing pipelines in Sixth Street, Tracy Boulevard, and Eleventh Street with approximately 1,390 linear feet of new 18-inch and 24-inch diameter pipelines.
  - To serve 2025 potable water demands, jack and bore approximately 160 linear feet of new pipelines. This represents one (1) jack and bore installation.
- New Pipelines plus Jack and Bore
  - To serve 2025 potable water demands, install approximately 43,010 linear feet of new pipelines ranging in diameter from 12 to 24 inches.
  - To serve 2025 potable water demands, jack and bore approximately 1,050 linear feet of new pipelines. This represents four (4) distinct jack and bore installations.
- Interconnections
  - Install PRVs at Schulte Road and Bud Lyons Way and at Schulte Road and Pavillion Parkway before the transmission main in Schulte Road is re-zoned to Zone 3.
- Re-zoning
  - Re-zone the existing transmission mains in Lammers Road, Schulte Road, and Hansen Road from Zone 2 to Zone 3 as described in Appendix D. The capital costs of pipelines and other new facilities which need to be constructed prior to re-zoning are included in their respective categories. The capital cost of the re-zoning itself is assumed to be insignificant.
- Groundwater Wells
  - Provide ammonia addition for existing City wells (Lincoln Well, Lewis Manor Well, Park & Ride Well and Ball Park Well) (as noted below under Buildout System Improvements, all future wells are also recommended to be equipped with ammonia addition).
  - A feasibility study is recommended to develop an implementation plan for future ASR expansion (see additional discussion in Chapters 5 and 8).

[2] The buildout hydraulic model was developed as a backbone system and is not an "all pipes" model; therefore, the hydraulic simulations performed may not identify all necessary water system improvements. Consequently, it is recommended that further hydraulic evaluations be performed as additional details are provided for each future development project.

The locations of the recommended 2025 potable water system improvement projects are shown on Figure 10-2. Preliminary capital cost estimates for the recommended 2025 potable water system improvements are presented in Table 10-2. Detailed maps illustrating the proposed pipeline projects for the 2025 potable water system are provided in Appendix F.

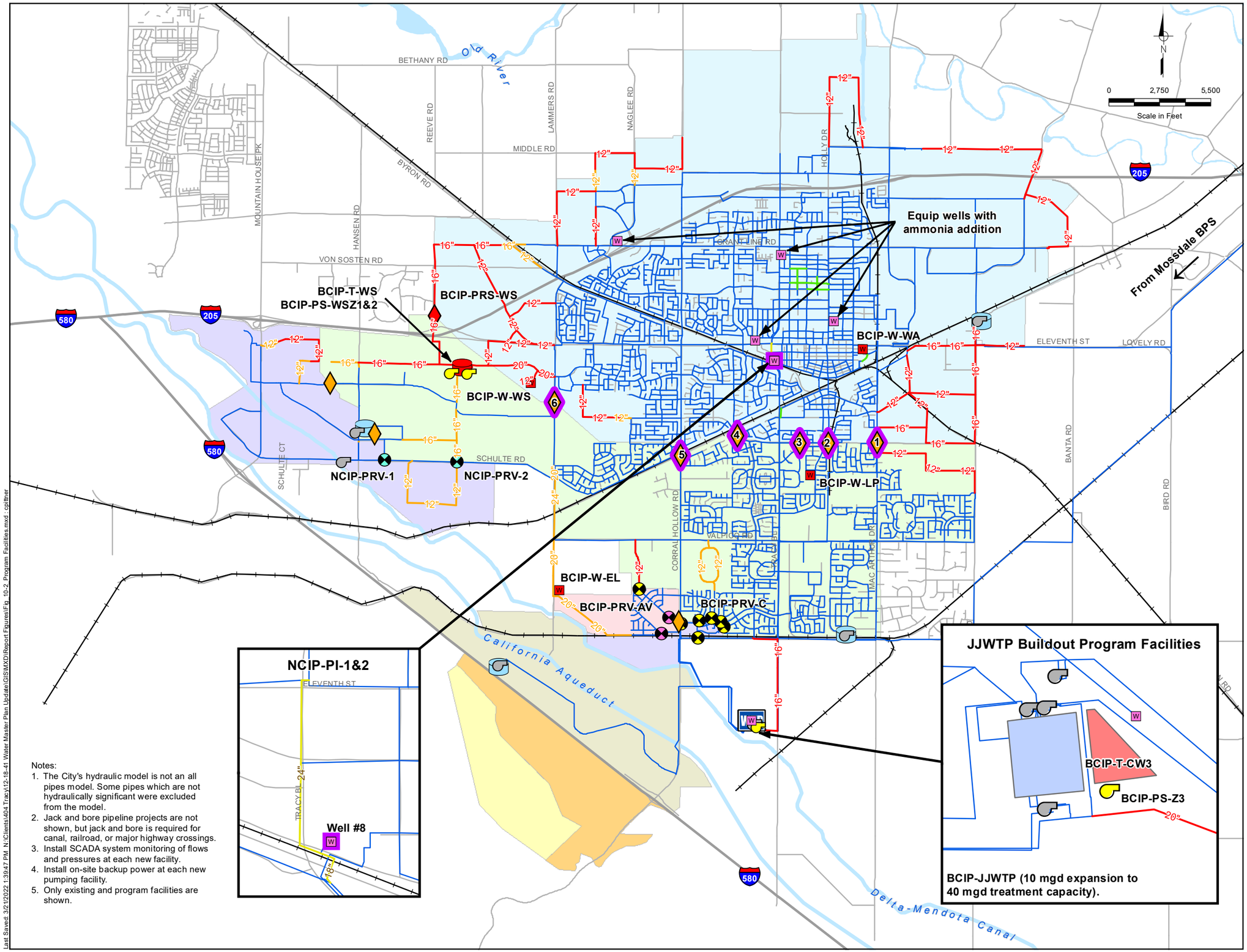
10.2.3 Buildout Potable Water System Improvements

Chapter 8 also summarized the evaluation of the City's buildout potable water system and its ability to meet the recommended water system operational and design criteria described in Chapter 6. Based on the buildout potable water system evaluation, the following backbone water system improvements were recommended to meet projected buildout potable water demands. **Only program facilities are listed below; the complete list of recommended buildout potable water system improvements (including non-program facilities) and their recommended timing can be found in Chapter 8.**

- Land Acquisition
  - To account for land acquisition costs, it was assumed that 1.5 acres will be required for each tank site.
  - To account for land acquisition costs, it was assumed that 0.25 acres will be required for each ASR well site.
- Storage Reservoir

  Note: Because the actual dimensions of each proposed storage tank have not been determined, the recommended storage facility sizes do not include dead and freeboard storage requirements, which will be determined during design.

  - To provide buildout water storage capacity, installation of the following storage facilities is recommended:
    - Westside Tank - 1.0 MG
    - Install a new clearwell at the JJWTP with a minimum active storage capacity of 1.0 MG to provide storage for Zone 3. It is assumed that the existing JJWTP site can accommodate this new clearwell (i.e., land acquisition is not necessary).
- Groundwater Well
  - To provide emergency and dry year water supply, installation of the following groundwater wells is recommended:
    - Westside - ASR well with a minimum firm pumping capacity of 2,500 gpm
    - Wainwright - ASR well with a minimum firm pumping capacity of 2,500 gpm
    - Larsen Park - ASR well with a minimum firm pumping capacity of 2,500 gpm
    - Ellis - ASR well with a minimum firm pumping capacity of 1,000 gpm
    - All new groundwater wells should be equipped with ammonia addition and backup power



Notes:
1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
2. Jack and bore pipeline projects are not shown, but jack and bore is required for canal, railroad, or major highway crossings.
3. Install SCADA system monitoring of flows and pressures at each new facility.
4. Install on-site backup power at each new pumping facility.
5. Only existing and program facilities are shown.

Symbology

Proposed Buildout Program Facilities
- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Buildout System Pipeline
- SCADA System Improvement

Proposed 2025 Facilities
- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Existing System Facilities
- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- John Jones Water Treatment Plant
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

Pressure Zone
- Zone 1
- Zone 2
- Zone 3
- Ellis Reduced Zone
- Zone 4
- Zone 5
- Zone 6

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Figure 10-2

Recommended Future Potable Water System Program Improvements

City of Tracy
Water System Master Plan Update

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Table 10-2. Probable Construction Costs for Recommended 2025 Potable Water System CIP[a]

Improvement Type	Improvement Description	CIP ID	Quantity		Estimated Construction Cost, dollars[b]	CIP Cost, dollars (includes mark-ups)[c,d]
Shared City-side Facilities						
Pipeline Improvement	Replace existing 12-inch diameter pipeline crossing railroad track with 18-inch diameter pipe. Replace existing 12-inch diameter pipelines in Sixth Street, Tracy Boulevard, and Eleventh Street with 24-inch diameter pipe.	NCIP-PI-1	1,389	lf	627,574	879,000
Jack and Bore Improvement	18-inch diameter (24-inch casing)	NCIP-PI-2	159	lf	109,451	153,000
New Pipeline (Developed Area)	8-inch diameter	NCIP-PD-8	-	lf	-	-
New Pipeline (Developed Area)	10-inch diameter	NCIP-PD-10	-	lf	-	-
New Pipeline (Developed Area)	12-inch diameter	NCIP-PD-12	2,013	lf	523,453	733,000
New Pipeline (Developed Area)	14-inch diameter	NCIP-PD-14	-	lf	-	-
New Pipeline (Developed Area)	16-inch diameter	NCIP-PD-16	1,051	lf	351,924	493,000
New Pipeline (Developed Area)	18-inch diameter	NCIP-PD-18	-	lf	-	-
New Pipeline (Developed Area)	20-inch diameter	NCIP-PD-20	609	lf	243,594	341,000
New Pipeline (Developed Area)	24-inch diameter	NCIP-PD-24	3,426	lf	1,593,146	2,230,000
New Pipeline (Undeveloped Area)	8-inch diameter	NCIP-PU-8	-	lf	-	-
New Pipeline (Undeveloped Area)	10-inch diameter	NCIP-PU-10	-	lf	-	-
New Pipeline (Undeveloped Area)	12-inch diameter	NCIP-PU-12	18,666	lf	4,199,794	5,880,000
New Pipeline (Undeveloped Area)	14-inch diameter	NCIP-PU-14	-	lf	-	-
New Pipeline (Undeveloped Area)	16-inch diameter	NCIP-PU-16	9,270	lf	2,642,003	3,699,000
New Pipeline (Undeveloped Area)	18-inch diameter	NCIP-PU-18	-	lf	-	-
New Pipeline (Undeveloped Area)	20-inch diameter	NCIP-PU-20	7,975	lf	2,711,517	3,796,000
New Pipeline (Undeveloped Area)	24-inch diameter	NCIP-PU-24	-	lf	-	-
Jack and Bore	Boring and Receiving Pits	NCIP-JB-PIT	5	each	200,000	280,000
Jack and Bore	8-inch diameter (16-inch casing)	NCIP-JB-8	-	lf	-	-
Jack and Bore	12-inch diameter (21-inch casing)	NCIP-JB-12	-	lf	-	-
Jack and Bore	16-inch diameter (24-inch casing)	NCIP-JB-16	374	lf	258,046	361,000
Jack and Bore	18-inch diameter (24-inch casing)	NCIP-JB-18	-	lf	-	-
Jack and Bore	20-inch diameter (30-inch casing)	NCIP-JB-20	-	lf	-	-
Jack and Bore	24-inch diameter (36-inch casing)	NCIP-JB-24	677	lf	673,911	943,000
Interconnection	PRV at Schulte Road and Bud Lyons Way	NCIP-PRV-1	1	L.S.	125,000	175,000
Interconnection	PRV at Schulte Road and Pavillion Prkway	NCIP-PRV-2	1	L.S.	125,000	175,000
Groundwater Wells	Equip Lincoln Well, Park & Ride Well, Ball Park Well and Lewis Manor Well with ammonia addition	NCIP-GW-1	1	L.S.	-	1,500,000
ASR Expansion Study	Evaluate future ASR well sites and operational scenarios	NCIP-ASR	1	L.S.	-	350,000
					Total	**$ 21,988,000**

(a) Costs shown are presented in 2020 dollars.
(b) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.
(c) Costs include mark-ups equal to 40 percent (General Contingency: 15 percent; Design and Planning: 10 percent; Construction Management: 10 percent; and Program Administration: 5 percent).
(d) Total rounded to nearest $1,000.

- Booster Pump Station[3]
  - To provide buildout water pumping capacity and to convey water from proposed partially buried storage reservoirs, installation of the following pumping facilities is recommended:
    - Zone 3 BPS (JJWTP) – Install additional Zone 3 booster pumps at the JJWTP with a minimum firm pumping capacity of 1,500 gpm
    - Westside Zone 1 Tank - Booster pump station with a minimum firm pumping capacity of 4,500 gpm
    - Westside Zone 2 Tank - Booster pump station with a minimum firm pumping capacity of 2,400 gpm
- New Pipeline plus Jack and Bore[4]
  - To serve buildout potable water demands, install approximately 131,280 linear feet of new pipelines (in addition to the proposed 2025 pipelines) ranging in diameter from 12 to 20 inches.
  - To serve buildout potable water demands, jack and bore approximately 2,750 linear feet of new pipelines. This represents eleven (11) distinct jack and bore installations.
- Interconnection
  - To provide supply during peak demands and/or emergency conditions between pressure zones, installation of the following pressure zone interconnections is recommended:
    - Westside PRS (from Zone 2 into Zone 1)
    - Avenues PRV (from Ellis Reduced Zone into Zone 2)
  - To provide adequate pressure to the Plan C area and prevent the accumulation of stagnant water in dead-end mains, installation of six (6) PRVs is recommended before the Plan C re-zoning occurs (to be funded with Plan C funding).

    Note: The estimated probable construction costs do not include installation of individual PRVs on water service connections with static pressures exceeding 80 psi, as these will be the responsibility of individual developer(s).
- Re-zoning
  - Re-zone the Plan C area from Zone 2 to Zone 3. The capital costs of pipelines and other new facilities which need to be constructed prior to re-zoning are included in their respective categories. The capital cost of the re-zoning itself is assumed to be insignificant.

[3] Cost based on the firm pumping capacity required.

[4] The buildout hydraulic model was developed as a backbone system and is not an "all pipes" model; therefore, the hydraulic simulations performed may not identify all necessary water system improvements. Consequently, it is recommended that further hydraulic evaluations be performed as additional details are provided for each future development project.

- SCADA System and Backup Power
  - Install SCADA system monitoring of flows and pressures at PRS #1-#6 to provide operators with additional understanding and flexibility in system operations.
  - Add remote operation of Well 8 from the SCADA system to provide additional operational flexibility.
  - Install SCADA system monitoring of flows and pressures at each new water supply facility to provide operators with real-time system data and flexibility in system operations. The capital cost for SCADA system installation is included in the cost for these facilities.
  - Install on-site backup power to any proposed buildout system pumping facility to improve supply reliability. The capital cost for backup power is included in the cost for new pump stations.
- JJWTP Expansion
  - A future additional 10 mgd expansion of the JJWTP (for a total treatment capacity of 40 mgd) is recommended to provide the City with additional water treatment capacity, as well as operational flexibility and reliability. The expansion would also include a new administration/maintenance building to accommodate future staffing needs and maintenance activities.
- Participation in Phase 2 Los Vaqueros Reservoir Expansion Project
  - The City's participation in the Phase 2 Los Vaqueros Reservoir Expansion Project would increase the City's water supply reliability by providing storage of supplies for use in dry years.
  - The estimated cost for 5,000 acre-feet of storage for the City will be approximately $10 million plus an additional $1.5 million for implementation and will be shared by existing rate payers and new development.
- Participation in the B.F. Sisk Dam Raise & Reservoir Expansion Project
  - The City's participation in the B.F. Sisk Dam Raise & Reservoir Expansion Project would increase the City's water supply reliability by providing storage of supplies for use in dry years.
  - The estimated cost for 5,000 acre-feet of storage for the City will be approximately $38 million and will be shared by existing rate payers and new development.
- Water Master Plan Updates
  - Regular updates of this Citywide Water System Master Plan are recommended to evaluate potable water and recycled water infrastructure needs to reflect any changes in future development plans, water use trends and patterns, and water supply availability and reliability, as well as new regulations and operational needs as new potable water and recycled water system infrastructure is constructed. It is recommended that updates be prepared at least once every 10 years, or more often if changing conditions warrant more frequent updates. For purposes of this Citywide Water System Master Plan Update, three future updates are planned.

The locations of the recommended buildout program facility improvements are shown on Figure 10-2. Preliminary capital cost estimates for the recommended buildout potable water system improvements are presented in Table 10-3. Detailed maps illustrating the proposed pipeline projects for the buildout potable water system are provided in Appendix F.

10.2.4 Water Treatment Plant Expansion Costs

In 2008, the JJWTP was expanded by 15 mgd to provide additional treatment capacity for future development. While some of this capacity is now utilized by the City's existing water users, it is estimated that 9 mgd of the expansion capacity is still available for future developments to use. To recoup the costs of constructing this remaining 9 mgd of treatment capacity, the City will include a charge for the JJWTP expansion capacity in the developer impact fees. The cost of the 2008 expansion was $45 million, or $3 million per mgd of capacity. Therefore, the remaining JJWTP expansion cost to be allocated amongst future developments is $27 million.

In addition, as discussed in Chapter 8, a future additional 10 mgd expansion of the JJWTP is recommended. The estimated construction cost is $4 million per mgd, or $40 million for the recommended 10 mgd expansion, plus an additional $12 million for a new administration/ maintenance building.

10.2.5 Summary of Recommended Potable Water System CIP Costs

Preliminary capital cost estimates for the recommended existing, 2025, and buildout potable water system improvements are presented in Tables 10-1, 10-2, and 10-3, respectively.

The total existing potable water system CIP cost estimate is $2.0 million, while the total 2025 and buildout potable water system CIP cost estimates (which include only program facilities) are $22.0 million and $211.9 million, respectively. The estimated probable construction costs do not include installation of individual PRVs on potable water service connections with static pressures exceeding 80 psi, as these will be the responsibility of individual developer. The remaining previous JJWTP expansion buy-in cost is $27.0 million.

The total CIP costs from Table 10-1 should be allocated to existing rate payers, while the total CIP costs from Table 10-2 and Table 10-3 and the previous JJWTP expansion buy-in cost should be allocated to new development; with the exception of the costs for the participation in the Phase 2 Los Vaqueros Reservoir Expansion Project which should be shared between existing rate payers and future development.

Table 10-3. Probable Construction Costs for Recommended Buildout Potable Water System CIP[a]

Improvement Type	Improvement Description	CIP ID	Quantity		Estimated Construction Cost, dollars[b]	CIP Cost, dollars (includes mark-ups)[c,d]
Shared City-side Facilities						
Land Acquisition[e]	Tank Sites	BCIP-LA-T	1	sites	-	285,000
Land Acquisition[f]	ASR Well Sites	BCIP-LA-W	4	sites	-	190,000
Storage Reservoir[g]	1.0 MG Clearwell No. 3 at JJWTP	BCIP-T-CW3	1	L.S.	3,008,250	4,212,000
Storage Reservoir[g]	1.0 MG Westside Tank	BCIP-T-WS	1	L.S.	3,008,250	4,212,000
Groundwater Well	2,500 gpm ASR Well in Westside	BCIP-W-WS	1	L.S.	3,900,000	5,460,000
Groundwater Well	2,500 gpm ASR Well in Wainwright	BCIP-W-WA	1	L.S.	3,900,000	5,460,000
Groundwater Well	2,500 gpm ASR Well in Larsen Park	BCIP-W-LP	1	L.S.	3,900,000	5,460,000
Groundwater Well	1,000 gpm ASR Well in Ellis	BCIP-W-EL	1	L.S.	2,500,000	3,500,000
Booster Pump Station[h]	2.16 mgd at Zone 3 Clearwell (JJWTP)	BCIP-PS-Z3	1	L.S.	1,554,755	2,177,000
Booster Pump Station[h]	6.48 mgd at Westside Zone 1 Tank	BCIP-PS-WSZ1	1	L.S.	2,263,735	3,169,000
Booster Pump Station[h]	3.46 mgd at Westside Zone 2 Tank	BCIP-PS-WSZ2	1	L.S.	1,767,450	2,474,000
New Pipeline (Developed Area)	8-inch diameter	BCIP-PD-8	11	lf	2,090	3,000
New Pipeline (Developed Area)	10-inch diameter	BCIP-PD-10	-	lf	-	-
New Pipeline (Developed Area)	12-inch diameter	BCIP-PD-12	-	lf	-	-
New Pipeline (Developed Area)	14-inch diameter	BCIP-PD-14	-	lf	-	-
New Pipeline (Developed Area)	16-inch diameter	BCIP-PD-16	11,349	lf	3,801,881	5,323,000
New Pipeline (Developed Area)	18-inch diameter	BCIP-PD-18	-	lf	-	-
New Pipeline (Developed Area)	20-inch diameter	BCIP-PD-20	1,132	lf	452,853	634,000
New Pipeline (Developed Area)	24-inch diameter	BCIP-PD-24	-	lf	-	-
New Pipeline (Undeveloped Area)	8-inch diameter	BCIP-PU-8	-	lf	-	-
New Pipeline (Undeveloped Area)	10-inch diameter	BCIP-PU-10	-	lf	-	-
New Pipeline (Undeveloped Area)	12-inch diameter	BCIP-PU-12	84,957	lf	19,115,431	26,762,000
New Pipeline (Undeveloped Area)	14-inch diameter	BCIP-PU-14	-	lf	-	-
New Pipeline (Undeveloped Area)	16-inch diameter	BCIP-PU-16	27,691	lf	7,891,999	11,049,000
New Pipeline (Undeveloped Area)	18-inch diameter	BCIP-PU-18	-	lf	-	-
New Pipeline (Undeveloped Area)	20-inch diameter	BCIP-PU-20	6,148	lf	2,090,151	2,926,000
New Pipeline (Undeveloped Area)	24-inch diameter	BCIP-PU-24	-	lf	-	-
Jack and Bore	Boring and Receiving Pits	BCIP-JB-PIT	11	each	440,000	616,000
Jack and Bore	8-inch diameter (16-inch casing)	BCIP-JB-8	-	lf	-	-
Jack and Bore	12-inch diameter (21-inch casing)	BCIP-JB-12	1,489	lf	885,921	1,240,000
Jack and Bore	16-inch diameter (24-inch casing)	BCIP-JB-16	1,257	lf	867,182	1,214,000
Jack and Bore	18-inch diameter (24-inch casing)	BCIP-JB-18	-	lf	-	-
Jack and Bore	20-inch diameter (30-inch casing)	BCIP-JB-20	-	lf	-	-
Jack and Bore	24-inch diameter (36-inch casing)	BCIP-JB-24	-	lf	-	-
Interconnection	Westside PRS (12-inch)	BCIP-PRS-WS	1	L.S.	250,000	350,000
Interconnection	Avenues PRV (12-inch)	BCIP-PRV-AV	1	L.S.	125,000	175,000
SCADA	Well No. 8	BCIP-S-W8	1	L.S.	125,000	175,000
SCADA	Pressure Regulating Station No. 1	BCIP-S-1	1	L.S.	125,000	175,000
SCADA	Pressure Regulating Station No. 2	BCIP-S-2	1	L.S.	125,000	175,000
SCADA	Pressure Regulating Station No. 3	BCIP-S-3	1	L.S.	125,000	175,000
SCADA	Pressure Regulating Station No. 4	BCIP-S-4	1	L.S.	125,000	175,000
SCADA	Pressure Regulating Station No. 5	BCIP-S-5	1	L.S.	125,000	175,000
SCADA	Pressure Regulating Station No. 6	BCIP-S-6	1	L.S.	125,000	175,000
JJWTP Expansion	Expand JJWTP from 30 mgd to 40 mgd and new administration/maintenance building	BCIP-JJWTP	1	L.S.	52,000,000	72,800,000
Participation in Phase 2 Los Vaqueros Reservoir Expansion Project[i]	5,000 acre-feet of storage for dry year use	BCIP-LVE	1	L.S.	11,500,000	11,500,000
Participation in B.F. Sisk Dam Raise & Reservoir Expansion Project[i]	5,000 acre-feet of storage for dry year use	BCIP-SISK	1	L.S.	38,000,000	38,000,000
Water Master Plan Updates	Future updates to Water Master Plan (three updates assumed @ $500,000 per update)	BCIP-WMP	3	each		1,500,000
					Total	**$ 211,916,000**

(a) Costs shown are presented in 2020 dollars.
(b) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.
(c) Costs include mark-ups equal to 40 percent (General Contingency: 15 percent; Design and Planning: 10 percent; Construction Management: 10 percent; and Program Administration: 5 percent).
(d) Total rounded to nearest $1,000.
(e) Assumes each tank site is 1.5 acres. Cost includes Westside Tank site.
(f) Assumes each ASR well site is 0.25 acres. Cost includes Westside, Wainwright, Larsen Park, and Ellis ASR Well sites.
(g) Recommended volume based on active volume. Cost assumes the construction of a partially buried prestressed concrete tank.
(h) Recommended capacity based on firm pumping capacity.
(i) Cost for participation in Phase 2 Los Vaqueros Reservoir Expansion Project and B.F. Sisk Dam Raise & Reservoir Expansion Project to be shared by existing rate payers and new development.

10.3 RECOMMENDED RECYCLED WATER SYSTEM CAPITAL IMPROVEMENT PROGRAM

A summary of the recommended capital improvement projects for the recycled water system is presented below in *Section 10.3.1 2025 Recycled Water System Improvements* and *Section 10.3.2 Buildout Recycled Water System Improvements*. Each section contains a table with preliminary capital cost estimates for the recommended recycled water system improvements. These costs are summarized in *Section 10.3.3 Summary of Recommended Recycled Water System CIP Costs*.

10.3.1 2025 Recycled Water System Improvements

Based on the recycled water system evaluation, the following backbone improvements were recommended to meet projected 2025 recycled water demands. **Only program facilities are listed below; the complete list of recommended 2025 recycled water system improvements (including non-program facilities) and their recommended timing can be found in Chapter 9.**

- Booster Pump Station[5]
  - To provide 2025 recycled water pumping capacity, installation of the following pumping facilities is recommended:
    - Zone C BPS - Booster pump station with a minimum pumping capacity of 1,700 gpm.
- New Pipeline plus Jack and Bore[6]
  - To serve 2025 recycled water demands, install approximately 11,370 linear feet of new pipelines ranging in diameter from 8 to 30 inches.
  - To serve 2025 recycled water demands, jack and bore approximately 590 linear feet of new pipelines. This represents 2 distinct jack and bore installations.
  - To deliver recycled water to the DMC as part of the City's planned recycled water exchange agreement with the USBR, install approximately 23,680 linear feet and jack and bore approximately 180 linear feet (in 1 installation) of new, 30-inch diameter pipeline. This assumes Alignment A as depicted on Figure 9-3 is constructed. A detailed alignment study should be conducted to determine the final alignment of the recycled water exchange pipeline. Actual length of the recycled water exchange pipeline may change considerably if a different alignment is selected. A separate line item for program implementation is also included for the City's planned recycled water exchange agreement to account for coordination and negotiations with the USBR and SWRCB which may require additional studies, legal review and assistance and staff and consultant time.

    Note: Within individual developments, additional new pipelines of 16-inch diameter and less will be required. The total length of pipelines needed to serve 2025 recycled water demands is unknown, as some development areas are still preparing recycled water system plans.

[5] Cost based on the firm pumping capacity required.

[6] The buildout hydraulic model was developed as a backbone system and is not an "all pipes" model; therefore, the hydraulic simulations performed may not identify all necessary recycled water system improvements. Consequently, it is recommended that further hydraulic evaluations be performed as additional details are provided for each future development project.

The locations of the recommended 2025 recycled water program facility improvements are shown on Figure 10-3. Preliminary capital cost estimates for the recommended 2025 recycled water system improvements are presented in Table 10-4. Detailed maps illustrating the proposed pipeline projects for the 2025 potable water system are provided in Appendix G.

10.3.2 Buildout Recycled Water System Improvements

As discussed in Chapter 9, the buildout recycled water system is expected to consist of one system that encompasses the entire SOI. Based on the buildout recycled water system evaluation, the following backbone recycled water system improvements were recommended to meet projected buildout recycled water demands. **Only program facilities are listed below; the complete list of recommended buildout recycled water system improvements (including non-program facilities) and their recommended timing can be found in Chapter 9.**

- Land Acquisition
  - To account for land acquisition costs, assume 1.5 acres will be required for each tank site.
- Storage Reservoir

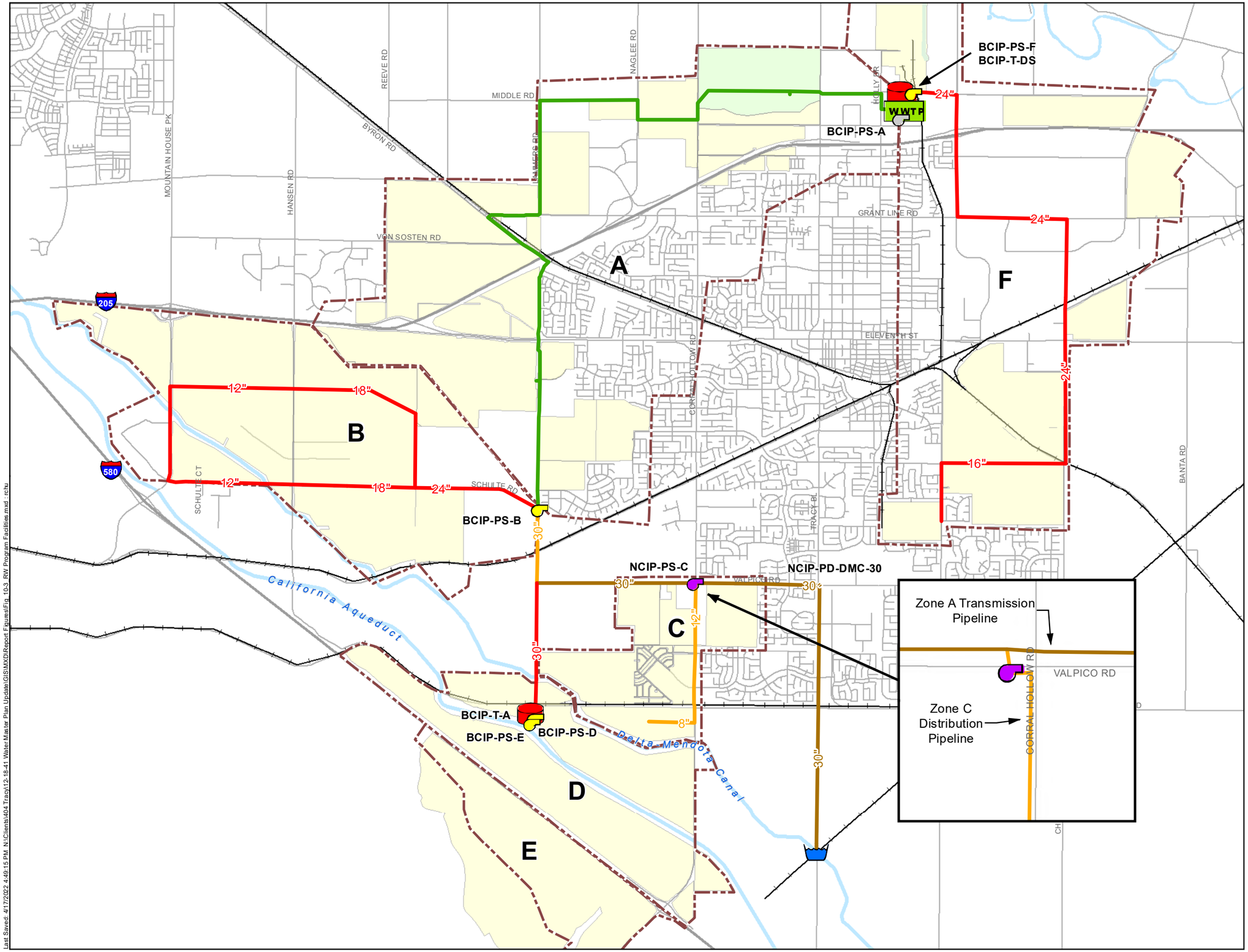
  Note: Because the actual dimensions of each proposed storage tank have not been determined, the recommended storage facility sizes do not include dead and freeboard storage requirements, which will be determined during design.

  - To provide buildout recycled water storage capacity, installation of the following storage facilities is recommended:
    - Zone A Tank – install an above ground, welded steel storage tank with a minimum active storage capacity of 5.7 MG
    - Install a diurnal storage tank at the WWTP with a minimum active storage capacity of 2.3 MG. It is assumed that the existing WWTP site can accommodate this new tank (i.e., land acquisition is not necessary). The need for this storage will depend on WWTP diurnal flow patterns, and it is recommended that the City re-evaluate the required diurnal storage at the WWTP by performing a diurnal flow study in 2040.
- Booster Pump Station
  - To provide buildout recycled water pumping capacity and to convey water from proposed partially buried storage reservoirs, installation of the following pumping facilities is recommended:
    - Zone A BPS Expansion – install additional booster pumps with a minimum pumping capacity of 3,472 gpm
    - Zone B BPS – Booster pump station with a minimum pumping capacity of 5,780 gpm
    - Zone D BPS – Booster pump station with a minimum pumping capacity of 2,700 gpm
    - Zone E BPS – Booster pump station with a minimum pumping capacity of 2,000 gpm
    - Zone F BPS – Booster pump station with a minimum pumping capacity of 4,400 gpm

Table 10-4. Probable Construction Costs for the Recommended 2025 Recycled Water System CIP[a]

Improvement Type	Improvement Description	CIP ID	Quantity		Estimated Construction Cost, dollars[b]	CIP Cost, dollars (includes mark-ups)[c,d]
Shared City-side Facilities						
Booster Pump Station	2.45 mgd for Zone C	NCIP-PS-C	1	L.S.	1,441,820	2,019,000
New Pipeline (Developed Area)	8-inch diameter	NCIP-PD-8	4,962	lf	868,372	1,216,000
New Pipeline (Developed Area)	10-inch diameter	NCIP-PD-10	-	lf	-	-
New Pipeline (Developed Area)	12-inch diameter	NCIP-PD-12	3,055	lf	778,900	1,090,000
New Pipeline (Developed Area)	14-inch diameter	NCIP-PD-14	-	lf	-	-
New Pipeline (Developed Area)	16-inch diameter	NCIP-PD-16	-	lf	-	-
New Pipeline (Developed Area)	18-inch diameter	NCIP-PD-18	-	lf	-	-
New Pipeline (Developed Area)	20-inch diameter	NCIP-PD-20	-	lf	-	-
New Pipeline (Developed Area)	24-inch diameter	NCIP-PD-24	131	lf	60,939	85,000
New Pipeline (Developed Area)	30-inch diameter	NCIP-PD-30	3,218	lf	1,818,131	2,545,000
New DMC Pipeline (Developed Area)	30-inch diameter	NCIP-PD-DMC-30	23,683	lf	13,380,877	18,733,000
New Pipeline (Undeveloped Area)	8-inch diameter	NCIP-PU-8	-	lf	-	-
New Pipeline (Undeveloped Area)	10-inch diameter	NCIP-PU-10	-	lf	-	-
New Pipeline (Undeveloped Area)	12-inch diameter	NCIP-PU-12	-	lf	-	-
New Pipeline (Undeveloped Area)	14-inch diameter	NCIP-PU-14	-	lf	-	-
New Pipeline (Undeveloped Area)	16-inch diameter	NCIP-PU-16	-	lf	-	-
New Pipeline (Undeveloped Area)	18-inch diameter	NCIP-PU-18	-	lf	-	-
New Pipeline (Undeveloped Area)	20-inch diameter	NCIP-PU-20	-	lf	-	-
New Pipeline (Undeveloped Area)	24-inch diameter	NCIP-PU-24	-	lf	-	-
New Pipeline (Undeveloped Area)	30-inch diameter	NCIP-PU-30	-	lf	-	-
Jack and Bore	Boring and Receiving Pits	NCIP-JB-PIT	2	each	80,000	112,000
Jack and Bore	8-inch diameter (16-inch casing)	NCIP-JB-8	154	lf	79,907	112,000
Jack and Bore	12-inch diameter (21-inch casing)	NCIP-JB-12	-	lf	-	-
Jack and Bore	16-inch diameter (24-inch casing)	NCIP-JB-16	-	lf	-	-
Jack and Bore	18-inch diameter (24-inch casing)	NCIP-JB-18	-	lf	-	-
Jack and Bore	20-inch diameter (30-inch casing)	NCIP-JB-20	-	lf	-	-
Jack and Bore	24-inch diameter (36-inch casing)	NCIP-JB-24	-	lf	-	-
Jack and Bore	30-inch diameter (42-inch casing)	NCIP-JB-30	434	lf	483,956	678,000
Jack and Bore (DMC Pipeline)	Boring and Receiving Pits	NCIP-JB-DMC-PIT	1	each	40,000	56,000
Jack and Bore (DMC Pipeline)	30-inch diameter (42-inch casing)	NCIP-JB-DMC-30	178	lf	198,418	278,000
Recycled Water Exchange Program Implementation	Additional studies, legal review and assistance, City staff and consultant time	NCIP-DMC	1	L.S.	1,000,000	1,000,000
					Total	**$ 27,924,000**

(a) Costs shown are presented in 2020 dollars.
(b) Estimated construction costs do not yet reflect an adjustment to account for the current economic bidding climate.
(c) Costs include mark-ups equal to 40 percent (General Contingency: 15 percent; Design and Planning: 10 percent; Construction Management: 10 percent; and Program Administration: 5 percent).
(d) Total rounded to nearest $1,000.



Notes:
1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
2. Jack and bore pipeline projects are not shown, but jack and bore is required for canal, railroad, or major highway crossings.
3. Install SCADA system monitoring of flows and pressures at each new facility.
4. Only existing and program facilities are shown.

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Figure 10-3

Recommended Future Recycled Water System Program Improvements

City of Tracy
Water System Master Plan Update

Last Saved: 4/17/2022 4:49:15 PM N:\Clients\404 Tracy\12-18-41 Water Master Plan Update\GIS\MXD\Report Figures\Fig 10-3 RW Program Facilities.mxd - rchu

- New Pipeline plus Jack and Bore[7]
  - To serve buildout recycled water demands, install approximately 71,550 linear feet of new pipelines (in addition to the proposed 2025 pipelines) ranging in diameter from 12 to 30 inches.
  - To serve buildout potable water demands, jack and bore approximately 1,590 linear feet of new pipelines. This represents 5 distinct jack and bore installations.

    Note: Within individual developments, additional new pipelines of 16-inch diameter and less will be required. The total length of pipelines needed to serve buildout recycled water demands is unknown, as some development areas are still preparing recycled water system plans.

- SCADA System
  - Install SCADA system monitoring of flows and pressures at each new water supply facility to provide operators with real-time system data and flexibility in system operations. The capital cost for SCADA system installation is included in the cost for these facilities.

The locations of these recommended buildout recycled water program facility improvements are shown on Figure 10-3. Preliminary capital cost estimates for the recommended buildout recycled water system improvements are presented in Table 10-5. Detailed maps illustrating the proposed pipeline projects for the buildout recycled water system are provided in Appendix G.

10.3.3 Summary of Recommended Recycled Water System CIP Costs

As discussed in Appendix E, unit construction costs for pipelines, booster pump stations, and storage tanks are essentially the same as for the potable water system. However, unit construction costs for recycled water system pipelines 8 inches and 12 inches in diameter are slightly less than for potable water pipelines, because the 8-inch and 12-inch diameter recycled water pipelines are assumed to be constructed from PVC instead of ductile iron.

Preliminary capital cost estimates for the recommended 2025 and buildout recycled water system are presented in Table 10-4 and Table 10-5, respectively. The estimated probable construction costs do not include installation of individual PRVs on recycled water service connections with peak hour or fill period pressures exceeding 100 psi, as these will be the responsibility of individual developer.

The total 2025 recycled water system CIP cost estimate is $27.9 million, while the total buildout recycled water system CIP cost estimate is $65.5 million. The total recommended recycled water system CIP cost estimate is $93.4 million. These costs only include program facilities.

[7] The buildout hydraulic model was developed as a backbone system and is not an "all pipes" model; therefore, the hydraulic simulations performed may not identify all necessary water system improvements. Consequently, it is recommended that further hydraulic evaluations be performed as additional details are provided for each future development project.

Table 10-5. Probable Construction Costs for the Recommended Buildout Recycled Water System CIP[a]

Improvement Type	Improvement Description	CIP ID	Quantity		Estimated Construction Cost, dollars[b]	CIP Cost, dollars (includes mark-ups)[c,d]
Shared City-side Facilities						
Land Acquisition[e]	Tank Sites	BCIP-LA-T	1	sites	-	285,000
Storage Reservoir[f]	5.7 MG Zone A Tank	BCIP-T-A	1	L.S.	5,809,500	8,133,000
Storage Reservoir[f]	2.3 MG WWTP Diurnal Storage Tank	BCIP-T-DS	1	L.S.	4,262,640	5,968,000
Booster Pump Station	5.00 mgd Zone A Expansion	BCIP-PS-A	1	L.S.	1,818,715	2,546,000
Booster Pump Station	6.34 mgd for Zone F	BCIP-PS-F	1	L.S.	2,016,095	2,823,000
Booster Pump Station	8.32 mgd for Zone B	BCIP-PS-B	1	L.S.	2,309,610	3,233,000
Booster Pump Station	3.89 mgd for Zone D	BCIP-PS-D	1	L.S.	1,654,515	2,316,000
Booster Pump Station	2.88 mgd for Zone E	BCIP-PS-E	1	L.S.	1,505,630	2,108,000
New Pipeline (Developed Area)	8-inch diameter	BCIP-PD-8	-	lf	-	-
New Pipeline (Developed Area)	10-inch diameter	BCIP-PD-10	-	lf	-	-
New Pipeline (Developed Area)	12-inch diameter	BCIP-PD-12	-	lf	-	-
New Pipeline (Developed Area)	14-inch diameter	BCIP-PD-14	-	lf	-	-
New Pipeline (Developed Area)	16-inch diameter	BCIP-PD-16	2,499	lf	837,072	1,172,000
New Pipeline (Developed Area)	18-inch diameter	BCIP-PD-18	-	lf	-	-
New Pipeline (Developed Area)	20-inch diameter	BCIP-PD-20	-	lf	-	-
New Pipeline (Developed Area)	24-inch diameter	BCIP-PD-24	21,852	lf	10,161,175	14,226,000
New Pipeline (Developed Area)	30-inch diameter	BCIP-PD-30	-	lf	-	-
New Pipeline (Undeveloped Area)	8-inch diameter	BCIP-PU-8	-	lf	-	-
New Pipeline (Undeveloped Area)	10-inch diameter	BCIP-PU-10	-	lf	-	-
New Pipeline (Undeveloped Area)	12-inch diameter	BCIP-PU-12	19,557	lf	4,302,643	6,024,000
New Pipeline (Undeveloped Area)	14-inch diameter	BCIP-PU-14	-	lf	-	-
New Pipeline (Undeveloped Area)	16-inch diameter	BCIP-PU-16	5,343	lf	1,522,836	2,132,000
New Pipeline (Undeveloped Area)	18-inch diameter	BCIP-PU-18	9,202	lf	2,898,523	4,058,000
New Pipeline (Undeveloped Area)	20-inch diameter	BCIP-PU-20	-	lf	-	-
New Pipeline (Undeveloped Area)	24-inch diameter	BCIP-PU-24	7,219	lf	2,851,449	3,992,000
New Pipeline (Undeveloped Area)	30-inch diameter	BCIP-PU-30	5,882	lf	2,823,234	3,953,000
Jack and Bore	Boring and Receiving Pits	BCIP-JB-PIT	5	each	200,000	280,000
Jack and Bore	8-inch diameter (16-inch casing)	BCIP-JB-8	-	lf	-	-
Jack and Bore	12-inch diameter (21-inch casing)	BCIP-JB-12	-	lf	-	-
Jack and Bore	16-inch diameter (24-inch casing)	BCIP-JB-16	-	lf	-	-
Jack and Bore	18-inch diameter (24-inch casing)	BCIP-JB-18	-	lf	-	-
Jack and Bore	20-inch diameter (30-inch casing)	BCIP-JB-20	-	lf	-	-
Jack and Bore	24-inch diameter (36-inch casing)	BCIP-JB-24	1,234	lf	1,227,805	1,719,000
Jack and Bore	30-inch diameter (42-inch casing)	BCIP-JB-30	359	lf	400,168	560,000
					Total	**$ 65,528,000**

(a) Costs shown are presented in 2020 dollars.
(b) Estimated construction costs do not yet reflect an adjustment to account for the current economic bidding climate.
(c) Costs include mark-ups equal to 40 percent (General Contingency: 15 percent; Design and Planning: 10 percent; Construction Management: 10 percent; and Program Administration: 5 percent).
(d) Total rounded to nearest $1,000.
(e) Assumes each tank site is 1.5 acres. Cost includes Zone A Tank site.
(f) Recommended volume based on active volume. Cost assumes the Zone A tank will be an aboveground welded steel tank, and the WWTP tank will be a partially buried prestressed concrete tank.

10.4 CAPITAL IMPROVEMENT PROGRAM TIMING AND TRIGGERS

As described in Chapters 7 and 8 for the potable water system and Chapter 9 for the recycled water system, the construction of the capital improvements for the future potable and recycled water systems should be coordinated with the proposed schedules of new development and/or other system needs to ensure that the required infrastructure will be in place to serve future customers when needed.

Triggers for capital improvements vary depending on the improvement type and the location of the specific improvement project. General guidelines are summarized as follows:

- Existing system pipeline improvements are triggered by existing fire flow deficiencies and should be addressed as soon as funding is available.
- Improvements that improve system operational flexibility and reliability should be prioritized. Examples of such improvements include the equipping of the City's existing wells with ammonia addition, the JJWTP expansion and construction of Clearwell #3 at the JJWTP, and implementation of SCADA system improvements and backup power provisions.
- Pipelines which extend potable water service to currently undeveloped areas are generally triggered by development of those areas. Hydraulic evaluations for specific developments should be conducted to confirm that the proposed pipelines to serve each development are adequate.
- The NCIP-PI-1 and NCIP-PI-2 projects are triggered by new development, which is expected to occur by 2025, and should be in service before 2025. Similarly, the infrastructure needed to re-zone the existing transmission mains in Lammers Road, Schulte Road, and Hansen Road from Zone 2 to Zone 3 should be constructed before 2025.
- New valve interconnections between pressure zones are triggered when the pipelines requiring the valve connections are constructed.
- Pump stations and tanks which serve a new pressure zone with no existing facilities, such as Zones 5 and 6 in the potable water system or Zones B through F in the recycled water system, are triggered when development of the new pressure zone begins.
- New pump stations and tanks which serve an existing pressure zone are triggered when total demands within that pressure zone nearly exceeds the capacity of existing facilities. The City should continue to monitor demands within the existing pressure zones and begin design and construction of new facilities in advance of demands exceeding existing capacity.

APPENDIX A

Land Use Assumptions and Projected Water Demands for New Developments

Table A-1. Land Uses with TAZ Estimates provided by City Planning Division

General Plan Planning Area/Common Name	TAZ	Total Acres	Adjusted Total Acres	Overall Density (Units per Gross Acre)	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	Taz 2040	TAZ 2040 to Buildout	TAZ 2040 to Buildout	TAZ Buildout	TAZ Buildout	TAZ Buildout	TAZ Buildout	Very Low Density (1.5 DU per acre typical)	Low Density (4.35 DU per acre typical)	Medium Density (9 DU per acre typical)	High Density SFD (13 DU per acre typical)	High Density Multi-Family (24 DU per acre typical)	Total Resid SF DU	Total Resid MF DU	Senior /Assisted Living		Institutional (Hospital and Medical Office)		Industrial Acres (0.5 FAR)	Retail/Commercial/ Office Acres
					SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr. Assist Liv Acres	acres	acres	acres	acres	acres			units	acres	square footage	acres		
UR 5 (Bright) (1)	527	170	108	8.2							546								10					40	38	10	10	546	0		0		0	0	10
	789										100	240																100	240		0		0	0	0
UR 7 (Bright/Castro) (2)	792	112	107	5.7	150						456													40	48			606	0		0		0	0	0
Rocking Horse (3)	788	58	55	4.5	250																			55				250	0		0		0	0	0
Tracy Village (4)	535	135	130	4.6	400						200													130				600	0		0		0	0	0
UR1 (5)	515	780	780	3.8	50	50					200							169	20				380	300	65		25	250	219		0		0	0	20
	517																400											400	0		0		0	0	0
	613										200						260											460	0		0		0	0	0
	616																300											300	0		0		0	0	0
	617												10				200	200										200	200		0		0	0	10
	618				50	50					200	50					300											550	100		0		0	0	0
	659																200											200	0		0		0	0	0
Ellis (6)	529	321	185	4.1	43						132													178	7			175	0		0		0	0	0
	661											60																0	60		0		0	0	0
	662				43						132																	175	0		0		0	0	0
	663				43						132																	175	0		0		0	0	0
	664										176																	176	0		0		0	0	0
Avenues (8)	670	96	96	4.7							350													96				350	0		0		0	0	0
	599										103																	103	0		0		0	0	0
UR10 (9)	660	116	116	N/A																116								0	0		0		0	116	0
Tracy Hills (10)	573	2732	1845	3.3	200						100		7										81	876	342	8		300	0		0		0	0	9
	574																			27								0	0		0		0	27	0
	601																700			85								700	0		0		0	85	0
	682										600																	600	0		0		0	0	0
	683				200						150						100											450	0		0		0	0	0
	684										300																	300	0		0		0	0	0
	685										908						200											1,108	0		0		0	0	0
	686										500						500											1,000	0		0		0	0	0
	687										320																	320	0		0		0	0	0
	688										450																	450	0		0		0	0	0
	689				200						600																	800	0		0		0	0	0
	690				200						100																	300	0		0		0	0	0
	691													196														0	0		0		0	196	0
	692																500											500	0		0		0	0	0
	693				200						185		30															385	0		0		0	0	30
	1044										50																	50	0		0		0	0	0
Gateway (11)	794	535	454			75	8.5					302	34						34						50		17	0	377	1,557	0	688,000	0	0	120
	839									17						69												0	0		86		0	0	0
	840																											0	0		0		0	0	0
	843									12.5						50												0	0		63		0	0	0
	844						8				50		33						34									50	0		0		0	0	75
	845								20						60						50							0	0		0		130	0	0
	847				160						325																	485	0		0		0	0	0
	848				18					5	75					20												93	0		25		0	0	0
UR6 (Cordes Ranch) (12)	829	1730	971	N/A			5						40	150																	0		0	150	171
	830						5						20																		0		0	0	25
	831													50																	0		0	50	0
	832							50					54	50																	0		0	100	54
	833													110																	0		0	110	0
	834							20						20																	0		0	40	0
	835																		57												0		0	0	57

Table A-1. Land Uses with TAZ Estimates provided by City Planning Division

General Plan Planning Area/Common Name	TAZ	Total Acres	Adjusted Total Acres	Overall Density (Units per Gross Acre)	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	Taz 2040	TAZ 2040 to Buildout	TAZ 2040 to Buildout	TAZ Buildout	TAZ Buildout	TAZ Buildout	TAZ Buildout	Very Low Density (1.5 DU per acre typical)	Low Density (4.35 DU per acre typical)	Medium Density (9 DU per acre typical)	High Density SFD (13 DU per acre typical)	High Density Multi-Family (24 DU per acre typical)	Total Resid SF DU	Total Resid MF DU	Senior /Assisted Living		Institutional (Hospital and Medical Office)		Industrial Acres (0.5 FAR)	Retail/Commercial/ Office Acres
					SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr. Assist Liv Acres	acres	acres	acres	acres	acres			units	acres	square footage	acres		
	836																														0		0	0	0
	837													50																	0		0	50	0
	838													74																	0		0	74	0
	840													143																	0		0	143	0
	841							50						143																	0		0	193	0
UR4 (Bright Triangle) (13)	795	190	162	5														816									34	0	816		0		0	0	43
	817																		22									0	0		0		0	0	22
	818																		22									0	0		0		0	0	22
	828																		80									0	0		0		0	0	80
UR3 (Catellus) (14)	819	700	700	0.1																66			40					0	0		0		0	66	40
	820																		40	66								0	0		0		0	66	40
	821																60			66								60	0		0		0	66	0
	822																			67								0	0		0		0	67	0
	823																			67								0	0		0		0	67	0
	824																		45	67								0	0		0		0	67	45
	825																			67								0	0		0		0	67	0
	1039																			69								0	0		0		0	69	0
I-205 Expansion (15)	525	172	172	10.2							257	180	50				257	180							42	50	30	514	360		0		0	0	50
	641										257	180					257	180										514	360		0		0	0	0
West Side Industrial (16)	528	487	485	N/A				120						240																	0		0	360	0
	842													200																	0		0	200	0
	851							45						45																	0		0	90	0
East Side Industrial (17)	510	370	368	N/A										220																	0		0	220	0
	511												5	69																	0		0	69	5
	627													74																	0		0	74	0
Larch Clover (18)	521	442	100	2.7																			250	40	40		12	0	0		0		0	0	0
	530																549											549	0		0		0	0	0
	554																											0	0		0		0	0	0
	638						10												80									0	0		0		0	0	90
	641																											0	0		0		0	0	0
	642																360	288	20									360	288		0		0	0	20
	656																											0	0		0		0	0	0
Chrisman Road (19)	647	116	113	N/A															13	100											0		0	100	13
Rocha (20)	810	91	91	8													296	431						68			23	296	431		0		0	0	0
Berg/Byron remainder (21)	796	56	44	9.3													26								39		5	26	0		0		0	0	0
	1040					72											275	60										275	132		0		0	0	0
	625																50											50	0		0		0	0	0
Berg Road Subdivision (22)	1040	10	10	7.1	71																				10			71	0		0		0	0	0
SWC Valpico and Corral Hollow (23)	671	65	65	4.3													282							65				282	0		0		0	0	0
Kagehiro (24)	534	47	10	5	62																			10				62	0		0		0	0	0
Dobler/ Maibes (25)	644	23	23	N/A									23																		0		0	0	23
Holly Sugar Industrial	518	160	143	N/A									18	125																	0		0	125	18
Between Holly Sugar and Arbor	636	111	100											50						50											0		0	100	0
Gabriel Estates	653																																		
San Marco	622																																		
	654																																		
Sterling Park	624																																		
Alden Meadows	791																																		
Presidio	623																																		
Placencia Fields/CalTrans	793																	30	1									0	30		0		0	0	1
Belconte	797																																		
Lyon Crossroads	625																																		

Table A-1. Land Uses with TAZ Estimates provided by City Planning Division

General Plan Planning Area/Common Name	TAZ	Total Acres	Adjusted Total Acres	Overall Density (Units per Gross Acre)	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	Taz 2040	TAZ 2040 to Buildout	TAZ 2040 to Buildout	TAZ Buildout	TAZ Buildout	TAZ Buildout	TAZ Buildout	Very Low Density (1.5 DU per acre typical)	Low Density (4.35 DU per acre typical)	Medium Density (9 DU per acre typical)	High Density SFD (13 DU per acre typical)	High Density Multi-Family (24 DU per acre typical)	Total Resid SF DU	Total Resid MF DU	Senior /Assisted Living		Institutional (Hospital and Medical Office)		Industrial Acres (0.5 FAR)	Retail/Commercial/ Office Acres
					SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr. Assist Liv Acres	acres	acres	acres	acres	acres			units	acres	square footage	acres		
Cintra Park	640																																		
Woodfield Estates	1042																																		
SWC Grant Line and Corral Hollow	639						1.06			2.73																					3		0	0	1
Bridle Creek, Laurelbrook	526																																		
Heartland / Chesapeake Bay	798																																		
West HS / Alegre Commons	556																																		
Summergate	555																																		
Arnaudo Village, Rebeiro	657																																		
East of Tracy Blvd, between I-205 & Grant Line (La Quinta)	553						87-room hotel																								0		0	0	0
The Classics, California Espirit, Mobile Home Park	537																																		
Garden Square + Shamrock	699																			4											0		0	4	0
Garden Square+ Brookview	1041																																		
Garden Square	696																																		
Mars Ct, Gandy Dancer area	816							4.8												18											0		0	23	0
Jim Tracey (vacant)	815												29																		0		0	0	29
N. Side Valpico, inc. Tar pit	811																	442											442		0		0	0	0
NEI Amazon + Crate & Barrel North bldg.	649													15																	0		0	15	0
US Cold, other Ind.	650																																		
Crate & Barrel South, Amazon Pkng	680													5																	0		0	5	0
OSH, Seagate, United Grocers	635																																		
Various M-1 and M-2, SEC MacArthur and Grant Line	509																																		
Red Maple Village (west half)	814																																		
ISP (So. Side Valpico, b/t RR spur & Glenbriar)	589																																		
Heinz	694													11						11								0	0		0		0	22	0
Mission Court	612											200						210										0	410		0		0	0	0
Red Maple remainder	813												3					78										0	78		0		0	0	3
Sycamore Village (apts +SFDs)	652																																		
LDR	610																																		
Corral Hollow Estates (county)	603																																		
old residential	541																																		
old residential (Clover+more)	538																																		
South side GL, west of MA (GHC + res)	540																																		
LDR, Dr. Powers Park	557																																		
Old Res., Millenium	544																																		
Old Res, Lincoln Park-mostly built but includes NEC 11th & Central	545											12																0	12		0		0	0	0
S. Side old downtown, MDR, LDR, PUD	567																	20										0	20		0		0	0	0
Edgewood	597																																		
Edgewood	785																																		
Edgewood-res plus commercial site	784						2.4						8.5																		0		0	0	11
Edgewood, Brookview West	786																																		
Edgewood	787																																		
Edgewood	598																																		
Fairhaven, Victoria Greens, Harvest Glen, Glen Creek	596																																		
Murifield 8 & 9	607																																		
Murifield	608																																		
Parkside Estates, California Parkside, California Marquis	609																																		

Table A-1. Land Uses with TAZ Estimates provided by City Planning Division

General Plan Planning Area/Common Name	TAZ	Total Acres	Adjusted Total Acres	Overall Density (Units per Gross Acre)	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	Taz 2040	TAZ 2040 to Buildout	TAZ 2040 to Buildout	TAZ Buildout	TAZ Buildout	TAZ Buildout	TAZ Buildout	Very Low Density (1.5 DU per acre typical)	Low Density (4.35 DU per acre typical)	Medium Density (9 DU per acre typical)	High Density SFD (13 DU per acre typical)	High Density Multi-Family (24 DU per acre typical)	Total Resid SF DU	Total Resid MF DU	Senior /Assisted Living		Institutional (Hospital and Medical Office)		Industrial Acres (0.5 FAR)	Retail/Commercial/ Office Acres
					SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr. Assist Liv Acres	acres	acres	acres	acres	acres			units	acres	square footage	acres		
Glenbriar, Pebblebrook	590																																		
County Residential	591																																		
Tiburon Village, Katerra Apts	812					264																						0			0		0	0	0
Larkspur Estates-14 units remaining	536				14																							14			0		0	0	0
Eastlake	614																																		
Elissagaray Ranch	615																																		
Country Vista (Yosemite Vista)	695																																		
Victoria Park	611																																		
Santana, Centennial	651																																		
Schulte Ranch, Quail Glen, Countrywood, Vintage Estates, Mt Oso	568																	50											50		0		0	0	0
Forest Glen, Mt. Diablo Estates	566																																		
Bowtie East, Quail Run, Pheasant Crossing 2, CA Cameo, CA Collections	565											See TOD/Valley Link Plan						See TOD/Valley Link Plan													0		0	0	0
Bowtie West, Ryland Junction	564											See TOD/Valley Link Plan						See TOD/Valley Link Plan													0		0	0	0
Tennis Vista, RR property	621																			9											0		0	9	0
Tennis Village, Harvest Ridge	620																																		
Westchester Green, Rancho Pacific, Alden Glen, Fox Hollow	560																																		
Harvest Landing, Quail Meadows, Corral Hollow Estates	619																																		
CBD	561																																		
N. side 11th, b/t Parker & Central	550																																		
City Hall, Creamery, downtown	559																																		
S. sidw GL, west of MA, Light Industrial, PUD	542												1.75																		0		0	0	2
Tracy High, GHC, Res	587																																		
West of Downtown	562																																		
GHC, MDC, MDR (N. of 11th, b/t Tracy & Parker)	551																																		
Commercial, MDR (99 cent store, affordable hsg.)	563																																		
LDR, MDR, GHC (N. of 11th, b/t Lincoln & Tracy)	558																																		
LDR (East, Acacia)	543																																		
HDR	549																																		
(Hospital) MDR, MDC, MO	548						5						5															0	0		0		0	0	10
HDR, PUD, GHC, MDR, MDC (E. of Holly, N. of G.L.)	539																	65										0	65		0		0	0	0
LDR, MDR, MDC (El Pescadero Park, S. side Clover)	552					20						20						60										0	100		0		0	0	0
s. side GL, b/t Parker &East	546											22																0	22		0		0	0	0
GHC, HDR, LDR, POM, MDR	547																																		
Highway Service, GHC (Kaiser, Arco)	655						5						5																		0		0	0	10
M-1, PUD, HS (N. of I-205, b/t Tracy & Holly)	637																			2											0		0	2	0
M-2	700																																		
Airport	593																		?	?											0		0	0	0
Redbridge	602																																		
I-205 Specific Plan (N. part of Harvest)	799												1																		0		0	0	1
I-205-Auto Plaza	808												3.7																		0		0	0	4
I-205-Auto Plaza	806																																		
I-205 CC-West Valley Mall+	643												20																		0		0	0	20

Table A-1. Land Uses with TAZ Estimates provided by City Planning Division

General Plan Planning Area/Common Name	TAZ	Total Acres	Adjusted Total Acres	Overall Density (Units per Gross Acre)	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2025	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	TAZ 2040	Taz 2040	TAZ 2040 to Buildout	TAZ 2040 to Buildout	TAZ Buildout	TAZ Buildout	TAZ Buildout	TAZ Buildout	Very Low Density (1.5 DU per acre typical)	Low Density (4.35 DU per acre typical)	Medium Density (9 DU per acre typical)	High Density SFD (13 DU per acre typical)	High Density Multi-Family (24 DU per acre typical)	Total Resid SF DU	Total Resid MF DU	Senior /Assisted Living		Institutional (Hospital and Medical Office)		Industrial Acres (0.5 FAR)	Retail/Commercial/ Office Acres
					SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr Assist Liv Acres	SFDU	MFDU	Retail/Office Acres	Ind Acres	Institutional Acres	Sr. Assist Liv Acres	acres	acres	acres	acres	acres			units	acres	square footage	acres		
I-205-Home Depot, Winco	803																																		
I-205-NEC Naglee & GL	809																																		
I-205 Outlets & Surrounding	634						5 acre office +107 room hotel						13																		0		0	0	13
NEI-Yellow freight & IPT 1	632																																		
NEI-Rados Haley	628													52																0		0	52	0
NEI-Home Depot, Ridgeline +	633							26																						0		0	26	0
NEI-IPT 2, FEMA +	631							75																						0		0	75	0
NEI-Seefried	629							71																						0		0	71	0
NEI Prologis, basin (NWC GL & Paradise)	677							12																						0		0	12	0
NEI-Majestic	648							75																						0		0	75	0
NEI-Barbosa, Animal Shelter, part of PacMed, Katerra	678													20																0		0	20	0
NEI-Kellogg, part of Katerra	514																																		
NEI-SSI, Best Buy, Prologis (Chabot Ct)	679																																		
Totals		**9825**	**7333**		**2354**	**531**					**8154**	**1266**	**413.95**	**2112**	**60**	**139**	**6072**	**3279**	**478**	**957**	**50**		**751**	**1,898**	**681**	**68**	**156**	**16,580**	**4,812**	**1,557**	**176**	**688,000**	**130**	**3,618**	**1,196**

Does not include units/acreage already built
Does not include schools
Gateway office and industrial is really called "business commercial" in the draft Specific Plan
Cordes Ranch has built 7.7 million square feet of industrial, and about 14-16 million square feet to go

* Tracy Hills MUBP is 50 acres retail, 50 acres office, 80 acres medium density residential
**Pursuant to Ellis DA Ellis receives 2,250 RGAs above the GMO Guidelines Category of F3, which are not yet assigned a location
Larch Clover Planning Ares is largely built out-only assuming 100 acres of land use change (to retail)
Office FAR is assumed at .45, and Retail is .30
Industrial FAR is assumed at .45
Purple=Built Out TAZ

Table A-2. 2025 Time Frame - Land Use Assumptions and Projected Water Demands for New Developments

Project or Development Area	Data Source(s)[a]	Parks Area Assumption[b]	Assumed Recycled Water Availability	Residential – Very Low Density						Residential – Low Density						Residential – Medium Density						
				Dwelling Units	*Total Acres*	Residential Acres	Assumed Park Acres	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Dwelling Units	*Total Acres*	Residential Acres	Assumed Park Acres	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Dwelling Units	*Total Acres*	Residential Acres	Assumed Park Acres	Assumed Other Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]
UR 5 (Bright)	TAZ Spreadsheet	✓	✓																			
UR 7 (Bright/Castro)	TAZ Spreadsheet	✓	✓							150	34.5	30.6	3.9	67.8	16.3							
Rocking Horse	Hydraulic Analysis TM		✓							226	56.7	56.7		102.2								
Tracy Village[f]	Hydraulic Analysis TM		✓							400	64.1	64.1		180.9								
UR 1	TAZ Spreadsheet	✓								50	11.5	10.2	1.3	28.3		50	5.6	4.1	0.6	0.8	21.3	
Ellis[g,h]	Hydraulic Analysis TM		✓							664	150.5	150.5		300.3								
Avenues	Hydraulic Analysis TM		✓																			
UR 10	TAZ Spreadsheet	✓	✓																			
Tracy Hills[i]	Hydraulic Analysis TM, TAZ Spreadsheet	✓								1,073	269.8	269.8		485.3		132	33.2	28.2		5.0	56.4	
Westside Ranch	Westside Draft Specific Plan	✓	✓																			
Cordes Ranch	Hydraulic Analysis TM, TAZ Spreadsheet	✓																				
UR 4 (Bright Triangle)	TAZ Spreadsheet	✓	✓																			
UR 3 (Catellus)	TAZ Spreadsheet	✓	✓																			
I-205 Expansion	TAZ Spreadsheet	✓	✓																			
West Side Industrial	TAZ Spreadsheet	✓																				
East Side Industrial	TAZ Spreadsheet	✓																				
Larch-Clover	TAZ Spreadsheet	✓	✓																			
Chrisman Road	TAZ Spreadsheet	✓																				
Rocha	TAZ Spreadsheet	✓																				
Berg/Byron Remainder	TAZ Spreadsheet	✓																				
Berg Road Subdivision	Hydraulic Analysis TM															71	9.9	8.4		1.5	27.2	
SWC Valpico & Corral Hollow	TAZ Spreadsheet	✓	✓																			
Kagehiro[g,j]	Email from City Planning Division									252	47.0	47.0		114.0								
Dobler/Maibes	TAZ Spreadsheet	✓	✓																			
Holly Sugar Industrial	TAZ Spreadsheet	✓	✓																			
Northeast Industrial Area	Hydraulic Analysis TM																					
Industrial Areas Specific Plan	TAZ Spreadsheet																					
I-205 Corridor Specific Plan	TAZ Spreadsheet																					
Home 2 Suites	Hydraulic Analysis TM																					
Sierra Hills	Hydraulic Analysis TM																					
Grant Line Road Apartments	Hydraulic Analysis TM																					
Aspire II	Hydraulic Analysis TM																					
Harvest	Hydraulic Analysis TM																					
321 E. Grant Line Rd Apartments	Hydraulic Analysis TM																					
Barcelona Infill	Hydraulic Analysis TM									51	10.2	10.2		23.1								
Mountain View	Tracy Municipal Services Review, June 2019																					
Tracy Combined Cycle Power Plant RW Conversion[k]	Hydraulic Analysis TM		✓																			
Legacy Fields[l]	Hydraulic Analysis TM		✓																			
Parks RW Conversion[m]	2017 Irrigation Meters		✓																			
Infill (misc.)	TAZ Spreadsheet									14	3.2	3.2		6.3								
			Total							**2,880**	**647**	**642**	**5**	**1,308**	**16**	**253**	**49**	**41**	**1**	**7**	**105**	

(a) Data Source abbreviations:
TAZ Spreadsheet - data from Land Uses with TAZ Estimates_06_23_2021_2025_2040_BU_Independent.xlsx spreadsheet received from the City Planning Division in June 2021 (Table A-1).
Hydraulic Analysis TM - data from a previously prepared hydraulic analysis technical memorandum prepared by either West Yost Associates or Blackwater Consulting Engineers, Inc.

(b) For selected projects and development areas, it was assumed that 11.2% of the total acres in very low, low, and medium density residential land uses will be developed as parks. These park acres are in addition to the identified parks in the Rocking Horse, Ellis, Avenues, Tracy Hills Phase 1, and Legacy Fields developments. If available, recycled water was used to meet park demands.
(c) Includes 9.6% Unaccounted-for Water (UAFW).
(d) Includes 5.0% UAFW.
(e) Assumes that 15 percent of total gross acres will be landscaped and irrigated. If available, recycled water was used to meet irrigated area demands.
(f) Miscellaneous potable water demands for Tracy Village are from existing residential units to be annexed as part of the Project. Miscellaneous recycled water demand for Tracy Village is to fill the lakes which will be constructed as part of the project.
(g) Projected land use data includes dwelling units and acreage developed by 2017.
(h) Land use data for Ellis includes dwelling units constructed by 2017. Miscellaneous potable water demand for Ellis represents projected demands for the Aquatic Center minus 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(i) Land use data from hydraulic analysis TMs was used for Tracy Hills Phase 1. The parks acreage assumption was not applied to Tracy Hills Phase 1 because the available land use data specifically identified parks. The parks acreage assumption was applied to the remaining phases of Tracy Hills, which used land use data from the TAZ spreadsheet.
(j) Land use data for Kagehiro includes dwelling units constructed by 2017. Miscellaneous potable water demand for Kagehiro represents 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(k) Demands for the Tracy Combined Cycle Power Plant Recycled Water Conversion are from City of Tracy Recycled Water Project - Projected Recycled Water Demands TM, West Yost Associates, October 11, 2016.
(l) It was assumed that 50 percent of the remaining Legacy Fields acreage (from City of Tracy Parks Master Plan, Table A-1, April 2013) will be developed by 2025. Projected near term demands for Legacy Fields are equal to 50 percent of projected Legacy Fields demands for the 2040 and buildout time frames.
(m) Represents the transfer of 2017 metered potable demands for selected existing parks and irrigated areas to recycled water demands. Projected recycled water demands for these areas are larger than existing potable water demands due to current potable water conservation practices. Refer to Chapter 9 for a full list of irrigated areas projected to be converted to recycled water use.

Table A-2. 2025 Time Frame - Land Use Assumptions and Projected Water Demands for New Developments

Project or Development Area	Residential – High Density						Residential – Very High Density						Commercial					Office				
	Dwelling Units	*Total Acres*	Residential Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Dwelling Units	*Total Acres*	Residential Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	Commercial Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	Office Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]
UR 5 (Bright)																						
UR 7 (Bright/Castro)																						
Rocking Horse																						
Tracy Village[f]													2.7	2.3	0.4	4.5	1.7					
UR 1	100	7.7	6.5	1.2	26.2																	
Ellis[g,h]																						
Avenues																						
UR 10																						
Tracy Hills[i]																						
Westside Ranch																						
Cordes Ranch													10.0	8.5	1.5	20.1						
UR 4 (Bright Triangle)																						
UR 3 (Catellus)																						
I-205 Expansion																						
West Side Industrial																						
East Side Industrial																						
Larch-Clover													10.0	8.5	1.5	16.9	6.3					
Chrisman Road																						
Rocha																						
Berg/Byron Remainder	72	5.0	4.3	0.8	18.7																	
Berg Road Subdivision																						
SWC Valpico & Corral Hollow																						
Kagehiro[g,j]																						
Dobler/Maibes																						
Holly Sugar Industrial																						
Northeast Industrial Area																						
Industrial Areas Specific Plan																						
I-205 Corridor Specific Plan																						
Home 2 Suites							110	2.6	2.2	0.4	18.5							0.6	0.5	0.1	1.1	
Sierra Hills	300	11.6	9.9	1.7	74.1																	
Grant Line Road Apartments	448	20.0	17.0	3.0	111.8																	
Aspire II	47	2.3	2.0	0.3	11.8																	
Harvest	300	17.9	15.2	2.7	76.6																	
321 E. Grant Line Rd Apartments	40	1.7	1.4	0.3	9.9																	
Barcelona Infill																						
Mountain View																						
Tracy Combined Cycle Power Plant RW Conversion[k]																						
Legacy Fields[l]																						
Parks RW Conversion[m]																						
Infill (misc.)	284	15.1	12.9	2.3	71.8								22.5	19.1	3.4	45.1						
Total	**1,591**	**81**	**69**	**12**	**401**		**110**	**3**	**2**	**0**	**18**		**45**	**38**	**7**	**87**	**8**	**1**	**1**	**0**	**1**	

(a) Data Source abbreviations:
TAZ Spreadsheet - data from Land Uses with TAZ Estimates_06_23_2021_2025_2040_BU_Independent.xlsx spreadsheet received from the City Planning Division in June 2021 (Table A-1).
Hydraulic Analysis TM - data from a previously prepared hydraulic analysis technical memorandum prepared by either West Yost Associates or Blackwater Consulting Engineers, Inc.

(b) For selected projects and development areas, it was assumed that 11.2% of the total acres in very low, low, and medium density residential land uses will be developed as parks. These park acres are in addition to the identified parks in the Rocking Horse, Ellis, Avenues, Tracy Hills Phase 1, and Legacy Fields developments. If available, recycled water was used to meet park demands.
(c) Includes 9.6% Unaccounted-for Water (UAFW).
(d) Includes 5.0% UAFW.
(e) Assumes that 15 percent of total gross acres will be landscaped and irrigated. If available, recycled water was used to meet irrigated area demands.
(f) Miscellaneous potable water demands for Tracy Village are from existing residential units to be annexed as part of the Project. Miscellaneous recycled water demand for Tracy Village is to fill the lakes which will be constructed as part of the project.
(g) Projected land use data includes dwelling units and acreage developed by 2017.
(h) Land use data for Ellis includes dwelling units constructed by 2017. Miscellaneous potable water demand for Ellis represents projected demands for the Aquatic Center minus 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(i) Land use data from hydraulic analysis TMs was used for Tracy Hills Phase 1. The parks acreage assumption was not applied to Tracy Hills Phase 1 because the available land use data specifically identified parks. The parks acreage assumption was applied to the remaining phases of Tracy Hills, which used land use data from the TAZ spreadsheet.
(j) Land use data for Kagehiro includes dwelling units constructed by 2017. Miscellaneous potable water demand for Kagehiro represents 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(k) Demands for the Tracy Combined Cycle Power Plant Recycled Water Conversion are from City of Tracy Recycled Water Project - Projected Recycled Water Demands TM, West Yost Associates, October 11, 2016.
(l) It was assumed that 50 percent of the remaining Legacy Fields acreage (from City of Tracy Parks Master Plan, Table A-1, April 2013) will be developed by 2025. Projected near term demands for Legacy Fields are equal to 50 percent of projected Legacy Fields demands for the 2040 and buildout time frames.
(m) Represents the transfer of 2017 metered potable demands for selected existing parks and irrigated areas to recycled water demands. Projected recycled water demands for these areas are larger than existing potable water demands due to current potable water conservation practices. Refer to Chapter 9 for a full list of irrigated areas projected to be converted to recycled water use.

Table A-2. 2025 Time Frame - Land Use Assumptions and Projected Water Demands for New Developments

Project or Development Area	Industrial					Institutional					Identified Parks			Misc. Water Demands		Total Dwelling Units	Total Area, acres	Total Potable Water Demand, af/yr	Total Recycled Water Demand, af/yr
	Total Acres	Industrial Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	Institutional Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	PW Demand, af/yr[c]	RW Demand, af/yr[d]	PW Demand, af/yr[c]	RW Demand, af/yr[d]				
UR 5 (Bright)																			
UR 7 (Bright/Castro)																150	34.5	67.8	16.3
Rocking Horse											2.4		10.1			226	59.1	102.2	10.1
Tracy Village[f]														17.7	126.1	400	66.8	203.1	127.8
UR 1																200	24.7	75.9	
Ellis[g,h]											11.2		47.2	-29		664	161.7	270.9	47.2
Avenues																			
UR 10																			
Tracy Hills[i]											11.4	50.4				1,205	314.3	592.1	
Westside Ranch																			
Cordes Ranch	429.7	365.2	64.5	660.7													439.7	680.8	
UR 4 (Bright Triangle)																			
UR 3 (Catellus)																			
I-205 Expansion																			
West Side Industrial	165.0	140.3	24.8	253.7													165.0	253.7	
East Side Industrial																			
Larch-Clover																	10.0	16.9	6.3
Chrisman Road																			
Rocha																			
Berg/Byron Remainder																72	5.0	18.7	
Berg Road Subdivision																71	9.9	27.2	
SWC Valpico & Corral Hollow																			
Kagehiro[g,j]														-24		252	47.0	89.8	
Dobler/Maibes																			
Holly Sugar Industrial																			
Northeast Industrial Area	259.0	220.2	38.9	398.2													259.0	398.2	
Industrial Areas Specific Plan	4.8	4.1	0.7	7.4													4.8	7.4	
I-205 Corridor Specific Plan																			
Home 2 Suites																110	3.2	19.6	
Sierra Hills																300	11.6	74.1	
Grant Line Road Apartments																448	20.0	111.8	
Aspire II																47	2.3	11.8	
Harvest																300	17.9	76.6	
321 E. Grant Line Rd Apartments																40	1.7	9.9	
Barcelona Infill																51	10.2	23.1	
Mountain View																			
Tracy Combined Cycle Power Plant RW Conversion[k]															33.7				33.7
Legacy Fields[l]											114.3	26.2	198.9				114.3	26.2	198.9
Parks RW Conversion[m]														-318	458.1			-318	458.1
Infill (misc.)						2.7	2.3	0.4	4.7							298	43.6	128.0	
Total	**859**	**730**	**129**	**1,320**		**3**	**2**	**0**	**5**		**139**	**77**	**256**	**-354**	**618**	**4,834**	**1,826**	**2,968**	**898**

(a) Data Source abbreviations:
TAZ Spreadsheet - data from Land Uses with TAZ Estimates_06_23_2021_2025_2040_BU_Independent.xlsx spreadsheet received from the City Planning Division in June 2021 (Table A-1).
Hydraulic Analysis TM - data from a previously prepared hydraulic analysis technical memorandum prepared by either West Yost Associates or Blackwater Consulting Engineers, Inc.

(b) For selected projects and development areas, it was assumed that 11.2% of the total acres in very low, low, and medium density residential land uses will be developed as parks. These park acres are in addition to the identified parks in the Rocking Horse, Ellis, Avenues, Tracy Hills Phase 1, and Legacy Fields developments. If available, recycled water was used to meet park demands.

(c) Includes 9.6% Unaccounted-for Water (UAFW).

(d) Includes 5.0% UAFW.

(e) Assumes that 15 percent of total gross acres will be landscaped and irrigated. If available, recycled water was used to meet irrigated area demands.

(f) Miscellaneous potable water demands for Tracy Village are from existing residential units to be annexed as part of the Project. Miscellaneous recycled water demand for Tracy Village is to fill the lakes which will be constructed as part of the project.

(g) Projected land use data includes dwelling units and acreage developed by 2017.

(h) Land use data for Ellis includes dwelling units constructed by 2017. Miscellaneous potable water demand for Ellis represents projected demands for the Aquatic Center minus 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.

(i) Land use data from hydraulic analysis TMs was used for Tracy Hills Phase 1. The parks acreage assumption was not applied to Tracy Hills Phase 1 because the available land use data specifically identified parks. The parks acreage assumption was applied to the remaining phases of Tracy Hills, which used land use data from the TAZ spreadsheet.

(j) Land use data for Kagehiro includes dwelling units constructed by 2017. Miscellaneous potable water demand for Kagehiro represents 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.

(k) Demands for the Tracy Combined Cycle Power Plant Recycled Water Conversion are from City of Tracy Recycled Water Project - Projected Recycled Water Demands TM, West Yost Associates, October 11, 2016.

(l) It was assumed that 50 percent of the remaining Legacy Fields acreage (from City of Tracy Parks Master Plan, Table A-1, April 2013) will be developed by 2025. Projected near term demands for Legacy Fields are equal to 50 percent of projected Legacy Fields demands for the 2040 and buildout time frames.

(m) Represents the transfer of 2017 metered potable demands for selected existing parks and irrigated areas to recycled water demands. Projected recycled water demands for these areas are larger than existing potable water demands due to current potable water conservation practices. Refer to Chapter 9 for a full list of irrigated areas projected to be converted to recycled water use.

Table A-3. 2040 Time Frame - Land Use Assumptions and Projected Water Demands for New Developments

Project or Development Area	Data Source(s)[a]	Parks Area Assumption[b]	Assumed Recycled Water Availability	Residential – Very Low Density						Residential – Low Density						Residential – Medium Density						
				Dwelling Units	*Total Acres*	Residential Acres	Assumed Park Acres	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Dwelling Units	*Total Acres*	Residential Acres	Assumed Park Acres	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Dwelling Units	*Total Acres*	Residential Acres	Assumed Park Acres	Assumed Other Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]
UR 5 (Bright)	TAZ Spreadsheet	✓	✓							174	40.0	35.5	4.5	78.7	18.9	342	38.1	28.1	4.3	5.7	111.9	42.0
UR 7 (Bright/Castro)	TAZ Spreadsheet	✓	✓							174	40.0	35.5	4.5	78.7	18.9	432	48.0	35.4	5.4	7.2	141.3	53.0
Rocking Horse	Hydraulic Analysis TM		✓							226	56.7	56.7		102.2								
Tracy Village[f]	Hydraulic Analysis TM		✓							600	96.2	96.2		271.4								
UR 1	TAZ Spreadsheet	✓								450	103.4	91.9	11.6	254.8		250	27.8	20.5	3.1	4.2	106.6	
Ellis[g,h]	Hydraulic Analysis TM		✓							958	213.5	213.5		433.3								
Avenues	Hydraulic Analysis TM		✓							480	90.4	90.4		217.1								
UR 10	TAZ Spreadsheet	✓	✓																			
Tracy Hills[i]	Hydraulic Analysis TM, TAZ Spreadsheet	✓	✓	100	66.7	59.2	7.5	53.2	31.4	3,111	737.1	695.7	41.4	1,407.0	174.3	1,841	232.4	180.3	17.2	34.9	602.2	219.3
Westside Ranch	Westside Draft Specific Plan	✓	✓													2,130	210.0	155.0	23.5	31.5	696.8	231.7
Cordes Ranch[j]	Hydraulic Analysis TM, TAZ Spreadsheet	✓	✓																			
UR 4 (Bright Triangle)	TAZ Spreadsheet	✓	✓																			
UR 3 (Catellus)	TAZ Spreadsheet	✓	✓																			
I-205 Expansion	TAZ Spreadsheet	✓	✓													378	42.0	31.0	4.7	6.3	123.7	46.3
West Side Industrial	TAZ Spreadsheet	✓	✓																			
East Side Industrial	TAZ Spreadsheet	✓																				
Larch-Clover	TAZ Spreadsheet	✓	✓																			
Chrisman Road	TAZ Spreadsheet	✓																				
Rocha	TAZ Spreadsheet	✓																				
Berg/Byron Remainder	TAZ Spreadsheet	✓																				
Berg Road Subdivision	Hydraulic Analysis TM															71	9.9	8.4		1.5	27.2	
SWC Valpico & Corral Hollow	TAZ Spreadsheet	✓	✓																			
Kagehiro[g,k]	Email from City Planning Division									252	47.0	47.0		114.0								
Dobler/Maibes	TAZ Spreadsheet	✓	✓																			
Holly Sugar Industrial	TAZ Spreadsheet	✓	✓																			
Northeast Industrial Area	Hydraulic Analysis TM																					
Industrial Areas Specific Plan	TAZ Spreadsheet																					
I-205 Corridor Specific Plan	TAZ Spreadsheet																					
Home 2 Suites	Hydraulic Analysis TM																					
Sierra Hills	Hydraulic Analysis TM																					
Grant Line Road Apartments	Hydraulic Analysis TM																					
Aspire II	Hydraulic Analysis TM																					
Harvest	Hydraulic Analysis TM																					
321 E. Grant Line Rd Apartments	Hydraulic Analysis TM																					
Barcelona Infill	Hydraulic Analysis TM									51	10.2	10.2		23.1								
Mountain View	Tracy Municipal Services Review, June 2019			165	156.0	156.0		87.7														
Tracy Combined Cycle Power Plant RW Conversion[l]	Hydraulic Analysis TM		✓																			
Legacy Fields[m]	Hydraulic Analysis TM		✓																			
Parks RW Conversion[n]	2017 Irrigation Meters		✓																			
Infill (misc.)	TAZ Spreadsheet									14	3.2	3.2		6.3								
			Total	**265**	**223**	**215**	**7**	**141**	**31**	**6,490**	**1,438**	**1,376**	**62**	**2,987**	**212**	**5,444**	**608**	**459**	**58**	**91**	**1,810**	**592**

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Hydraulic Analysis TM - data from a previously prepared hydraulic analysis technical memorandum prepared by either West Yost Associates or Blackwater Consulting Engineers, Inc.

(b) For selected projects and development areas, it was assumed that 11.2% of the total acres in very low, low, and medium density residential land uses will be developed as parks. These park acres are in addition to the identified parks in the Rocking Horse, Ellis, Avenues, Tracy Hills Phase 1, and Legacy Fields developments. If available, recycled water was used to meet park demands.
(c) Includes 9.6% Unaccounted-for Water (UAFW).
(d) Includes 5.0% UAFW.
(e) Assumes that 15 percent of total gross acres will be landscaped and irrigated. If available, recycled water was used to meet irrigated area demands.
(f) Miscellaneous potable water demands for Tracy Village are from existing residential units to be annexed as part of the Project. Miscellaneous recycled water demand for Tracy Village is to fill the lakes which will be constructed as part of the project.
(g) Projected land use data includes dwelling units and acreage developed by 2017.
(h) Land use data for Ellis includes dwelling units constructed by 2017. Miscellaneous potable water demand for Ellis represents projected demands for the Aquatic Center minus 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(i) Land use data from hydraulic analysis TMs was used for Tracy Hills Phase 1. The parks acreage assumption was not applied to Tracy Hills Phase 1 because the available land use data specifically identified parks. The parks acreage assumption was applied to the remaining phases of Tracy Hills, which used land use data from the TAZ spreadsheet.
(j) Miscellaneous water use for Cordes Ranch represents the transfer of 2017 metered potable irrigation demands to recycled water demands once recycled water service is extended to Cordes Ranch.
(k) Land use data for Kagehiro includes dwelling units constructed by 2017. Miscellaneous potable water demand for Kagehiro represents 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(l) Demands for the Tracy Combined Cycle Power Plant Recycled Water Conversion are from City of Tracy Recycled Water Project - Projected Recycled Water Demands TM, West Yost Associates, October 11, 2016.
(m) Remaining Legacy Fields acreage to be developed is from the City of Tracy Parks Master Plan, Table A-1, April 2013. Projected demands for Legacy Fields are equal to total demands projected in the Water Supply Assessment for the Holly Sugar Sports Park (West Yost Associates, June 2009) minus the existing recycled water demand for Legacy Fields.
(n) Represents the transfer of 2017 metered potable demands for selected existing parks and irrigated areas to recycled water demands. Projected recycled water demands for these areas are larger than existing potable water demands due to current potable water conservation practices. Refer to Chapter 9 for a full list of irrigated areas projected to be converted to recycled water use.

Table A-3. 2040 Time Frame - Land Use Assumptions and Projected Water Demands for New Developments

	Residential – High Density						Residential – Very High Density						Commercial					Office				
Project or Development Area	Dwelling Units	*Total Acres*	Residential Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Dwelling Units	*Total Acres*	Residential Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	Commercial Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	Office Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]
UR 5 (Bright)	370	20.0	17.0	3.0	85.7	12.6																
UR 7 (Bright/Castro)																						
Rocking Horse																						
Tracy Village[f]													4.0	3.4	0.6	6.8	2.5					
UR 1	150	11.5	9.8	1.7	39.4								10.0	8.5	1.5	20.1						
Ellis[g,h]													14.8	12.6	2.2	25.0	9.3					
Avenues																						
UR 10																						
Tracy Hills[i]	125	7.0	6.0	1.1	29.0	4.4							40.6	34.5	6.1	68.7	25.6	45.5	38.7	6.8	64.2	28.7
Westside Ranch	414	26.0	22.1	3.9	95.9	16.4							149.0	126.7	22.4	252.2	94.1					
Cordes Ranch[j]													55.0	46.8	8.3	93.1	34.7	69.0	58.7	10.4	97.3	43.6
UR 4 (Bright Triangle)																						
UR 3 (Catellus)																						
I-205 Expansion	496	29.0	24.6	4.3	114.9	18.3							50.0	42.5	7.5	84.6	31.6					
West Side Industrial																						
East Side Industrial													5.0	4.3	0.8	10.0						
Larch-Clover													10.0	8.5	1.5	16.9	6.3					
Chrisman Road																						
Rocha																						
Berg/Byron Remainder	72	5.0	4.3	0.8	18.7																	
Berg Road Subdivision																						
SWC Valpico & Corral Hollow																						
Kagehiro[g,k]																						
Dobler/Maibes													23.0	19.6	3.5	38.9	14.5					
Holly Sugar Industrial													18.0	15.3	2.7	30.5	11.4					
Northeast Industrial Area																						
Industrial Areas Specific Plan													32.0	27.2	4.8	64.2						
I-205 Corridor Specific Plan													37.7	32.0	5.7	75.7						
Home 2 Suites							110	2.6	2.2	0.4	18.5							0.6	0.5	0.1	1.1	
Sierra Hills	300	11.6	9.9	1.7	74.1																	
Grant Line Road Apartments	448	20.0	17.0	3.0	111.8																	
Aspire II	47	2.3	2.0	0.3	11.8																	
Harvest	300	17.9	15.2	2.7	76.6																	
321 E. Grant Line Rd Apartments	40	1.7	1.4	0.3	9.9																	
Barcelona Infill																						
Mountain View																						
Tracy Combined Cycle Power Plant RW Conversion[l]																						
Legacy Fields[m]																						
Parks RW Conversion[n]																						
Infill (misc.)	538	28.7	24.4	4.3	136.1								99.4	84.5	14.9	199.6						
Total	**3,300**	**181**	**154**	**27**	**804**	**52**	**110**	**3**	**2**	**0**	**18**		**549**	**466**	**82**	**986**	**230**	**115**	**98**	**17**	**163**	**72**

(a) Data Source abbreviations:
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Hydraulic Analysis TM - data from a previously prepared hydraulic analysis technical memorandum prepared by either West Yost Associates or Blackwater Consulting Engineers, Inc.

(b) For selected projects and development areas, it was assumed that 11.2% of the total acres in very low, low, and medium density residential land uses will be developed as parks. These park acres are in addition to the identified parks in the Rocking Horse, Ellis, Avenues, Tracy Hills Phase 1, and Legacy Fields developments. If available, recycled water was used to meet park demands.
(c) Includes 9.6% Unaccounted-for Water (UAFW).
(d) Includes 5.0% UAFW.
(e) Assumes that 15 percent of total gross acres will be landscaped and irrigated. If available, recycled water was used to meet irrigated area demands.
(f) Miscellaneous potable water demands for Tracy Village are from existing residential units to be annexed as part of the Project. Miscellaneous recycled water demand for Tracy Village is to fill the lakes which will be constructed as part of the project.
(g) Projected land use data includes dwelling units and acreage developed by 2017.
(h) Land use data for Ellis includes dwelling units constructed by 2017. Miscellaneous potable water demand for Ellis represents projected demands for the Aquatic Center minus 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(i) Land use data from hydraulic analysis TMs was used for Tracy Hills Phase 1. The parks acreage assumption was not applied to Tracy Hills Phase 1 because the available land use data specifically identified parks. The parks acreage assumption was applied to the remaining phases of Tracy Hills, which used land use data from the TAZ spreadsheet.
(j) Miscellaneous water use for Cordes Ranch represents the transfer of 2017 metered potable irrigation demands to recycled water demands once recycled water service is extended to Cordes Ranch.
(k) Land use data for Kagehiro includes dwelling units constructed by 2017. Miscellaneous potable water demand for Kagehiro represents 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(l) Demands for the Tracy Combined Cycle Power Plant Recycled Water Conversion are from City of Tracy Recycled Water Project - Projected Recycled Water Demands TM, West Yost Associates, October 11, 2016.
(m) Remaining Legacy Fields acreage to be developed is from the City of Tracy Parks Master Plan, Table A-1, April 2013. Projected demands for Legacy Fields are equal to total demands projected in the Water Supply Assessment for the Holly Sugar Sports Park (West Yost Associates, June 2009) minus the existing recycled water demand for Legacy Fields.
(n) Represents the transfer of 2017 metered potable demands for selected existing parks and irrigated areas to recycled water demands. Projected recycled water demands for these areas are larger than existing potable water demands due to current potable water conservation practices. Refer to Chapter 9 for a full list of irrigated areas projected to be converted to recycled water use.

Table A-3. 2040 Time Frame - Land Use Assumptions and Projected Water Demands for New Developments

	Industrial					Institutional					Identified Parks			Misc. Water Demands					
Project or Development Area	*Total Acres*	Industrial Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	Institutional Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	PW Demand, af/yr[c]	RW Demand, af/yr[d]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Total Dwelling Units	Total Area, acres	Total Potable Water Demand, af/yr	Total Recycled Water Demand, af/yr
UR 5 (Bright)																886	98.1	276.3	73.5
UR 7 (Bright/Castro)																606	88.0	220.0	71.8
Rocking Horse											2.4		10.1			226	59.1	102.2	10.1
Tracy Village[f]														17.7	156.0	600	100.2	295.8	158.5
UR 1																850	152.8	420.8	
Ellis[g,h]	28.8	24.5	4.3	35.2	18.2	16.0	13.6	2.4	22.6	10.1	16.7		70.3	-29		958	289.8	486.7	108.0
Avenues											4.6		19.4			480	95.0	217.1	19.4
UR 10																			
Tracy Hills[i]	196.0	166.6	29.4	239.6	123.8	18.6	15.8	2.8	26.2	11.7	27.9		117.5			5,177	1,371.7	2,490.1	736.9
Westside Ranch						150.0	127.5	22.5	211.6	94.7						2,544	535.0	1,256.4	436.9
Cordes Ranch[j]	1,219.7	1,036.7	183.0	1,490.9	770.3									-84	83.8		1,343.7	1,597.5	932.5
UR 4 (Bright Triangle)																			
UR 3 (Catellus)																			
I-205 Expansion																874	121.0	323.2	96.2
West Side Industrial	650.0	552.5	97.5	794.5	410.5												650.0	794.5	410.5
East Side Industrial	363.0	308.6	54.5	558.2													368.0	568.2	
Larch-Clover																	10.0	16.9	6.3
Chrisman Road																			
Rocha																			
Berg/Byron Remainder																72	5.0	18.7	
Berg Road Subdivision																71	9.9	27.2	
SWC Valpico & Corral Hollow																			
Kagehiro[g,k]														-24		252	47.0	89.8	
Dobler/Maibes																	23.0	38.9	14.5
Holly Sugar Industrial	125.0	106.3	18.8	152.8	78.9												143.0	183.3	90.3
Northeast Industrial Area	468.0	397.8	70.2	719.6													468.0	719.6	
Industrial Areas Specific Plan	4.8	4.1	0.7	7.4													36.8	71.6	
I-205 Corridor Specific Plan																	37.7	75.7	
Home 2 Suites																110	3.2	19.6	
Sierra Hills																300	11.6	74.1	
Grant Line Road Apartments																448	20.0	111.8	
Aspire II																47	2.3	11.8	
Harvest																300	17.9	76.6	
321 E. Grant Line Rd Apartments																40	1.7	9.9	
Barcelona Infill																51	10.2	23.1	
Mountain View																165	156.0	87.7	
Tracy Combined Cycle Power Plant RW Conversion[l]															33.7				33.7
Legacy Fields[m]											228.5	52.3	397.9				228.5	52.3	397.9
Parks RW Conversion[n]														-318	458.1			-318	458.1
Infill (misc.)	81.0	68.9	12.2	124.5		2.7	2.3	0.4	4.7							552	215.1	471.3	
Total	**3,136**	**2,666**	**470**	**4,123**	**1,402**	**187**	**159**	**28**	**265**	**117**	**280**	**52**	**615**	**-438**	**732**	**15,609**	**6,719**	**10,911**	**4,055**

(a) Data Source abbreviations:
TAZ Spreadsheet - data from Land Uses with TAZ Estimates_06_23_2021_2025_2040_BU_Independent.xlsx spreadsheet received from the City Planning Division in June 2021 (Table A-1).
Hydraulic Analysis TM - data from a previously prepared hydraulic analysis technical memorandum prepared by either West Yost Associates or Blackwater Consulting Engineers, Inc.

(b) For selected projects and development areas, it was assumed that 11.2% of the total acres in very low, low, and medium density residential land uses will be developed as parks. These park acres are in addition to the identified parks in the Rocking Horse, Ellis, Avenues, Tracy Hills Phase 1, and Legacy Fields developments. If available, recycled water was used to meet park demands.
(c) Includes 9.6% Unaccounted-for Water (UAFW).
(d) Includes 5.0% UAFW.
(e) Assumes that 15 percent of total gross acres will be landscaped and irrigated. If available, recycled water was used to meet irrigated area demands.
(f) Miscellaneous potable water demands for Tracy Village are from existing residential units to be annexed as part of the Project. Miscellaneous recycled water demand for Tracy Village is to fill the lakes which will be constructed as part of the project.
(g) Projected land use data includes dwelling units and acreage developed by 2017.
(h) Land use data for Ellis includes dwelling units constructed by 2017. Miscellaneous potable water demand for Ellis represents projected demands for the Aquatic Center minus 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(i) Land use data from hydraulic analysis TMs was used for Tracy Hills Phase 1. The parks acreage assumption was not applied to Tracy Hills Phase 1 because the available land use data specifically identified parks. The parks acreage assumption was applied to the remaining phases of Tracy Hills, which used land use data from the TAZ spreadsheet.
(j) Miscellaneous water use for Cordes Ranch represents the transfer of 2017 metered potable irrigation demands to recycled water demands once recycled water service is extended to Cordes Ranch.
(k) Land use data for Kagehiro includes dwelling units constructed by 2017. Miscellaneous potable water demand for Kagehiro represents 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(l) Demands for the Tracy Combined Cycle Power Plant Recycled Water Conversion are from City of Tracy Recycled Water Project - Projected Recycled Water Demands TM, West Yost Associates, October 11, 2016.
(m) Remaining Legacy Fields acreage to be developed is from the City of Tracy Parks Master Plan, Table A-1, April 2013. Projected demands for Legacy Fields are equal to total demands projected in the Water Supply Assessment for the Holly Sugar Sports Park (West Yost Associates, June 2009) minus the existing recycled water demand for Legacy Fields.
(n) Represents the transfer of 2017 metered potable demands for selected existing parks and irrigated areas to recycled water demands. Projected recycled water demands for these areas are larger than existing potable water demands due to current potable water conservation practices. Refer to Chapter 9 for a full list of irrigated areas projected to be converted to recycled water use.

Table A-4. Buildout Time Frame - Land Use Assumptions and Projected Water Demands for New Developments

Project or Development Area	Data Source(s)[a]	Parks Area Assumption[b]	Assumed Recycled Water Availability	Residential – Very Low Density						Residential – Low Density						Residential – Medium Density						
				Dwelling Units	*Total Acres*	Residential Acres	Assumed Park Acres	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Dwelling Units	*Total Acres*	Residential Acres	Assumed Park Acres	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Dwelling Units	*Total Acres*	Residential Acres	Assumed Park Acres	Assumed Other Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]
UR 5 (Bright)	TAZ Spreadsheet	✓	✓							174	40.0	35.5	4.5	78.7	18.9	342	38.1	28.1	4.3	5.7	111.9	42.0
UR 7 (Bright/Castro)	TAZ Spreadsheet	✓	✓							174	40.0	35.5	4.5	78.7	18.9	432	48.0	35.4	5.4	7.2	141.3	53.0
Rocking Horse	Hydraulic Analysis TM		✓							226	56.7	56.7		102.2								
Tracy Village[f]	Hydraulic Analysis TM		✓							600	96.2	96.2		271.4								
UR 1	TAZ Spreadsheet	✓	✓	570	380.0	337.4	42.6	303.0	179.2	1,255	288.5	256.2	32.3	567.6	136.1	535	59.4	43.9	6.7	8.9	175.0	65.6
Ellis[g,h]	Hydraulic Analysis TM		✓							958	213.5	213.5		433.3								
Avenues	Hydraulic Analysis TM		✓							480	90.4	90.4		217.1								
UR 10	TAZ Spreadsheet	✓	✓																			
Tracy Hills[i]	Hydraulic Analysis TM, TAZ Spreadsheet	✓	✓	122	81.3	72.2	9.1	64.9	38.4	3,439	812.5	762.7	49.8	1,555.4	209.9	3,491	415.7	315.6	37.8	62.4	1,142.0	421.6
Westside	Westside Draft Specific Plan	✓	✓													2,130	210.0	155.0	23.5	31.5	696.8	231.7
Cordes Ranch[j]	Hydraulic Analysis TM, TAZ Spreadsheet	✓	✓																			
UR 4 (Bright Triangle)	TAZ Spreadsheet	✓	✓																			
UR 3 (Sandhu)	TAZ Spreadsheet	✓	✓	60	40.0	35.5	4.5	31.9	18.9													
I-205 Expansion	TAZ Spreadsheet	✓	✓													378	42.0	31.0	4.7	6.3	123.7	46.3
West Side Industrial	TAZ Spreadsheet	✓	✓																			
East Side Industrial	TAZ Spreadsheet	✓	✓																			
Larch-Clover	TAZ Spreadsheet	✓	✓	375	250.0	222.0	28.0	199.3	117.9	174	40.0	35.5	4.5	78.7	18.9	360	40.0	29.5	4.5	6.0	117.8	44.1
Chrisman Road	TAZ Spreadsheet	✓	✓																			
Rocha	TAZ Spreadsheet	✓	✓							296	68.0	60.4	7.6	133.9	32.1							
Berg/Byron Remainder	TAZ Spreadsheet	✓														411	39.0	28.8	4.4	5.9	169.3	
Berg Road Subdivision	Hydraulic Analysis TM															71	9.9	8.4		1.5	27.2	
SWC Valpico & Corral Hollow	TAZ Spreadsheet	✓	✓							282	65.0	57.7	7.3	127.5	30.7							
Kagehiro[g,k]	Email from City Planning Division									252	47.0	47.0		114.0								
Dobler/Maibes	TAZ Spreadsheet	✓	✓																			
Holly Sugar Industrial	TAZ Spreadsheet	✓	✓																			
Northeast Industrial Area	Hydraulic Analysis TM																					
Industrial Areas Specific Plan	TAZ Spreadsheet																					
I-205 Corridor Specific Plan	TAZ Spreadsheet																					
Home 2 Suites	Hydraulic Analysis TM																					
Sierra Hills	Hydraulic Analysis TM																					
Grant Line Road Apartments	Hydraulic Analysis TM																					
Aspire II	Hydraulic Analysis TM																					
Harvest	Hydraulic Analysis TM																					
321 E. Grant Line Rd Apartments	Hydraulic Analysis TM																					
Barcelona Infill	Hydraulic Analysis TM									51	10.2	10.2		23.1								
Mountain View	Tracy Municipal Services Review, June 2019			165	156.0	156.0		87.7														
Tracy Combined Cycle Power Plant RW Conversion[l]	Hydraulic Analysis TM		✓																			
Legacy Fields[m]	Hydraulic Analysis TM		✓																			
Parks RW Conversion[n]	2017 Irrigation Meters		✓																			
Infill (misc.)	TAZ Spreadsheet									14	3.2	3.2		6.3								
			Total	**1,292**	**907**	**823**	**84**	**687**	**354**	**8,375**	**1,871**	**1,761**	**110**	**3,788**	**465**	**8,150**	**902**	**676**	**91**	**135**	**2,705**	**904**

(a) Data Source abbreviations:
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Hydraulic Analysis TM - data from a previously prepared hydraulic analysis technical memorandum prepared by either West Yost Associates or Blackwater Consulting Engineers, Inc.

(b) For selected projects and development areas, it was assumed that 11.2% of the total acres in very low, low, and medium density residential land uses will be developed as parks. These park acres are in addition to the identified parks in the Rocking Horse, Ellis, Avenues, Tracy Hills Phase 1, and Legacy Fields developments. If available, recycled water was used to meet park demands.
(c) Includes 9.6% Unaccounted-for Water (UAFW).
(d) Includes 5.0% UAFW.
(e) Assumes that 15 percent of total gross acres will be landscaped and irrigated. If available, recycled water was used to meet irrigated area demands.
(f) Miscellaneous potable water demands for Tracy Village are from existing residential units to be annexed as part of the Project. Miscellaneous recycled water demand for Tracy Village is to fill the lakes which will be constructed as part of the project.
(g) Projected land use data includes dwelling units and acreage developed by 2017.
(h) Land use data for Ellis includes dwelling units constructed by 2017. Miscellaneous potable water demand for Ellis represents projected demands for the Aquatic Center minus 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(i) Land use data from hydraulic analysis TMs was used for Tracy Hills Phase 1. The parks acreage assumption was not applied to Tracy Hills Phase 1 because the available land use data specifically identified parks. The parks acreage assumption was applied to the remaining phases of Tracy Hills, which used land use data from the TAZ spreadsheet.
(j) Miscellaneous water use for Cordes Ranch represents the transfer of 2017 metered potable irrigation demands to recycled water demands once recycled water service is extended to Cordes Ranch.
(k) Land use data for Kagehiro includes dwelling units constructed by 2017. Miscellaneous potable water demand for Kagehiro represents 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(l) Demands for the Tracy Combined Cycle Power Plant Recycled Water Conversion are from City of Tracy Recycled Water Project - Projected Recycled Water Demands TM, West Yost Associates, October 11, 2016.
(m) Remaining Legacy Fields acreage to be developed is from the City of Tracy Parks Master Plan, Table A-1, April 2013. Projected demands for Legacy Fields are equal to total demands projected in the Water Supply Assessment for the Holly Sugar Sports Park (West Yost Associates, June 2009) minus the existing recycled water demand for Legacy Fields.
(n) Represents the transfer of 2017 metered potable demands for selected existing parks and irrigated areas to recycled water demands. Projected recycled water demands for these areas are larger than existing potable water demands due to current potable water conservation practices. Refer to Chapter 9 for a full list of irrigated areas projected to be converted to recycled water use.

Table A-4. Buildout Time Frame - Land Use Assumptions and Projected Water Demands for New Developments

Project or Development Area	Residential – High Density						Residential – Very High Density						Commercial					Office				
	Dwelling Units	*Total Acres*	Residential Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Dwelling Units	*Total Acres*	Residential Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	Commercial Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	Office Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]
UR 5 (Bright)	370	20.0	17.0	3.0	85.7	12.6							10.0	8.5	1.5	16.9	6.3					
UR 7 (Bright/Castro)																						
Rocking Horse																						
Tracy Village[f]													4.0	3.4	0.6	6.8	2.5					
UR 1	519	39.9	33.9	6.0	120.3	25.2							30.0	25.5	4.5	50.8	18.9					
Ellis[g,h]													14.8	12.6	2.2	25.0	9.3					
Avenues																						
UR 10																						
Tracy Hills[i]	125	7.0	6.0	1.1	29.0	4.4							40.6	34.5	6.1	68.7	25.6	45.5	38.7	6.8	64.2	28.7
Westside	414	26.0	22.1	3.9	95.9	16.4							149.0	126.7	22.4	252.2	94.1					
Cordes Ranch[i]													55.0	46.8	8.3	93.1	34.7	126.0	107.1	18.9	177.7	79.6
UR 4 (Bright Triangle)	816	34.0	28.9	5.1	189.1	21.5							80.0	68.0	12.0	135.4	50.5	44.0	37.4	6.6	62.1	27.8
UR 3 (Sandhu)													45.0	38.3	6.8	76.2	28.4	40.0	34.0	6.0	56.4	25.3
I-205 Expansion	1,370	80.0	68.0	12.0	317.4	50.5							50.0	42.5	7.5	84.6	31.6					
West Side Industrial																						
East Side Industrial													5.0	4.3	0.8	8.5	3.2					
Larch-Clover	288	12.0	10.2	1.8	66.7	7.6							110.0	93.5	16.5	186.2	69.5					
Chrisman Road													13.0	11.1	2.0	22.0	8.2					
Rocha	431	23.0	19.6	3.5	99.9	14.5																
Berg/Byron Remainder	72	5.0	4.3	0.8	18.7																	
Berg Road Subdivision																						
SWC Valpico & Corral Hollow																						
Kagehiro[g,k]																						
Dobler/Maibes													23.0	19.6	3.5	38.9	14.5					
Holly Sugar Industrial													18.0	15.3	2.7	30.5	11.4					
Northeast Industrial Area																						
Industrial Areas Specific Plan	520	27.7	23.6	4.2	131.5								32.0	27.2	4.8	64.2						
I-205 Corridor Specific Plan													37.7	32.0	5.7	75.7						
Home 2 Suites							110	2.6	2.2	0.4	18.5							0.6	0.5	0.1	1.1	
Sierra Hills	300	11.6	9.9	1.7	74.1																	
Grant Line Road Apartments	448	20.0	17.0	3.0	111.8																	
Aspire II	47	2.3	2.0	0.3	11.8																	
Harvest	300	17.9	15.2	2.7	76.6																	
321 E. Grant Line Rd Apartments	40	1.7	1.4	0.3	9.9																	
Barcelona Infill																						
Mountain View																						
Tracy Combined Cycle Power Plant RW Conversion[l]																						
Legacy Fields[m]																						
Parks RW Conversion[n]																						
Infill (misc.)	973	51.9	44.1	7.8	246.1								100.4	85.3	15.1	201.6						
Total	**7,033**	**380**	**323**	**57**	**1,685**	**153**	**110**	**3**	**2**	**0**	**18**		**818**	**695**	**123**	**1,437**	**409**	**256**	**218**	**38**	**361**	**161**

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(c) Includes 9.6% Unaccounted-for Water (UAFW).
(d) Includes 5.0% UAFW.
(e) Assumes that 15 percent of total gross acres will be landscaped and irrigated. If available, recycled water was used to meet irrigated area demands.
(f) Miscellaneous potable water demands for Tracy Village are from existing residential units to be annexed as part of the Project. Miscellaneous recycled water demand for Tracy Village is to fill the lakes which will be constructed as part of the project.
(g) Projected land use data includes dwelling units and acreage developed by 2017.
(h) Land use data for Ellis includes dwelling units constructed by 2017. Miscellaneous potable water demand for Ellis represents projected demands for the Aquatic Center minus 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(i) Land use data from hydraulic analysis TMs was used for Tracy Hills Phase 1. The parks acreage assumption was not applied to Tracy Hills Phase 1 because the available land use data specifically identified parks. The parks acreage assumption was applied to the remaining phases of Tracy Hills, which used land use data from the TAZ spreadsheet.
(j) Miscellaneous water use for Cordes Ranch represents the transfer of 2017 metered potable irrigation demands to recycled water demands once recycled water service is extended to Cordes Ranch.
(k) Land use data for Kagehiro includes dwelling units constructed by 2017. Miscellaneous potable water demand for Kagehiro represents 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(l) Demands for the Tracy Combined Cycle Power Plant Recycled Water Conversion are from City of Tracy Recycled Water Project - Projected Recycled Water Demands TM, West Yost Associates, October 11, 2016.
(m) Remaining Legacy Fields acreage to be developed is from the City of Tracy Parks Master Plan, Table A-1, April 2013. Projected demands for Legacy Fields are equal to total demands projected in the Water Supply Assessment for the Holly Sugar Sports Park (West Yost Associates, June 2009) minus the existing recycled water demand for Legacy Fields.
(n) Represents the transfer of 2017 metered potable demands for selected existing parks and irrigated areas to recycled water demands. Projected recycled water demands for these areas are larger than existing potable water demands due to current potable water conservation practices. Refer to Chapter 9 for a full list of irrigated areas projected to be converted to recycled water use.

Table A-4. Buildout Time Frame - Land Use Assumptions and Projected Water Demands for New Developments

	Industrial					Institutional					Identified Parks			Misc. Water Demands					
Project or Development Area	*Total Acres*	Industrial Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	Institutional Acres	Assumed Irrigated Acres[e]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	*Total Acres*	PW Demand, af/yr[c]	RW Demand, af/yr[d]	PW Demand, af/yr[c]	RW Demand, af/yr[d]	Total Dwelling Units	Total Area, acres	Total Potable Water Demand, af/yr	Total Recycled Water Demand, af/yr
UR 5 (Bright)																886	108.1	293.2	79.9
UR 7 (Bright/Castro)																606	88.0	220.0	71.8
Rocking Horse											2.4		10.1			226	59.1	102.2	10.1
Tracy Village[f]														17.7	156.0	600	100.2	295.8	158.5
UR 1																2,879	797.9	1,216.6	425.0
Ellis[g,h]	28.8	24.5	4.3	35.2	18.2	16.0	13.6	2.4	22.6	10.1	16.7		70.3	7.1		958	289.8	523.2	108.0
Avenues											4.6		19.4			480	95.0	217.1	19.4
UR 10	116.0	98.6	17.4	141.8	73.3												116.0	141.8	73.3
Tracy Hills[i]	308.0	261.8	46.2	376.5	194.5	18.6	15.8	2.8	26.2	11.7	27.9		117.5			7,177	1,757.2	3,326.8	1,052.4
Westside						150.0	127.5	22.5	211.6	94.7						2,544	535.0	1,256.4	436.9
Cordes Ranch[j]	1,219.7	1,036.7	183.0	1,490.9	770.3									-84	83.8		1,400.7	1,677.9	968.5
UR 4 (Bright Triangle)																816	158.0	386.5	99.8
UR 3 (Sandhu)	535.0	454.8	80.3	654.0	337.9											60	660.0	818.4	410.4
I-205 Expansion																1,748	172.0	525.7	128.4
West Side Industrial	650.0	552.5	97.5	794.5	410.5												650.0	794.5	410.5
East Side Industrial	363.0	308.6	54.5	443.7	229.3												368.0	452.2	232.4
Larch-Clover																1,197	452.0	648.7	257.9
Chrisman Road	100.0	85.0	15.0	122.2	63.2												113.0	144.2	71.4
Rocha																727	91.0	233.7	46.6
Berg/Byron Remainder																483	44.0	188.0	
Berg Road Subdivision																71	9.9	27.2	
SWC Valpico & Corral Hollow																282	65.0	127.5	30.7
Kagehiro[g,k]														-24		252	47.0	89.8	
Dobler/Maibes																	23.0	38.9	14.5
Holly Sugar Industrial	125.0	106.3	18.8	152.8	78.9												143.0	183.3	90.3
Northeast Industrial Area	468.0	397.8	70.2	719.6													468.0	719.6	
Industrial Areas Specific Plan	26.8	22.8	4.0	41.2												520	86.5	237.0	
I-205 Corridor Specific Plan																	37.7	75.7	
Home 2 Suites																110	3.2	19.6	
Sierra Hills																300	11.6	74.1	
Grant Line Road Apartments																448	20.0	111.8	
Aspire II																47	2.3	11.8	
Harvest																300	17.9	76.6	
321 E. Grant Line Rd Apartments																40	1.7	9.9	
Barcelona Infill																51	10.2	23.1	
Mountain View																165	156.0	87.7	
Tracy Combined Cycle Power Plant RW Conversion[l]															33.7				33.7
Legacy Fields[m]											228.5	52.3	397.9				228.5	52.3	397.9
Parks RW Conversion[n]														-432	593.5			-432	593.5
Infill (misc.)	153.0	130.1	23.0	235.3		2.7	2.3	0.4	4.7							987	311.3	694.0	
Total	**4,093**	**3,479**	**614**	**5,208**	**2,176**	**187**	**159**	**28**	**265**	**117**	**280**	**52**	**615**	**-516**	**867**	**24,960**	**9,698**	**15,691**	**6,222**

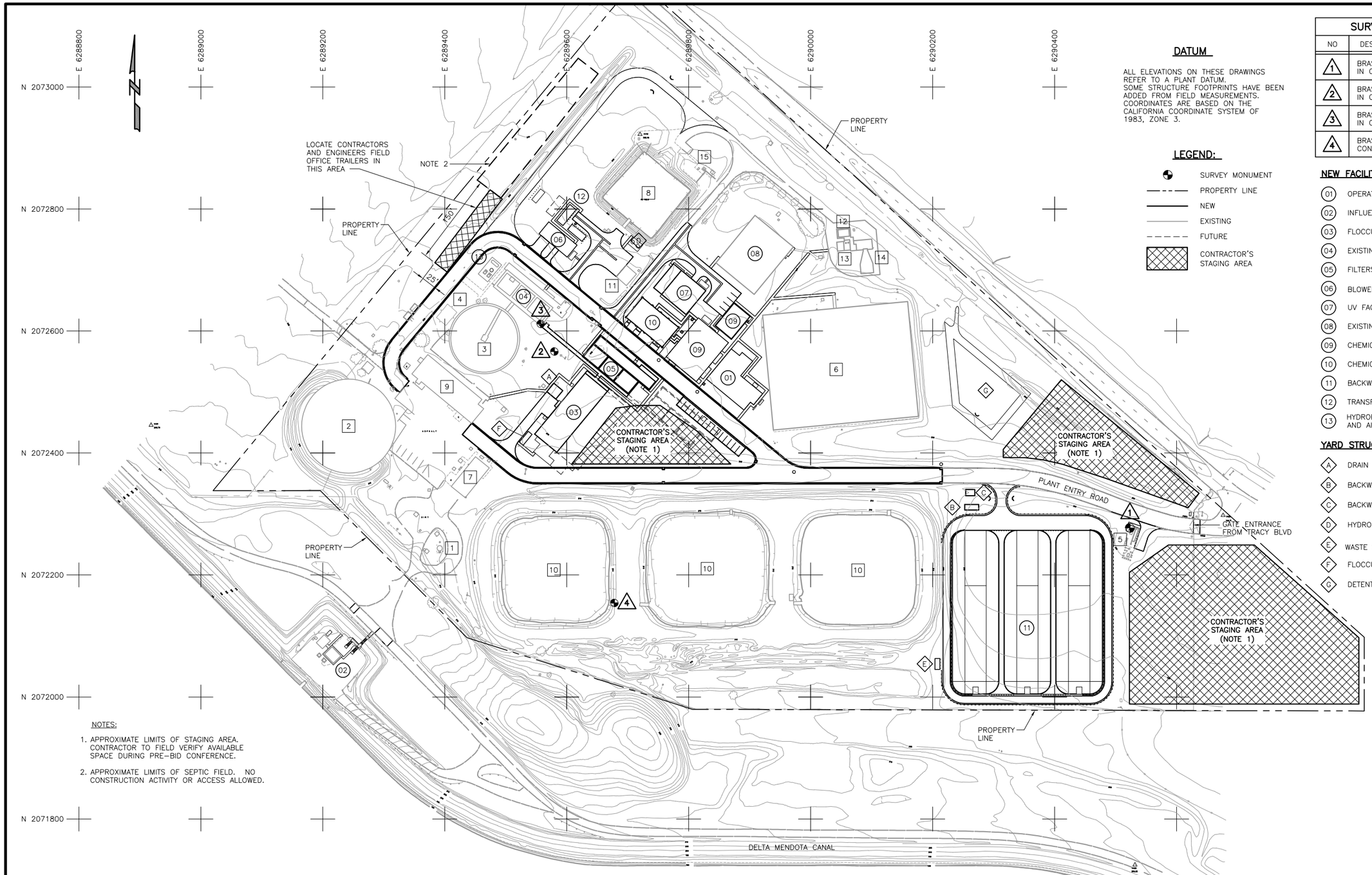
(a) Data Source abbreviations:
TAZ Spreadsheet - data from Land Uses with TAZ Estimates_06_23_2021_2025_2040_BU_Independent.xlsx spreadsheet received from the City Planning Division in June 2021 (Table A-1).
Hydraulic Analysis TM - data from a previously prepared hydraulic analysis technical memorandum prepared by either West Yost Associates or Blackwater Consulting Engineers, Inc.

(b) For selected projects and development areas, it was assumed that 11.2% of the total acres in very low, low, and medium density residential land uses will be developed as parks. These park acres are in addition to the identified parks in the Rocking Horse, Ellis, Avenues, Tracy Hills Phase 1, and Legacy Fields developments. If available, recycled water was used to meet park demands.
(c) Includes 9.6% Unaccounted-for Water (UAFW).
(d) Includes 5.0% UAFW.
(e) Assumes that 15 percent of total gross acres will be landscaped and irrigated. If available, recycled water was used to meet irrigated area demands.
(f) Miscellaneous potable water demands for Tracy Village are from existing residential units to be annexed as part of the Project. Miscellaneous recycled water demand for Tracy Village is to fill the lakes which will be constructed as part of the project.
(g) Projected land use data includes dwelling units and acreage developed by 2017.
(h) Land use data for Ellis includes dwelling units constructed by 2017. Miscellaneous potable water demand for Ellis represents projected demands for the Aquatic Center minus 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(i) Land use data from hydraulic analysis TMs was used for Tracy Hills Phase 1. The parks acreage assumption was not applied to Tracy Hills Phase 1 because the available land use data specifically identified parks. The parks acreage assumption was applied to the remaining phases of Tracy Hills, which used land use data from the TAZ spreadsheet.
(j) Miscellaneous water use for Cordes Ranch represents the transfer of 2017 metered potable irrigation demands to recycled water demands once recycled water service is extended to Cordes Ranch.
(k) Land use data for Kagehiro includes dwelling units constructed by 2017. Miscellaneous potable water demand for Kagehiro represents 2017 metered water use. The 2017 metered use was subtracted from the calculated water demands for the entire development to account for the portion of the development constructed by 2017.
(l) Demands for the Tracy Combined Cycle Power Plant Recycled Water Conversion are from City of Tracy Recycled Water Project - Projected Recycled Water Demands TM, West Yost Associates, October 11, 2016.
(m) Remaining Legacy Fields acreage to be developed is from the City of Tracy Parks Master Plan, Table A-1, April 2013. Projected demands for Legacy Fields are equal to total demands projected in the Water Supply Assessment for the Holly Sugar Sports Park (West Yost Associates, June 2009) minus the existing recycled water demand for Legacy Fields.
(n) Represents the transfer of 2017 metered potable demands for selected existing parks and irrigated areas to recycled water demands. Projected recycled water demands for these areas are larger than existing potable water demands due to current potable water conservation practices. Refer to Chapter 9 for a full list of irrigated areas projected to be converted to recycled water use.

APPENDIX B

JJWTP Expansion Project

Site Plan, Process Schematic, and Hydraulic Profile



DATUM

ALL ELEVATIONS ON THESE DRAWINGS REFER TO A PLANT DATUM. SOME STRUCTURE FOOTPRINTS HAVE BEEN ADDED FROM FIELD MEASUREMENTS. COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983, ZONE 3.

LEGEND:

- SURVEY MONUMENT
- PROPERTY LINE
- NEW
- EXISTING
- FUTURE
- CONTRACTOR'S STAGING AREA

SURVEY GRID MONUMENT DATA

NO	DESCRIPTION	COORDINATES	ELEVATION
1	BRASS DISK IN CONC SLAB	N 2072277.29 E 6290523.62	200.76
2	BRASS DISK IN CONC VAULT	N 2072566.47 E 6289579.75	204.54
3	BRASS DISK IN CONC SLAB	N 2072611.76 E 6289557.30	216.52
4	BRASS DISK IN CONC HEADWALL	N 2072154.17 E 6289678.10	211.72

NEW FACILITIES/MODIFICATIONS

- 01 OPERATIONS/CONTROL BUILDING
- 02 INFLUENT PUMP STATION MODIFICATIONS
- 03 FLOCCULATION / SEDIMENTATION SYSTEM
- 04 EXISTING FILTER NO.S 1 – 3 MODIFICATIONS
- 05 FILTERS NO.S 4 – 6
- 06 BLOWER AND ELECTRICAL DISTRIBUTION BUILDING
- 07 UV FACILITY / FILTER OVERFLOW STRUCTURE
- 08 EXISTING CLEARWELL NO.1 MODIFICATIONS
- 09 CHEMICAL BUILDING / CHLORINE SCRUBBER
- 10 CHEMICAL TANK FARM
- 11 BACKWASH WATER RECOVERY BASIN NO.1 – 3
- 12 TRANSFORMER/GENERATOR/FUEL TANK
- 13 HYDROPNEUMATIC TANK, AIR RECEIVER AND AIR BLOWER

YARD STRUCTURE

- A DRAIN PUMP STATION
- B BACKWASH WATER RECOVERY BASIN VALVE VAULT
- C BACKWASH WATER RECOVERY BASIN METER
- D HYDROPNEUMATIC TANK PAD
- E WASTE STREAM TREATMENT MCC PAD
- F FLOCCULATION / SEDIMENTATION MCC PAD
- G DETENTION POND

EXISTING FACILITIES

- 1 SURGE TOWER
- 2 EQUALIZATION TANK
- 3 REACTOR CLARIFIER
- 4 CONTROL METER VAULT
- 5 WELL NO.2
- 6 CLEARWELL NO.2
- 7 CHEMICAL FEED BUILDING
- 8 FTW RECOVERY POND *
- 9 CONTROL BUILDING
- 10 SLUDGE DRYING BED NO.1 – 3
- 11 SWITCHGEAR BUILDING
- 12 ZONE 1 BPS ELECTRICAL BUILDING
- 13 METER VAULT
- 14 ZONE 1 PUMP STATION
- 15 WELL NO.1

* FACILITY RENAMED AFTER IMPROVEMENTS

NOTES:

1. APPROXIMATE LIMITS OF STAGING AREA. CONTRACTOR TO FIELD VERIFY AVAILABLE SPACE DURING PRE-BID CONFERENCE.
2. APPROXIMATE LIMITS OF SEPTIC FIELD. NO CONSTRUCTION ACTIVITY OR ACCESS ALLOWED.

A – GENERAL SITE PLAN

SCALE: 1"= 80'
FILE: 00G011

REV	DATE	BY	DESCRIPTION
			CONFORMED DOCUMENTS FOR CONSTRUCTION

DESIGNED MAL
DRAWN DST
CHECKED WCL
DATE MAR 2005

DISCIPLINE ENGINEER: ** ORIGINAL STAMPED BY MATHEW AXEL LARSON **
PROJECT ENGINEER: ** ORIGINAL STAMPED BY SUZAN K. ENGLAND **
PARTNER: ** ORIGINAL STAMPED BY KENNETH WILKINS **

carollo engineers

CITY OF TRACY
JOHN JONES WTP – EXPANSION PROJECT
GENERAL
SITE PLAN

VERIFY SCALES
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0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

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DRAWING NO. G-12
SHEET NO. 12 OF 573

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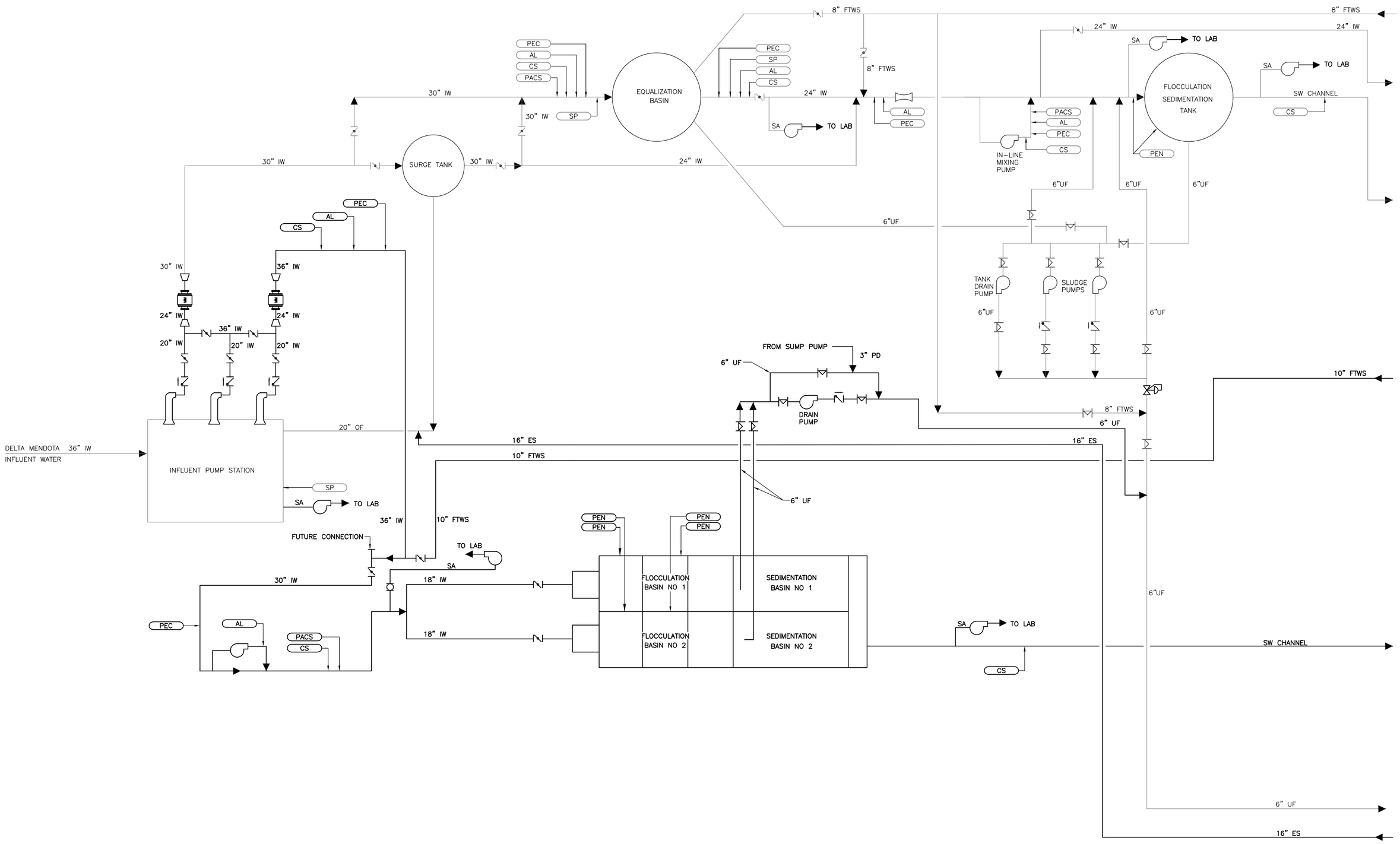

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED IN PART ON INFORMATION PROVIDED BY OTHERS

THIS DRAWING WAS PREPARED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON AND IS NOT TO BE USED ELSEWHERE

DESIGNED	MAL
DRAWN	SJB
CHECKED	BTF
DATE	MAR 2005

DISCIPLINE ENGINEER

PROJECT ENGINEER

PARTNER

carollo engineers

CITY OF TRACY

JOHN JONES WTP – EXPANSION PROJECT

GENERAL

PROCESS SCHEMATIC
SHEET 1 OF 2

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SHEET NO. 9 OF 573

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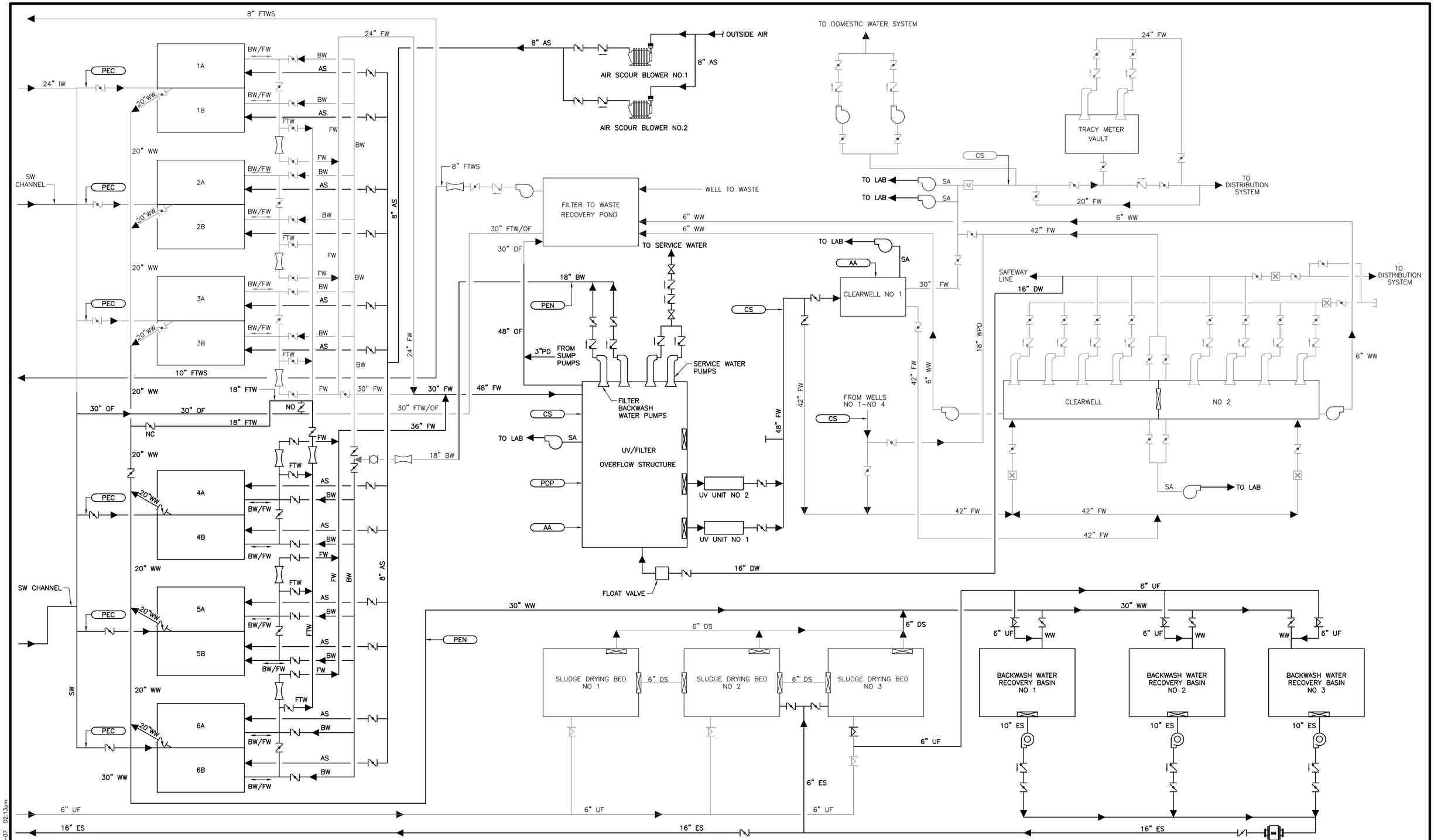

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED IN PART ON INFORMATION PROVIDED BY OTHERS

THIS DRAWING WAS PREPARED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON AND IS NOT TO BE USED ELSEWHERE

DESIGNED	MAL
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DATE	MAR 2005

DISCIPLINE ENGINEER

PROJECT ENGINEER

PARTNER

carollo engineers

CITY OF TRACY

JOHN JONES WTP – EXPANSION PROJECT

GENERAL

PROCESS SCHEMATIC
SHEET 2 OF 2

VERIFY SCALES

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SHEET NO. 10 OF 573

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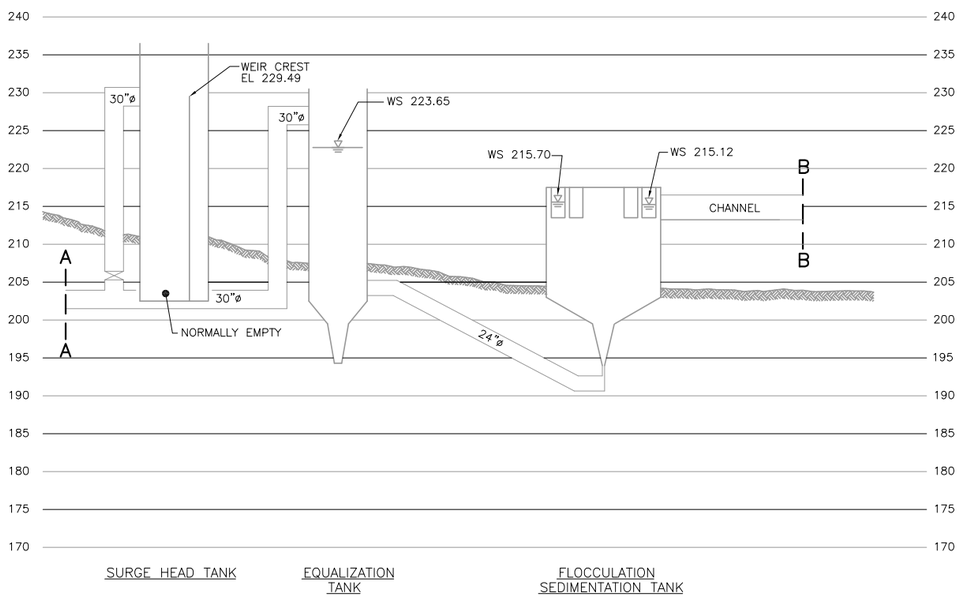

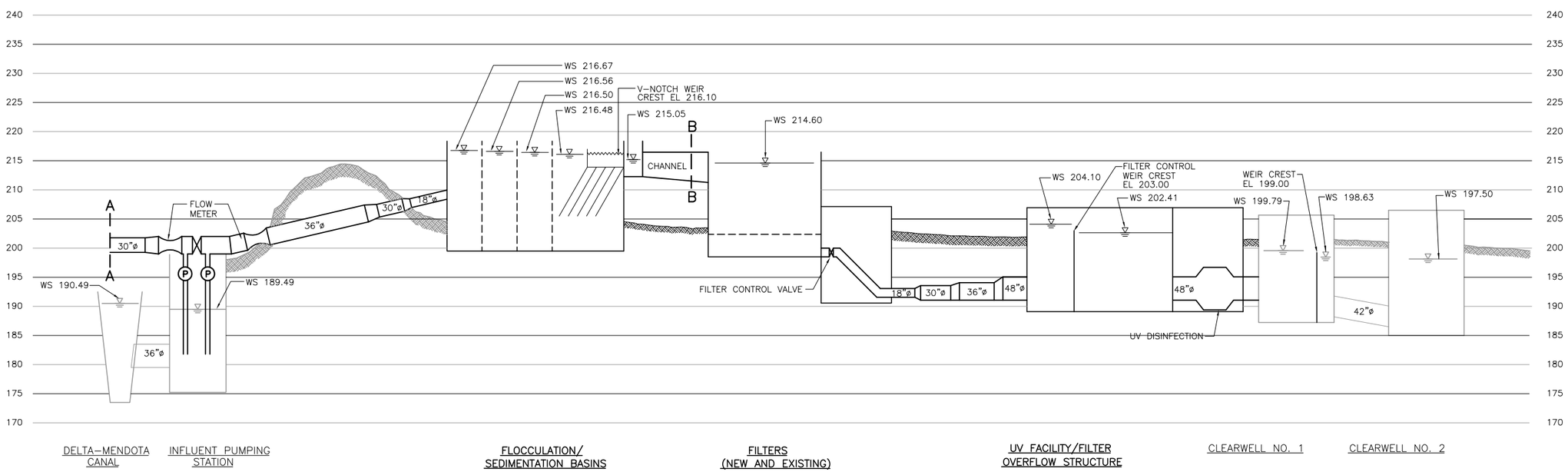

LEGEND

XXX — WATER SURFACE ELEVATION AT 30 MGD

REV	DATE	BY	DESCRIPTION
			CONFORMED DOCUMENTS FOR CONSTRUCTION

DESIGNED MAL
DRAWN PGG
CHECKED AS
DATE MAR 2005

DISCIPLINE ENGINEER: ** ORIGINAL STAMPED BY MATHEW AXEL LARSON **
PROJECT ENGINEER: ** ORIGINAL STAMPED BY SUZAN K. ENGLAND **
PARTNER: ** ORIGINAL STAMPED BY KENNETH WILKINS **

carollo engineers

CITY OF TRACY
JOHN JONES WTP – EXPANSION PROJECT
GENERAL
HYDRAULIC PROFILE

VERIFY SCALES
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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

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SHEET NO. 11 OF 573

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APPENDIX C

City of Tracy

Existing Potable Water System Hydraulic Grade Schematic

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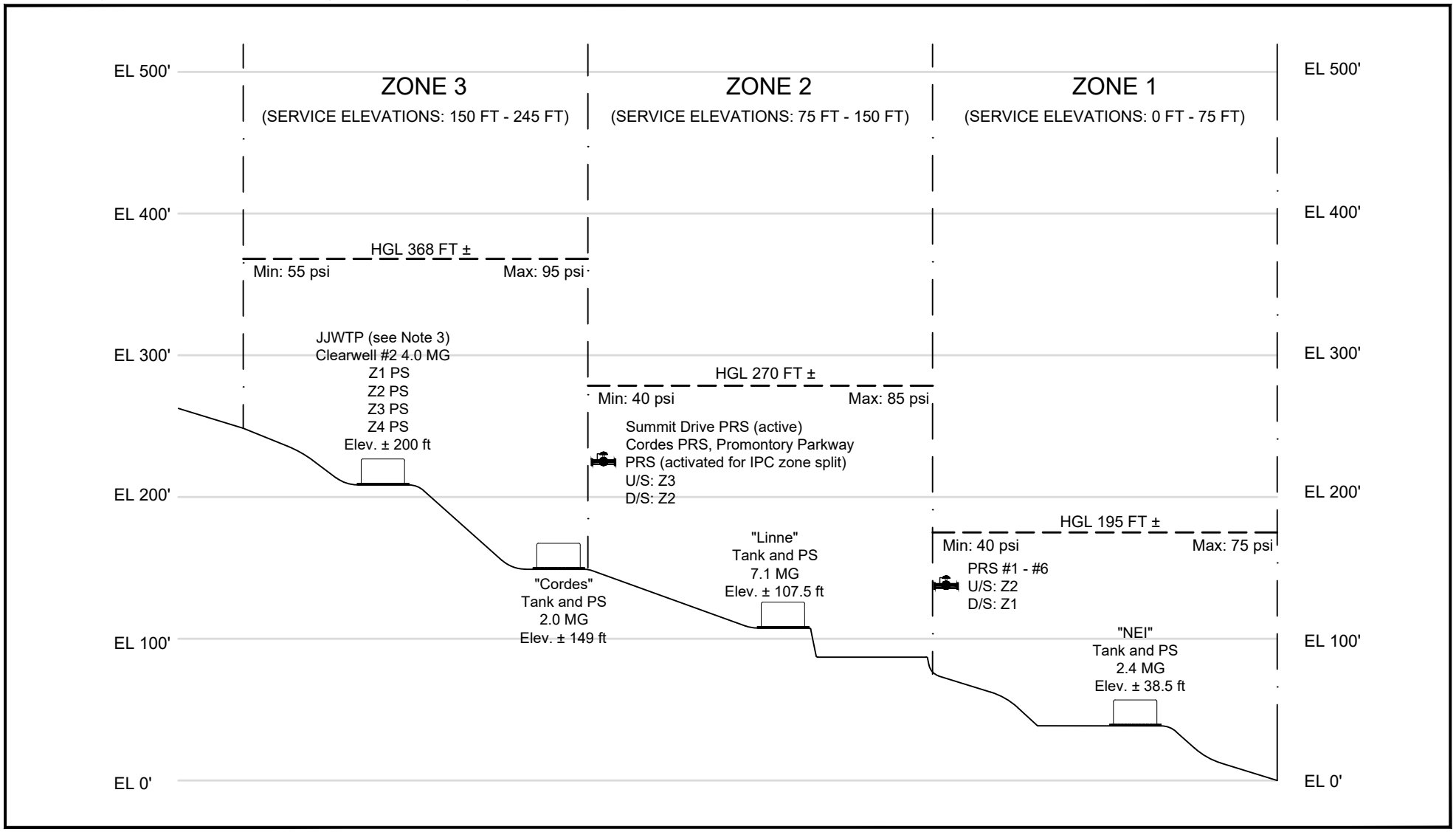


Notes:

1. Elevations on this figure are from various sources and should not be used for design purposes.
2. Horizontal spacing is for illustrative purposes and is not to scale.
3. JJWTP Facilities do not currently supply Zone 3 directly.
4. Ellis Reduced Zone (not shown) is served from Zone 3 via the Summit Drive PRV. It has a hydraulic grade of approximately 323 ft, and a service elevation range of 140 ft - 185 ft.
5. Last updated December 2019.

Appendix C

Existing Potable Water System Hydraulic Grade Schematic

WEST YOST ASSOCIATES

City of Tracy Water System Master Plan Update

APPENDIX D

Lammers Road and Hood Way Design Recommendation Technical Memoranda

Note: The Technical Memoranda in this Appendix were written using the old pressure zone nomenclature. Please note that "City-side Pressure Zone 3" is now referred to as "Pressure Zone 3" using the updated pressure zone nomenclature discussed in Chapters 7 and 8.

WEST YOST ASSOCIATES

TECHNICAL MEMORANDUM

DATE: September 25, 2019

Project No.: 404-60-19-47
SENT VIA: EMAIL

TO: Zabih Zaca, City of Tracy

CC: Robert Armijo, City of Tracy
Paul Verma, City of Tracy
Al Gali, City of Tracy
Nanda Gottiparthy, SNG & Associates, Inc.

FROM: Nathaniel Homan, PE, RCE #89903
Jim Connell, PE, RCE #63052

REVIEWED BY: Amy Kwong, PE, RCE #73213

SUBJECT: Design Recommendations for Lammers Road Pipeline

In a technical memorandum (TM) prepared for the City of Tracy (City) titled *Hydraulic Evaluation of International Park of Commerce (IPC) Buildings 3, 4, and 12*, dated May 18, 2017 (May 2017 TM), West Yost Associates (West Yost) recommended that 3,440 lineal feet (lf) of 20-inch diameter Pressure Zone 2 (Zone 2) transmission main be constructed in Lammers Road between Valpico Road and Schulte Road in addition to the 3,025 lf of City-side Pressure Zone 3 (Zone 3) transmission main to be constructed in Lammers Road between the northwest corner of the Ellis Specific Plan development and Valpico Road. The purpose of this recommended Zone 2 pipeline improvement was to maintain the Zone 2 transmission main system after the existing 24-inch diameter Zone 2 transmission main in the above-mentioned section of Lammers Road is re-zoned to Zone 3. The key figures from the May 2017 TM are included for reference as Attachment 1.

This TM summarizes the findings and conclusions of West Yost's technical evaluation of four alternatives to the recommendations from the May 2017 TM:

- Alternative 1: Re-zone the existing 24-inch diameter Zone 2 transmission main in Lammers Road between Valpico Road and Schulte Road without any improvements. This alternative was previously evaluated in the May 2017 TM, but system conditions have changed with additional development. Therefore, this condition was re-evaluated to confirm if improvements are required.
- Alternative 2: Re-zone the existing 24-inch diameter Zone 2 transmission main in Lammers Road between Valpico Road and Schulte Road and construct a new Pressure Regulating Station (PRS) at the intersection of Lammers Road and Schulte Road to support Zone 2.

- Alternative 3: Construct a new Zone 3 transmission main in Lammers Road between Valpico Road and Schulte Road instead of re-zoning the existing transmission main.
- Alternative 4: Re-zone the existing 24-inch diameter Zone 2 transmission main in Lammers Road between Valpico Road and Schulte Road and construct a new Zone 2 transmission main in Lammers Road between Valpico Road and Schulte Road (similar to the recommendation from the May 2017 TM).

West Yost first performed hydraulic modeling[1] and reviewed plans and record drawings of the construction areas to determine which of the four alternatives are both hydraulically feasible and constructible. West Yost then compared the various alternatives and developed design recommendations for the preferred alternative. It should be noted that all evaluations performed for this TM assume that the improvements identified in the evaluation for Design Recommendations for Hood Way Pipeline have been completed.

This TM is submitted in accordance with West Yost's January 2019 Scope of Services. The following sections summarize our findings and conclusions:

- Alternative 1: No New Pipeline
- Alternative 2: New PRS (No New Pipeline)
- Alternative 3: New Zone 3 Pipeline
- Alternative 4: New Zone 2 Pipeline
- Comparison of Alternatives and Conclusions

ALTERNATIVE 1: NO NEW PIPELINE

In Alternative 1, no new infrastructure would be constructed in Lammers Road between Valpico Road and Schulte Road. The existing 24-inch diameter Zone 2 pipeline in Lammers Road south of Schulte Road would be re-zoned to Zone 3 by closing existing valves located at the intersection of Valpico Road and Lammers Road and at the intersection of Schulte Road and Lammers Road. A depiction of Alternative 1 is shown on Figure 1.

While Alternative 1 is much less expensive than constructing the additional pipeline recommended in the May 2017 TM, re-zoning the existing pipeline in Lammers Road without providing a new Zone 2 transmission line would significantly impact the ability of the Zone 2 system west of Corral Hollow Road to convey large quantities of water. Increased headloss in the water distribution

[1] Hydraulic modeling was performed using the City's developer hydraulic model, which includes all of the previously evaluated development projects that have been proposed and is separate from the 2012 Water System Master Plan model. It is assumed that the Cordes Tank and Booster Pump Station are operational and that the 16-inch diameter Zone 2 transmission main connection to Lammers Road is in service. Planning and modeling criteria used to evaluate the various alternatives are based on the system performance and operational criteria developed in the 2012 WSMP and are provided in Attachment 2 for reference.

pipelines due to the lack of a major transmission main would cause a decrease in pressure in this portion of the Zone 2 system. Additional consequences from Alternative 1 include the following:

1. PRS #6 would no longer provide supply to Zone 1 during a normal maximum day demand condition. This is because the Zone 2 pressure upstream of PRS #6 would fall below the pressure sustaining setting of 78 pounds per square inch (psi).
2. Zone 1 would not meet fire flow requirements at Kimball High School during a maximum day demand condition[2], as shown on Figure 2. This is because PRS #6 would no longer be available to support Zone 1 as discussed in Item 1 above.
3. Zone 2 would also not meet fire flow requirements in portions of the IPC during a maximum day demand condition, as shown on Figure 2. Some hydrants in the IPC are located at the highest elevations in Zone 2 and the decrease in Zone 2 pressure and reduced transmission capacity of the Zone 2 system would cause some locations in the IPC to be deficient in meeting fire flow requirements.
4. The existing 24-inch diameter pipeline in Valpico Road would become a dead-end and would experience a decrease in water quality.

Alternative 1 is not recommended because it results in fire flow deficiencies within Zone 1 and Zone 2 and water quality concerns in the existing 24-inch diameter pipeline in Valpico Road.

ALTERNATIVE 2: NEW PRS (NO NEW PIPELINE)

After evaluating Alternative 1, West Yost evaluated whether a new Zone 3 to Zone 2 PRS at the intersection of Lammers Road and Schulte Road would be a viable alternative to a new transmission pipeline (i.e. Alternatives 3 and 4) and alleviate the fire flow deficiencies in Zone 1 and Zone 2 that were observed in the Alternative 1 evaluation.

To resolve the fire flow deficiencies in Zone 1, the proposed Zone 3 to Zone 2 PRS would have to provide enough supply to sustain pressure in Zone 2 sufficiently to allow PRS #6 to open and support Zone 1. However, as stated above, the Zone 2 pressure upstream of PRS #6 would fall below the pressure sustaining setting of 78 psi during a normal maximum day demand condition if the Zone 2 transmission main in Lammers Road were re-zoned without constructing a new Zone 2 transmission main. Therefore, any PRS designed to alleviate the fire flow deficiencies in Zone 1 would have to provide sufficient flow from Zone 3 to Zone 2 continuously under normal operating conditions so that the pressure upstream of PRS #6 would remain above the pressure sustaining setting. However, operating the new Zone 3 to Zone 2 PRS in this manner would require at least 1,000 gallons per minute (gpm) of flow through the new PRS from Zone 3 to Zone 2 under a maximum day demand condition, which would significantly increase the demand on Zone 3 facilities that were not designed to accommodate this additional flow. Therefore, Alternative 2 is not recommended.

[2] Available fire flow simulations for the evaluated alternatives was performed during a maximum day demand condition while maintaining 30 psi residual system pressure.

ALTERNATIVE 3: NEW ZONE 3 PIPELINE

In Alternative 3, 3,240 lf of 24-inch diameter Zone 3 pipeline would be constructed in Lammers Road between Valpico Road and Schulte Road, while the existing 24-inch diameter Zone 2 pipeline in Lammers Road between Valpico Road and Schulte Road would continue to serve Zone 2. An existing valve at the intersection of Schulte Road and Lammers Road would be used to isolate the Zone 2 and Zone 3 transmission lines. The proposed Zone 3 pipeline south of Valpico Road would not connect to the existing pipelines at the intersection of Valpico Road and Lammers Road, but would instead connect to the recommended Zone 3 pipeline. Refer to Figure 3A for a depiction of Alternative 3. A detailed schematic of the connection to existing pipelines which would be required to construct Alternative 3 is shown on Figure 3B.

As part of Alternative 3, West Yost also evaluated the feasibility of constructing 830 lf of new 20-inch diameter Zone 2 pipeline to connect the existing 24-inch diameter Zone 2 pipeline at the intersection of Lammers Road and Schulte Road to the existing 20-inch diameter Zone 2 pipeline at the intersection of Lammers Road and Redbridge Road.

In the existing system, the 24-inch and 20-inch diameter transmission mains in Lammers Road are interrupted by 830 lf of 12-inch diameter pipeline through which large volumes of water must pass to reach PRS #6. Under a maximum day demand condition, the headloss in this 12-inch diameter pipeline exceeds 7 feet per 1,000 feet (ft/kft). While not critical to meeting existing fire flow requirements, the recommended 830 lf of 20-inch diameter pipeline would reduce the velocity and headloss and improve the Zone 2 backbone transmission system.

Refer to Figures 3C and 3D for detailed schematics of the connections to existing pipelines which would be required to construct Alternative 3 with the optional 830 lf of Zone 2 pipeline. It should be noted that surface features at the intersection of Lammers Road and Redbridge Road do not match those shown on the record drawings for that area as depicted on Figure 3D. The configuration of the existing pipelines in this area should be confirmed during design.

Zones 1 and 2 would meet fire flow requirements during a maximum day demand condition under Alternative 3, as shown on Figure 4. For the evaluation results shown on Figure 4, it was assumed that the optional 830 lf of Zone 2 pipeline would not be constructed for more conservative results. In summary, Alternative 3 is both hydraulically feasible and constructible.

ALTERNATIVE 4: NEW ZONE 2 PIPELINE

In Alternative 4, 3,240 lf of 24-inch diameter Zone 2 pipeline would be constructed in Lammers Road between Valpico Road and Schulte Road, while the existing 24-inch diameter Zone 2 pipeline in Lammers Road between Valpico Road and Schulte Road would be re-zoned to Zone 3. The proposed Zone 3 pipeline south of Valpico Road would connect to the existing pipelines at the intersection of Valpico Road and Lammers Road. An existing valve would be used to isolate the Zone 2 and Zone 3 transmission lines. Alternative 4 is similar to the recommendation presented in the May 2017 TM, and is shown on Figure 5A. Detailed schematics of the connections to existing pipelines which would be required to construct Alternative 4 are shown on Figures 5B and 5C.

As part of Alternative 4, West Yost also evaluated the feasibility of constructing 830 lf of new 20-inch diameter Zone 2 pipeline to connect the proposed 24-inch diameter Zone 2 pipeline to be constructed for Alternative 4 to the existing 20-inch diameter Zone 2 pipeline at the intersection of Lammers Road and Redbridge Road.

In the existing system, the 24-inch and 20-inch diameter transmission mains in Lammers Road are interrupted by 830 lf of 12-inch diameter pipeline through which large volumes of water must pass to reach PRS #6. Under a maximum day demand condition, the headloss in this 12-inch diameter pipeline exceeds 7 ft/kft. While not critical to meeting existing fire flow requirements, the recommended 830 lf of 20-inch diameter pipeline would reduce the velocity and headloss and improve the Zone 2 backbone transmission system.

Refer to Figures 5D and 5E for detailed schematics of the connections to existing pipelines which would be required to construct Alternative 4 with the optional 830 lf of Zone 2 pipeline. It should be noted that surface features at the intersection of Lammers Road and Redbridge Road do not match those shown on the record drawings for that area as depicted on Figure 5E. The configuration of the existing pipelines in this area should be confirmed during design.

As shown on Figure 6, Zones 1 and 2 would meet fire flow requirements during a maximum day demand condition under Alternative 4. For the evaluation results shown on Figure 6, it was assumed that the optional 830 lf of Zone 2 pipeline would not be constructed for more conservative results. In summary, Alternative 4 is both hydraulically feasible and constructible.

COMPARISON OF ALTERNATIVES AND CONCLUSIONS

Alternatives 1 and 2 do not meet the City's existing fire flow requirements and are therefore not hydraulically feasible. Therefore, West Yost does not recommend that the City proceed with either of these alternatives.

Alternatives 3 and 4, on the other hand, both meet existing fire flow requirements and are also constructible. Although Alternatives 3 and 4 are similar in many respects, West Yost recommends that the City construct Alternative 4 over Alternative 3 because it would avoid construction near the existing 8-inch diameter natural gas transmission main in the west side of Lammers Road. West Yost also recommends that the proposed 20-inch diameter Zone 2 pipeline between Schulte Road and Redbridge Road be constructed to improve Zone 2 transmission capacity.

It should be noted that the hydraulic analysis performed in this evaluation did not include buildout water system demands. In addition, the proposed alternative operations could potentially impact future developments such as Gateway and Westside Industrial, which are located in Zone 2, as they would no longer be able to connect directly to the existing 24-inch diameter pipeline in Schulte Road. The City's buildout water system hydraulic model is currently being updated by West Yost as part of the City's 2018 Water System Master Plan (WSMP). For the 2018 WSMP, West Yost will confirm whether Alternatives 3 and 4 are hydraulically feasible at buildout of the City's potable water system and also address any potential impacts to future developments. While it is likely that construction of either a new Zone 3 transmission pipeline (as in Alternative 3) or a new Zone 2 transmission pipeline (as in Alternative 4) will continue to be hydraulically feasible

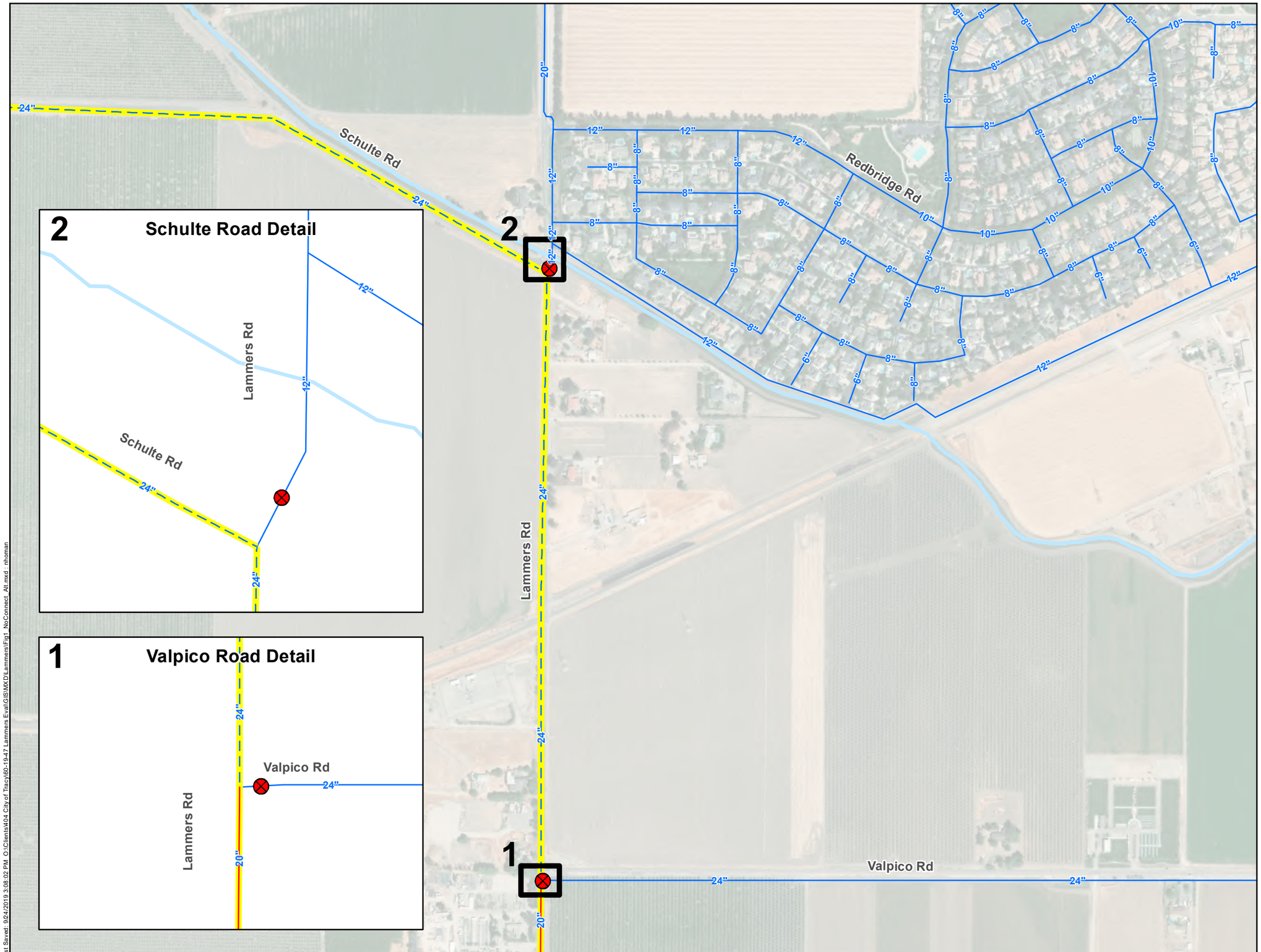
at buildout, the buildout analysis may determine that the new transmission pipeline should be of a larger diameter than is recommended in this evaluation.

In conclusion, West Yost currently recommends that the City construct the following infrastructure improvements in Lammers Road:

- 3,240 lf of new 24-inch diameter Zone 2 pipeline between Valpico Road and Schulte Road; and
- 830 lf of new 20-inch diameter Zone 2 pipeline from Schulte Road to Redbridge Road to improve existing deficiencies in the City's Zone 2 system. As noted above, the configuration of the existing pipelines in this area should be confirmed during design.

These recommendations should be confirmed using the buildout water system model as part of the 2018 WSMP.

No estimates of infrastructure costs were developed as part of this evaluation. The locations of existing pipelines and valves shown on the figures attached here-in should be confirmed prior to design. If existing pipelines or valves are not as shown on the reviewed plans and record drawings, additional evaluation of the feasibility of the recommended connections may be required.



N

0 250 500
Scale in Feet

Closed Valve Due to Re-zoning
Proposed Zone 3 Pipeline
Existing Pipeline to be Re-zoned to Zone 3
Existing Zone 2 Pipeline
Irrigation Canal

Notes:
1. Details are not to scale.

TRACY

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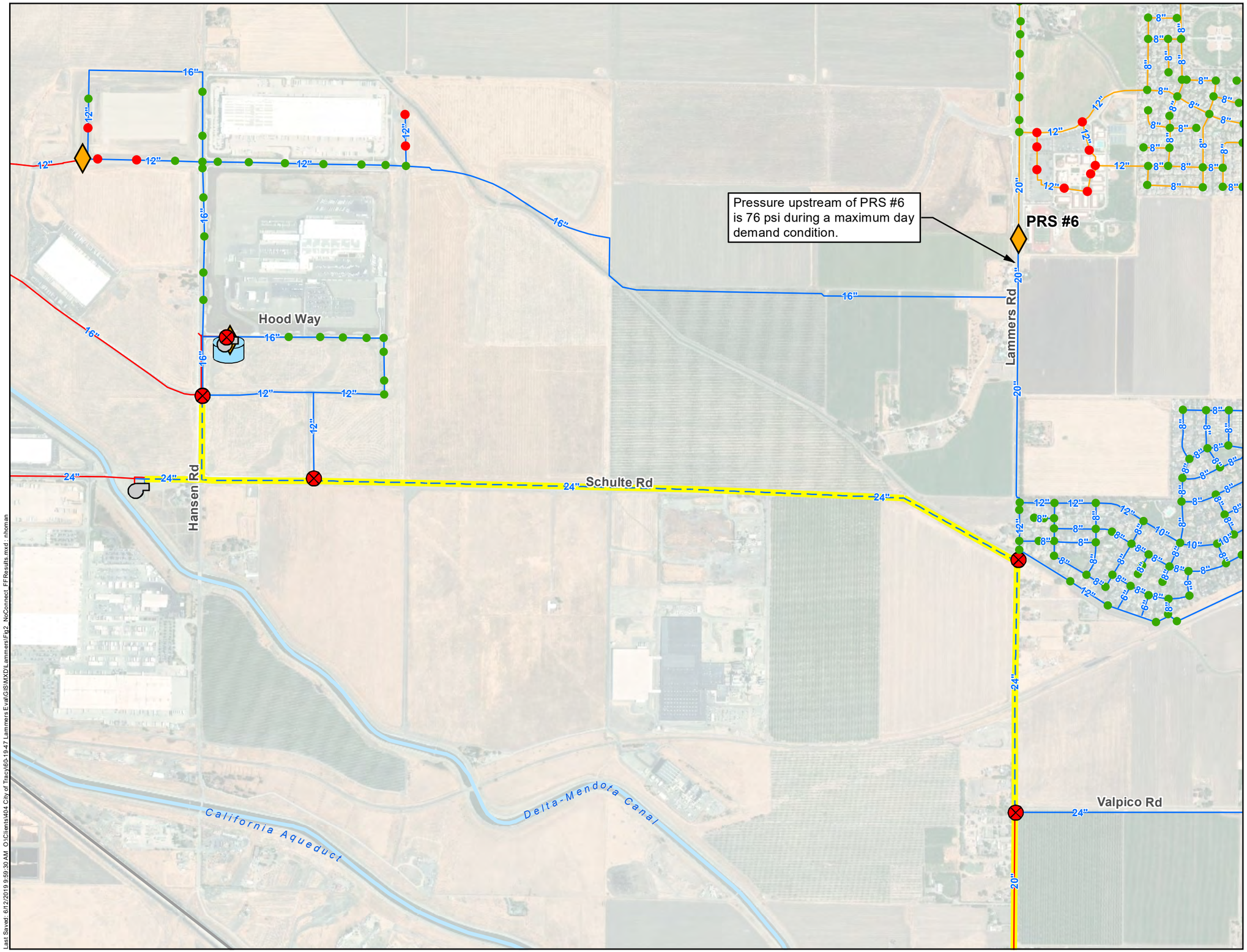
Figure 1

Alternative 1
No New Pipeline from Valpico Road to Schulte Road

City of Tracy
Design Recommendations for Lammers Road Pipeline

Last Saved: 9/24/2019 3:08:02 PM O:\Clients\404 City of Tracy\60-19-47 Lammers Eval\GIS\MXD\Lammers\Fig1_NoConnect_All.mxd - mhoman



Notes:
1. Results assume that connections in Hood Way and Hansen Road are constructed as recommended in the Design Recommendations for Hood Way Pipeline annotated figures.
2. The available fire flow shown is the maximum flow available while maintaining 30 psi residual system pressure. Fire flow evaluation performed under maximum day demand conditions.

TRACY

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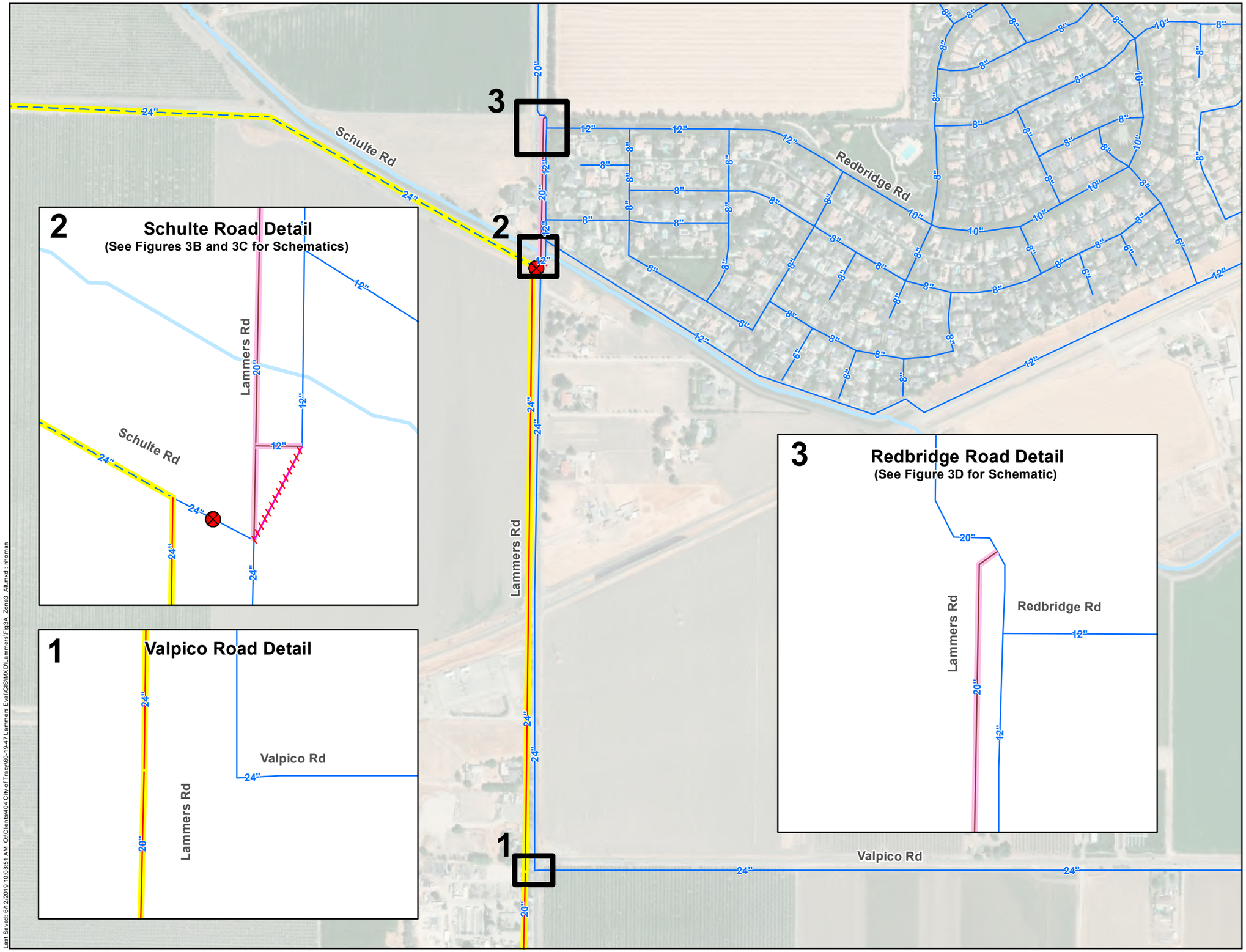
Figure 2

Alternative 1
Available Fire Flow

City of Tracy
Design Recommendations for
Lammers Road Pipeline

Last Saved: 6/12/2019 9:59:30 AM O:\Clients\404 City of Tracy\65-1947 Lammers Eval\GIS\MXD\Lammers\Fig2_NoConnect_FFResults.mxd - nhoman



Notes:
1. Details are not to scale.

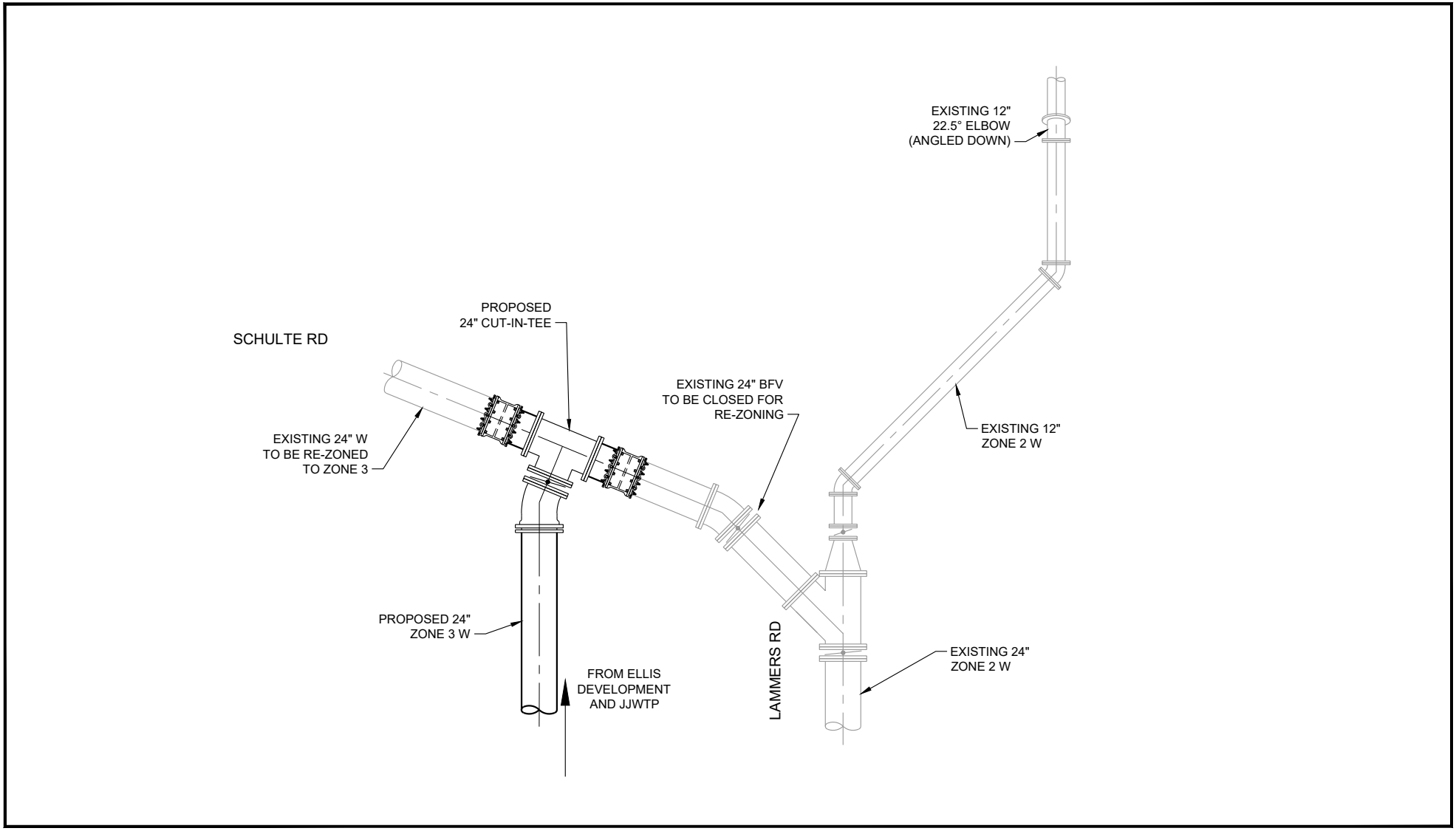
Figure 3A

Alternative 3
New Zone 3 Pipeline from Valpico Road to Schulte Road

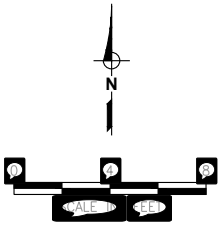
City of Tracy
Design Recommendations for Lammers Road Pipeline

Last Saved: 6/12/2019 10:08:51 AM O:\Clients\404 City of Tracy\60-19-47 Lammers Eval\GIS\MXD\Lammers\Fig3A_Zone3_Alt.mxd - rhoman

O:\Clients\404 City of Tracy\60-19-47 Lammers Eval\CAD\Figures\Linne_Hood_Connections.dwg 9/20/2019 1:56 PM nhoman



Notes:
1. Schematic connection points are for illustrative purposes only for the conceptual understanding of the likely components involved in installing the recommended connections. These schematics are not to be used for construction purposes.



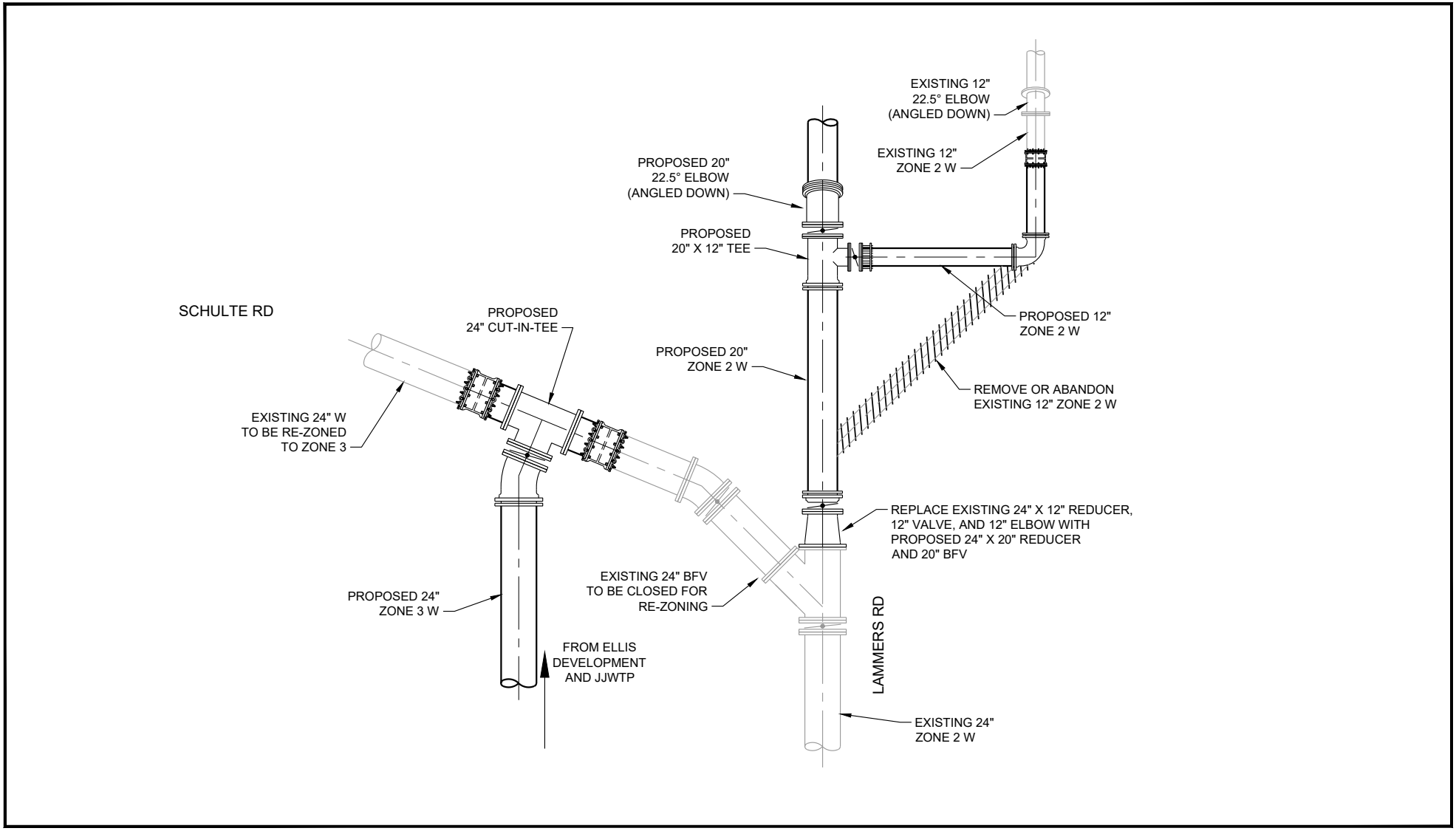
TRACY

WEST YOST ASSOCIATES

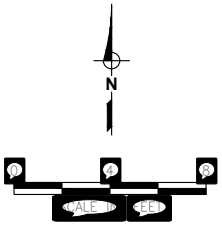
Figure 3B

Alternative 3
Schematic of Schulte Road and Lammers Road Connection

City of Tracy
Design Recommendations for
Lammers Road Pipeline



Notes:
1. Schematic connection points are for illustrative purposes only for the conceptual understanding of the likely components involved in installing the recommended connections. These schematics are not to be used for construction purposes.



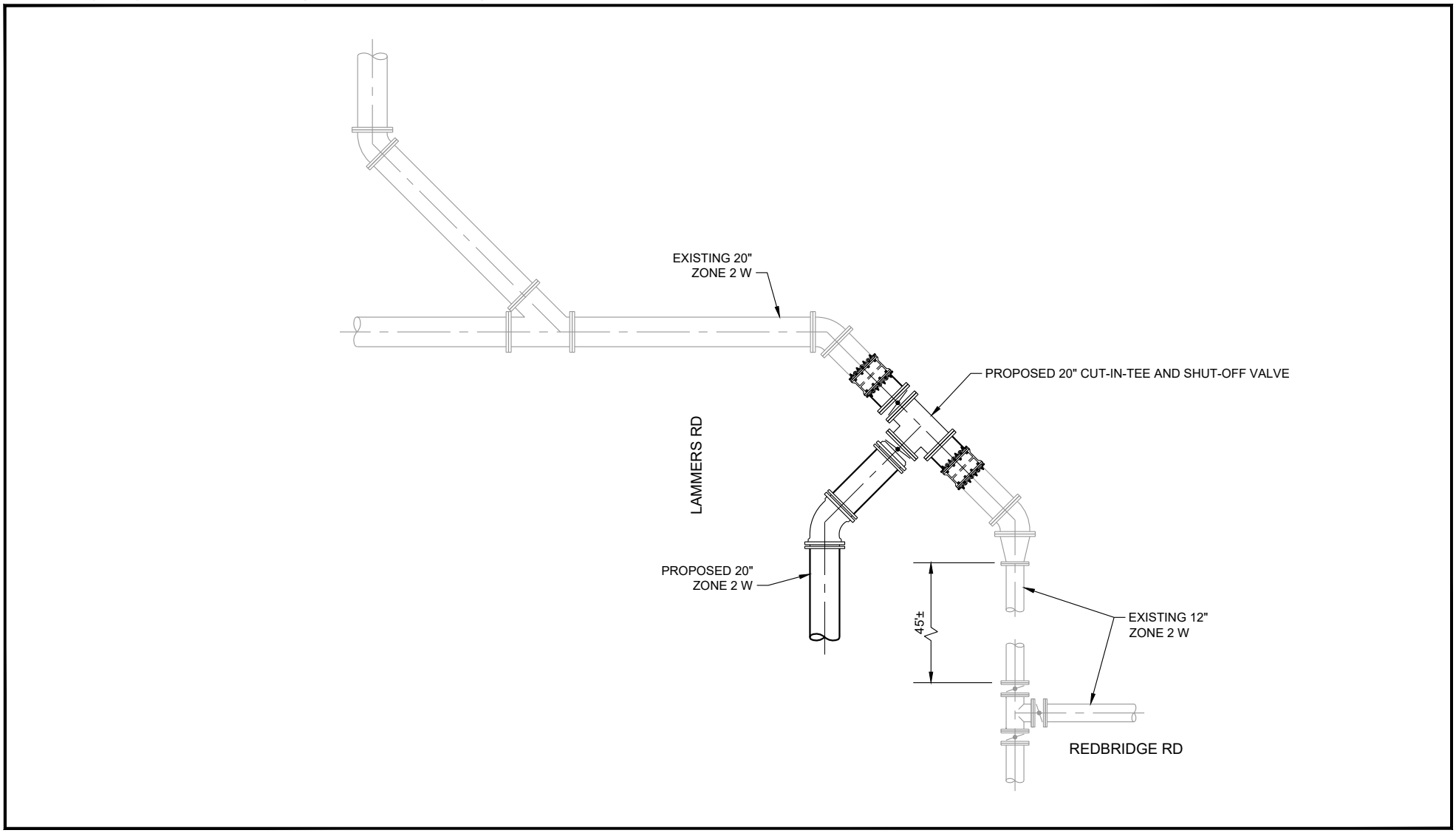
TRACY

WEST YOST ASSOCIATES

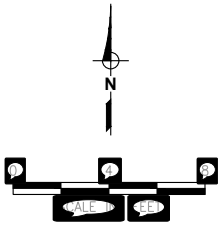
Figure 3C

Alternative 3
Schematic of Schulte Road and Lammers Road Connection with Optional Zone 2 Pipeline

City of Tracy
Design Recommendations for
Lammers Road Pipeline



Notes:
1. Schematic connection points are for illustrative purposes only for the conceptual understanding of the likely components involved in installing the recommended connections. These schematics are not to be used for construction purposes.
2. Existing pipelines presented in this schematic are based on available record drawings. Visible surface features near the intersection of Lammers Road and Redbridge Road do not match those shown on the record drawings. Configuration of existing pipelines in this area should be confirmed.



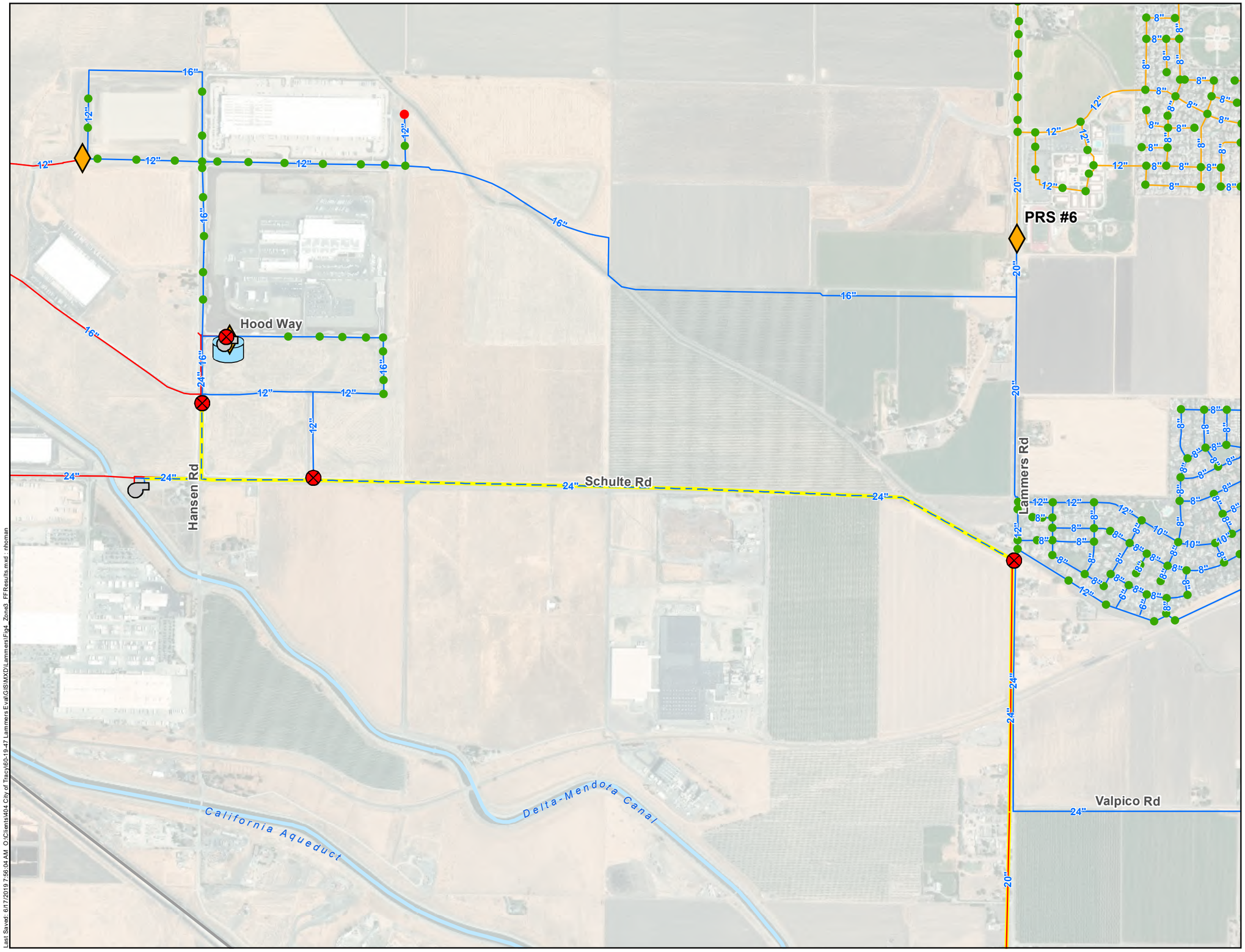
TRACY

WEST YOST ASSOCIATES

Figure 3D

Alternative 3
Schematic of Redbridge Road and Lammers Road Connection with Optional Zone 2 Pipeline

City of Tracy
Design Recommendations for
Lammers Road Pipeline



N

0 600 1,200

Scale in Feet

Available Fire Flow

- Does Not Meet Requirements
- Meets Requirements
- Closed Valve Due to Re-zoning
- Pressure Regulating Station
- Booster Pump Station
- Cordes Tank
- Proposed Zone 3 Pipeline
- Existing Pipeline to be Re-zoned to Zone 3

Existing Pipeline

- Zone 1
- Zone 2
- Zone 3

Notes:

1. Results assume that connections in Hood Way and Hansen Road are constructed as recommended in the Design Recommendations for Hood Way Pipeline annotated figures.
2. Results assume that optional Zone 2 pipeline will not be constructed (see Figure 5A).
3. The available fire flow shown is the maximum flow available while maintaining 30 psi residual system pressure. Fire flow evaluation performed under maximum day demand conditions.

TRACY

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Figure 4

Alternative 3
Available Fire Flow

City of Tracy
Design Recommendations for
Lammers Road Pipeline

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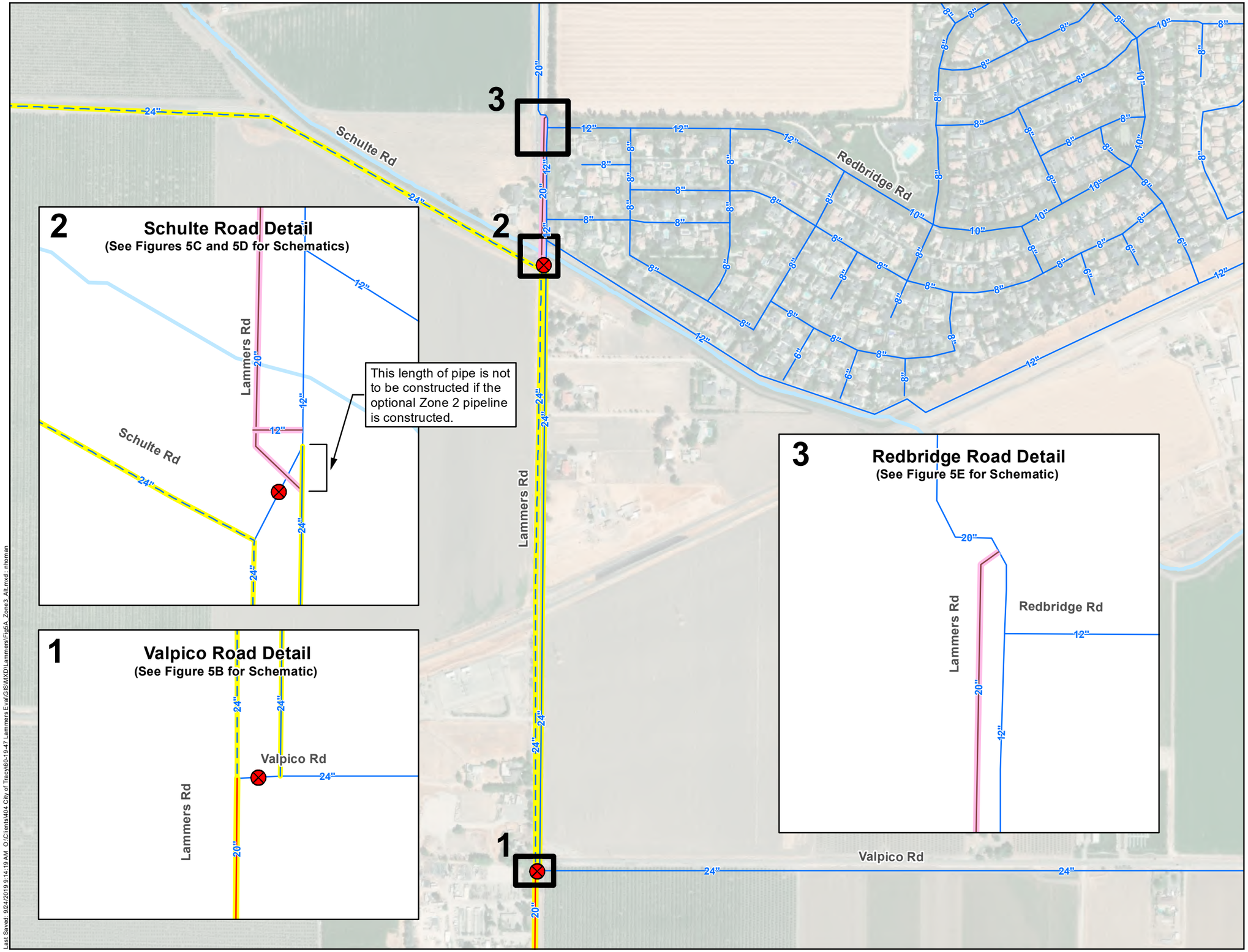

Closed Valve Due to Re-zoning
Proposed Zone 3 Pipeline
Proposed Zone 2 Pipeline
Existing Pipeline to be Re-zoned to Zone 3
Optional Zone 2 Pipeline
Existing Zone 2 Pipeline
Irrigation Canal

Notes:
1. Details are not to scale.

Figure 5A

Alternative 4
New Zone 2 Pipeline from Valpico Road to Schulte Road

City of Tracy
Design Recommendations for
Lammers Road Pipeline

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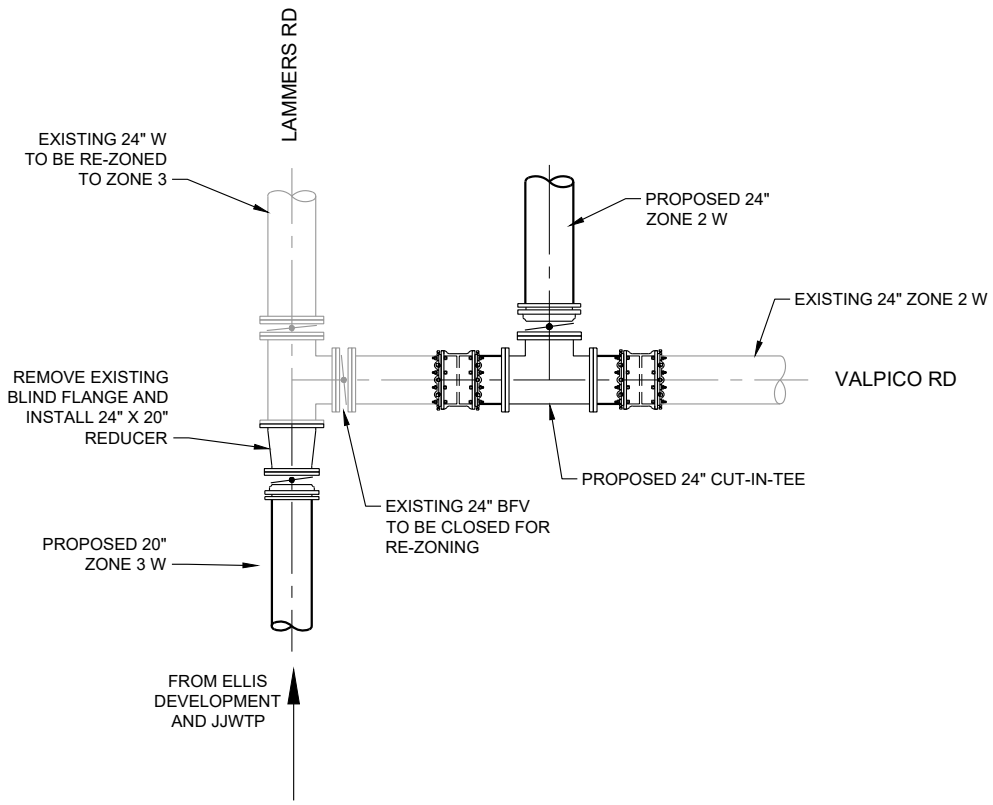


Notes:
1. Schematic connection points are for illustrative purposes only for the conceptual understanding of the likely components involved in installing the recommended connections. These schematics are not to be used for construction purposes.

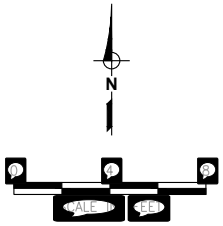
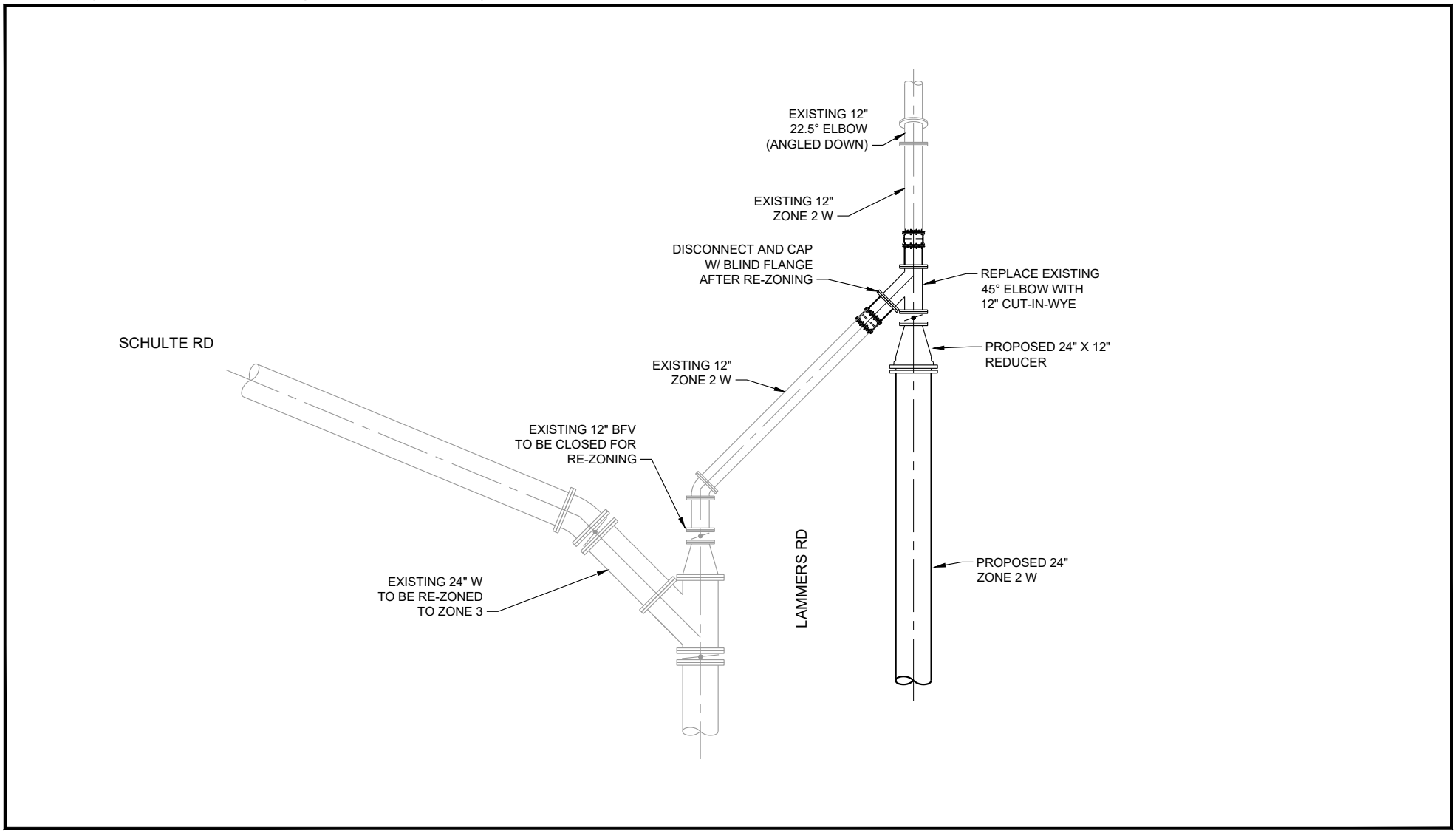


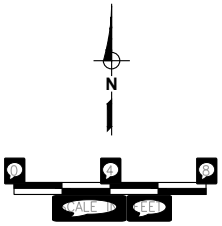
Figure 5B

Alternative 4
Schematic of Valpico Road and Lammers Road Connection

City of Tracy
Design Recommendations for
Lammers Road Pipeline



Notes:
1. Schematic connection points are for illustrative purposes only for the conceptual understanding of the likely components involved in installing the recommended connections. These schematics are not to be used for construction purposes.



TRACY

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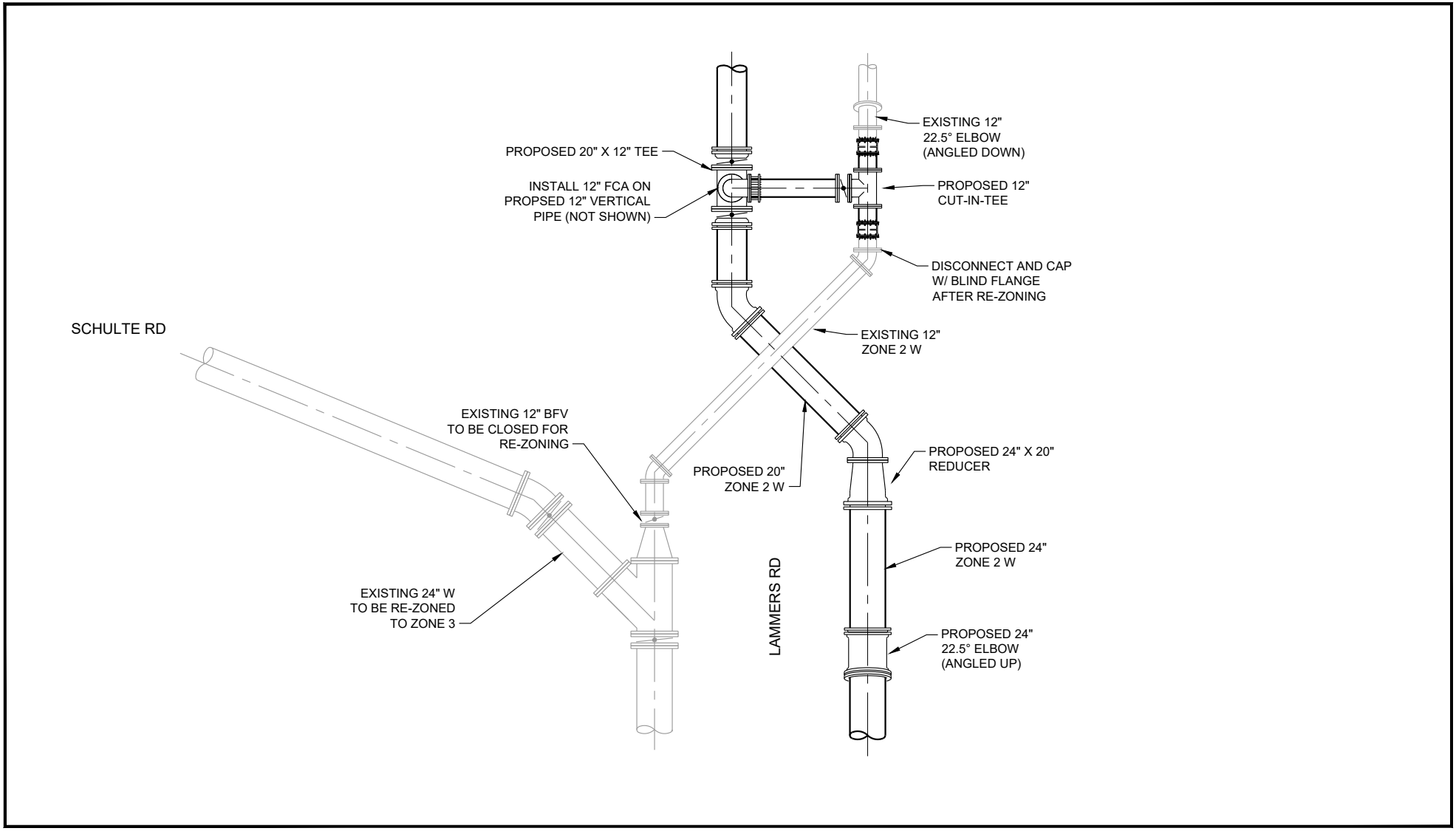
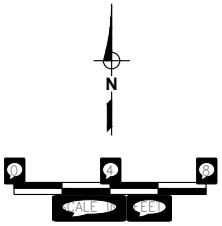
Figure 5C

Alternative 4
Schematic of Schulte Road and Lammers Road Connection

City of Tracy
Design Recommendations for
Lammers Road Pipeline



Notes:
1. Schematic connection points are for illustrative purposes only for the conceptual understanding of the likely components involved in installing the recommended connections. These schematics are not to be used for construction purposes.



TRACY

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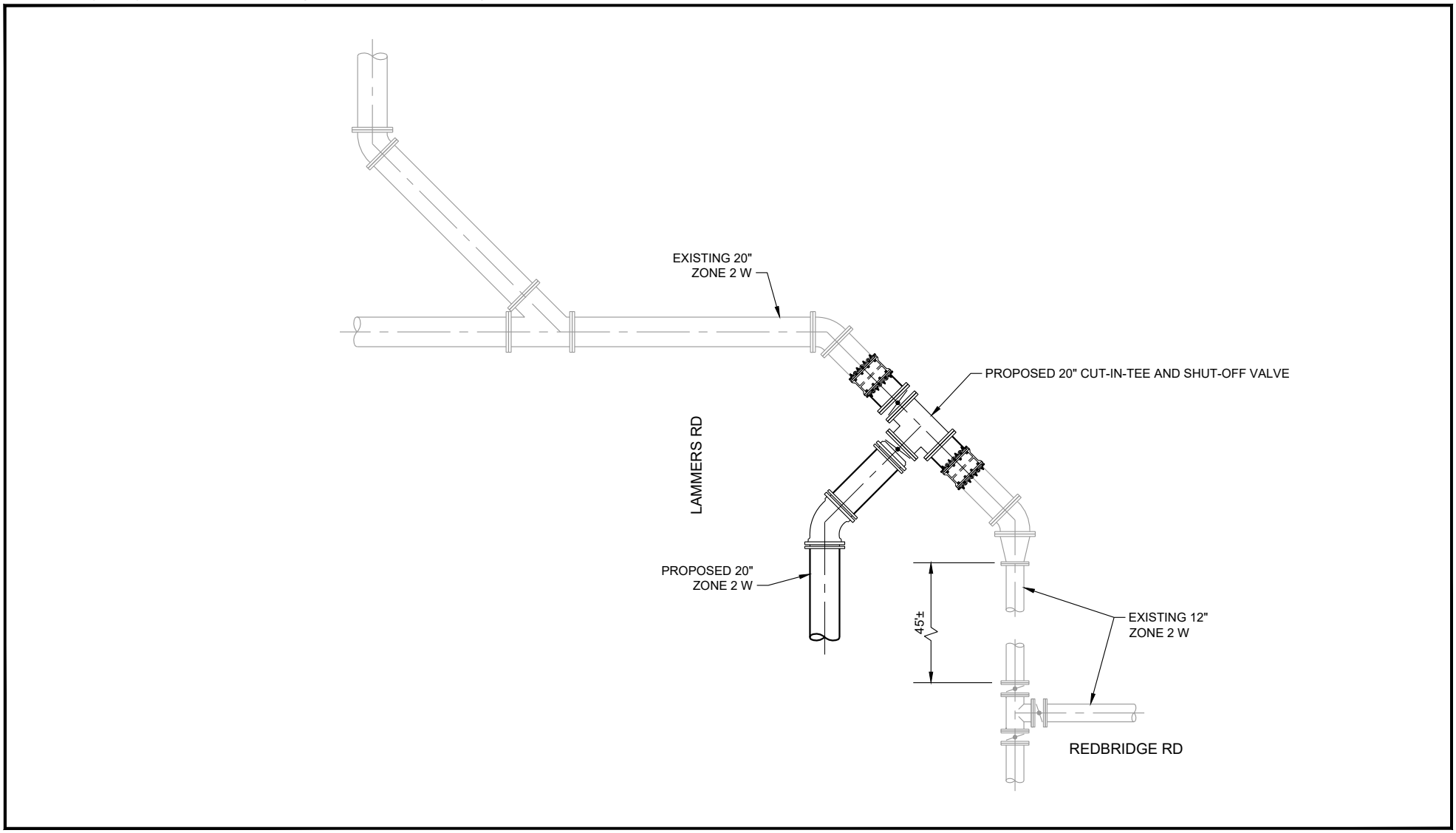
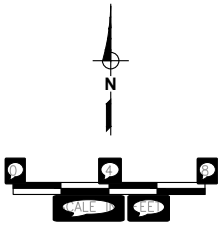
Figure 5D

Alternative 4
Schematic of Schulte Road and Lammers Road Connection with Optional Zone 2 Pipeline

City of Tracy
Design Recommendations for Lammers Road Pipeline



Notes:
1. Schematic connection points are for illustrative purposes only for the conceptual understanding of the likely components involved in installing the recommended connections. These schematics are not to be used for construction purposes.
2. Existing pipelines presented in this schematic are based on available record drawings. Visible surface features near the intersection of Lammers Road and Redbridge Road do not match those shown on the record drawings. Configuration of existing pipelines in this area should be confirmed.



TRACY

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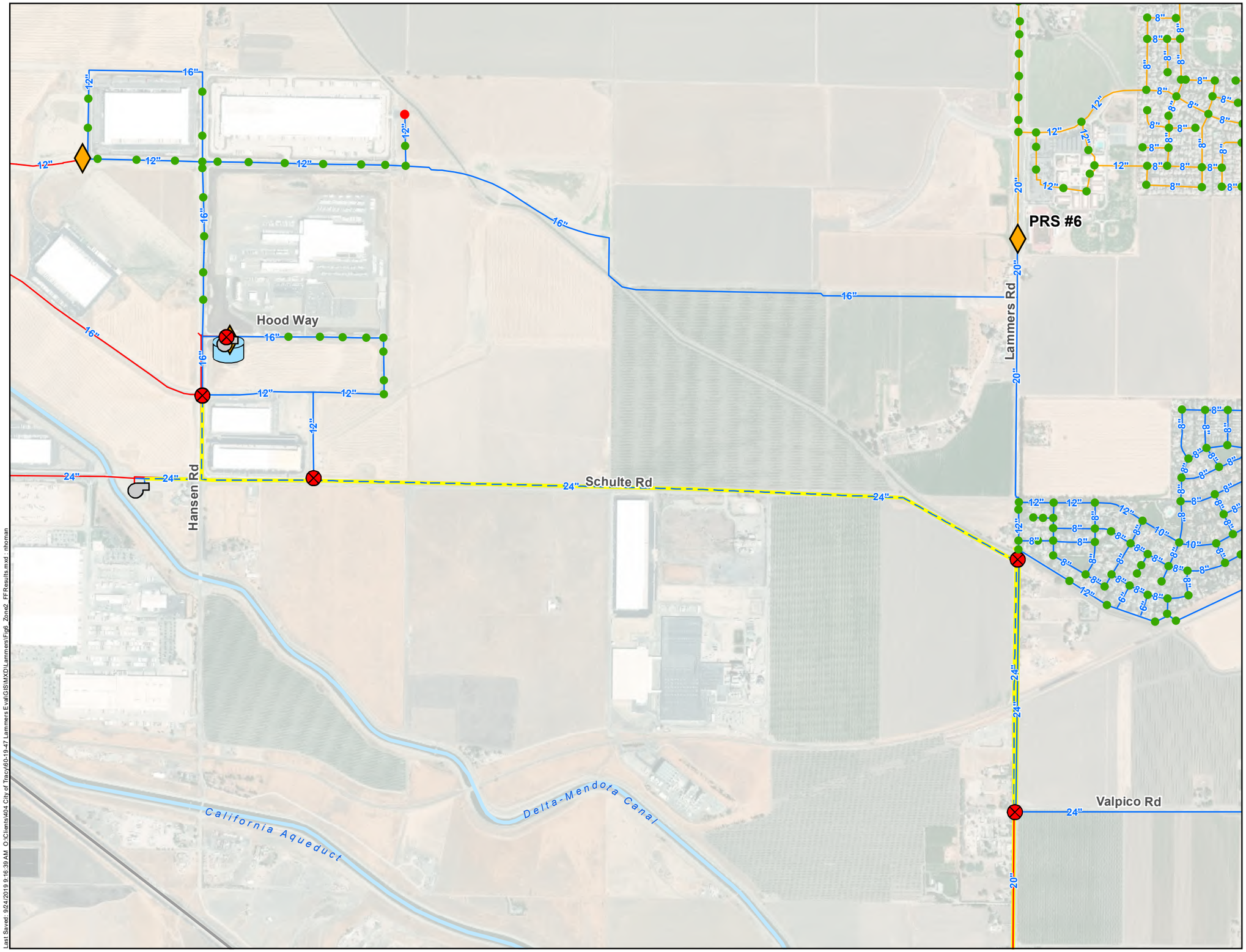
Figure 5E

Alternative 4
Schematic of Redbridge Road and Lammers Road Connection with Optional Zone 2 Pipeline

City of Tracy
Design Recommendations for
Lammers Road Pipeline



N

0 600 1,200

Scale in Feet

Available Fire Flow

- Does Not Meet Requirements
- Meets Requirements
- Closed Valve Due to Re-zoning
- Pressure Regulating Station
- Booster Pump Station
- Cordes Tank
- Proposed Zone 3 Pipeline
- Proposed Zone 2 Pipeline
- Existing Pipeline to be Re-zoned to Zone 3

Existing Pipeline

- Zone 1
- Zone 2
- Zone 3

Notes:

1. Results assume that connections in Hood Way and Hansen Road are constructed as recommended in the Design Recommendations for Hood Way Pipeline annotated figures.
2. Results assume that optional Zone 2 pipeline will not be constructed (see Figure 5A).
3. The available fire flow shown is the maximum flow available while maintaining 30 psi residual system pressure. Fire flow evaluation performed under maximum day demand conditions.

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Figure 6

Alternative 4
Available Fire Flow

City of Tracy
Design Recommendations for
Lammers Road Pipeline

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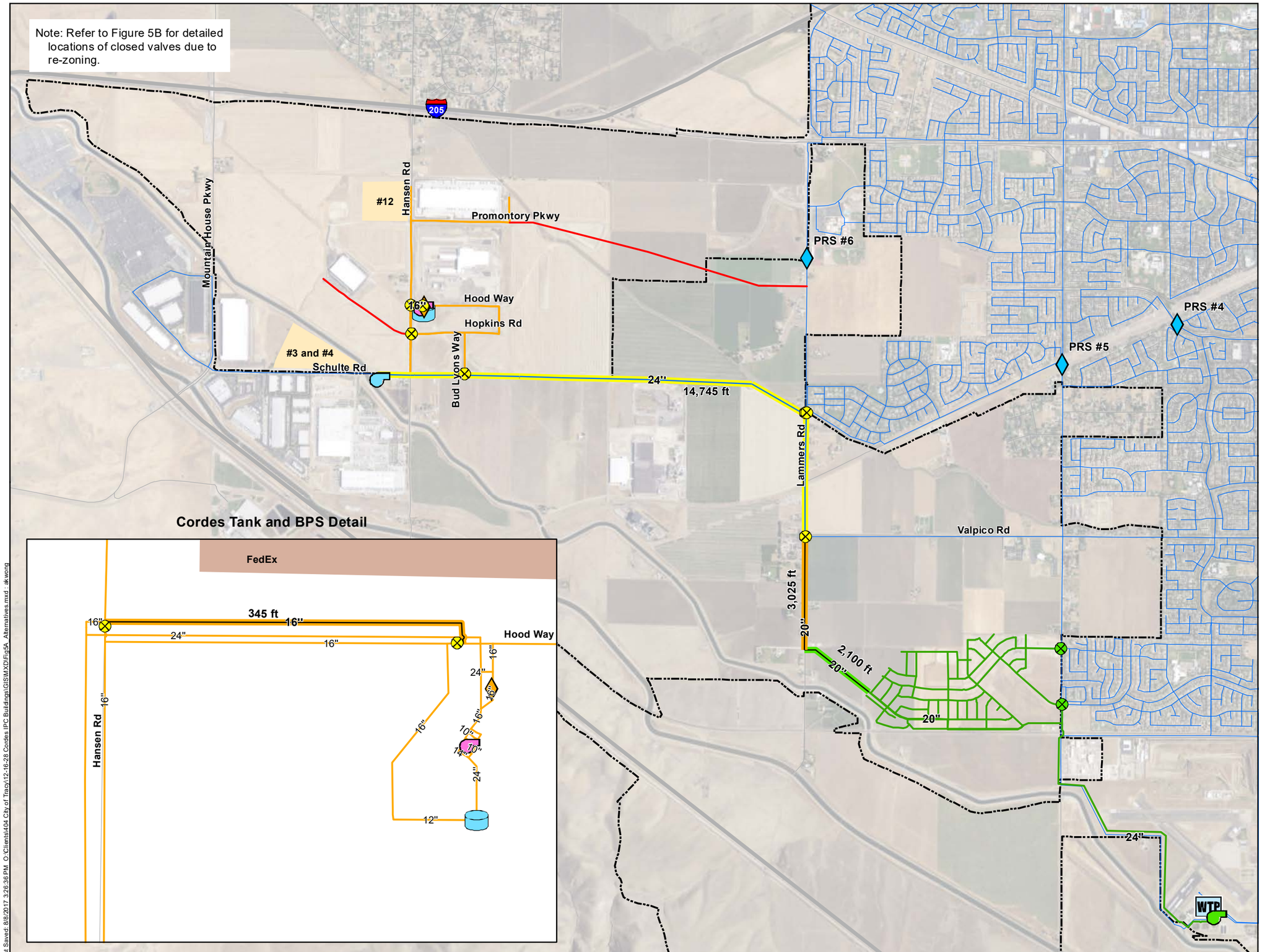
ATTACHMENT 1

Key Figures from Hydraulic Evaluation of IPC Buildings 3, 4, and 12 TM, May 18, 2017



N

0 1,250 2,500
Scale in Feet

Symbology

- Closed Valve Due to Re-zoning
- Previously Proposed Check Valve
- Pressure Regulating Station #9
- Existing Pressure Regulating Station
- Cordes Booster Pump Station
- Existing Patterson Pass Booster Pump Station
- Previously Proposed Interim Booster Pump and Pressure Regulating Station
- Cordes Tank
- WTP John Jones Water Treatment Plant
- Pipeline Required for Alternative Operations (Ellis)
- Proposed Pipeline Required for Alternative Operations (IPC)
- Existing Pipeline to be Re-zoned
- Existing Pipeline
- Ellis Pipeline
- Cordes Phases 1 and 2 Pipeline
- Smuckers Pipeline
- Proposed Project
- City Limit

TRACY

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Figure 5A

Proposed Alternative Operations

City of Tracy
Hydraulic Evaluation of
IPC Buildings 3, 4, and 12

Last Saved: 8/8/2017 3:26:36 PM O:\Clients\404 City of Tracy\12-16-28 Cordes IPC Buildings\GIS\MXD\Fig5A_Alternatives.mxd - ak wong

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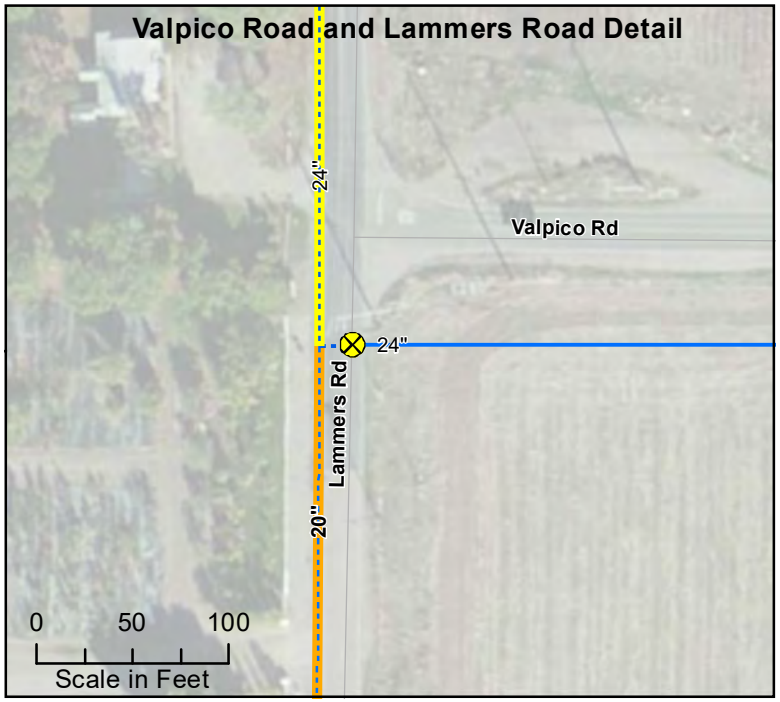

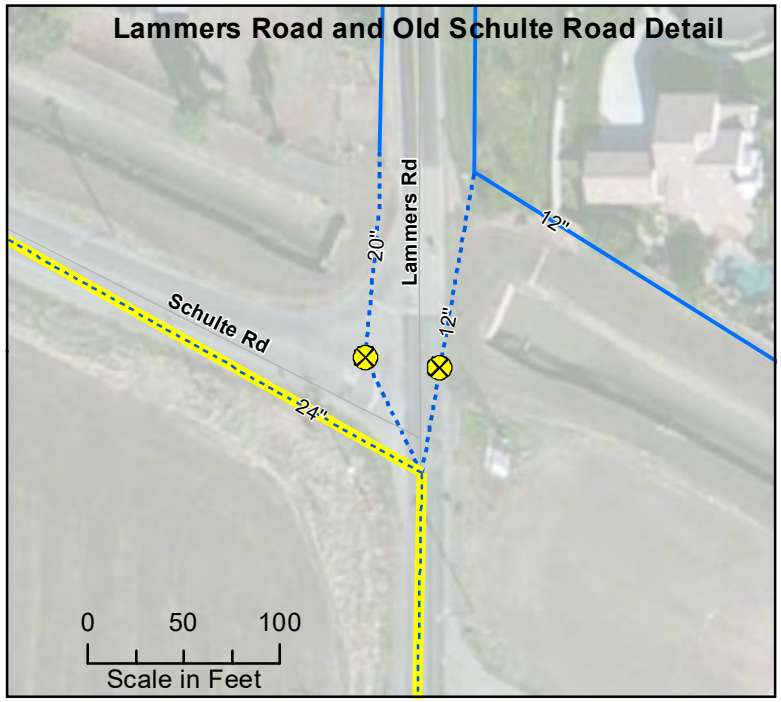

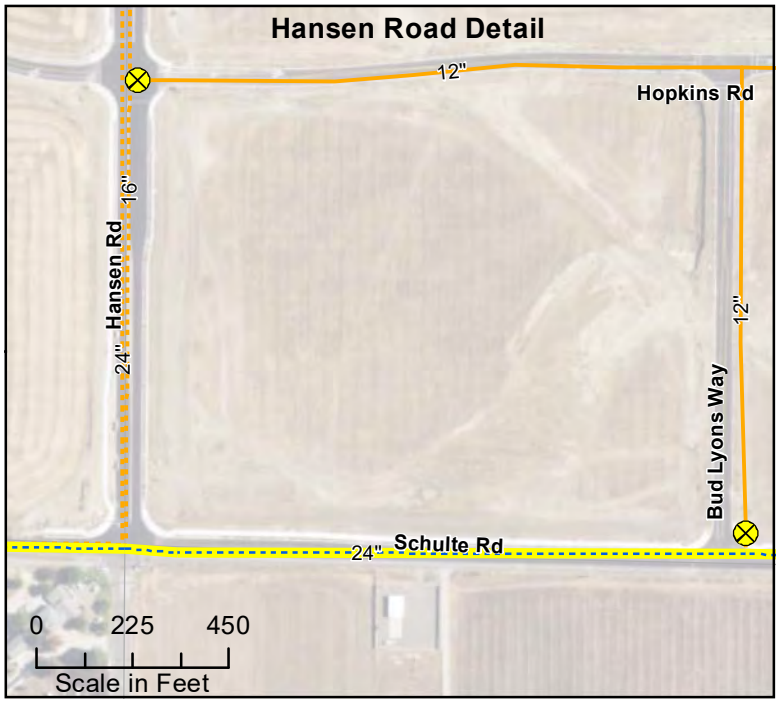

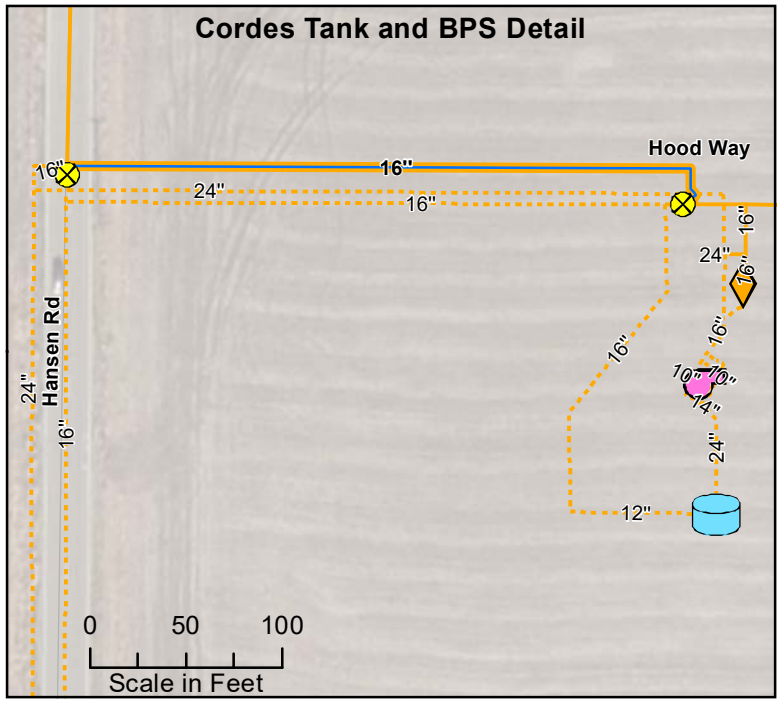

Symbology

- Closed Valve Due to Re-zoning
- Pressure Regulating Station #9
- Cordes Booster Pump Station
- Existing Patterson Pass Booster Pump Station
- Cordes Tank
- Existing Pipeline to be Re-zoned
- Proposed Zone 3 Pipeline Required for Alternative Operations (IPC)
- Proposed Zone 2 Pipeline Required for Alternative Operations (IPC)

Existing Pipeline

- Zone 2
- Zone 3

Cordes Phases 1 and 2 Pipeline

- Zone 2
- Zone 3

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Figure 5B

Proposed Alternative Operations: Details for Closed Valves

City of Tracy
Hydraulic Evaluation of
IPC Buildings 3, 4, and 12

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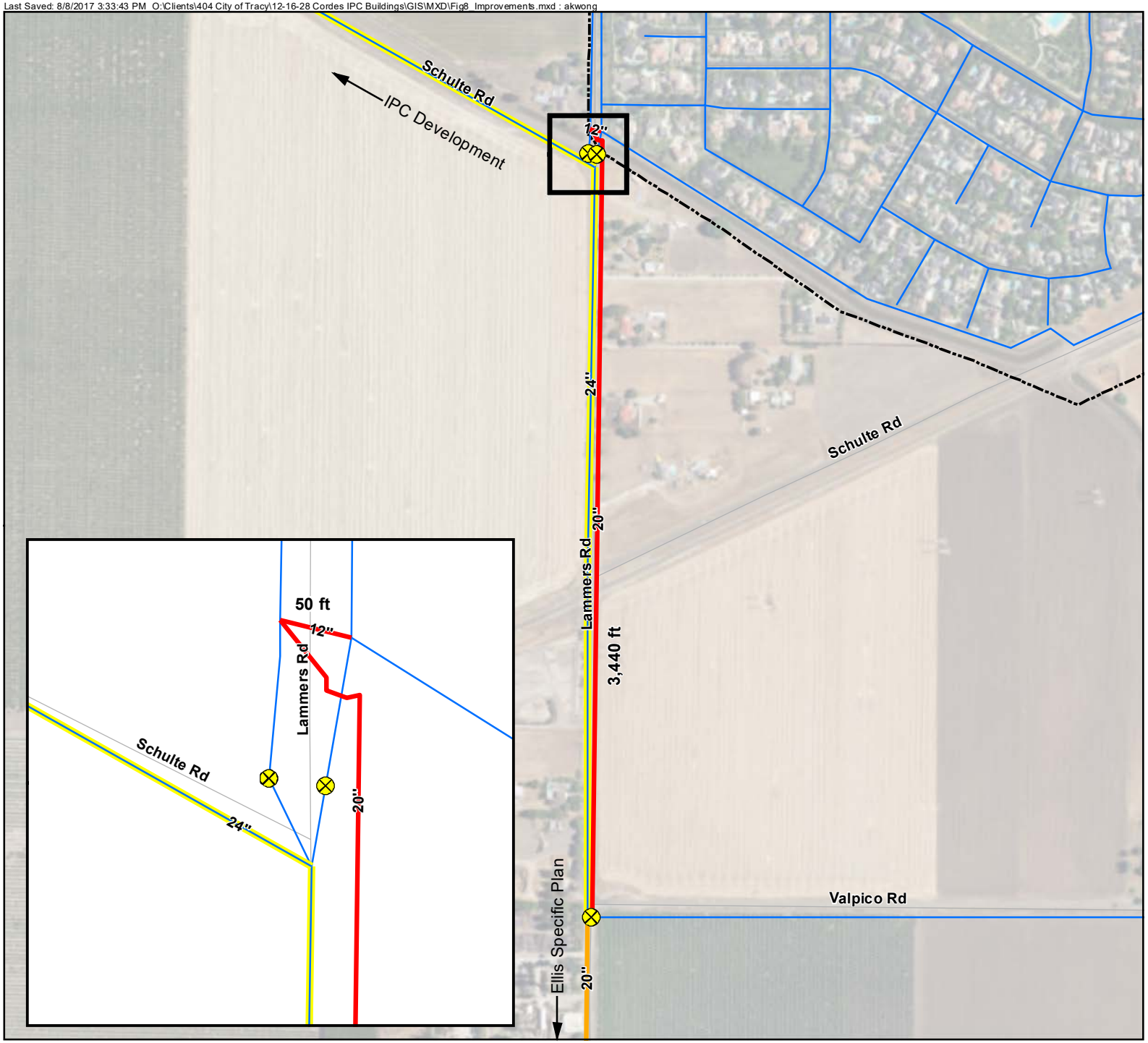

N

0 300 600

Scale in Feet

Symbology

- Closed Valve Due to Re-zoning
- Recommended Pipeline
- Existing Pipeline to be Re-zoned
- Proposed Pipeline Required for Alternative Operatons (IPC)
- Existing Pipeline
- City Limit

TRACY

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Figure 8

Recommended Improvements for Proposed Alternative Operations

City of Tracy
Hydraulic Evaluation of
IPC Buildings 3, 4, and 12

ATTACHMENT 2

Planning and Modeling Criteria
(2012 Citywide Water System Master Plan)

Planning and modeling criteria used to evaluate the various alternatives are based on the system performance and operational criteria developed in the 2012 Citywide Water System Master Plan. The criteria used to evaluate the existing water system and the proposed pipelines for the various alternatives are listed as follows:

- Residual pressure at the flowing hydrant (during an assumed maximum day demand plus fire flow condition) and throughout the water system must be equal to or greater than 30 pounds per square inch (psi) during the simulated fire condition.
- Minimum allowable service pressure is 40 psi during all other non-fire demand conditions.
- Maximum allowable service pressure is 80 psi. A pressure reducing valve (PRV) will be required on all water services with a static pressure greater than 80 psi and should conform with the requirements from the Uniform Plumbing Code.
- Maximum allowable distribution pipeline velocity is 12 feet per second (fps) during the simulated fire flow demand condition.
- Maximum allowable transmission and distribution pipeline velocity is 6 fps and 8 fps, respectively, during a non-fire demand condition.
- Maximum allowable head loss rate is 10 feet per 1,000 feet (ft/kft) during the simulated fire demand condition.
- Maximum head losses in distribution system pipelines should be limited to 7 ft/kft during a non-fire demand condition.
- New and required pipelines will be modeled with a roughness coefficient (C-factor) of 130.
- Available fire flow demand must meet a minimum flow of 1,500 gallons per minute (gpm), 2,500 gpm, 3,500 gpm, or 4,500 gpm depending on land use during a maximum day demand condition. These required fire flow demands assume that buildings are sprinklered.
- The 2012 Master Plan hydraulic model of the City's water distribution system was used as the basis for evaluation.[1] However, the hydraulic model was updated to include the following major existing system improvements:
  - Improvements that have been recently constructed on South Lammers Road (20-inch diameter pipeline and pressure regulating station (PRS #6)); and
  - Proposed improvements on South MacArthur Drive (24-inch diameter pipeline).

[1] This hydraulic model was updated to include projected water demands from new developments such as Valpico and MacDonald Apartments, Sierra Hills (Aspire I) Apartments, Tiburon Village, Middlefield Drive Apartments and Self-Storage Facility, I-205 Parcels M1 and M2 and Infill Parcels 7 and 13, Grant Line Road Apartments, South Lammers Road Development, Aspire II Development, Pescadero IPT Development, first three buildings at Cordes Ranch, Ellis Specific Plan Phase 1A and Phase 1A Extension, Marriott TownePlace Suites, Larch Clover Interim Annexation, Ellis Specific Plan Phase 2 - The Gardens, IPC Buildings 3, 4, and 12, IPC Building 25, IPC Buildings 22, 23, and Thermo Fisher, Tracy Village Specific Plan, Avenues Specific Plan, IPC Buildings 9, 10, and 14, NEI Specific Plan, and Tracy Hills Phases 1A, 1B, and 1C. City staff also requested West Yost to incorporate the following developments, which were evaluated by Black Water Consulting Engineers, Inc. into the City's hydraulic model: Barcelona Infill, Berg Road Properties, Harvest Apartments, 321 E. Grant Line Apartments, Project Hawk/IPC, and Home 2 Suites.

WEST YOST ASSOCIATES

TECHNICAL MEMORANDUM

DATE: November 11, 2019

Project No.: 404-60-19-47
SENT VIA: EMAIL

TO: Zabih Zaca, City of Tracy

CC: Robert Armijo, City of Tracy
Paul Verma, City of Tracy
Al Gali, City of Tracy
Nanda Gottiparthy, SNG & Associates, Inc.

FROM: Nathaniel Homan, PE, RCE #89903
Jim Connell, PE, RCE #63052

REVIEWED BY: Amy Kwong, PE, RCE #73213

SUBJECT: Design Recommendations for Hood Way Pipeline

In a technical memorandum (TM) prepared for the City of Tracy (City) titled *Hydraulic Evaluation of International Park of Commerce (IPC) Buildings 3, 4, and 12*, dated May 18, 2017, West Yost Associates (West Yost) recommended that 345 lineal feet (lf) of 16-inch diameter City-side Pressure Zone 2 (Zone 2) transmission main be constructed in Hood Way. The purpose of this recommended pipeline improvement was to provide pipeline network looping for Zone 2 pipelines located in Hood Way and Hansen Road after portions of the existing Zone 2 transmission main system are re-zoned to City-side Pressure Zone 3 (Zone 3).

This TM summarizes the findings and conclusions of West Yost's technical evaluation of the feasibility of constructing two shorter 16-inch diameter connections in Hood Way and Hansen Road, in place of the previously recommended pipeline. The locations of the proposed connections are shown on Figure 1.

The proposed connection in Hood Way would consist of approximately 36 lf of 16-inch diameter pipeline connecting the existing 16-inch diameter Zone 2 Cordes Tank fill line with the existing 24-inch diameter Zone 3 Cordes Pump Station discharge line. A detailed schematic of this connection is shown on Figure 2. An existing 16-inch butterfly valve would be permanently closed to re-zone the Cordes Tank fill line to Zone 3.

The proposed connection in Hansen Road would consist of approximately 20 lf of 16-inch diameter pipeline connecting the existing 16-inch diameter Zone 2 pipeline and the existing 24-inch diameter Zone 3 pipeline in Hansen Road. A detailed schematic of this connection is shown on Figure 3. This connection would be placed approximately 135 ft south of the intersection of Hopkins Road and Hansen Road to take advantage of the existing butterfly valve on the 24-inch diameter pipeline. This existing butterfly valve would be used to isolate the 24-inch diameter

pipeline between Schulte Road and Hopkins Road so that the pipeline in Hopkins Road west of Hansen Road could continue to serve Zone 3 during construction. The existing butterfly valve would be re-opened after construction is completed. The proposed new butterfly valve, to be installed north of the proposed cut-in-tee on the 16-inch diameter pipeline, would be permanently closed to re-zone the 16-inch diameter pipeline south of the proposed connection to Zone 3.

These proposed connections have two advantages over the previously recommended pipeline:

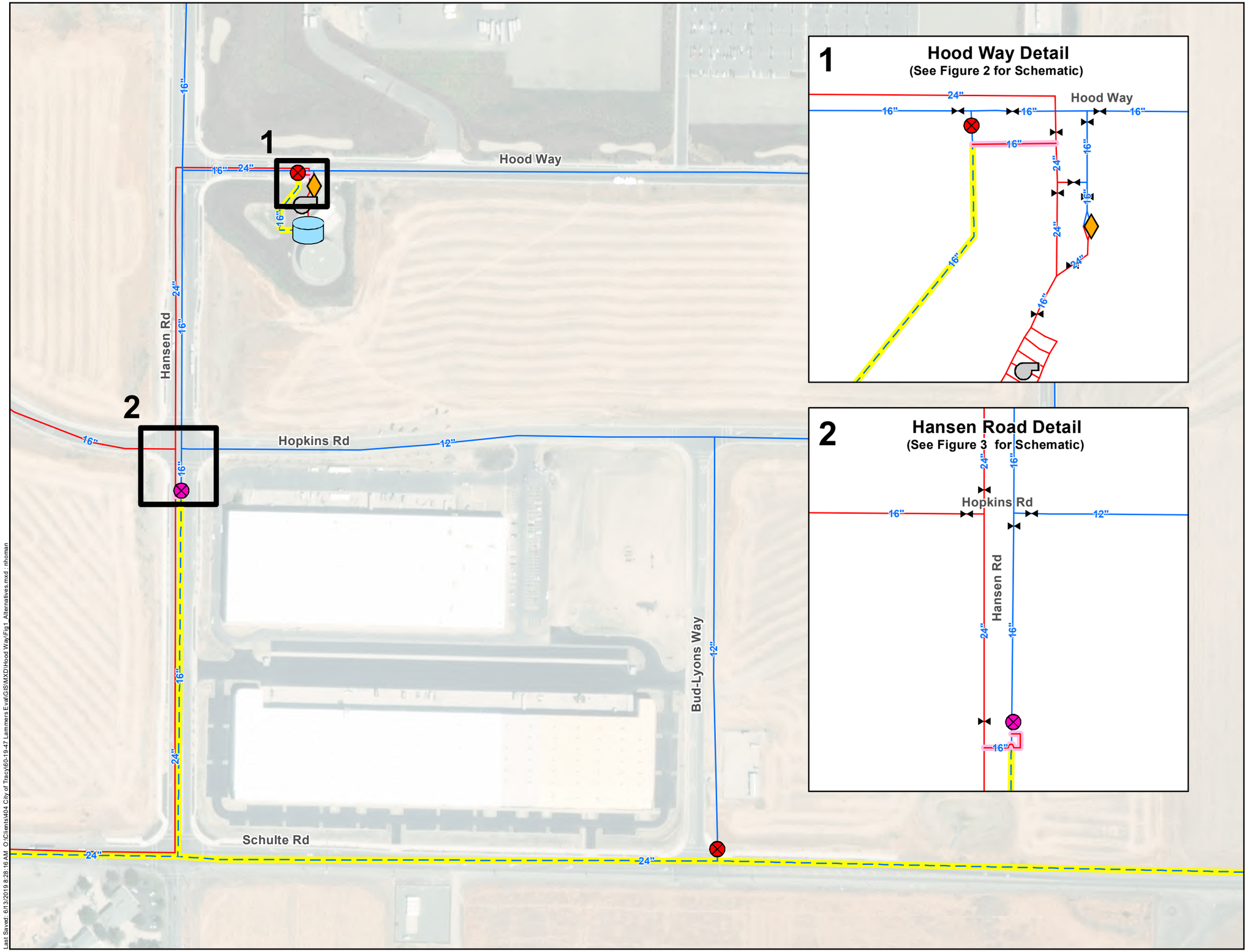
1. The total length of new pipeline required is 289 ft shorter than the previously recommended pipeline, making this alternative less expensive.
2. The proposed connections preserve the existing Zone 2 pipeline loop in Hansen Road, Hood Way, and Hopkins Road, unlike the alternative recommended in the May 2017 TM, which would break this loop by re-zoning the existing 16-inch diameter Zone 2 pipeline in Hansen Road between Hood Way and Hopkins Way to Zone 3.

After reviewing available plans and record drawings of the proposed construction areas, West Yost determined that the proposed connections are constructible. West Yost recommends the City construct the proposed connections instead of constructing the pipeline recommended in the May 2017 TM.

It should be noted that the re-zoning will close the valve at the southern end of the 12-inch diameter pipeline in Bud Lyons Way. This will create a long stretch of dead-end pipe and could potentially lead to water quality issues. Solutions to address these issues include:

1. Placing the water service lateral for the future building located east of Bud-Lyons Way as close as possible to the southern end of Bud Lyons Way. The demands from the building would keep water flowing through the pipeline and prevent stagnant water from forming.
2. Abandoning the pipeline in Bud Lyons Way. This option is only feasible if this pipeline is not needed for future water service connections.
3. Implementing a program to regularly flush the pipeline using a hydrant or blow off valve near the southern end of Bud Lyons Way.

This TM is submitted in accordance with West Yost's January 2019 Scope of Services. No estimates of infrastructure costs were developed as part of this evaluation. The locations of existing pipelines and valves shown on the figures attached here-in should be confirmed prior to design. If existing pipelines or valves are not as shown on the reviewed plans and record drawings, additional evaluation of the feasibility of the recommended connections may be required.



N

0 125 250
Scale in Feet

Closed Valve Due to Re-zoning

- Existing
- Proposed
- Other Existing Valve
- Cordes PRS #9
- Cordes Pump Station
- Cordes Tank
- Proposed Connection
- Existing Pipeline to be Re-zoned to Zone 3

Existing Pipeline

- Zone 2
- Zone 3

Notes:
1. Details are not to scale.

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Figure 1

Recommended Connections for Re-Zoning at Hood Way and Hansen Road

City of Tracy
Design Recommendations for
Hood Way Pipeline

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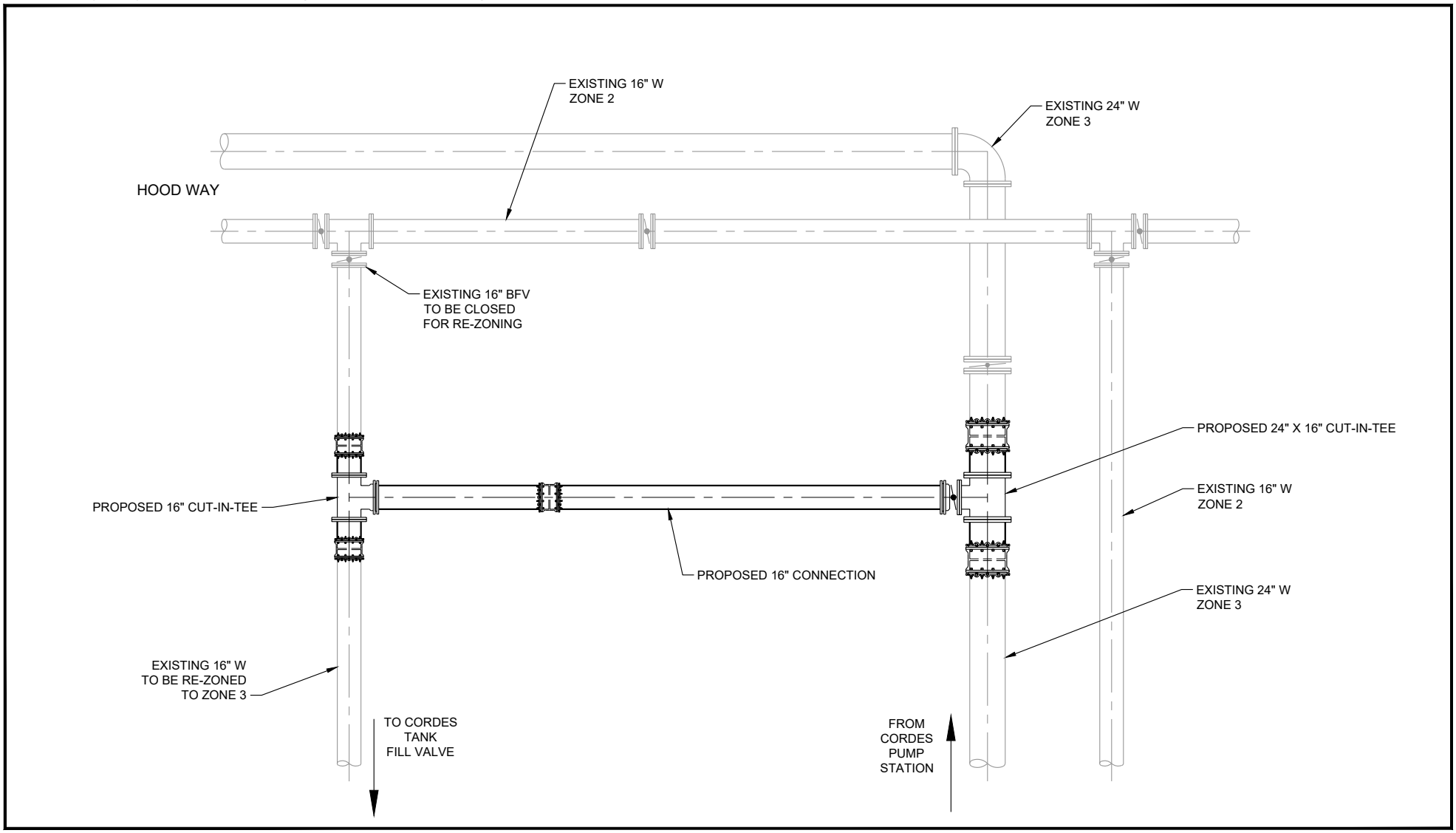

Notes:
1. Schematic connection points are for illustrative purposes only for the conceptual understanding of the likely components involved in installing the recommended connections. These schematics are not to be used for construction purposes.

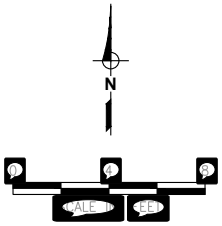

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Figure 2

Schematic
Hood Way Connection

City of Tracy
Design Recommendations for
Hood Way Pipeline

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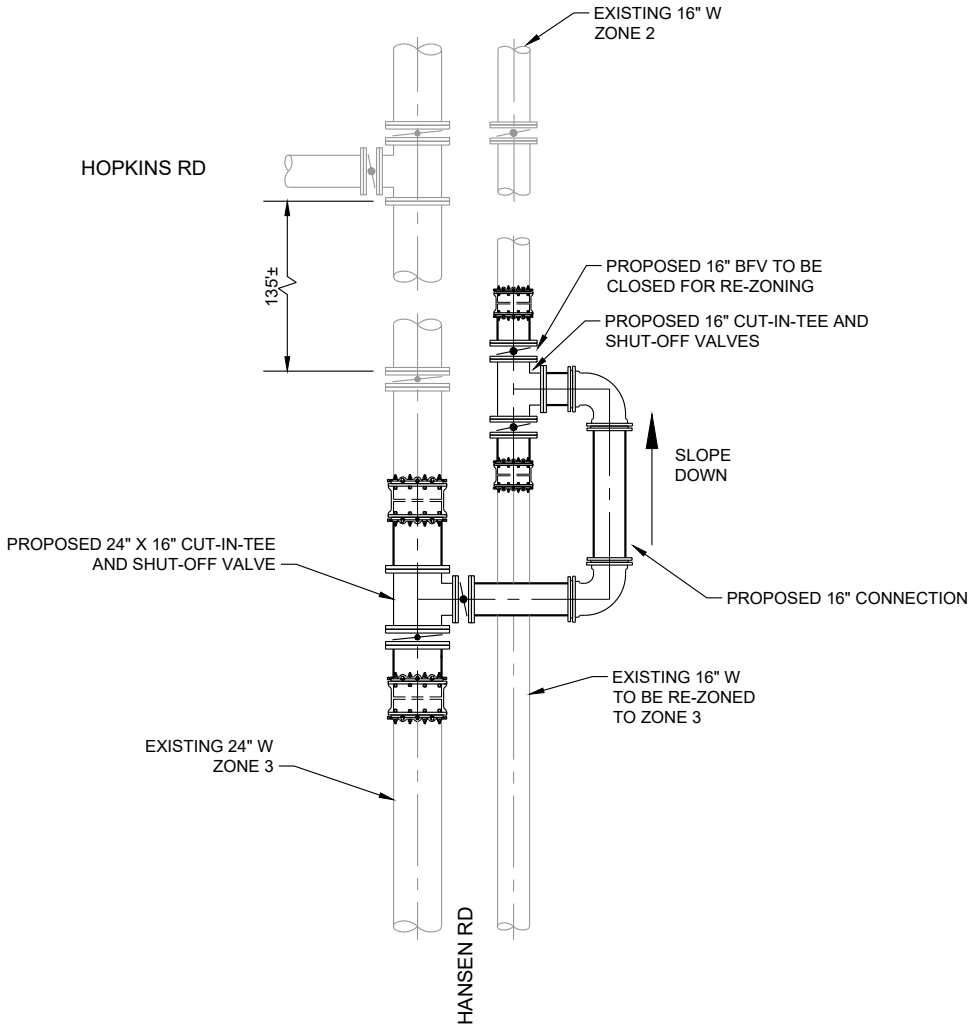

Notes:
1. Schematic connection points are for illustrative purposes only for the conceptual understanding of the likely components involved in installing the recommended connections. These schematics are not to be used for construction purposes.

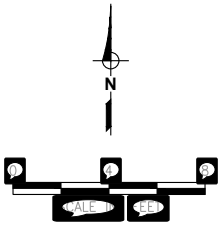

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Figure 3

Schematic
Hansen Road Connection

City of Tracy
Design Recommendations for
Hood Way Pipeline

APPENDIX E

Cost Estimating Assumptions

This appendix details West Yost's assumptions for estimating probable construction costs for the recommended potable and recycled water system facilities. Construction costs were developed based on a combination of data supplied by manufacturers, published industry standard cost data and curves, construction costs for similar facilities built by the City and/or other public agencies, and construction costs previously estimated by West Yost for similar facilities with similar construction cost indexes.

The costs presented in this appendix are for construction only and do not include estimating or construction uncertainties (e.g., variations in final quantities) or cost estimates for engineering, legal services, environmental review, inspections, and/or contract administration. Some of these items are referred to as contingency costs or mark-ups and are addressed in the last section of this appendix. It should also be noted that the construction costs presented in this appendix represent capital infrastructure costs and do not include costs for purchase of additional surface water supplies, supply reliability, or operation and maintenance.

All estimated construction costs have been adjusted to reflect 2020 dollars and should be used for conceptual cost estimates only and be updated regularly. Construction costs presented in this appendix are not intended to represent the lowest prices in the industry for each type of construction; rather they are representative of average or typical construction costs. These planning-level construction cost estimates have been prepared for guidance in evaluating various facility improvement options and are intended only for budgetary purposes within the context of this master planning effort.

The following sections of this appendix describe the assumptions used to estimate the probable construction costs for the planning and design of recommended water system facilities for the City's potable and recycled water systems:

- Land Acquisition Costs
- Potable Water System Construction Costs
- Recycled Water System Construction Costs
- Contingency Costs or Mark-ups

E.1 LAND ACQUISITION COSTS

It is assumed that land for buildout potable and recycled water facilities will be acquired at $190,000 per acre. Costs for land acquisition will only be added to major facilities such as tank sites where a large parcel is required. Consequently, land acquisition costs do not include right-of-way acquisition costs for transmission and distribution mains.

E.2 POTABLE WATER SYSTEM CONSTRUCTION COSTS

The following sections present the construction cost estimates used to project probable construction costs for recommended water system facilities in the City's potable water system and are categorized by improvement project type.

E.2.1 Treated Water Storage Reservoirs

Table 1 summarizes the estimated construction costs for treated water storage reservoirs between the size range of 0.5 to 6.0 MG. These costs generally include the installation of the storage tank, site piping, earthwork, paving, instrumentation, and related sitework. These costs are representative of construction conducted under normal excavation and foundation conditions and would be significantly higher for special or difficult foundation requirements.

It is recommended that new potable water storage reservoirs be partially buried prestressed concrete tanks to minimize impacts to developable land. These reservoirs could be located beneath City parks, allowing other uses of the land above the proposed reservoirs.

Table 1. Construction Costs for Treated Water Storage Reservoirs[a]

Capacity, MG	Estimated Construction Cost, million dollars[b] Partially Buried Prestressed Concrete
0.5	2.5
1.0	3.0
2.0	4.0
3.0	4.9
4.0	5.9
5.0	6.9
6.0	7.8

(a) Based on 2020 dollars.
(b) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.

E.2.2 Aquifer Storage and Recovery Production Wells

Aquifer Storage and Recovery (ASR) well construction consists of pilot hole drilling, water quality/soil sampling, pilot hole reaming, well construction, well development and providing the necessary housing, pump, motor, automatic control equipment (SCADA), discharge piping, and disinfection equipment. All new groundwater wells will be designed to allow for both injection and extraction of water supplies in conjunction with the City's proposed ASR Well Program.

Construction costs for new groundwater wells are estimated to be approximately $3,900,000 per well (assuming a well capacity of 2,500 gpm). For wells with a capacity of 1,000 gpm, estimated construction costs are approximately $2,500,000 per well. These estimates are based on recent bids for similarly sized wells and representative of construction conducted under normal drilling conditions. Costs would be significantly higher for special or difficult locations.

E.2.3 Treated Water Booster Pump Stations

Booster pump stations will be required at ground-level and below-grade reservoirs to lift water to the appropriate pressure zones. Estimated average construction costs for distribution pumping stations, as shown in Table 2, are based on enclosed stations with architectural and landscaping treatment suitable for residential areas. Booster pump station costs can vary considerably, depending on architectural design, pumping head, and pumping capacity. Therefore, these costs

presented below are representative of construction conducted under common or normal conditions and would be significantly higher for special or difficult conditions.

Booster pump station cost estimates include the installation of the booster pumps, site piping, earthwork, paving, a chemical feed system (hypochlorite), on-site backup/standby power generator, SCADA, and related sitework. Station designs will be based on the City's typical booster pump station configurations, which include 2 to 4 variable speed booster pumps installed in parallel to accommodate varying water demand conditions.

Table 2. Construction Costs for Treated Water Booster Pump Stations[a]

Firm Capacity[b], mgd	Estimated Construction Cost, million dollars[c]
0.5	1.3
1	1.4
2	1.5
3	1.7
5	2.0
10	2.8

(a) Based on 2020 dollars.
(b) Equal to the total pumping capacity with the largest pump out of service or on standby.
(c) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.

E.2.4 Pipelines

Unit construction costs for potable water pipelines 8 through 36 inches in diameter are provided in Table 3. These unit costs are categorized by typical pipeline construction either in developed (e.g., in urban or suburban roads) or undeveloped (e.g., across open fields or in rural roads) areas and are representative of pipeline construction conducted under common or normal conditions. Special or difficult conditions would increase costs significantly.

The unit construction costs presented below generally include pipeline materials, trenching, placing and jointing pipe, valves, fittings, hydrants, service connections, placing imported pipe bedding, native backfill material, and partial asphalt pavement replacement, if required. However, the costs presented in Table 3 do not include jacking and boring pipe or constructing boring and receiving pits. It is assumed the total cost to construct one boring pit and one receiving pit is $40,000. Pipeline jack and bore costs are shown in Table 4 and should be added where required.

Table 3. Unit Construction Costs for Pipelines[a,b]

Pipeline Diameter, inches	Unit Construction Cost, dollars/linear foot[c]	
	Developed Areas	Undeveloped Areas
8	190	160
10	220	185
12	260	225
14	300	255
16	335	285
18	370	315
20	400	340
24	465	395
30	565	480
36	660	560

(a) Based on 2020 dollars.
(b) Costs based on ductile iron cement-lined pipe.
(c) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.

Table 4. Unit Construction Costs for Jack and Bore[a]

Pipeline Size	Unit Construction Cost, dollars/linear foot[b,c]
8-inch pipe (16-inch casing)	520
12-inch pipe (21-inch casing)	595
16-inch pipe (24-inch casing)	690
20-inch pipe (30-inch casing)	845
24-inch pipe (36-inch casing)	995
30-inch pipe (42-inch casing)	1,115
54-inch pipe (66-inch casing)	1,700
Tunnel	3,540

(a) Based on 2020 dollars.
(b) Conductor pipe is not included in cost.
(c) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.

E.2.5 Pressure Regulating Stations and Pressure Reducing Valves

Interconnections (i.e., pressure regulating station or pressure reducing valve) are required to provide water supply between pressure zones during peak demands and/or emergency conditions. The estimated construction cost for a pressure regulating station is $250,000, while construction of a pressure reducing valve is estimated at $125,000. These costs are representative of construction conducted under normal conditions and would be significantly higher for special or difficult conditions.

Construction cost estimates for a pressure regulating station include the installation of a 12-inch diameter control valve, a concrete utility vault, access hatches, site piping, earthwork, paving,

SCADA, and related sitework. Construction cost estimates for a pressure reducing valve include the same items as a pressure regulating station; however, since a pressure reducing valve is typically used for emergency conditions, it requires a less complicated control valve and does not include SCADA installation.

E.2.6 Backup Power Generators

On-site backup power generators are recommended so pumps can continue delivering water to the distribution system in the event of a power outage. These generators should be sized to meet the power demands of the pumps. The construction cost for a new on-site backup power generator is estimated to be approximately $250,000. This cost is representative of construction conducted under normal conditions and would be significantly higher for special or difficult conditions.

E.2.7 SCADA System Improvements

SCADA system improvements are recommended to provide operators with real-time system data and flexibility in system operations. The construction cost for the installation of SCADA monitoring is estimated to be $125,000. This cost is representative of construction conducted under normal conditions and would be significantly higher for special or difficult conditions. Any discrepancies or inaccurate data tags should also be corrected to provide accurate real-time system flow and pressure monitoring.

E.3 RECYCLED WATER SYSTEM CONSTRUCTION COSTS

The following sections present the construction cost estimates used to project probable construction costs for recommended recycled water system facilities and are categorized by improvement project type.

The construction cost estimates of the recycled water system are based on similar assumptions to the construction cost estimates of the potable water system.

E.3.1 Recycled Water Storage Reservoirs

For partially buried prestressed concrete tanks, estimated storage reservoir costs are the same for recycled water and potable water and are repeated in Table 5 for reference. Table 5 also includes estimated costs for above ground, welded steel storage reservoirs. Costs for both concrete and welded steel tanks generally include the installation of the storage tank, site piping, earthwork, paving, instrumentation, and related sitework. Estimates are representative of construction conducted under normal excavation and foundation conditions and would be significantly higher for special or difficult foundation requirements. It is assumed that the recommended Zone A Tank (refer to Chapter 9) will be an above ground welded steel storage reservoir, while the remaining recommended storage reservoir(s) for the recycled water system will be partially buried prestressed concrete tanks.

Table 5. Construction Costs for Recycled Water Storage Reservoirs[a]

Capacity, MG	Estimated Construction Cost, million dollars[b]	
	Partially Buried Prestressed Concrete	Welded Steel
0.5	2.5	1.7
1.0	3.0	2.1
2.0	4.0	2.9
3.0	4.9	3.7
4.0	5.9	4.5
5.0	6.9	5.3
6.0	7.8	6.0

(a) Based on 2020 dollars.
(b) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.

E.3.2 Recycled Water Booster Pump Stations

Additional recycled water booster pump stations will be required at the Holly Drive WWTP and other locations to lift recycled water to the appropriate pressure zones. Estimated average construction costs for distribution pumping stations, as shown in Table 6, are based on enclosed stations with architectural and landscaping treatment suitable for residential areas. Booster pump station costs can vary considerably, depending on factors such as architectural design, pumping head, and pumping capacity. Therefore, these costs presented below are representative of construction conducted under common or normal conditions and would be significantly higher for special or difficult conditions.

Costs presented in Table 6 are discounted 10 percent from the potable water booster pump station costs presented in Table 2. This is because: (1) recycled water booster pump stations do not need to deliver design flows using firm capacity, so one fewer pump is required; and (2) they do not require backup generators.

Recycled water booster pump station cost estimates include the installation of the booster pumps, site piping, earthwork, paving, SCADA, and related sitework. Station designs will be based on the City's typical booster pump station configurations, which include 2 to 4 variable speed booster pumps installed in parallel to accommodate varying water demand conditions.

Table 6. Construction Costs for Recycled Water Booster Pump Stations[a]

Total Capacity, mgd	Estimated Construction Cost, million dollars[b]
0.5	1.2
1	1.2
2	1.4
3	1.5
5	1.8
10	2.6

(a) Based on 2020 dollars.
(b) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.

E.3.3 Recycled Water Pipelines

Unit construction costs for recycled water pipelines 8 inches and 12 inches in diameter are slightly less than for potable water pipelines, because the 8-inch and 12-inch diameter recycled water pipeline material is assumed to be PVC instead of ductile iron. For recycled water pipelines 16 inches through 36 inches in diameter, the material is assumed to be ductile iron, so the unit construction costs for these larger diameter recycled water pipelines are the same as for the corresponding potable water pipelines. Estimated pipeline unit costs are provided in Table 7 and are categorized by typical pipeline construction either in developed (e.g., in urban or suburban roads) or undeveloped (e.g., across open fields or in rural roads) areas. These costs are representative of pipeline construction conducted under common or normal conditions and would be significantly higher for special or difficult conditions.

The unit construction costs presented below generally include pipeline materials, trenching, placing and jointing pipe, valves, fittings, hydrants, service connections, placing imported pipe bedding, native backfill material, and partial asphalt pavement replacement, if required. However, the costs presented in Table 7 do not include jacking and boring pipe or constructing boring and receiving pits. It is assumed the total cost to construct one boring pit and one receiving pit is $40,000. Pipeline jack and bore costs are shown in Table 8 and should be added where required.

Table 7. Unit Construction Costs for Recycled Water Pipelines[a,b]

Pipeline Diameter, inches	Unit Construction Cost, dollars/linear foot[c]	
	Developed Areas	Undeveloped Areas
8	175	150
12	255	220
16	335	285
24	465	395
36	660	560

(a) Based on 2020 dollars.
(b) Costs based on PVC pipe for 8-inch and 12-inch diameter and ductile iron cement-lined pipe for 16-inch diameter and larger.
(c) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.

Table 8. Unit Construction Costs for Jack and Bore[a]	
Pipeline Size	Unit Construction Cost, dollars/linear foot[b,c]
8-inch pipe (16-inch casing)	520
12-inch pipe (21-inch casing)	595
16-inch pipe (24-inch casing)	690
20-inch pipe (30-inch casing)	845
24-inch pipe (36-inch casing)	995
30-inch pipe (42-inch casing)	1,115
54-inch pipe (66-inch casing)	1,700
Tunnel	3,540

(a) Based on 2020 dollars.
(b) Conductor pipe is not included in cost.
(c) Estimated construction costs do not reflect an adjustment to account for the current economic bidding climate.

E.4 CONTINGENCY COSTS OR MARK-UPS

Contingency costs or mark-ups must be reviewed on a case-by-case basis, because they will vary considerably with each construction project. However, to assist City staff with budgeting for these recommended water system facility improvements, standard mark-ups have been added to the planning budget as percentages of the estimated base construction cost.

Standard mark-ups are divided into four subcategories, totaling 40 percent:

- General Contingency: The construction costs presented above are representative of the construction of water system facilities under normal construction conditions and schedules; consequently, it is appropriate to allow for estimating and construction uncertainties unavoidably associated with conceptual project planning. Unexpected construction conditions, the need for unforeseen mechanical items, and variations in final quantities are only a few of the items that can increase project costs. An allowance of 15 percent of the base construction cost will be included to cover such project-related general contingencies.
- Design and Planning: Design and planning services associated with new facilities include preliminary investigations and reports, right-of-way acquisition, foundation explorations, preparation of drawings and specifications for construction, surveying and staking, sampling of testing material, and start-up services. The cost of these items may vary, but for the purpose of this study, it is assumed that engineering design and planning costs will equal 10 percent of the base construction cost.
- Construction Management: Construction management covers items such as contract management and inspection during construction. The cost of these items may vary, but for the purpose of this study, it is assumed that construction management costs will equal 10 percent of the base construction cost.

- Program Administration: Program administration covers items such as legal fees, environmental/CEQA compliance requirements, financing expenses, and interest during construction. The cost of these items may vary, but for the purpose of this study, it is assumed that program administration costs will equal 5 percent of the base construction cost.

An example application of these standard mark-ups to a project with an assumed base construction cost of $1.0 million is shown in Table 9. As shown, the total cost of all project construction contingencies (general contingency, design and planning, construction management, and program administration costs) is 40 percent of the base construction cost for each construction project.

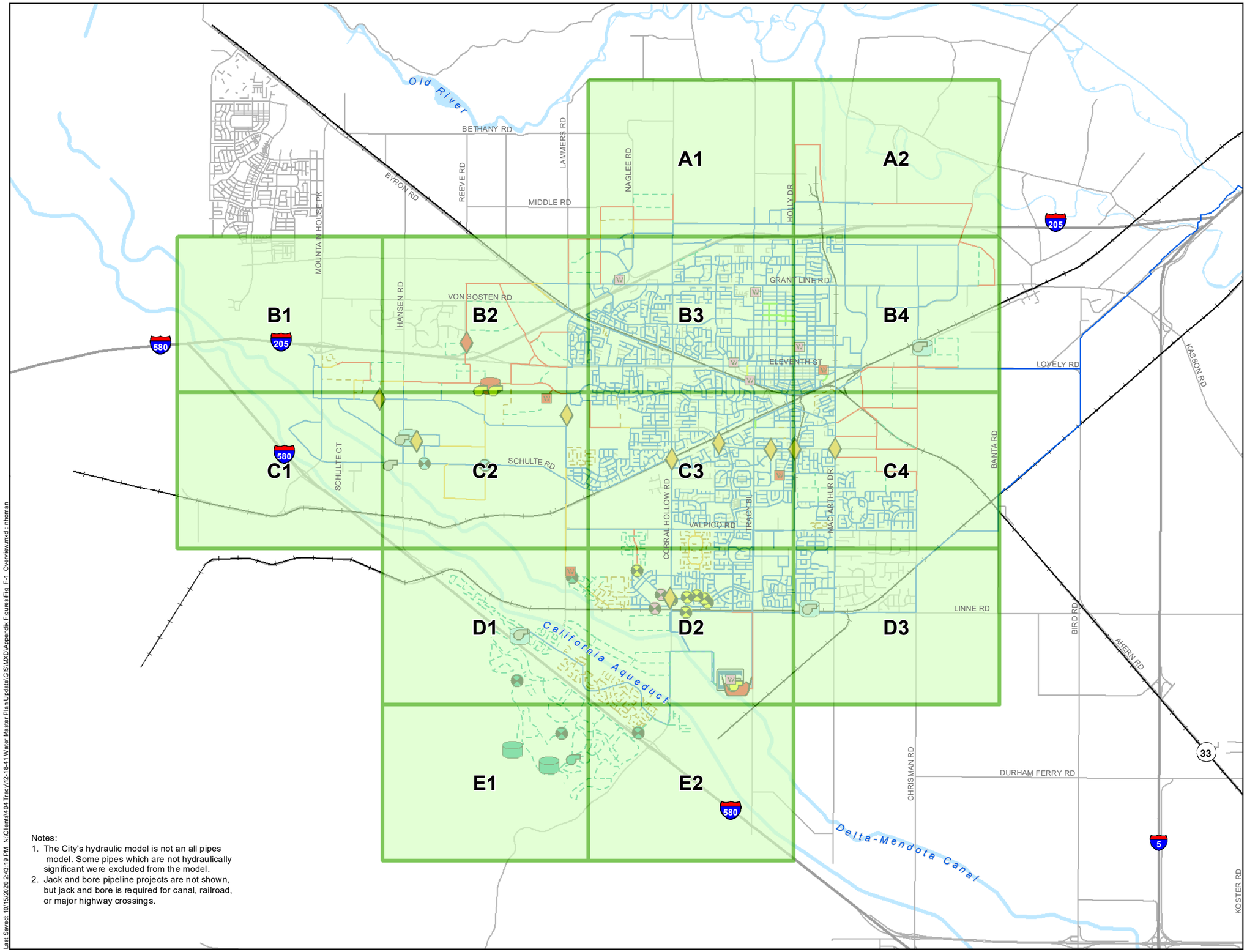
Table 9. Example Application of Mark-ups

Cost Component	Percent	Cost, dollars
Estimated Base Construction Cost before Mark-ups[a]		1,000,000
Mark-ups:		
General Contingency	15	150,000
Design and Planning	10	100,000
Construction Management	10	100,000
Program Administration	5	50,000
Estimated Total Project Cost		**$1,400,000**

(a) Assumed cost of an example project.

APPENDIX F

Proposed Future Potable Water System Facility Improvements



Notes:
1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
2. Jack and bore pipeline projects are not shown, but jack and bore is required for canal, railroad, or major highway crossings.

N

0 3,000 6,000
Scale in Feet

Symbology

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- WTP John Jones Water Treatment Plant
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

TRACY

WEST YOST ASSOCIATES

Figure F-1

Proposed Future Potable Water System Facility Improvements

City of Tracy
Water System Master Plan Update

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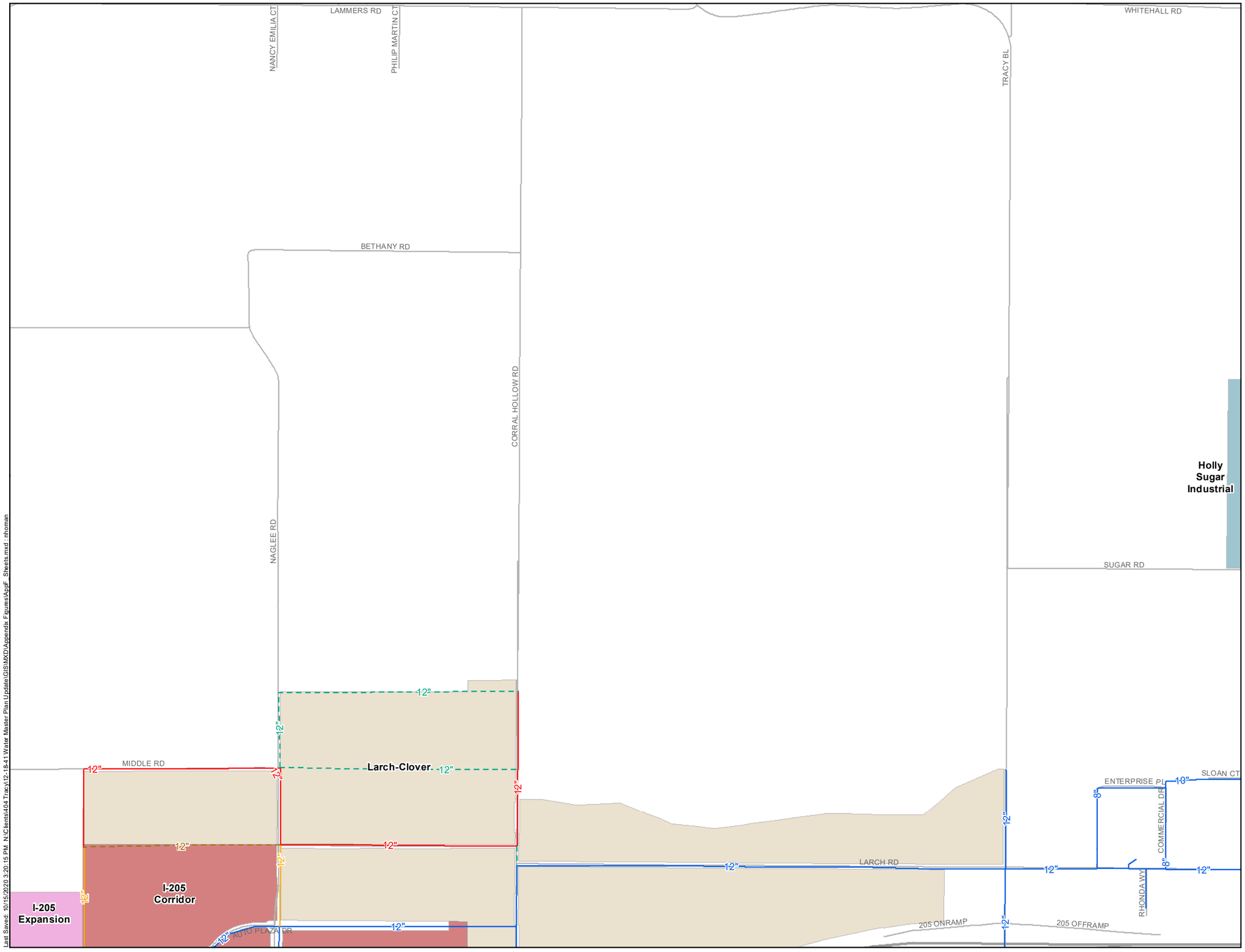

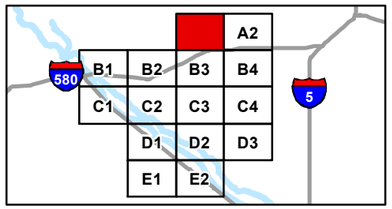

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

TRACY

WEST YOST ASSOCIATES

Figure F-A1

City of Tracy
Water System Master Plan Update

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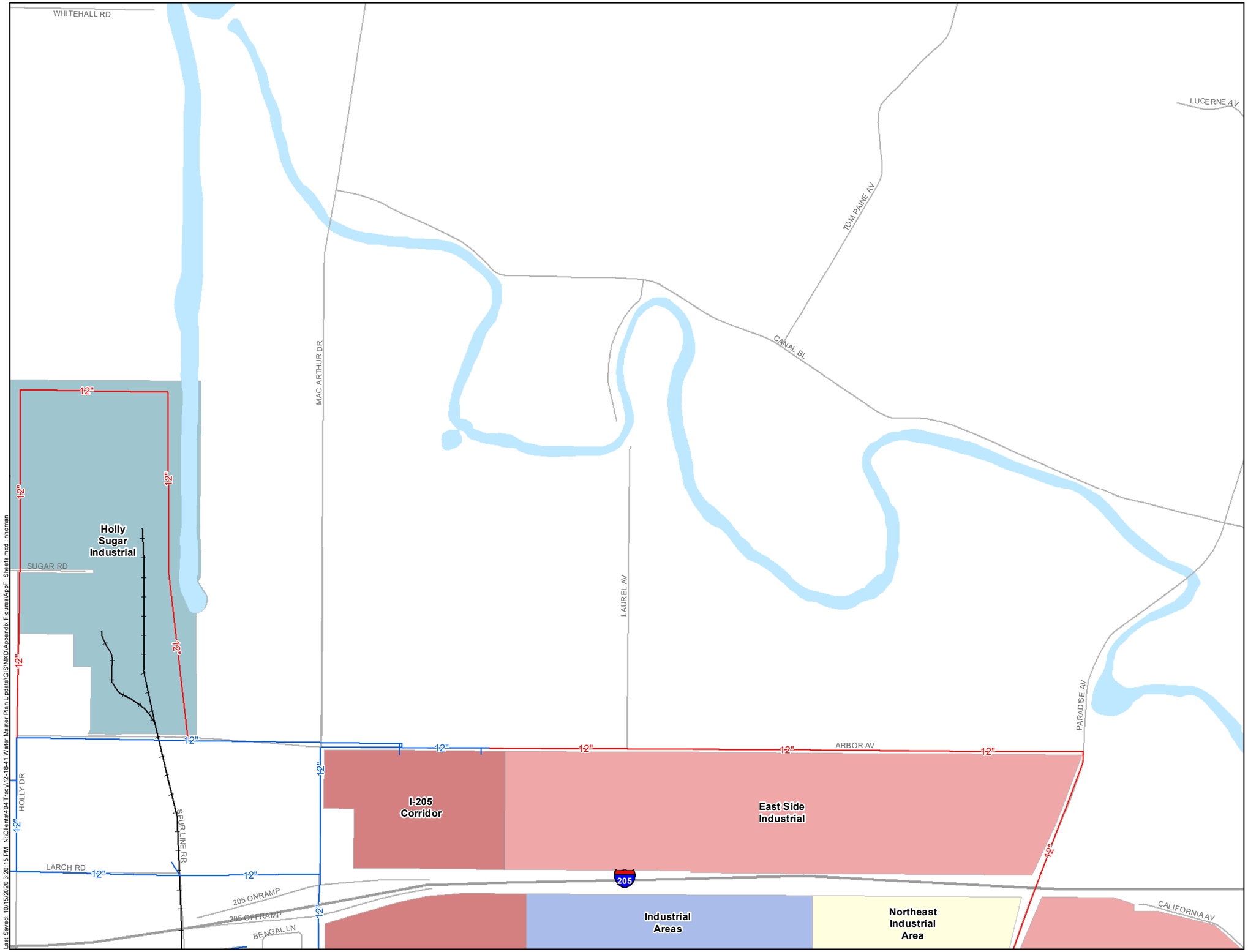

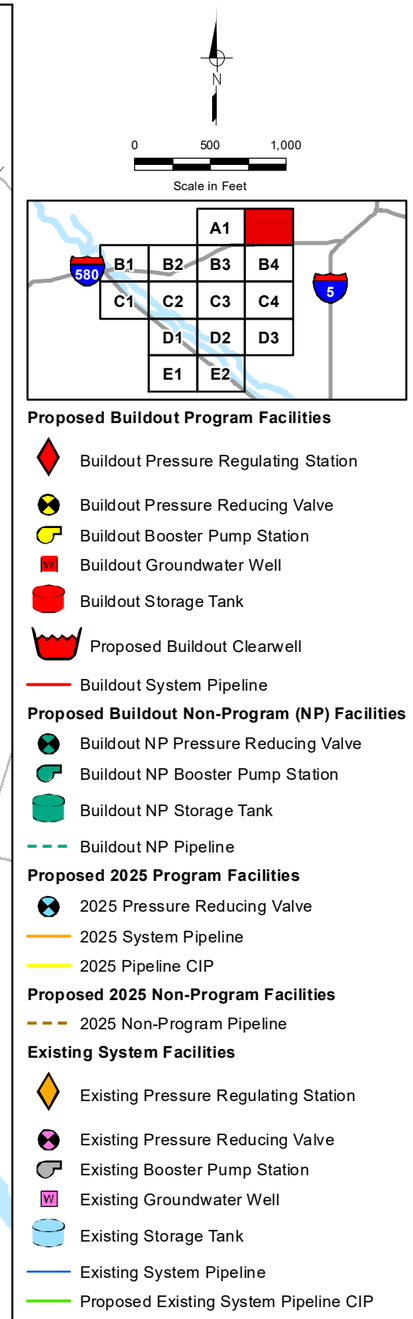

TRACY

WEST YOST ASSOCIATES

Figure F-A2

City of Tracy
Water System Master Plan Update

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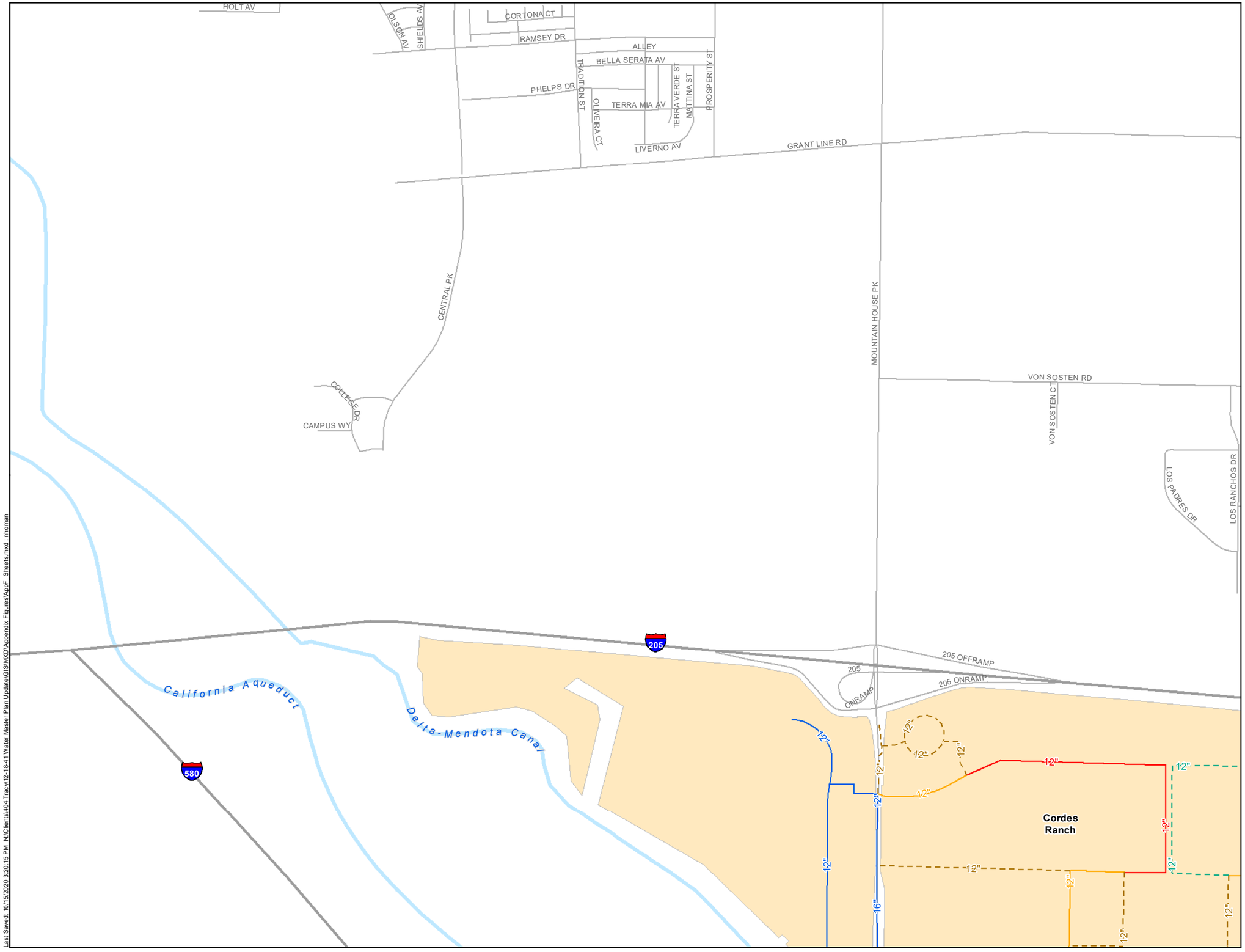

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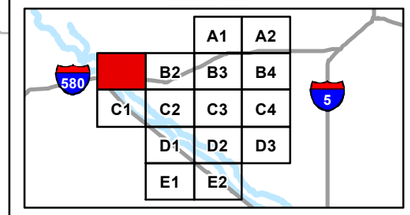

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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Figure F-B1

City of Tracy
Water System Master Plan Update

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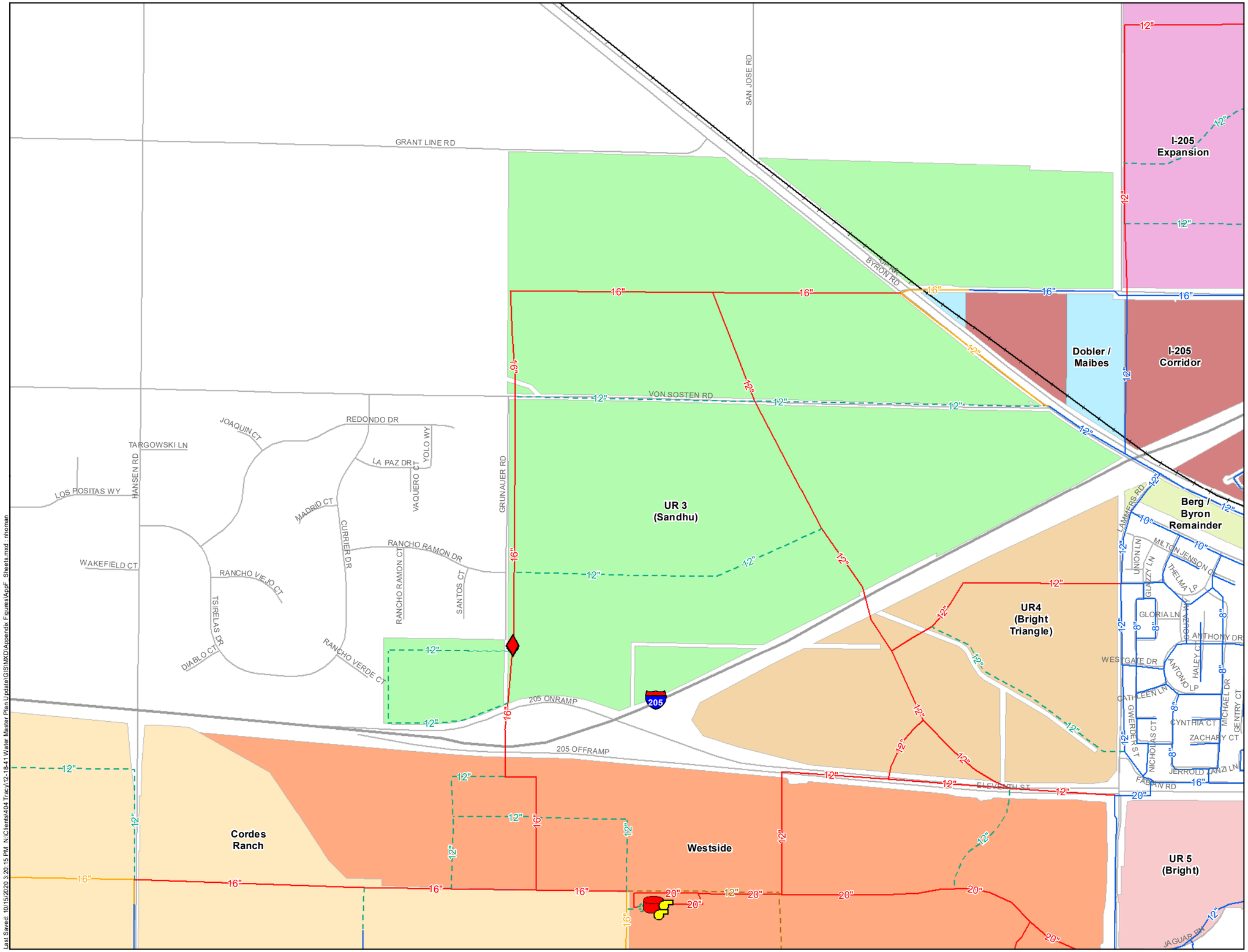

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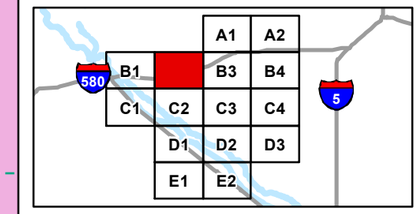

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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Figure F-B2

City of Tracy
Water System Master Plan Update

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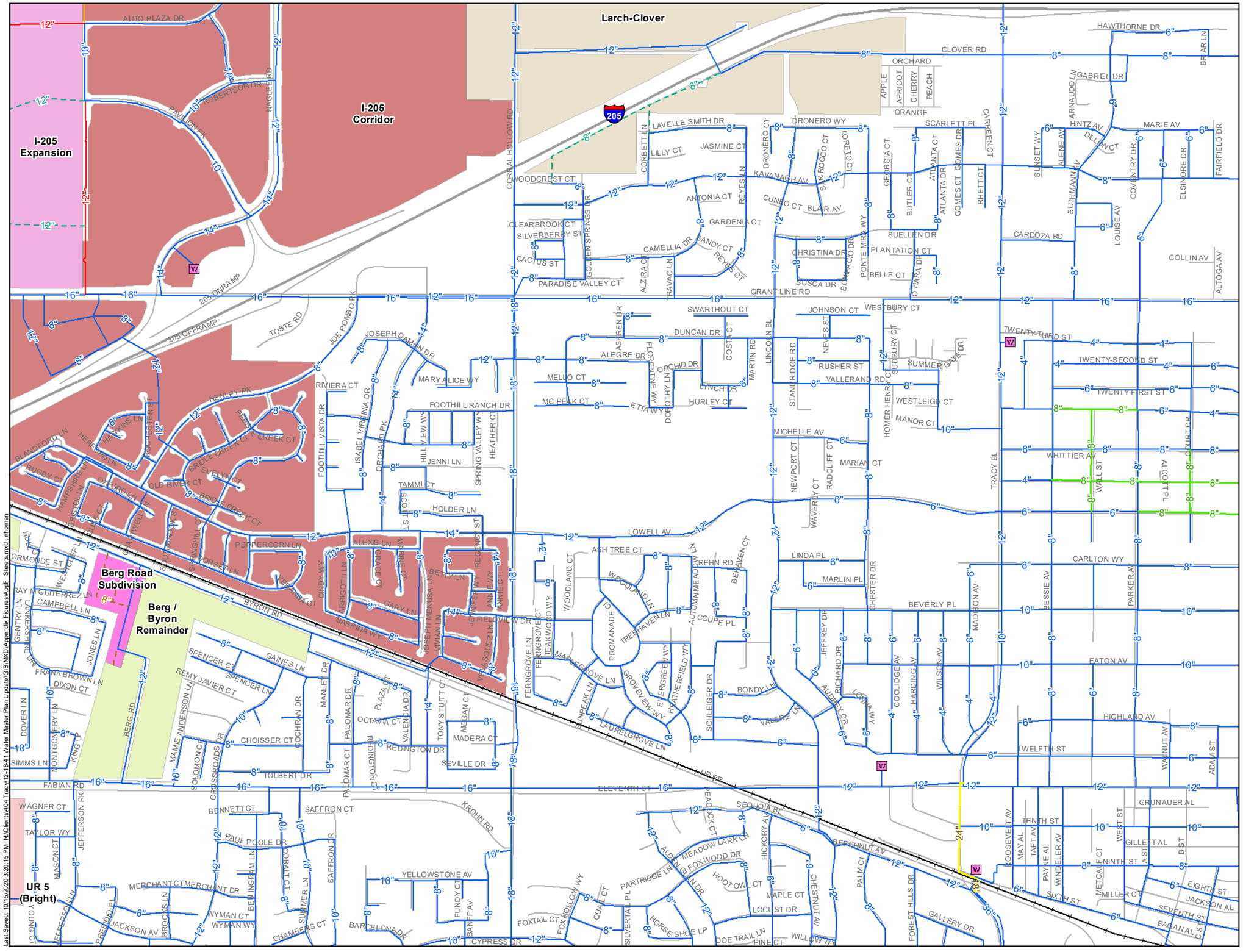

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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Figure F-B3

City of Tracy
Water System Master Plan Update

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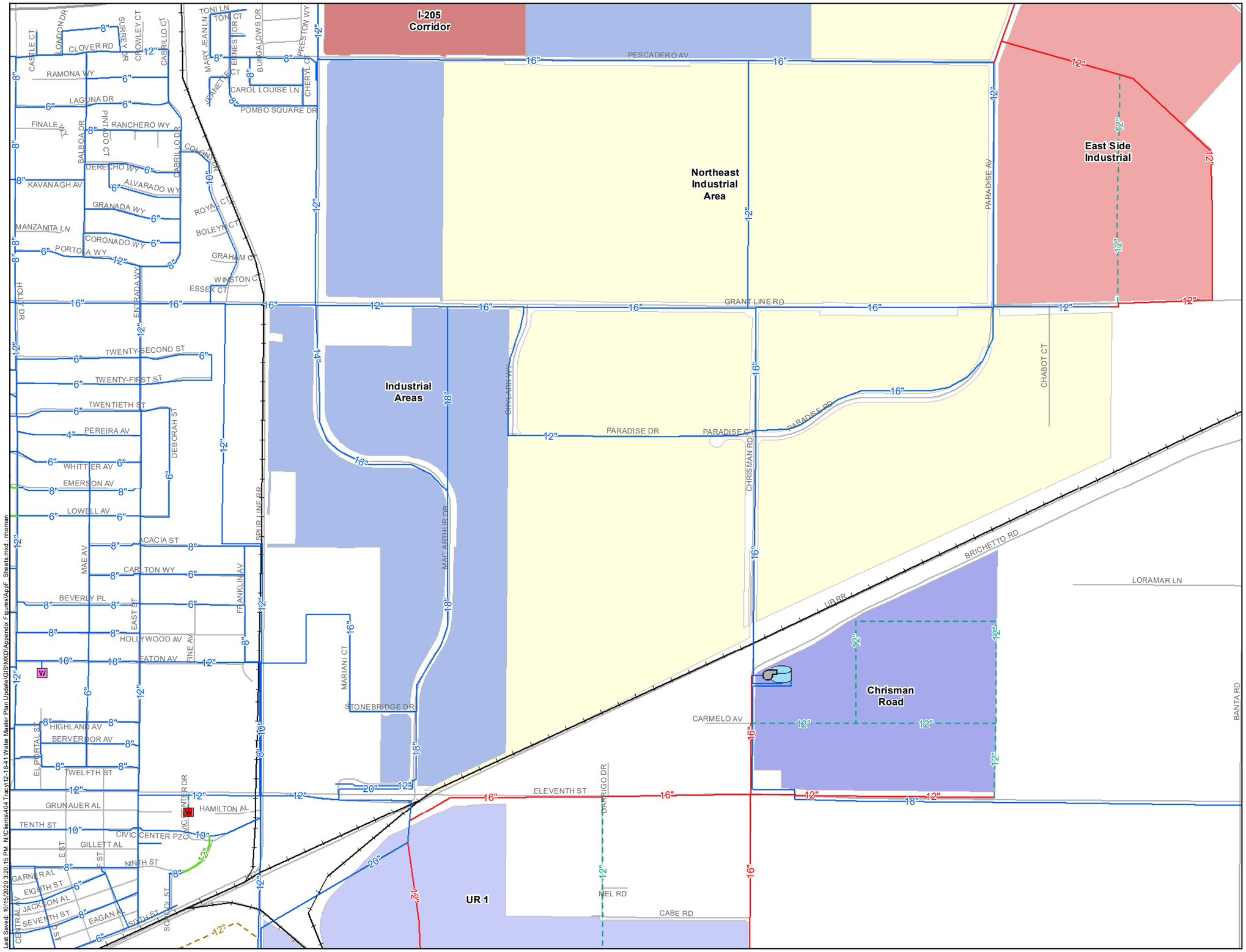

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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Figure F-B4

City of Tracy
Water System Master Plan Update

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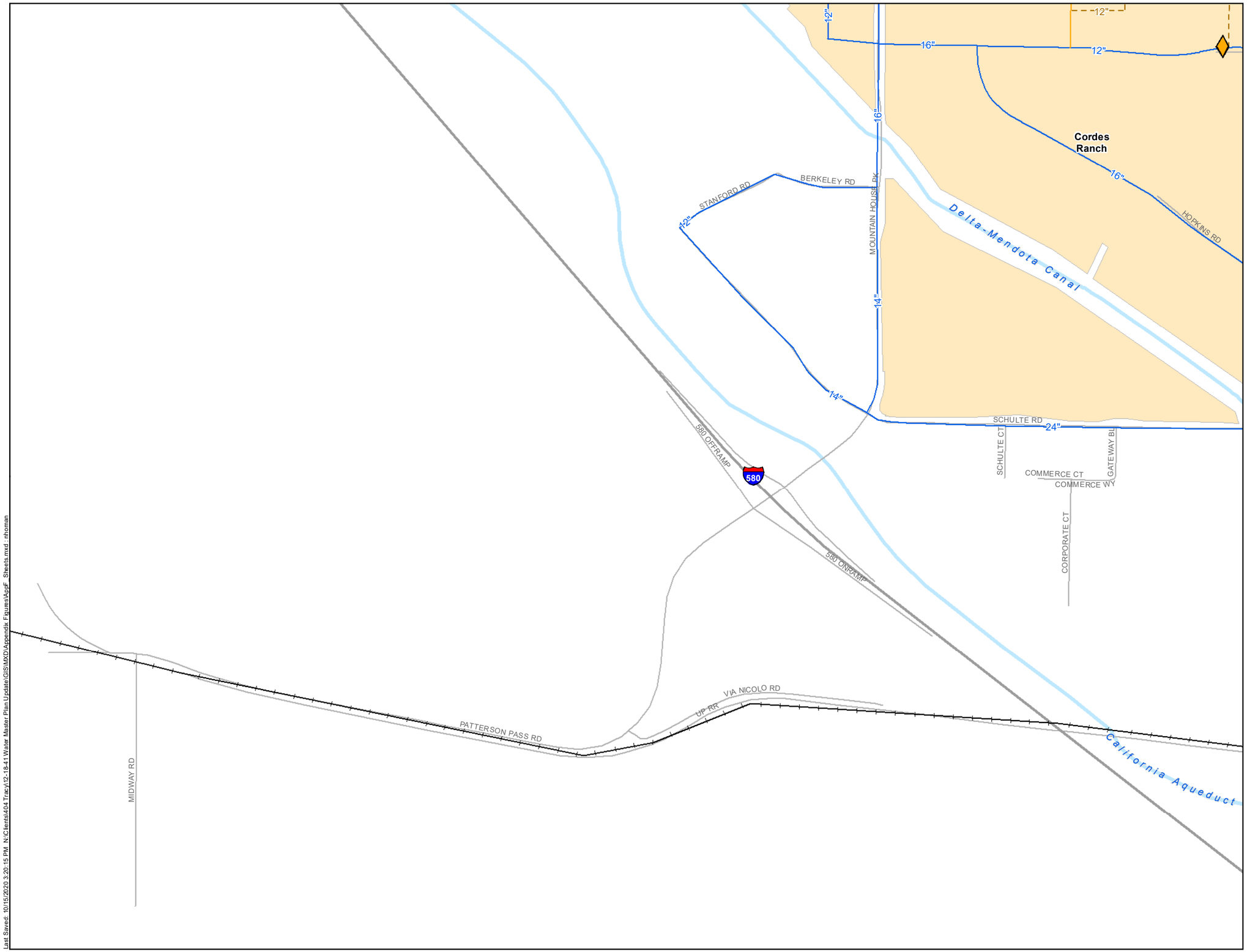

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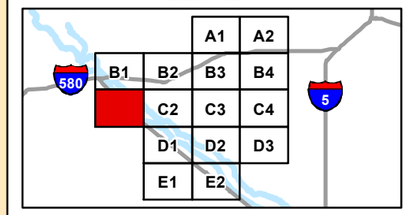

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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Figure F-C1

City of Tracy
Water System Master Plan Update

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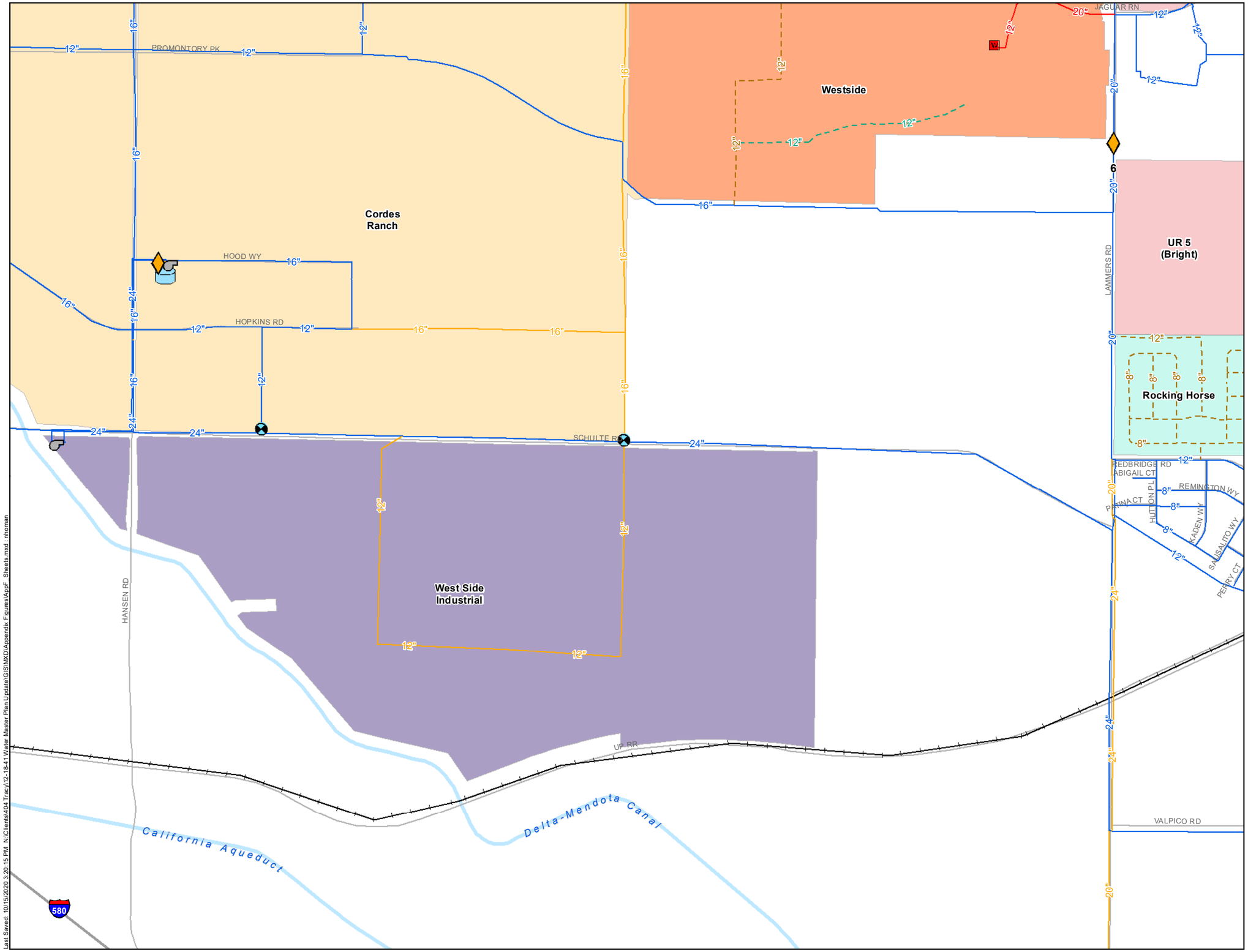

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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Figure F-C2

City of Tracy
Water System Master Plan Update

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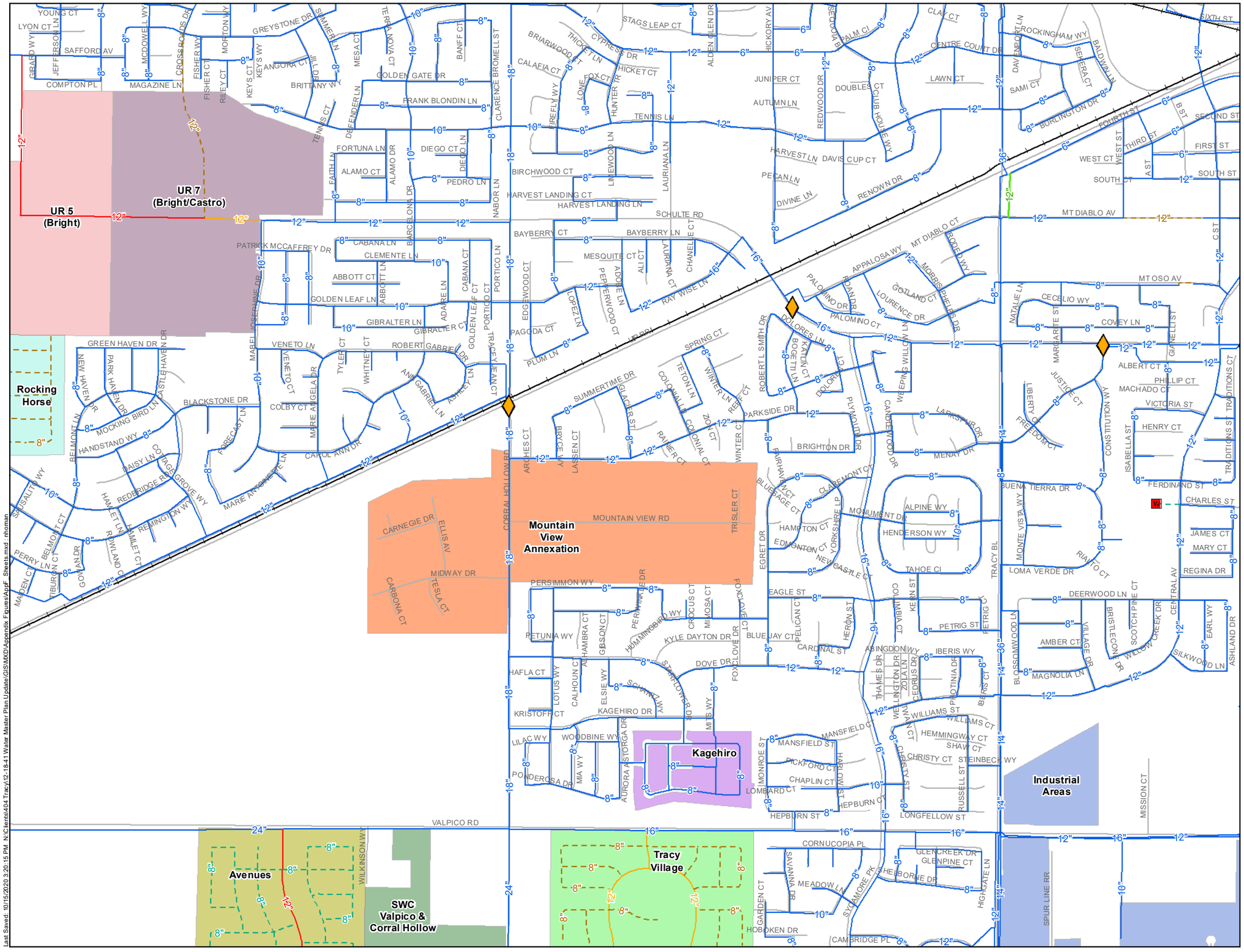

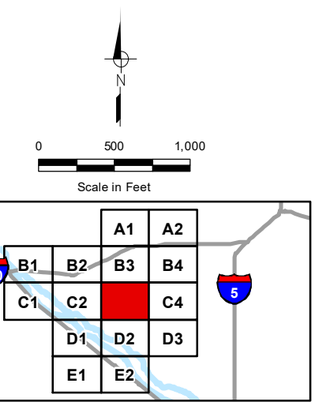

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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Figure F-C3

City of Tracy
Water System Master Plan Update

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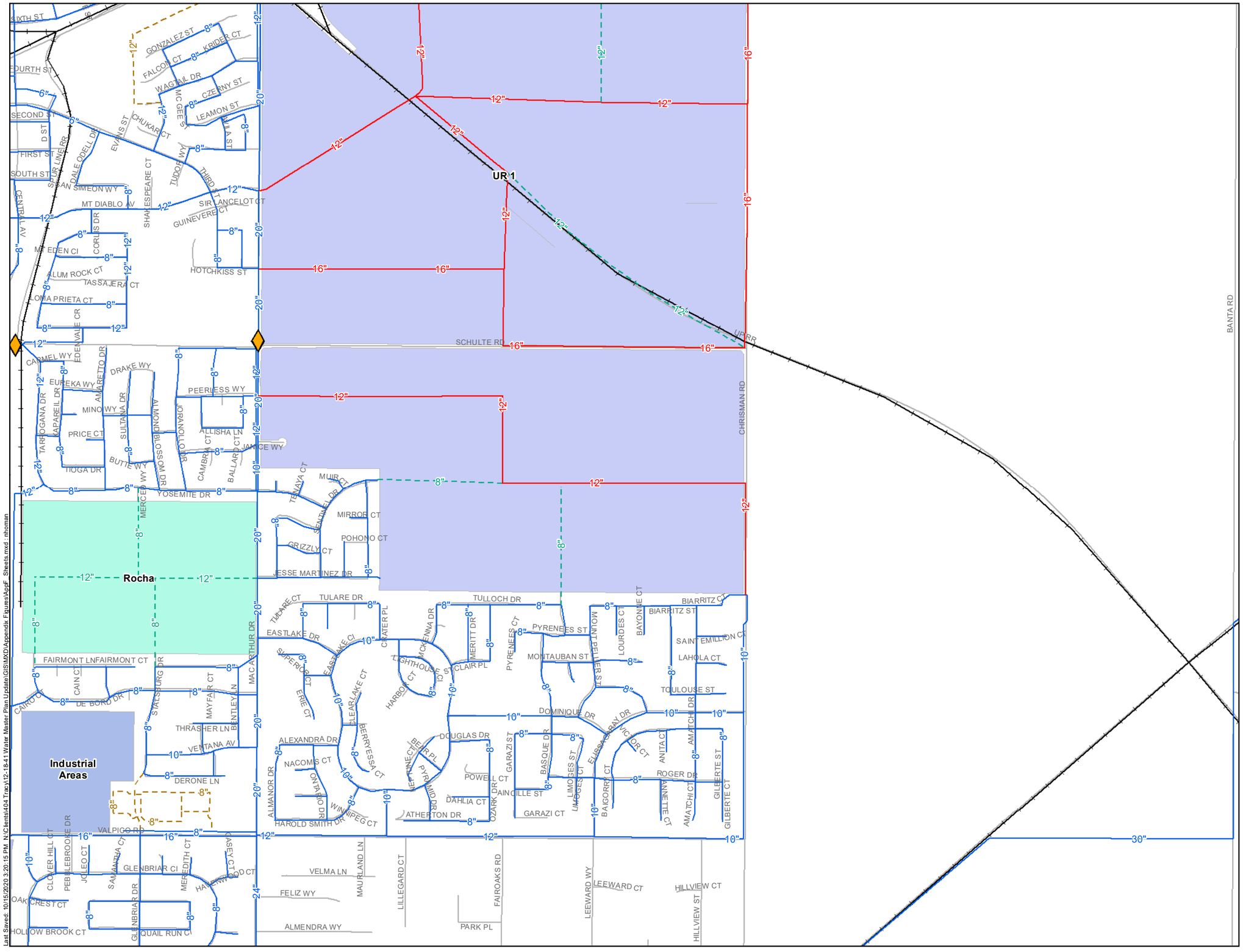

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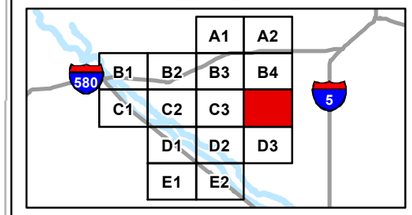

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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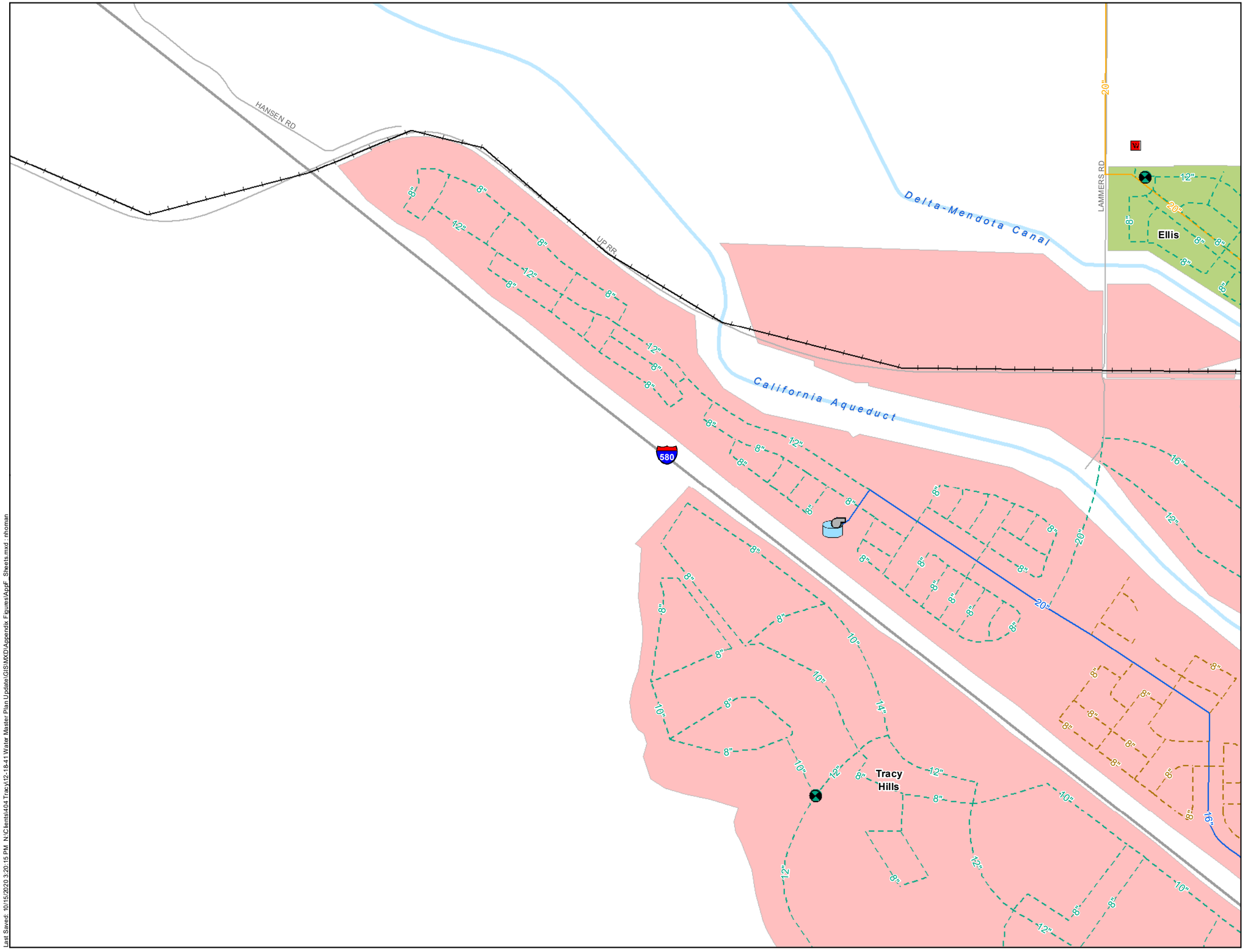
Figure F-C4

City of Tracy
Water System Master Plan Update



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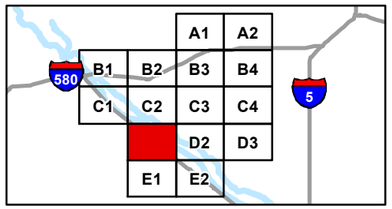

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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Figure F-D1

City of Tracy
Water System Master Plan Update

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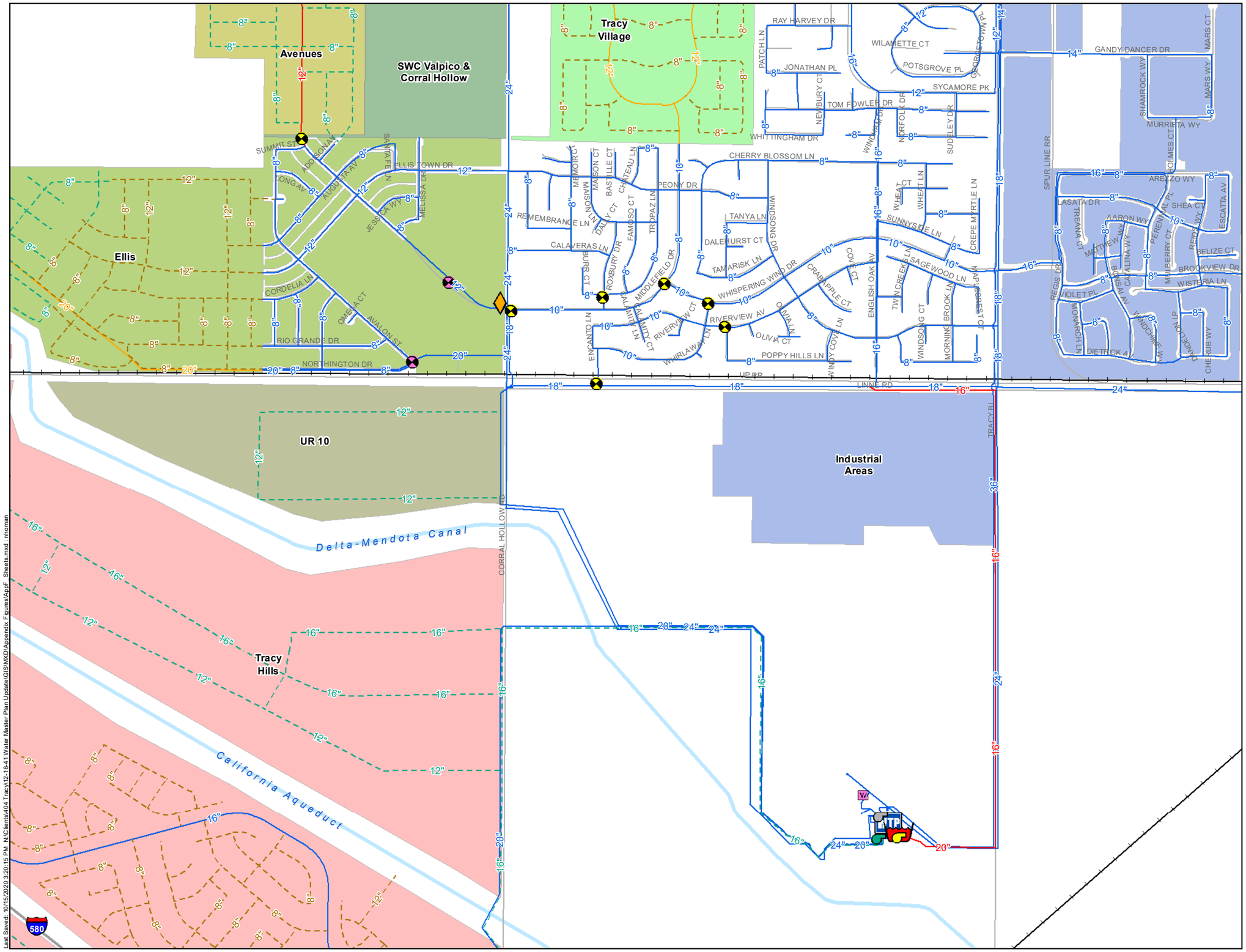

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B1	B2	B3	B4
C1	C2	C3	C4
	D1		D3
	E1	E2	

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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Figure F-D2

City of Tracy
Water System Master Plan Update

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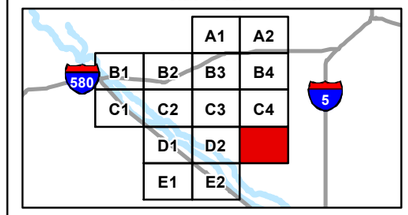

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

TRACY

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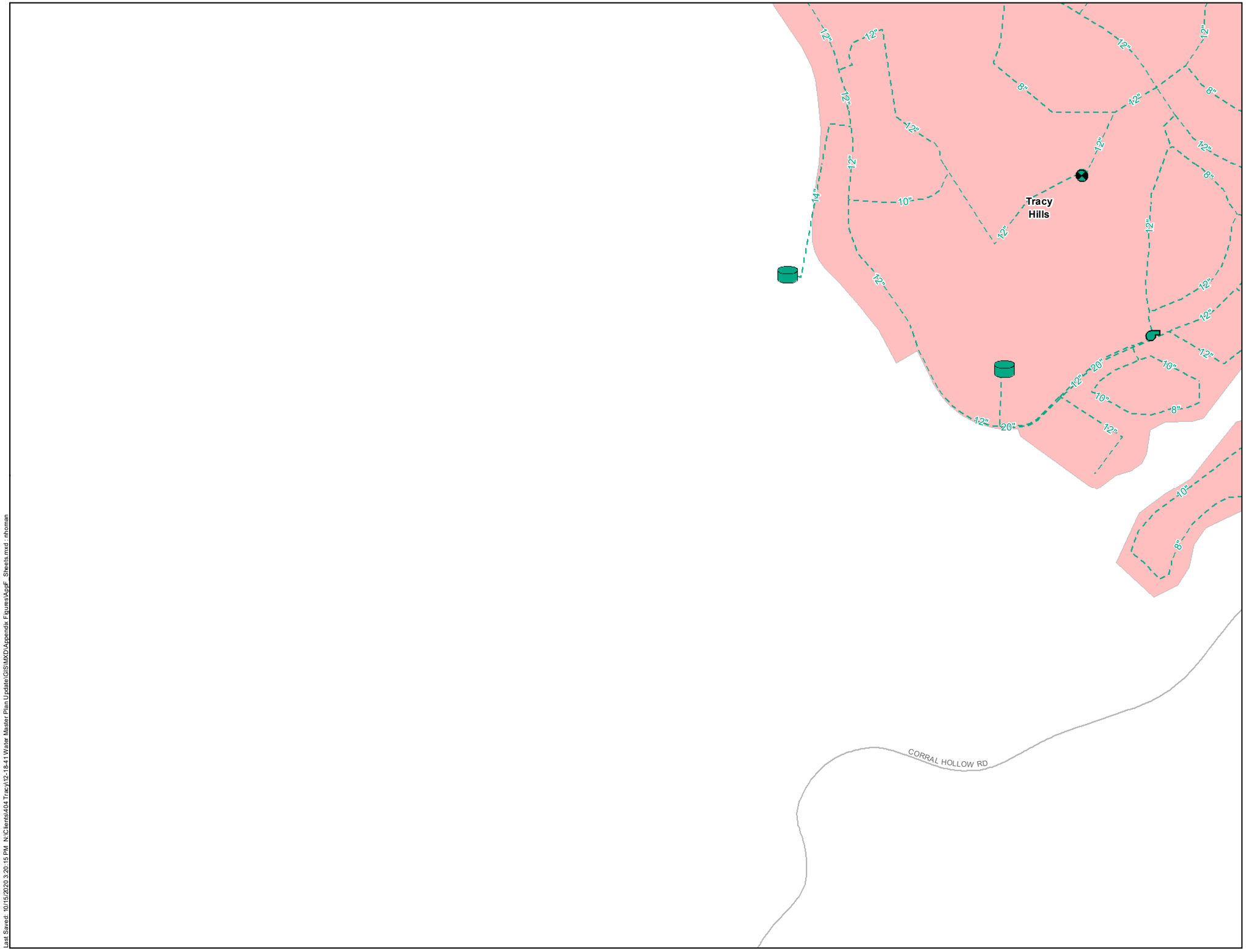
Figure F-D3

City of Tracy
Water System Master Plan Update



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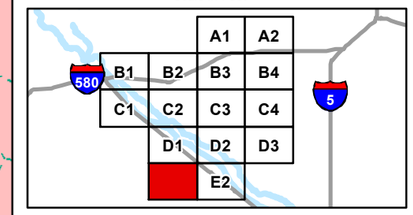

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

TRACY

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Figure F-E1

City of Tracy
Water System Master Plan Update

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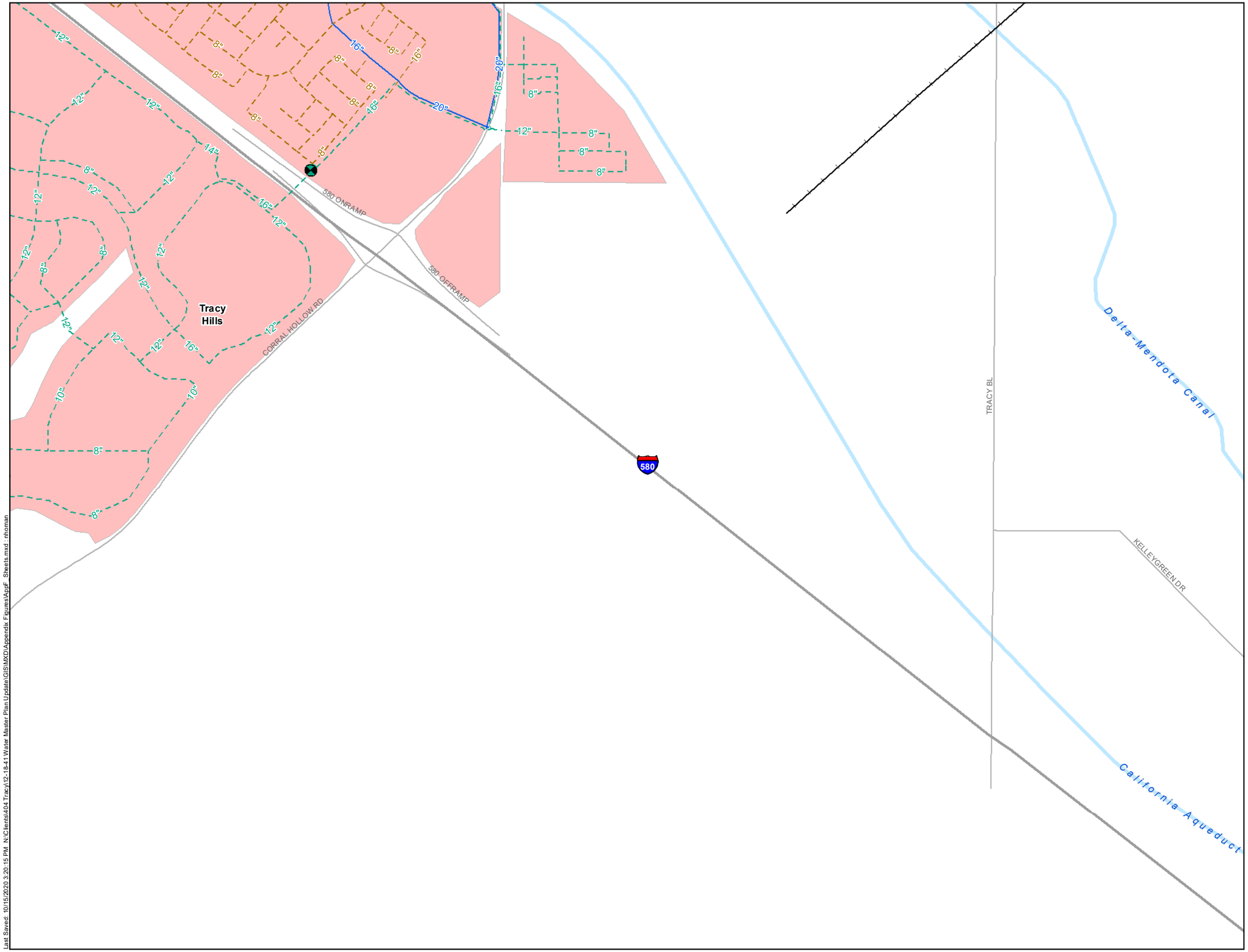

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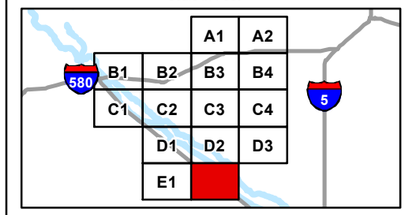

Proposed Buildout Program Facilities

- Buildout Pressure Regulating Station
- Buildout Pressure Reducing Valve
- Buildout Booster Pump Station
- Buildout Groundwater Well
- Buildout Storage Tank
- Proposed Buildout Clearwell
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Pressure Reducing Valve
- Buildout NP Booster Pump Station
- Buildout NP Storage Tank
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Pressure Reducing Valve
- 2025 System Pipeline
- 2025 Pipeline CIP

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Pressure Regulating Station
- Existing Pressure Reducing Valve
- Existing Booster Pump Station
- Existing Groundwater Well
- Existing Storage Tank
- Existing System Pipeline
- Proposed Existing System Pipeline CIP

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Figure F-E2

City of Tracy
Water System Master Plan Update

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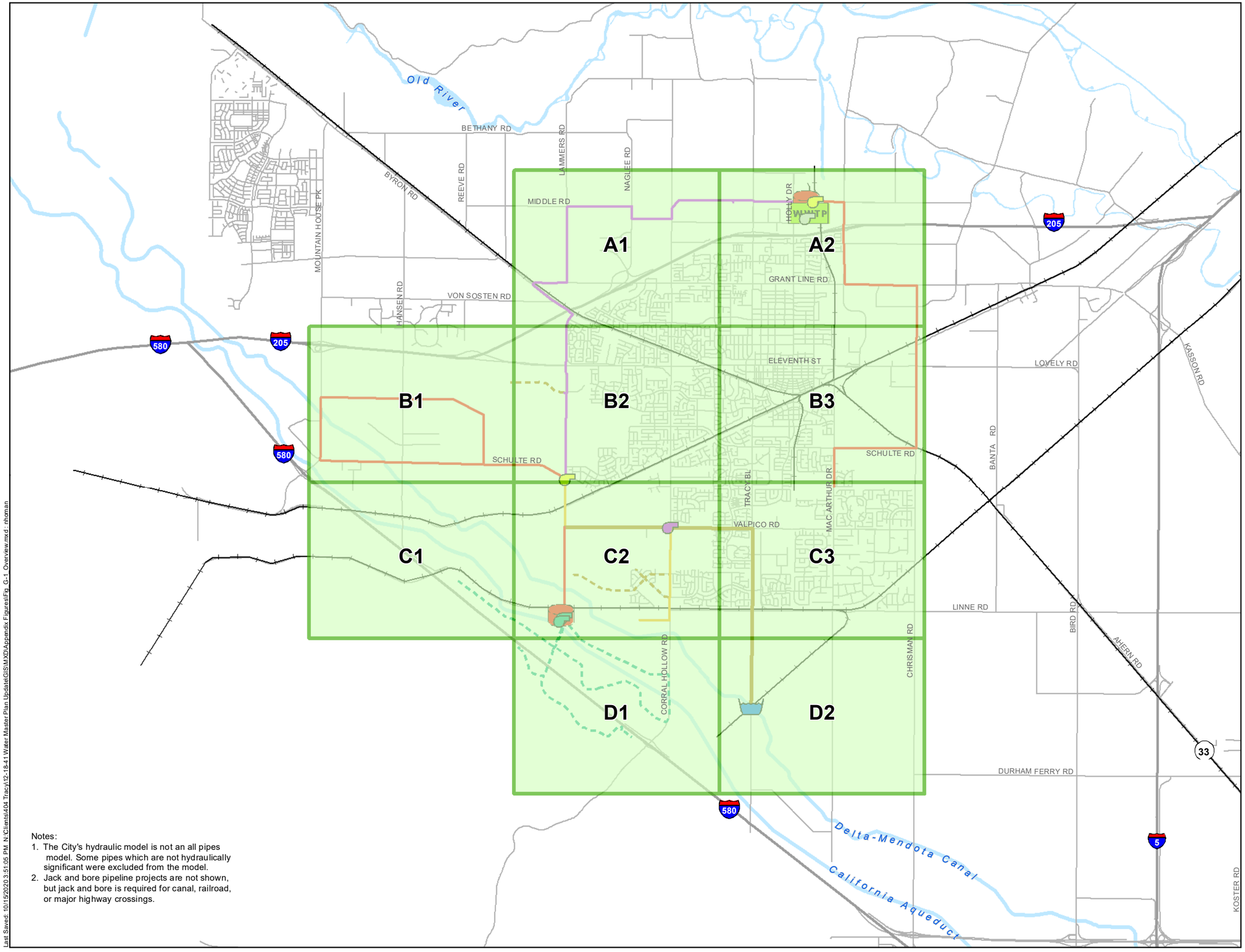
APPENDIX G

Proposed Future Recycled Water System Facility Improvements



Symbology

Proposed Buildout Program Facilities

- Buildout Booster Pump Station
- Buildout Storage Tank
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Booster Pump Station
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Booster Pump Station
- 2025 System Pipeline
- Delta-Mendota Canal Pipeline
- Delta-Mendota Canal Discharge Point

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Booster Pump Station
- WWTP Wastewater Treatment Plant
- Existing System Pipeline

Notes:

1. The City's hydraulic model is not an all pipes model. Some pipes which are not hydraulically significant were excluded from the model.
2. Jack and bore pipeline projects are not shown, but jack and bore is required for canal, railroad, or major highway crossings.

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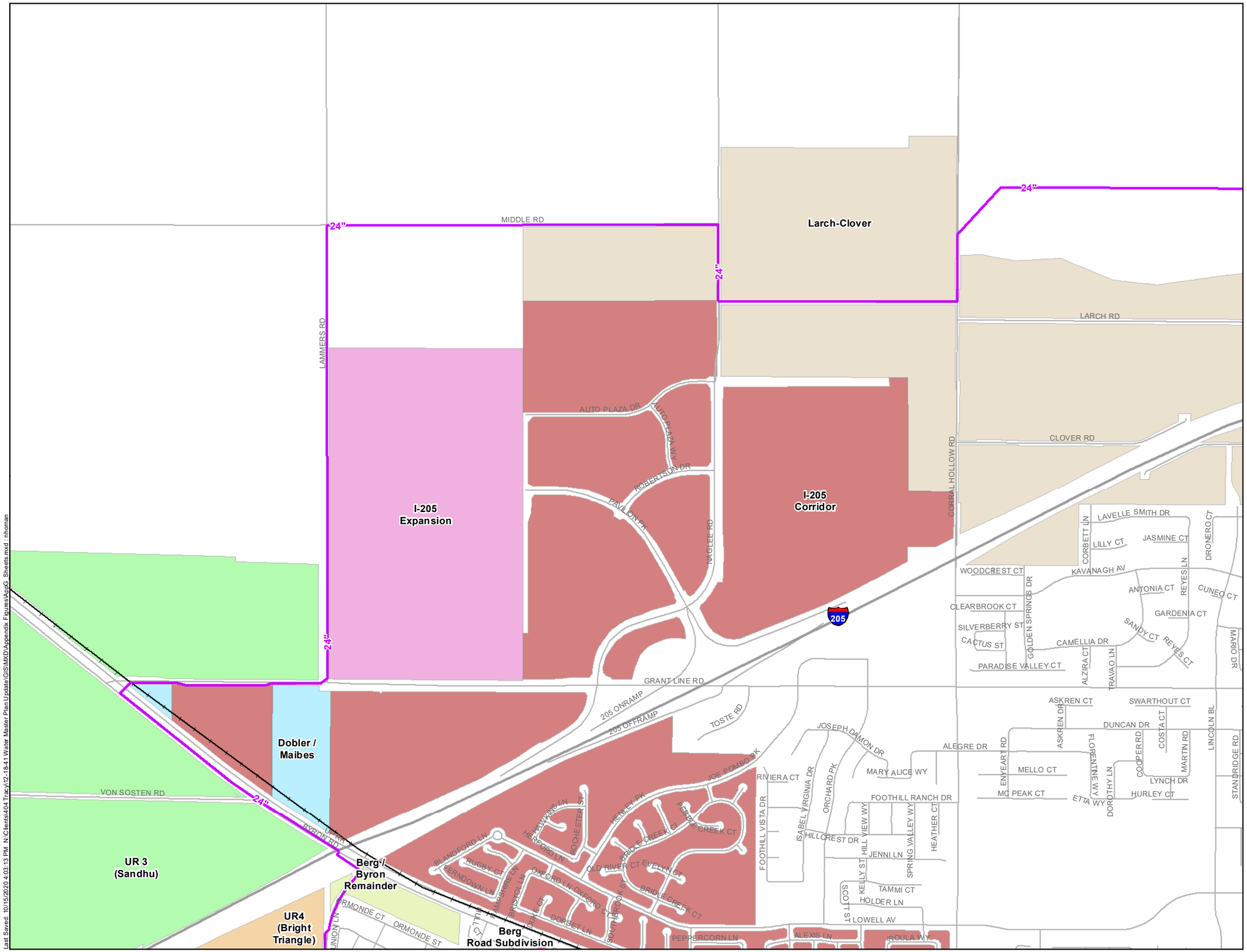
Figure G-1

Proposed Future Recycled Water System Facility Improvements

City of Tracy
Water System Master Plan Update



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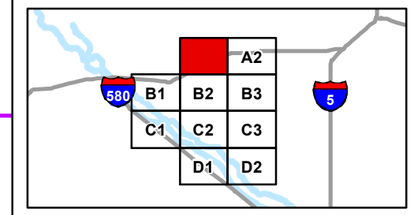

Symbology

Proposed Buildout Program Facilities

- Buildout Booster Pump Station
- Buildout Storage Tank
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Booster Pump Station
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Booster Pump Station
- 2025 System Pipeline
- Delta-Mendota Canal Pipeline
- Delta-Mendota Canal Discharge Point

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Booster Pump Station
- WWTP Wastewater Treatment Plant
- Existing System Pipeline

TRACY

WEST YOST ASSOCIATES

Figure G-A1

City of Tracy
Water System Master Plan Update

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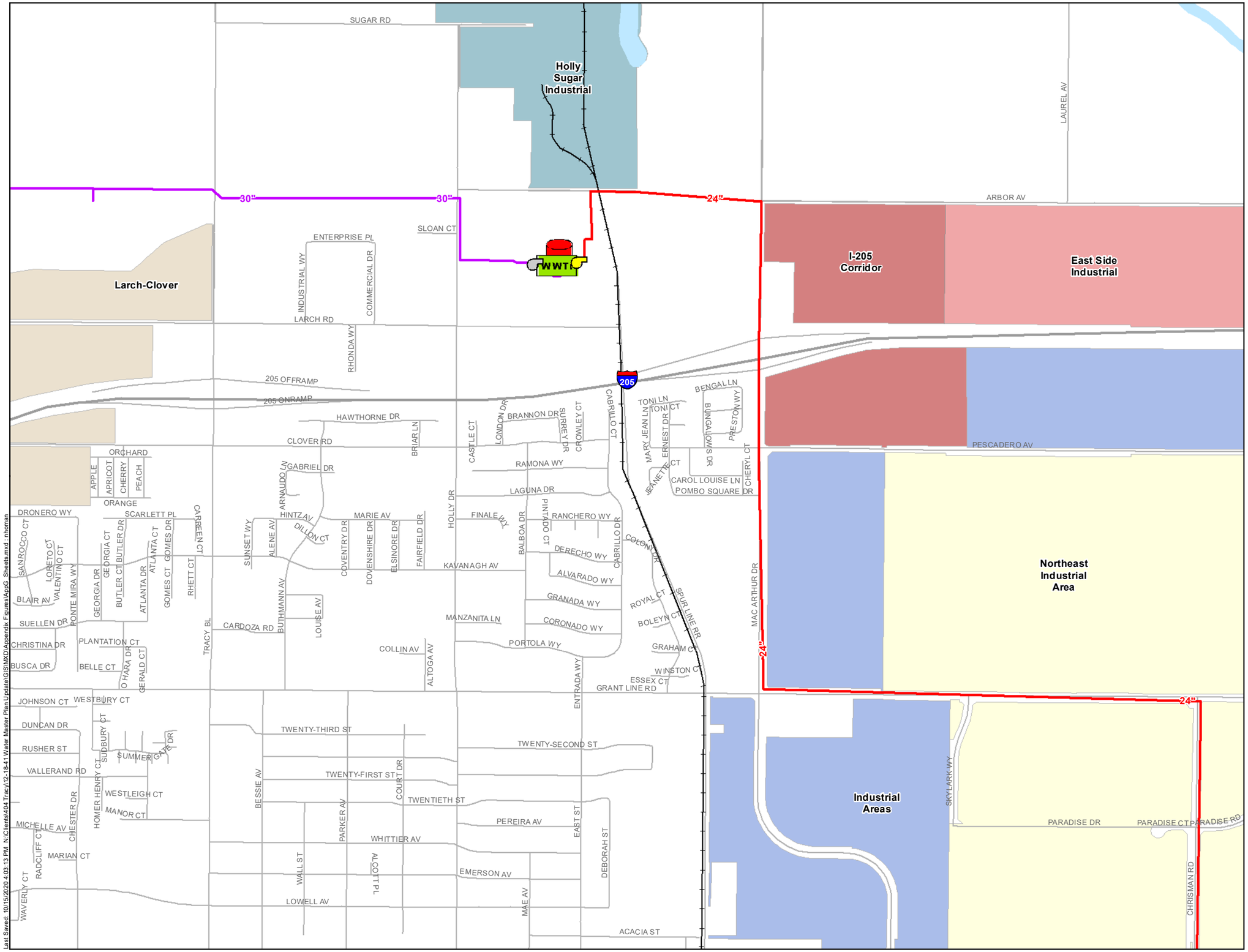

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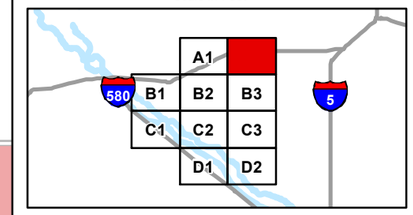

Symbology

Proposed Buildout Program Facilities

- Buildout Booster Pump Station
- Buildout Storage Tank
- Buildout System Pipeline

Proposed Buildout Non-Program (NP) Facilities

- Buildout NP Booster Pump Station
- Buildout NP Pipeline

Proposed 2025 Program Facilities

- 2025 Booster Pump Station
- 2025 System Pipeline
- Delta-Mendota Canal Pipeline
- Delta-Mendota Canal Discharge Point

Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

- Existing Booster Pump Station
- WWTP Wastewater Treatment Plant
- Existing System Pipeline

TRACY

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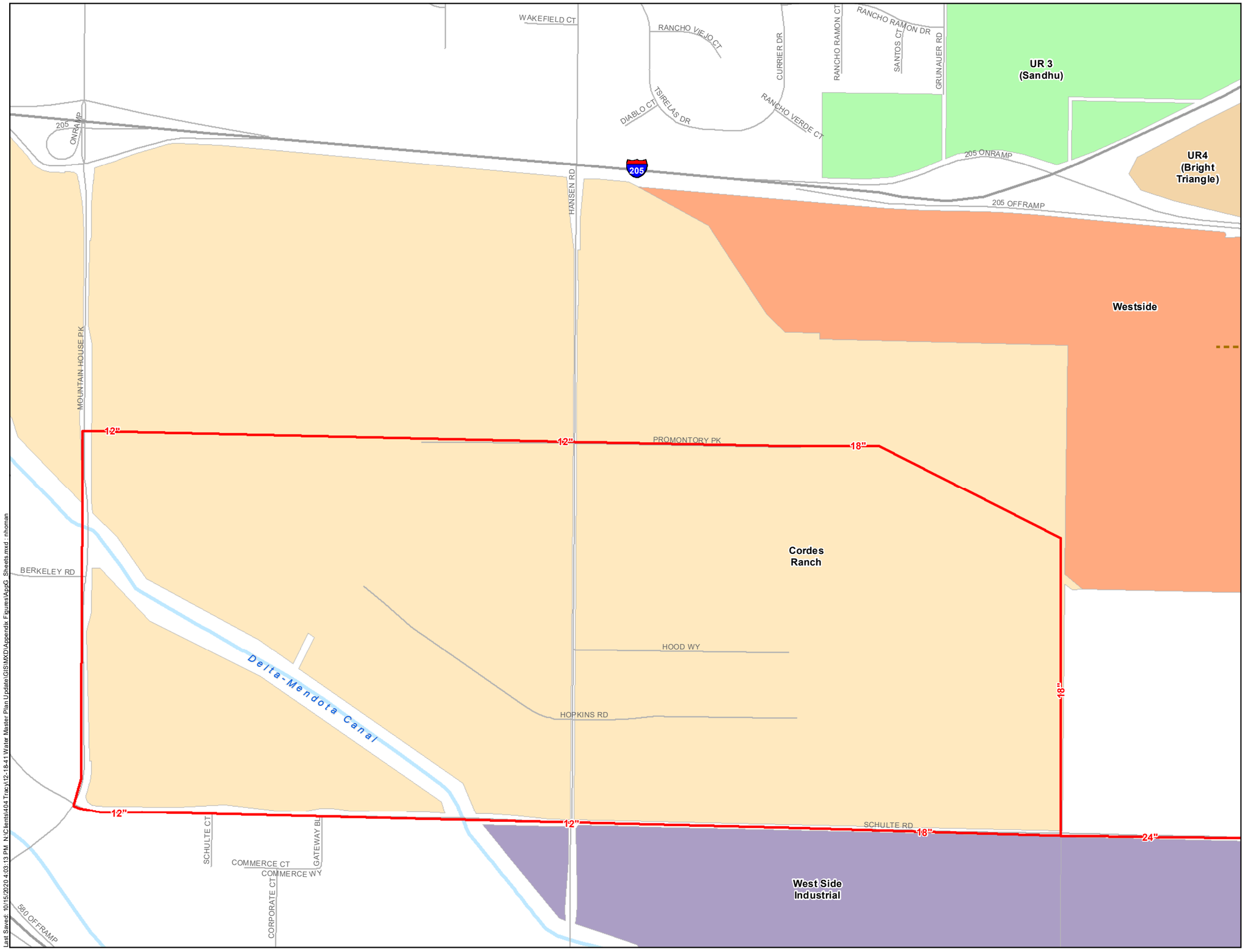
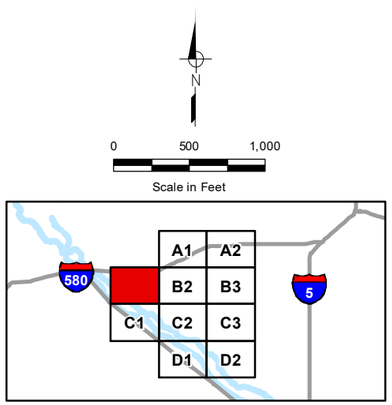
Figure G-A2

City of Tracy
Water System Master Plan Update





Symbology

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Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

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TRACY

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Figure G-B1

City of Tracy
Water System Master Plan Update

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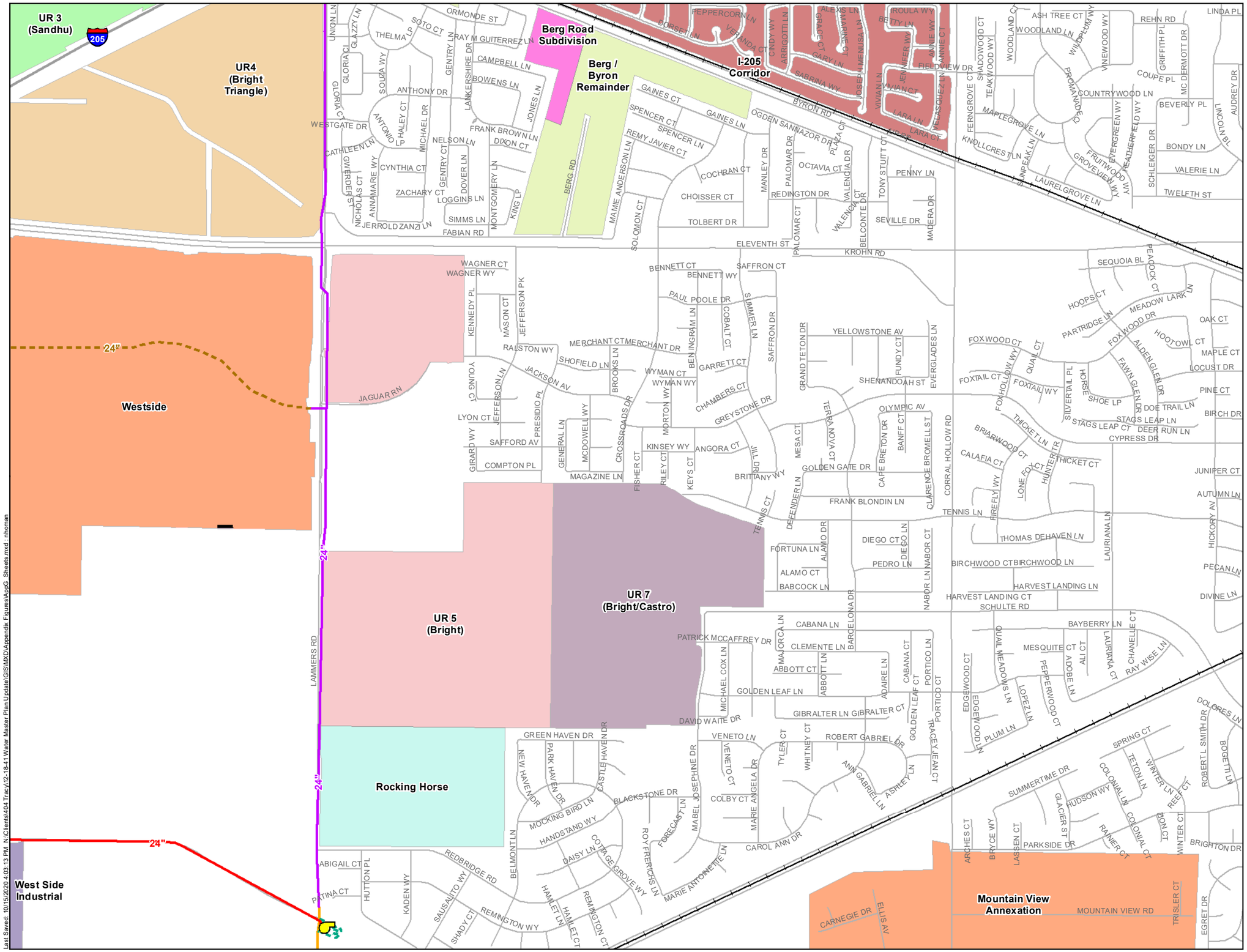

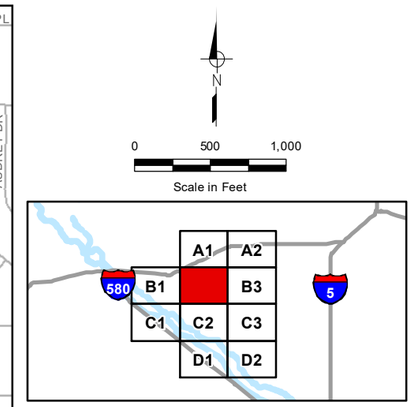

Symbology

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Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

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Figure G-B2

City of Tracy
Water System Master Plan Update

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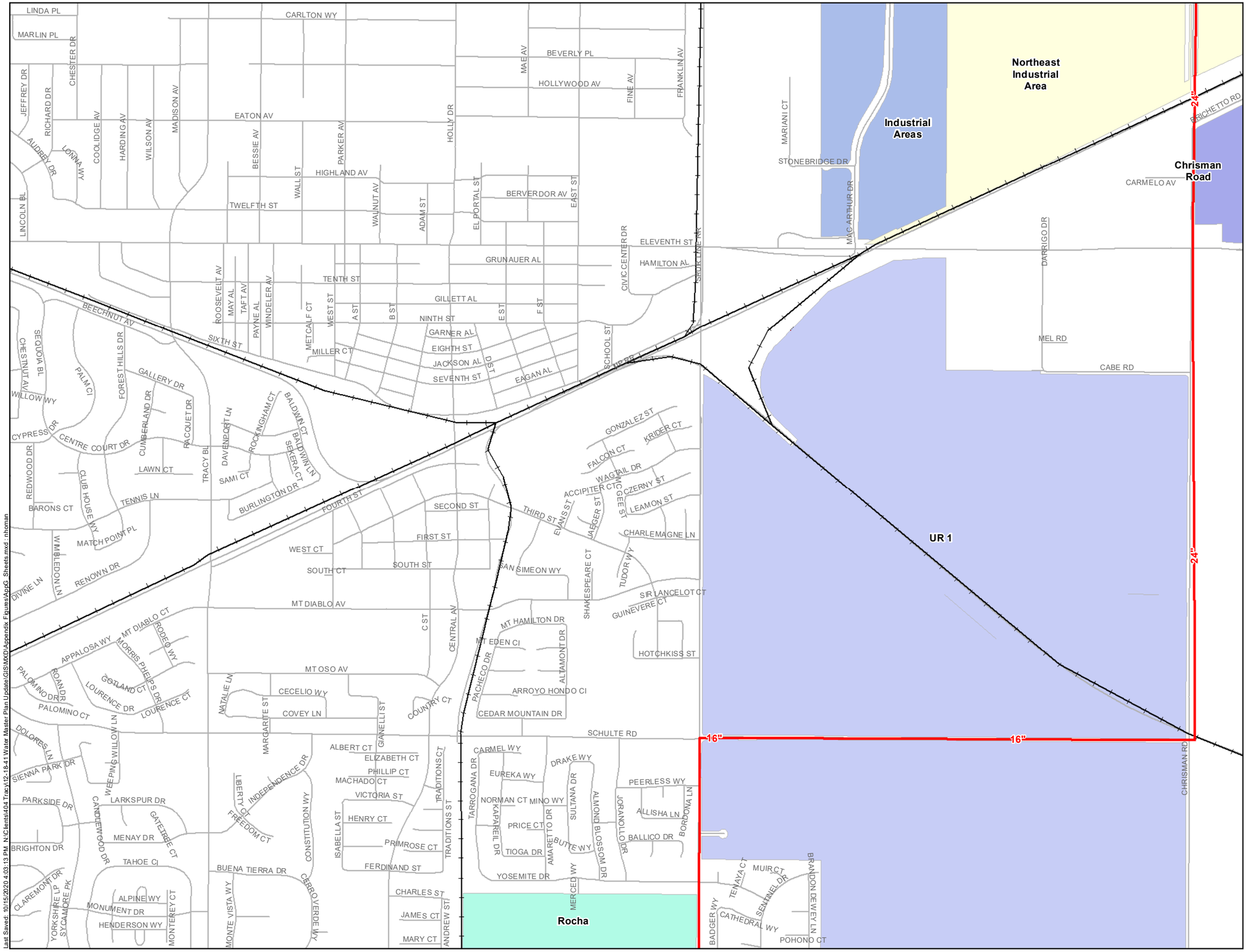

Symbology

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TRACY

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Figure G-B3

City of Tracy
Water System Master Plan Update

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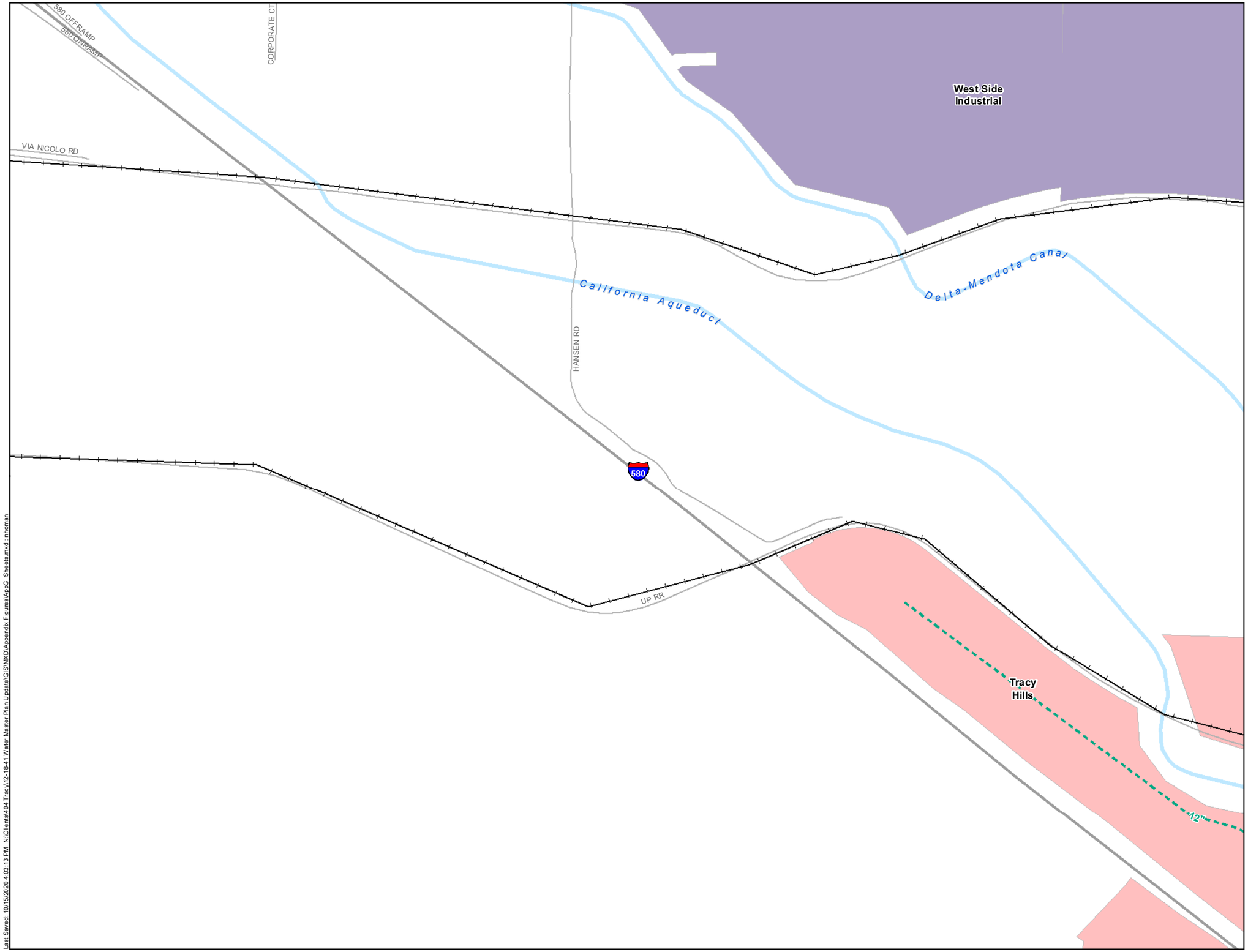

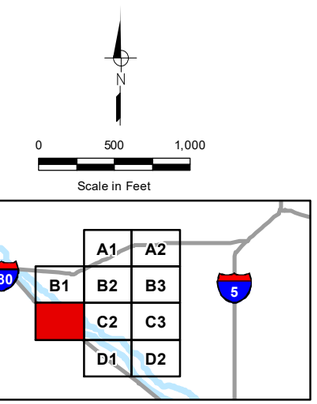

Symbology

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Proposed 2025 Non-Program Facilities

- 2025 Non-Program Pipeline

Existing System Facilities

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Figure G-C1

City of Tracy
Water System Master Plan Update

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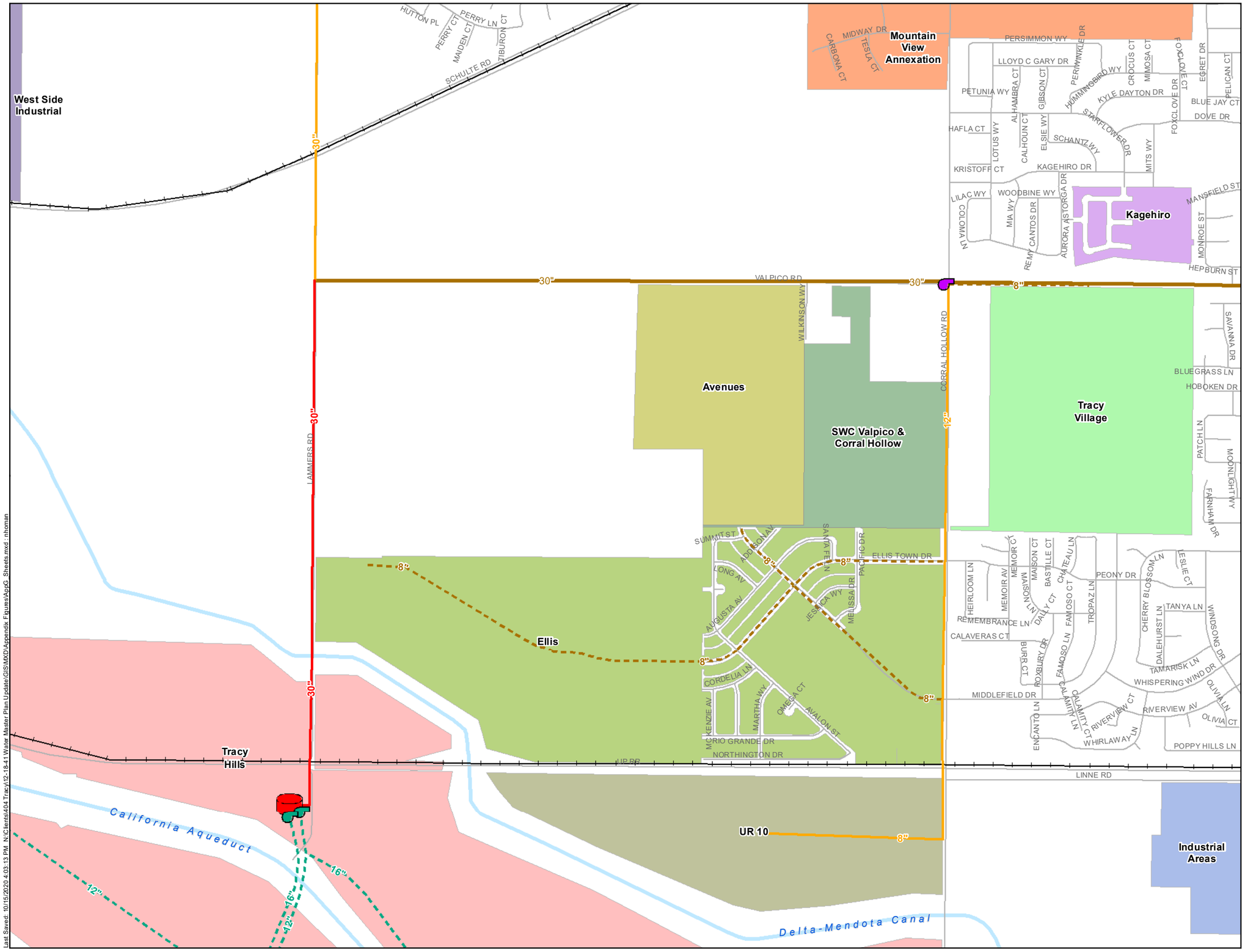

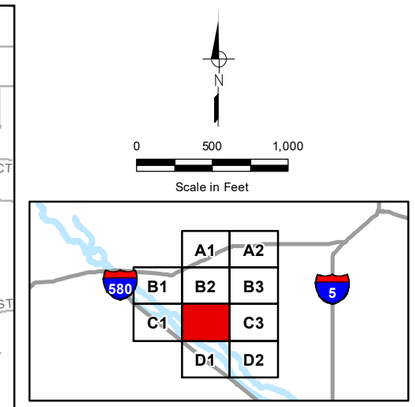

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Existing System Facilities

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TRACY

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Figure G-C2

City of Tracy
Water System Master Plan Update

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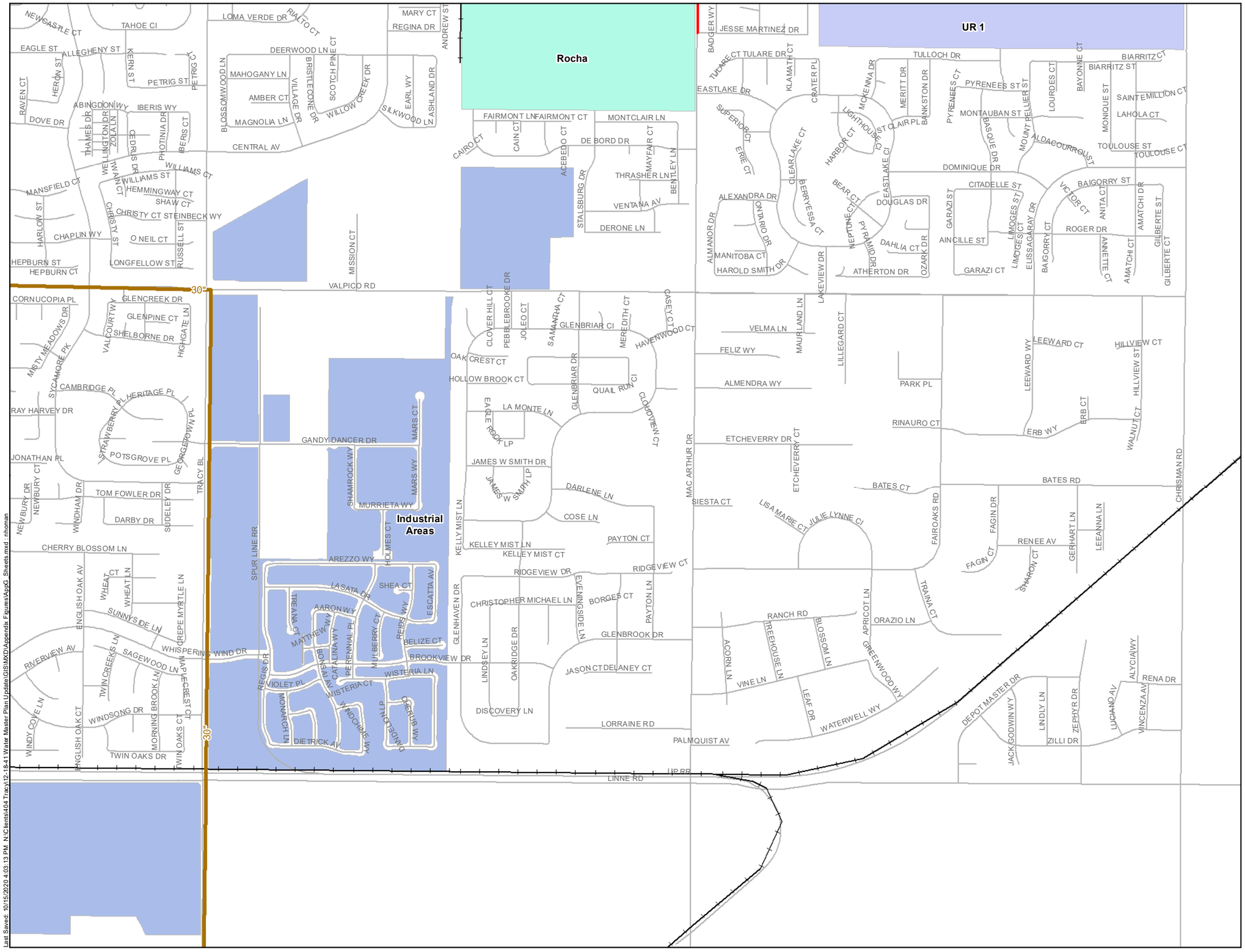

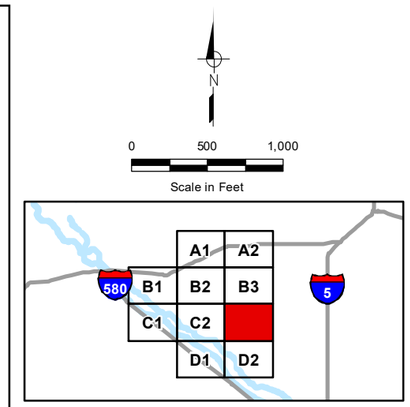

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TRACY

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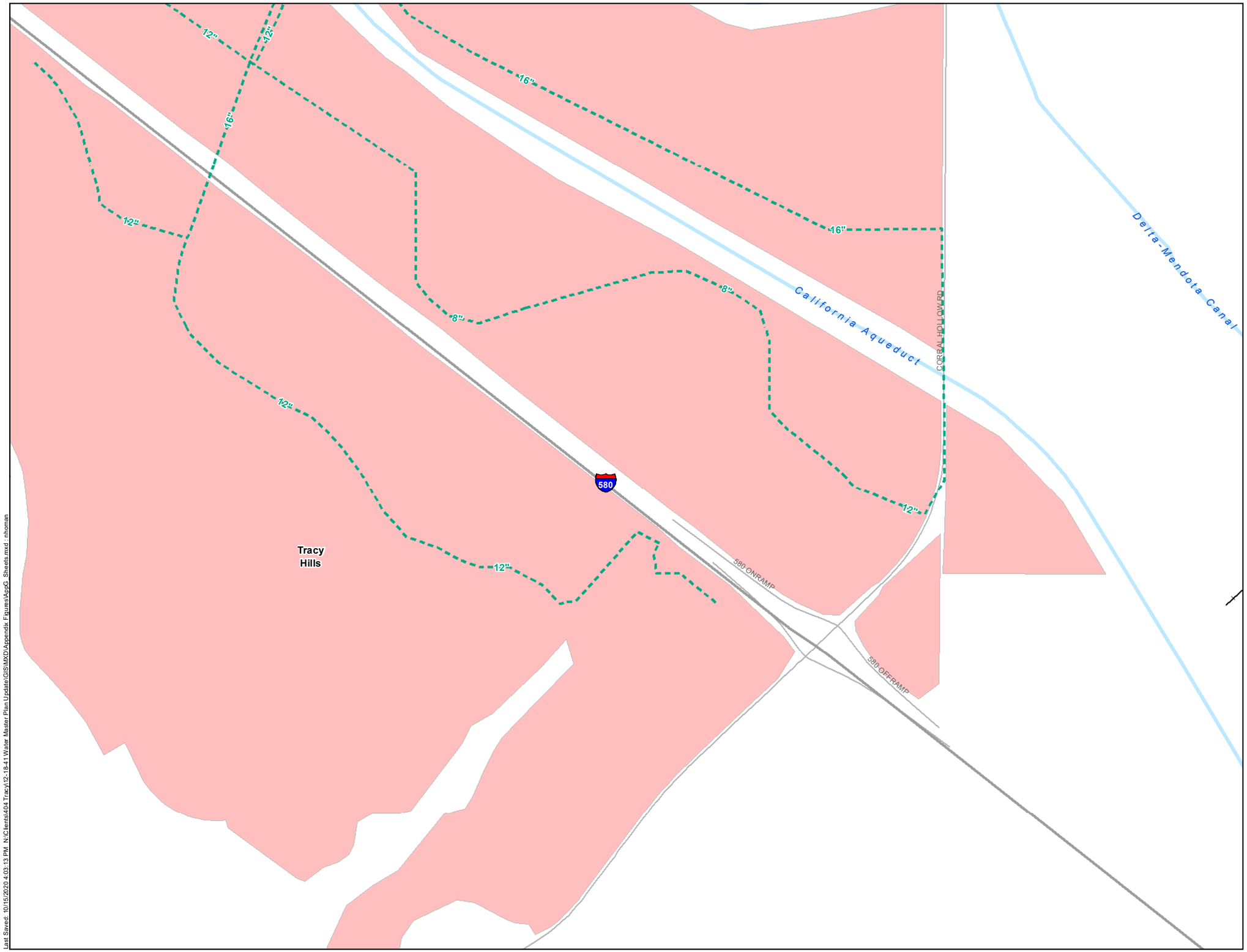
Figure G-C3

City of Tracy
Water System Master Plan Update



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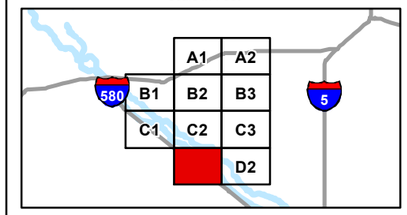

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TRACY

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Figure G-D1

City of Tracy
Water System Master Plan Update

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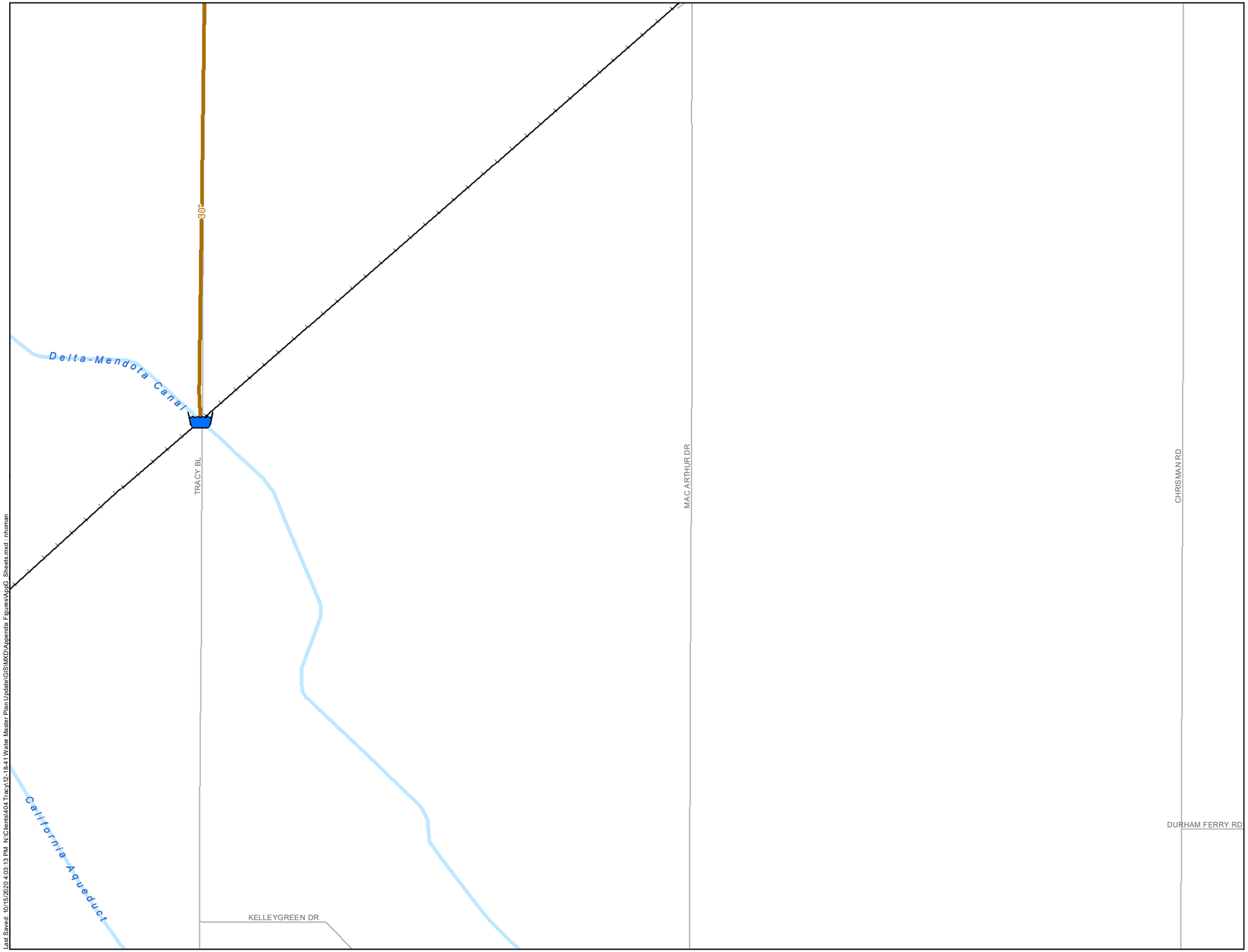

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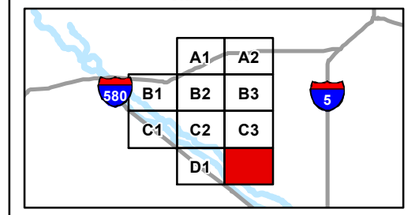

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TRACY

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Figure G-D2

City of Tracy
Water System Master Plan Update

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ATTACHMENT B

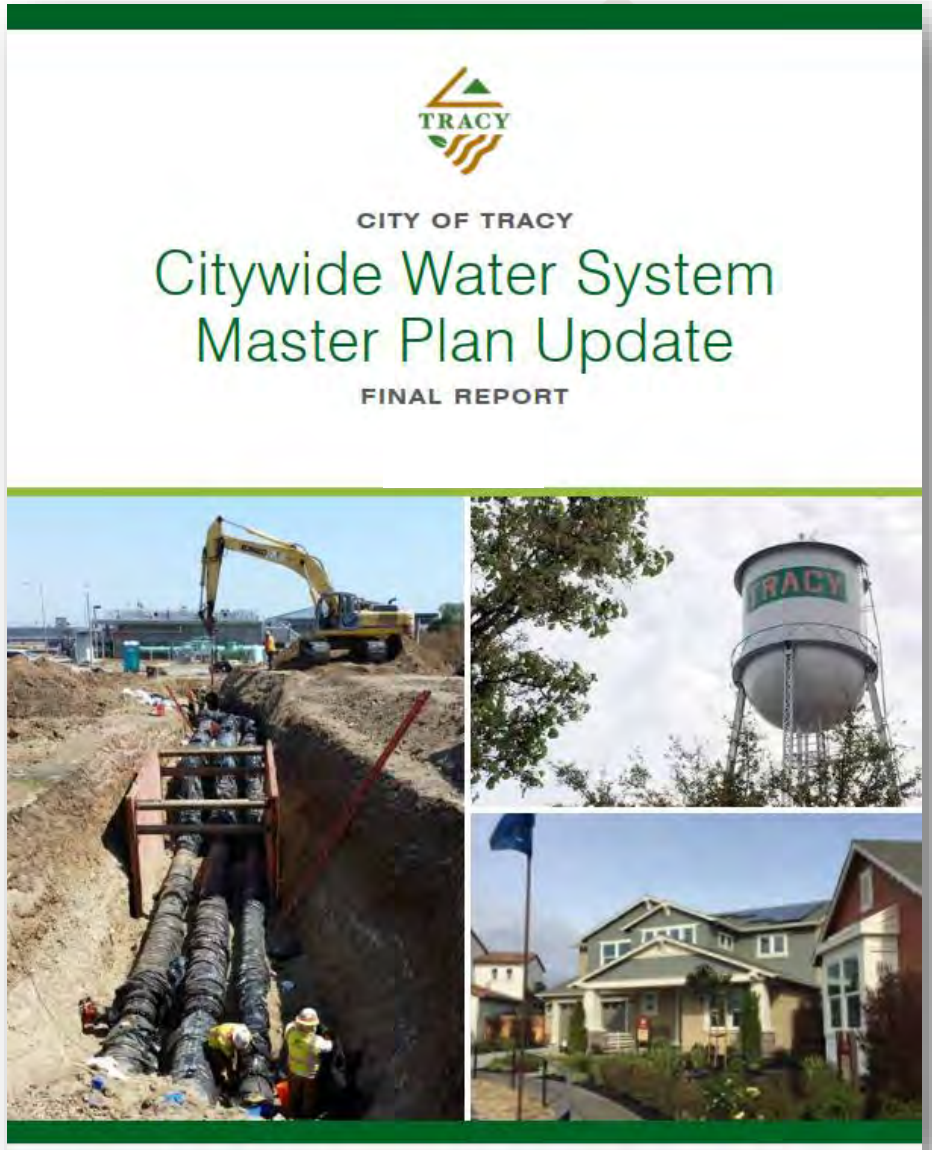
Citywide Water System Master Plan Update

Presentation to City Council

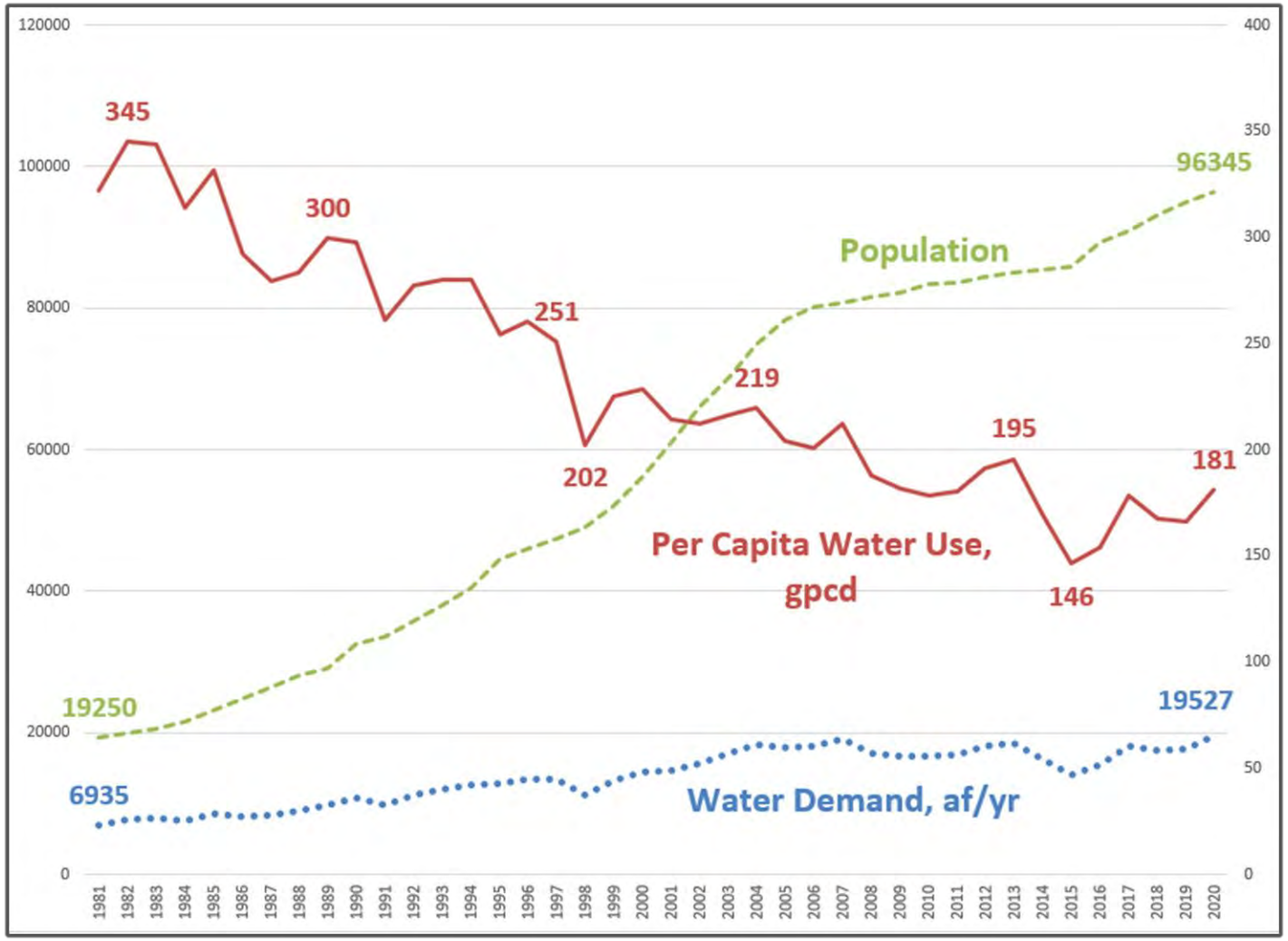
August 15, 2023

Purpose of Water Master Plan Update

- Previous Water Master Plan was completed in 2012
- Since then…
  - The City has incorporated several General Plan amendments that identify existing and new areas of development within and around the existing City limits
  - The City has experienced significant residential and commercial development (Tracy Hills, Ellis, International Park of Commerce)



Historical Water Use Trends



2020 Population & Water Use

- Population = 96,345
- Water Demand = 19,527 af/yr
- Per Capita Water Use = 181 gpcd

Since 1981…

- Population **+500%**
- Water Demand **+282%**
- Per Capita Water Use **-44%**

TRACY

Think Inside the Triangle™

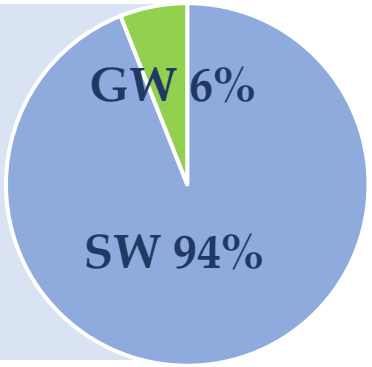
City Water Supply Sources

- **Treated Surface Water Supplies**
  - **Central Valley Project (CVP) Surface Water**
    - Treated at City's John Jones Water Treatment Plant
    - Subject to cutbacks in dry years
  - **BBID Pre-1914 Surface Water**
    - Treated at City's John Jones Water Treatment Plant
    - For use to meet demands in Tracy Hills
    - Historically high reliability
  - **SSJID Surface Water**
    - Treated at SSJID's Water Treatment Plant
    - City began taking deliveries in 2005
    - Historically high reliability, but subject to cutbacks in dry years
- **Groundwater Supplies**
  - Pumped from City's groundwater wells
  - Groundwater use dropped significantly when SSJID supplies became available
- **Recycled Water (coming soon)**
  - Treated at City's Wastewater Treatment Plant
  - To be used for landscape irrigation and exchange program

2022 Water Use

Treated Surface Water (17,739 af)

Groundwater (1,146 af)



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Think Inside the Triangle™

Changes since the 2012 Water Master Plan: **Supply & Demand**

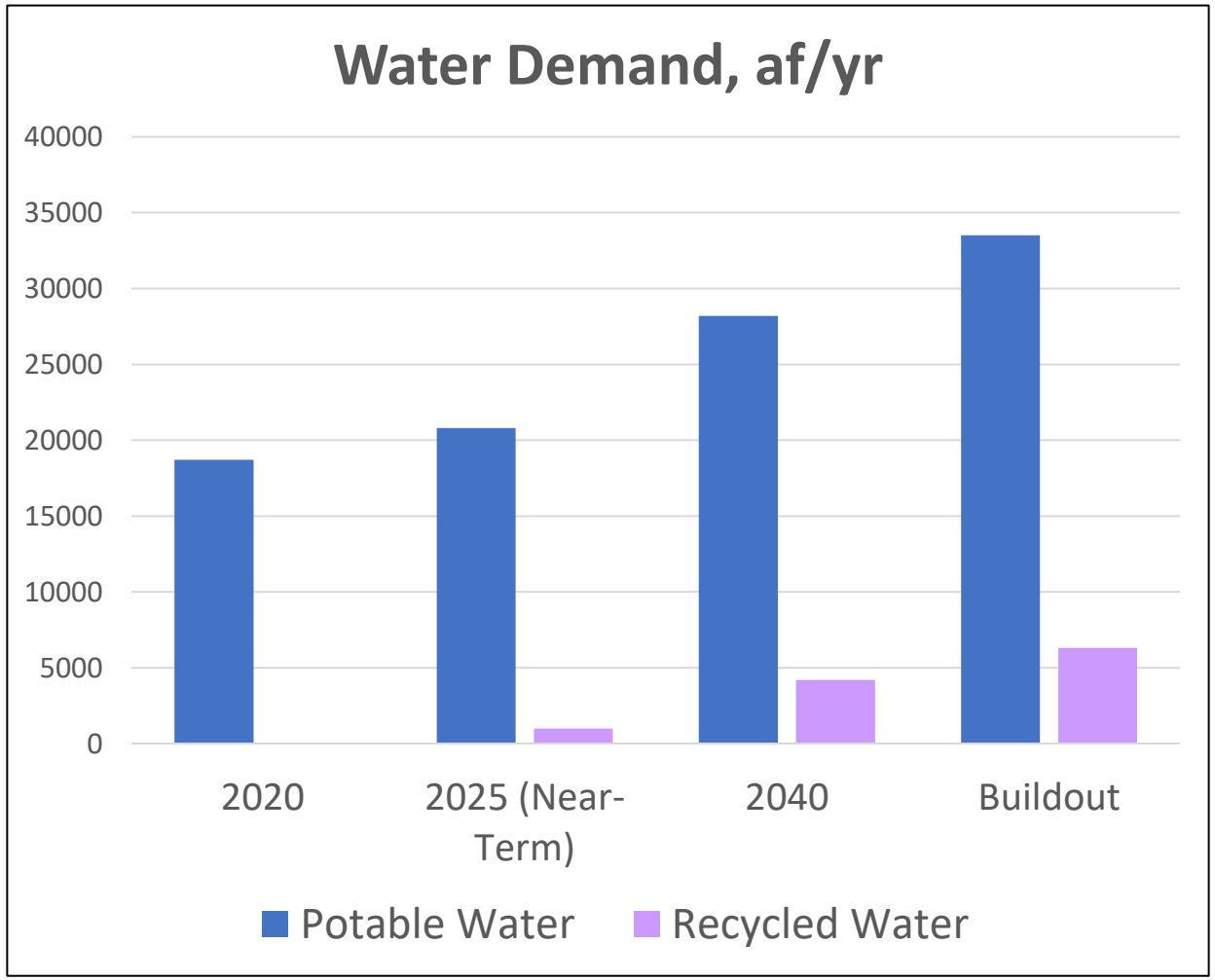
- Reduction in Per Capita Water Use since the 2012-2016 drought due to more efficient water use by the City's water customers
- Reduction in Maximum Day and Peak Hour water demands from improved water use efficiency
- Reduction in water supply reliability (Central Valley Project and SSJID supplies), primarily in dry years

TRACY

Think Inside the Triangle™

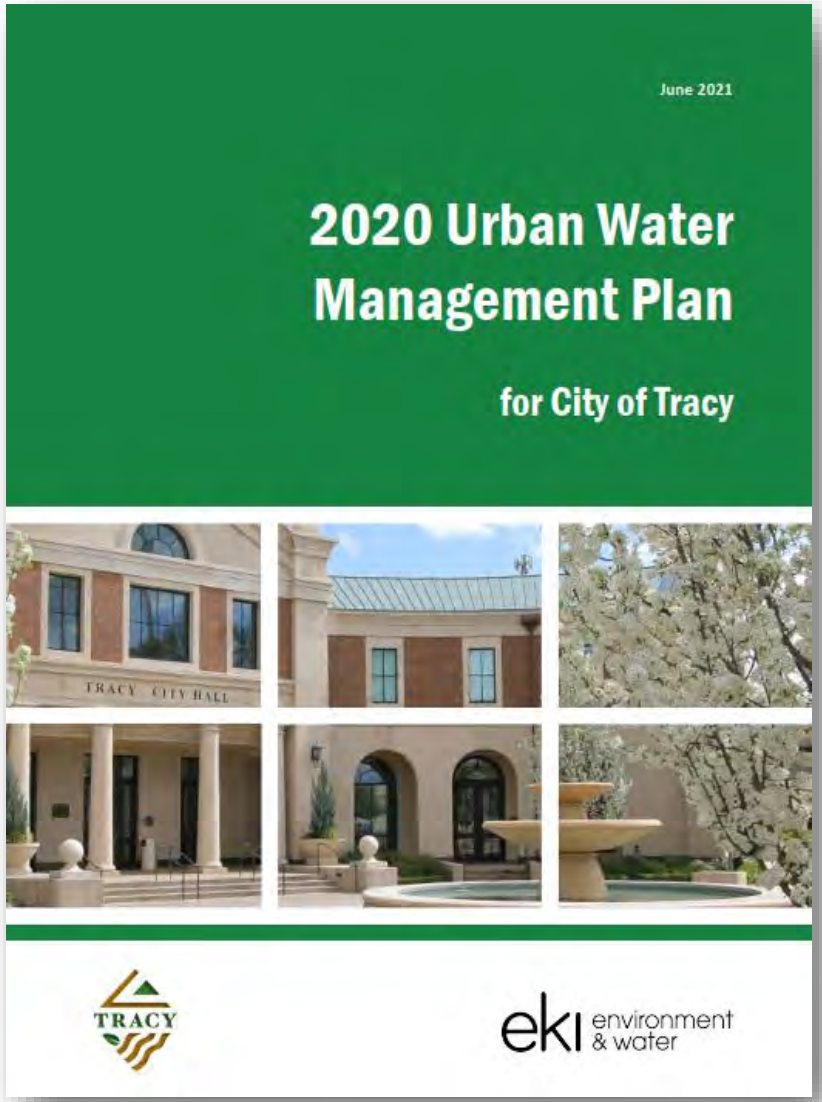
Projected Water Demands

- Buildout Demand
  - 2012 Water Master Plan
    - Potable: 36,200 af/yr
    - Recycled: 7,500 af/yr
  - 2023 Water Master Plan Update
    - Potable: 33,500 af/yr
    - Recycled: 6,300 af/yr



Water Supply Reliability

- Water supply assumptions consistent with the City's 2020 Urban Water Management Plan (UWMP) adopted in June 2021
- 2020 UWMP indicates potential surface water supply curtailments (CVP and SSJID) in dry years, resulting in potential supply shortages
- Continuing changes in water supply conditions may result in additional curtailments in dry years



Strategies and Actions to Address Potential Water Supply Shortages

- Recycled Water for non-potable use (primarily landscape irrigation)
- Recycled Water Exchange Program
- Aquifer Storage and Recovery (ASR) Program Expansion
- John Jones Water Treatment Plant Expansion, including a new admin/maintenance building to accommodate future staffing needs
- Participation in Los Vaqueros Reservoir Expansion Project and B.F. Sisk Dam Raise & Reservoir Expansion Project
- Implementation of Water Shortage Contingency Plan as needed to reduce water demands in dry years

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Think Inside the Triangle™

Changes since the 2012 Water Master Plan: **New Water System Facilities**

- Cordes Water Storage Tank and Pump Station
- Tracy Hills Zone 4 Pump Station at the City's JJWTP
- Tracy Hills On-site Zone 4 Water Storage Tank and Pump Station
- Recycled Water Pump Station at the City's WWTP and Recycled Water Pipeline on the west side of the City
- Potable Water and Recycled Water distribution pipelines

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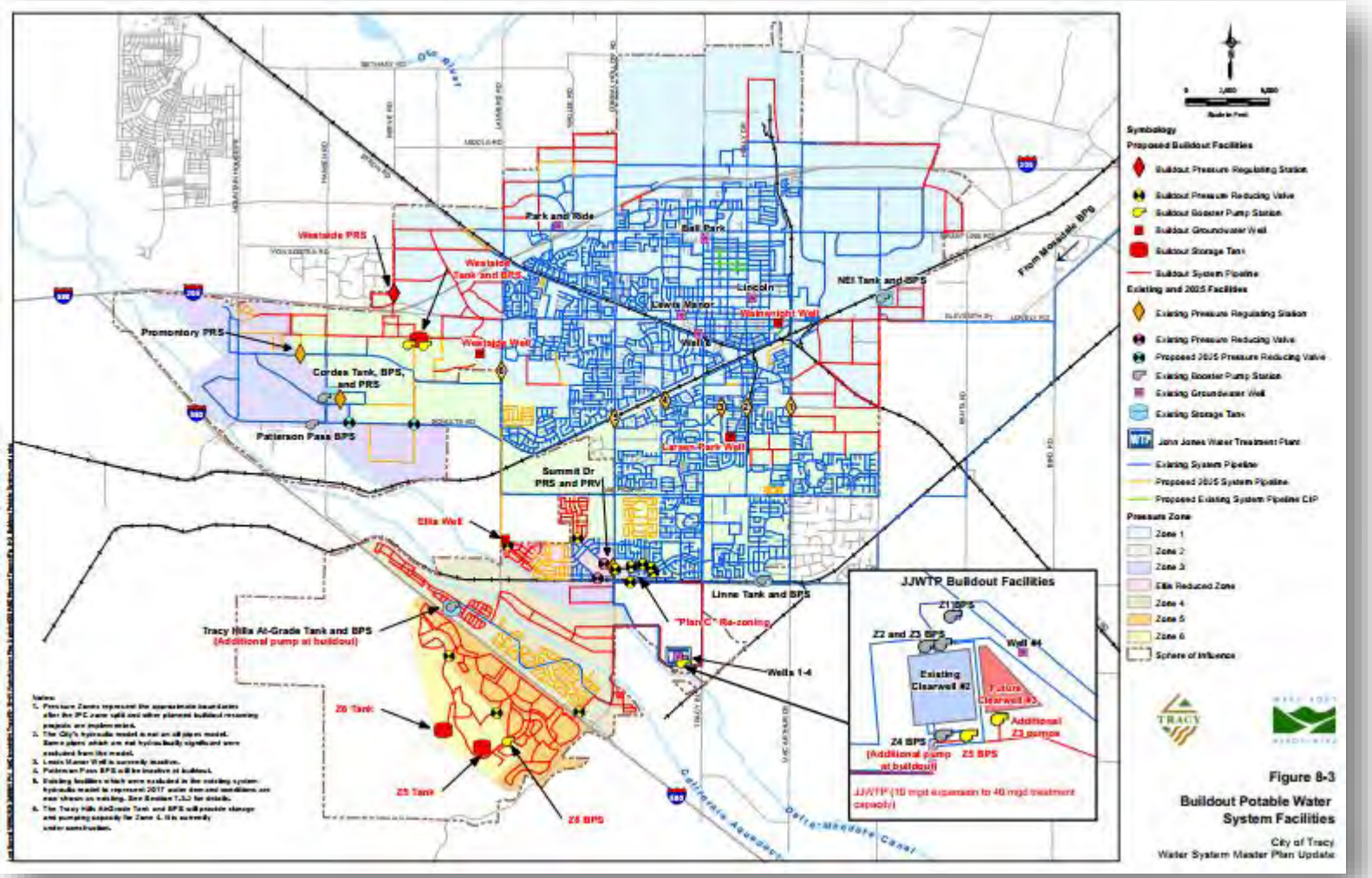
Think Inside the Triangle™

Recommended System Improvements: **Potable Water**



- New Storage Tanks
- New ASR Wells
- New Transmission and Distribution Pipelines
- Expansion of John Jones Water Treatment Plant

TRACY

Think Inside the Triangle™

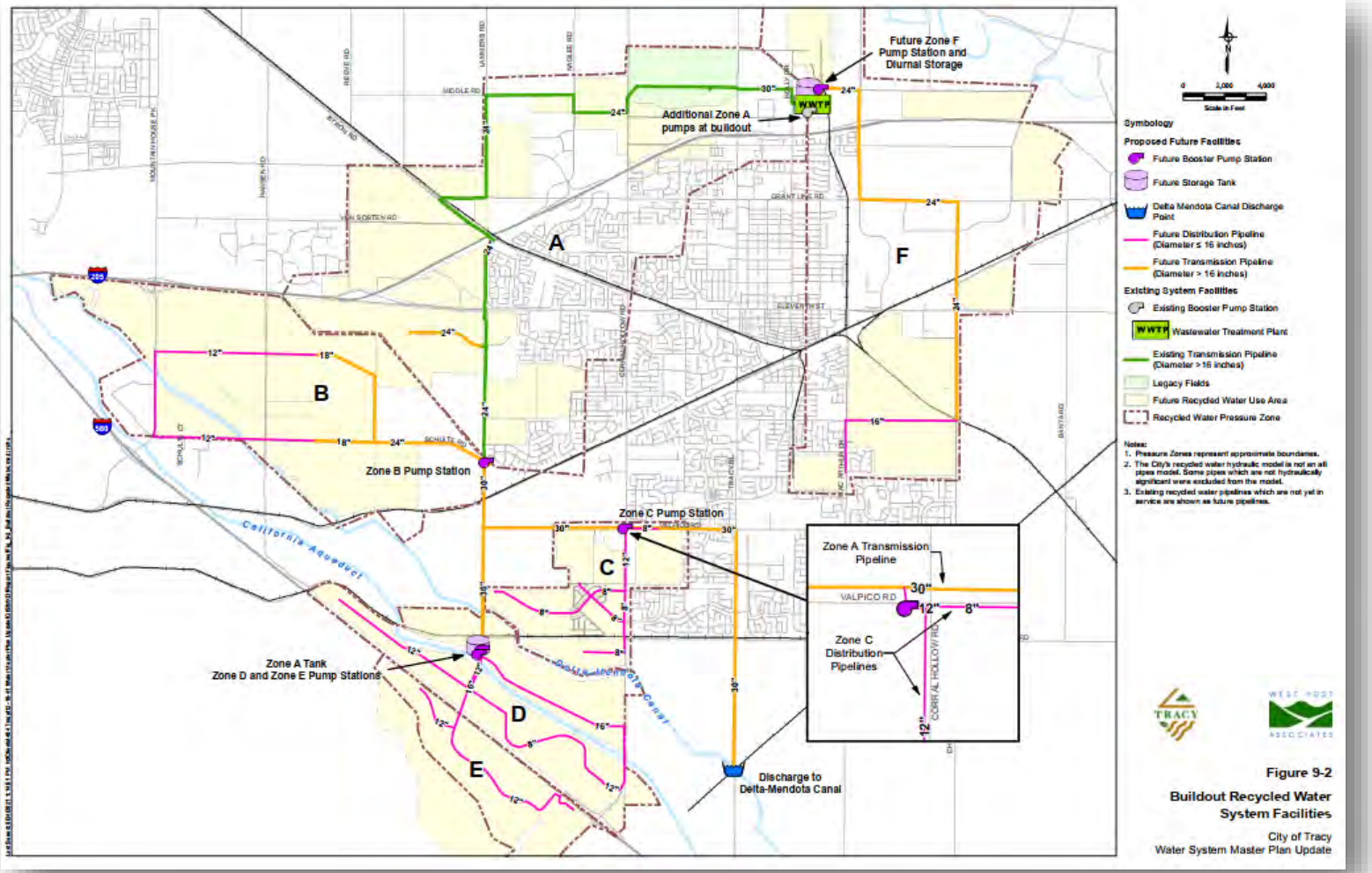
Changes since the 2012 Water Master Plan: **Recycled Water**

- Expansion of recycled water system to focus on new development areas in the City's west, east and southern areas
- Proposed Recycled Water Exchange Agreement
  - Indirect use of recycled water through an exchange agreement with the USBR
  - One-to-one exchange of tertiary-treated wastewater from the City's WWTP discharged to the Delta Mendota Canal (DMC) for a like amount of water to be diverted from the DMC for treatment at the City's JJWTP for potable use

TRACY

Think Inside the Triangle™

Recommended System Improvements: **Recycled Water**



- Additional Pump Stations and Storage Tank
- Additional Transmission and Distribution Pipelines
- Discharge Pipeline to DMC for Exchange Program

Think Inside the Triangle™

Summary of Water System Recommendations

- Potable Water System
  - Improvements to existing facilities to address existing deficiencies
  - New infrastructure to serve projected new development areas
- Recycled Water System
  - Focus on new infrastructure to provide recycled water for landscape irrigation for projected new development areas
  - New infrastructure for recycled water exchange program

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Think Inside the Triangle™

Summary of Water Supply Recommendations

- Participation in Los Vaqueros Reservoir Expansion Project and B.F. Sisk Dam Raise & Reservoir Expansion Project for additional water storage
- Expansion of John Jones Water Treatment Plant for additional water supply reliability and flexibility and future staffing needs
- New ASR wells for storage of water in wet years for use in dry years
- Update Water Master Plan as needed if water supply conditions change

TRACY
Think Inside the Triangle™

August 15, 2023

Agenda Item 3.D

RECOMMENDATION

Staff recommends that the City Council, by motion, designate a voting delegate and up to two alternate voting delegates for the League of California Cities (CalCities) 2023 Annual Conference Business Meeting.

EXECUTIVE SUMMARY

Staff requests that the City Council, by motion, designate a voting delegate and up to two alternate voting delegates for the upcoming League of California Cities (CalCities) 2023 Annual Conference Business Meeting (Annual Conference) and determine their position on resolutions that may be introduced during the conference. CalCities' deadline to submit resolutions was July 22, 2023, 60 days prior to the opening of the Annual Conference. CalCities has reported that no policy resolutions were received by the deadline for consideration; however, petitioned resolutions may still be introduced during the conference, and if qualified, will be considered by the General Assembly.

BACKGROUND AND LEGISLATIVE HISTORY

The League of California Cities (CalCities) 2023 Annual Conference is scheduled for Wednesday, September 20 through Friday, September 22, 2023. The League of California Cities advocates on issues that matter to California's 482 towns and cities. Their advocacy teams work with regional field staff and lawmakers to sponsor, draft, and support legislative and regulatory measures that promote local decision making and lobby against policy that erodes local control. CalCities takes positions on hundreds of bills annually. With over 400 city officials serving on its seven policy committees, cities directly influence the direction of CalCities overall advocacy efforts.

An important part of the Annual Conference is the CalCities Annual Business Meeting, to be held on Friday, September 22, 2023. At this meeting, CalCities membership considers and takes action on resolutions that establish CalCities' policy. In order to expedite the conduct of business at this policy-making meeting, each City Council is required to designate a voting delegate and up to two alternates who will be registered at the Annual Conference and present virtually at the Annual Business Meeting. A voting card will be given to the City official designated on the Voting Delegate Form. CalCities has requested to receive the names of the delegates by Monday, August 28, 2023.

Annual Conference Resolutions

The CalCities' Annual Conference resolutions process is one way that city officials can directly participate in the development of CalCities' policy. The deadline to submit resolutions was July 22, 2023. This year, CalCities did not receive resolutions to be considered at the Annual Conference, however petitioned resolutions may still be introduced during the conference, and if qualified, will be considered by the General Assembly. As there are no resolutions for consideration, the City Council is not being asked to make any policy determinations at this time.

Additional information can be found as follows: Details may be found in Attachment A: League of California Cities Annual Conference and Expo, Sept. 20-22, 2023, Sacramento SAFE Credit Union Convention Center provided by CalCities regarding its Annual Conference:

What's new in 2023 from CalCities?

- Voting delegates will receive increased communications to prepare them for their role during the General Assembly.
- The General Assembly will take place earlier to allow more time for debate and discussion.
- Improvements to the General Assembly process will make it easier for voting delegates to discuss and debate resolutions.

FISCAL IMPACT

The City Council and staff travel expenses are included in the FY 2023-24 Operating Budget. There are no other fiscal impacts related to this staff report. As there were no resolutions submitted to CalCities for consideration at this time, there is no known fiscal impacts for the City Council to consider; however, a petitioned resolution can still be submitted during the Annual Conference that may have a fiscal impact to the City.

STRATEGIC PLAN

This agenda item supports Governance Strategic Goal 1: Model Good Governance, Teamwork, and Transparency.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council, by motion, designate a voting delegate and up to two alternate voting delegates for the League of California Cities (CalCities) 2023 Annual Conference Business Meeting.

Prepared by: Karin Schnaider, Assistant City Manager

Reviewed by: Sara Cowell, Finance Director
Bijal Patel, City Attorney

Approved by: Midori Lichtwardt, Interim City Manager

Attachments:

A – Designation of Voting Delegates and Alternates - League of California Cities Annual Conference and Expo, Sept. 20-22, 2023, Sacramento SAFE Credit Union Convention Center

LEAGUE OF CALIFORNIA CITIES

ATTACHMENT A

Council Action Advised by August 28, 2023

DATE: Wednesday, June 21, 2023

TO: Mayors, Council Members, City Clerks, and City Managers

RE: DESIGNATION OF VOTING DELEGATES AND ALTERNATES
League of California Cities Annual Conference and Expo, Sept. 20-22, 2023, Sacramento SAFE Credit Union Convention Center

Every year, the League of California Cities convenes a member-driven General Assembly at the Cal Cities Annual Conference and Expo. The General Assembly is an important opportunity where city officials can directly participate in the development of Cal Cities policy.

Taking place on Sept. 22, the General Assembly is comprised of voting delegates appointed by each member city; every city has one voting delegate. Your appointed voting delegate plays an important role during the General Assembly by representing your city and voting on resolutions.

To cast a vote during the General Assembly, your city must designate a voting delegate and up to two alternate voting delegates, one of whom may vote if the designated voting delegate is unable to serve in that capacity. Voting delegates may either be an elected or appointed official.

Please complete the attached voting delegate form and email it to Cal Cities office no later than Monday, August 28.

New this year, we will host a pre-conference information session for voting delegates to explain their role. Submitting your voting delegate form by the deadline will allow us time to establish voting delegate/alternate records prior to the conference and provide pre-conference communications with voting delegates.

Please view Cal Cities' event and meeting policy in advance of the conference.

Action by Council Required. Consistent with Cal Cities bylaws, a city's voting delegate and up to two alternates must be designated by the city council. When completing the attached Voting Delegate form, please attach either a copy of the council resolution that reflects the council action taken or have your city clerk or mayor sign the form affirming that the names provided are those selected by the city council.

Please note that designating the voting delegate and alternates **must** be done by city council action and cannot be accomplished by individual action of the mayor or city manager alone.

Conference Registration Required. The voting delegate and alternates must be registered to attend the conference. They need not register for the entire conference; they may register for Friday only. Conference registration is open on the Cal Cities website.

For a city to cast a vote, one voter must be present at the General Assembly and in possession of the voting delegate card and voting tool. Voting delegates and alternates need to pick up their conference badges before signing in and picking up the voting delegate card at the voting delegate desk. This will enable them to receive the special sticker on their name badges that will admit the voting delegate into the voting area during the General Assembly.

Transferring Voting Card to Non-Designated Individuals Not Allowed. The voting delegate card may be transferred freely between the voting delegate and alternates, but *only* between the voting delegate and alternates. If the voting delegate and alternates find themselves unable to attend the General Assembly, they may *not* transfer the voting card to another city official.

Seating Protocol during General Assembly. At the General Assembly, individuals with a voting card will sit in a designated area. Admission to the voting area will be limited to the individual in possession of the voting card and with a special sticker on their name badge identifying them as a voting delegate.

The voting delegate desk, located in the conference registration area of the SAFE Credit Union Convention Center in Sacramento, will be open at the following times: Wednesday, Sept. 20, 8:00 a.m.- 6:00 p.m. and Thursday, Sept. 21, 7:30 a.m.- 4:00 p.m. On Friday, Sept. 22, the voting delegate desk will be open at the General Assembly, starting at 7:30 a.m., but will be closed during roll calls and voting.

The voting procedures that will be used at the conference are attached to this memo. Please share these procedures and this memo with your council and especially with the individuals that your council designates as your city's voting delegate and alternates.

Once again, thank you for completing the voting delegate and alternate form and returning it to Cal Cities office by Monday, Aug. 28. If you have questions, please contact Zach Seals at zseals@calcities.org.

Attachments:

- General Assembly Voting Guidelines
- Voting Delegate/Alternate Form
- Information Sheet: Cal Cities Resolutions and the General Assembly

LEAGUE OF CALIFORNIA CITIES

General Assembly Voting Guidelines

1. **One City One Vote.** Each member city has a right to cast one vote on matters pertaining to Cal Cities policy.

2. **Designating a City Voting Representative.** Prior to the Cal Cities Annual Conference and Expo, each city council may designate a voting delegate and up to two alternates; these individuals are identified on the voting delegate form provided to the Cal Cities Credentials Committee.

3. **Registering with the Credentials Committee.** The voting delegate, or alternates, may pick up the city's voting card at the voting delegate desk in the conference registration area. Voting delegates and alternates must sign in at the voting delegate desk. Here they will receive a special sticker on their name badge and thus be admitted to the voting area at the General Assembly.

4. **Signing Initiated Resolution Petitions**. Only those individuals who are voting delegates (or alternates), and who have picked up their city's voting card by providing a signature to the credentials committee at the voting delegate desk, may sign petitions to initiate a resolution.

5. **Voting.** To cast the city's vote, a city official must have in their possession the city's voting card and voting tool; and be registered with the credentials committee. The voting card may be transferred freely between the voting delegate and alternates but may not be transferred to another city official who is neither a voting delegate nor alternate.

6. **Voting Area at General Assembly.** At the General Assembly, individuals with a voting card will sit in a designated area. Admission to the voting area will be limited to the individual in possession of the voting card and with a special sticker on their name badge identifying them as a voting delegate.

7. **Resolving Disputes**. In case of dispute, the credentials committee will determine the validity of signatures on petitioned resolutions and the right of a city official to vote at the General Assembly.

CITY: _____

2023 ANNUAL CONFERENCE
VOTING DELEGATE/ALTERNATE FORM

Please complete this form and return it to Cal Cities office by Monday, August 28, 2023. Forms not sent by this deadline may be submitted to the Voting Delegate Desk located in the Annual Conference Registration Area. Your city council may designate one voting delegate and up to two alternates.

To vote at the General Assembly, voting delegates and alternates must be designated by your city council. Please attach the council resolution as proof of designation. As an alternative, the Mayor or City Clerk may sign this form, affirming that the designation reflects the action taken by the council.

Please note: Voting delegates and alternates will be seated in a separate area at the General Assembly. Admission to this designated area will be limited to individuals (voting delegates and alternates) who are identified with a special sticker on their conference badge. This sticker can be obtained only at the voting delegate desk.

1. VOTING DELEGATE

Name: _____ Email: _____

Title: _____

2. VOTING DELEGATE - ALTERNATE

Name: _____

Title: _____

Email: _____

3. VOTING DELEGATE - ALTERNATE

Name: _____

Title: _____

Email: _____

ATTACH COUNCIL RESOLUTION DESIGNATING VOTING DELEGATE AND ALTERNATES OR

ATTEST: I affirm that the information provided reflects action by the city council to designate the voting delegate and alternate(s).

Name: _____ Email: _____

Mayor or City Clerk: _____ Date: _____ Phone: _____
(circle one) (signature)

Please complete and email this form to votingdelegates@calcities.org by Monday, August 28, 2023.

How it works: Cal Cities Resolutions and the General Assembly

Developing League of California Cities policy is a dynamic process that engages a wide range of members to ensure that we are representing California cities with one voice. These policies directly guide Cal Cities advocacy to promote local decision-making, and lobby against statewide policy that erodes local control.

The resolutions process and General Assembly is one way that city officials can directly participate in the development of Cal Cities policy. If a resolution is approved at the General Assembly, it becomes official Cal Cities policy. Here's how Resolutions and the General Assembly works.

Prior to the Annual Conference and Expo

General Resolutions

Sixty days before the Annual Conference and Expo, Cal Cities members may submit policy proposals on issues of importance to cities. The resolution must have the concurrence of at least five additional member cities or individual members.

Policy Committees

The Cal Cities President assigns general resolutions to policy committees where members review, debate, and recommend positions for each policy proposal. Recommendations are forwarded to the Resolutions Committee.

During the Annual Conference and Expo

Petitioned Resolutions

The petitioned resolution is an alternate method to introduce policy proposals during the annual conference. The petition must be signed by voting delegates from 10% of member cities, and submitted to the Cal Cities President at least 24 hours before the beginning of the General Assembly.

Resolutions Committee

The Resolutions Committee considers all resolutions. General Resolutions approved[1] by either a policy committee or the Resolutions Committee are next considered by the General Assembly. General resolutions not approved, or referred for further study by both a policy committee and the Resolutions Committee do not go the General Assembly. All Petitioned Resolutions are considered by the General Assembly, unless disqualified.[2]

General Assembly

During the General Assembly, voting delegates debate and consider general and petitioned resolutions forwarded by the Resolutions Committee. Potential Cal Cities bylaws amendments are also considered at this meeting.

What's new in 2023?

- Voting delegates will receive increased communications to prepare them for their role during the General Assembly.
- The General Assembly will take place earlier to allow more time for debate and discussion.
- Improvements to the General Assembly process will make it easier for voting delegates to discuss and debate resolutions.

Who's who

Cal Cities policy development is a member-informed process, grounded in the voices and experiences of city officials throughout the state.

The **Resolutions Committee** includes representatives from each Cal Cities diversity caucus, regional division, municipal department, policy committee, as well as individuals appointed by the Cal Cities president.

Voting delegates are appointed by each member city; every city has one voting delegate.

The **General Assembly** is a meeting of the collective body of all voting delegates — one from every member city.

Seven **Policy Committees** meet throughout the year to review and recommend positions to take on bills and regulatory proposals. Policy committees include members from each Cal Cities diversity caucus, regional division, municipal department, as well as individuals appointed by the Cal Cities president.

[1] The Resolution Committee can amend a general resolution prior to sending it to the General Assembly.
[2] Petitioned Resolutions may be disqualified by the Resolutions Committee according to Cal Cities Bylaws Article VI. Sec. 5(f).

For more information visit www.calcities.org/general-assembly

APPROVED AS TO FORM AND LEGALITY

_____
CITY ATTORNEY'S OFFICE

TRACY CITY COUNCIL

RESOLUTION NO. _____

DESIGNATING A VOTING DELEGATE AND UP TO TWO ALTERNATE VOTING DELEGATES FOR THE LEAGUE OF CALIFORNIA CITIES (CALCITIES) 2023 ANNUAL CONFERENCE BUSINESS MEETING

WHEREAS, The League of California Cities (CalCities) 2023 Annual Conference is scheduled for Wednesday, September 20 through Friday, September 22, 2023; and

WHEREAS, An important part of the Annual Conference is the CalCities Annual Business Meeting held on Friday, September 22, 2023. At this meeting, CalCities membership considers and takes action on resolutions that establish Cal Cities policy; and

WHEREAS, In order to expedite the conduct of business at this policy-making meeting, each City Council is required to designate a voting delegate and up to two alternates who will be registered at the conference and present virtually at the Annual Business Meeting; and

WHEREAS, CalCities has requested to receive the names of the delegates by Monday, August 28, 2023; and

WHEREAS, CalCities' annual conference resolutions process is one way that city officials can directly participate in the development of CalCities policy. The deadline to submit resolutions was July 22, 2023; and

WHEREAS, This year, CalCities did not receive resolutions to be considered at the Annual Conference, however petitioned resolutions may still be introduced during the conference, and if qualified, will be considered by the General Assembly; now, therefore, be it

RESOLVED: That City Council hereby designates _____ as the voting delegate and _____ and _____ as the alternate voting delegates for the League of California Cities (CalCities) 2023 Annual Conference Business Meeting.

* * * * * * * * * * * * * *

The foregoing Resolution 2023-_____ was adopted by the Tracy City Council on _____, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTENTION: COUNCIL MEMBERS:

_____
NANCY D. YOUNG
Mayor of the City of Tracy, California

ATTEST:_____
ADRIANNE RICHARDSON
City Clerk and Clerk of the Council of the
City of Tracy, California

August 15, 2023

Agenda Item 3.E

RECOMMENDATION

Staff recommends that the City Council appoint, by motion, one member, to the Tracy Finance Committee to fulfill the remainder of the annual term, pursuant to the City Council's appointment procedures.

EXECUTIVE SUMMARY

Council is being asked to appoint, by motion, one member to the Tracy Finance Committee to fulfill the remainder of the annual term, pursuant to the City Council's appointment procedures. If appointed at this meeting, the term of the new appointee would end when the City Council next makes new committee appointments, anticipated to occur in January 2024.

BACKGROUND AND LEGISLATIVE HISTORY

On February 7, 2023, the City Council approved the formation the Tracy Finance Committee (Reso No. 2023-027) as a two-member standing committee of the City Council to discuss ongoing fiscal matters. The Tracy Finance Committee meets monthly on the third Wednesday of the month and is subject to the Brown Act.

Also on February 7, 2023, the City Council appointed, by motion, Mayor Young and Councilmember Arriola to the Tracy Finance Committee. (Resolution No. 2023-027) The bylaws for the committee were adopted on May 2, 2023 (Resolution 2023-085).

At the June 20, 2023, Council meeting, the City Council, through Resolution 2023-120, removed Mayor Young from the Tracy Finance Committee. Because the action taken at the June 20, 2023 Council meeting left the Tracy Finance Committee without a quorum, the June 21, 2023, Tracy Finance Committee meeting was cancelled. The City Council must appoint a new member to the Finance Committee for the remainder of the term.

ANALYSIS

The Tracy Finance Committee is a two-member standing committee of the City Council. The committee meets monthly on the third Wednesday of the month and is subject to the Brown Act.

The role of the Tracy Finance Committee is to provide quarterly updates to the full City Council as part of the regular agenda, to inform City Council Members and the public; and the multi-year fiscal sustainability plan will be presented to the City Council by the Finance Director for the body's review and approval. The full scope of responsibilities of the Tracy Finance committee can be found in the bylaws (Attachment A).

At the June 20, 2023 Council meeting, the City Council, through Resolution 2023-120, removed Mayor Young from the Tracy Finance Committee and a new member must be appointed. The new committee member would fulfill the remaining portion of the annual term, with new committee appointments expected to occur in January 2024.

Because the action taken at the June 20, 2023 Council meeting left the Tracy Finance Committee without a quorum, the June 21, 2023 Tracy Finance Committee meeting was cancelled.

FISCAL IMPACT

There is no fiscal impact associated with this action.

COORDINATION

The Finance Department is the liaison for the Tracy Finance Committee.

STRATEGIC PLAN

This item supports the City's Governance Strategic Priority, with Goal 2: Ensure short and long-term fiscal health.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council appoint, by motion, one member, to the Tracy Finance Committee to fulfill the remainder of the annual term, pursuant to the City Council's appointment procedures.

Prepared by: Sara Cowell, Director of Finance

Reviewed by: Bijal Patel, City Attorney
Karin Schnaider, Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

Attachments:
Attachment A: Finance Committee Bylaws

BYLAWS OF THE
FINANCE COMMITTEE BYLAWS
CITY OF TRACY, CALIFORNIA

WHEREAS, The City desires to form a standing committee of the Tracy City Council to continue the work begun by the previous Ad Hoc Fiscal Sustainability Subcommittee, to be named the Finance Committee (Committee); and

WHEREAS, Committees are essential to the effective operation of legislative bodies; and

WHEREAS, Committee membership enables members to develop specialized knowledge of the matters under their jurisdictions; and

WHEREAS, Committees monitor on-going governmental operations, identify issues suitable for legislative review, gather and evaluate information, and recommend courses of action for the Council; and

WHEREAS, the Finance Committee is authorized and directed to ascertain, study, and analyze all facts relating to any subjects or matters within their jurisdiction, and shall report to and submit recommendations to the City Council for action.

NOW, THEREFORE, these Bylaws govern the conduct of the Finance Committee meetings and the transaction of its affairs.

A. PURPOSE

1. The purpose of the Committee is to provide policy guidance as it relates to the development of a multi-year fiscal sustainability plan to address the City's fiscal health and long-term planning.
2. The Finance Committee shall have initial jurisdiction over any item assigned to it by the City Council as well as any items being advanced by the City Manager that implement or relate to the overall jurisdictional purpose of the Committee.
3. Approaches may include, but are not limited to, budget strategies and fiscal policies, related revenue enhancement, cost containment, and use of other revenue sources such as Measure V and/or General Fund Reserves, keeping in mind planned recreational amenities.
4. The Committee will aid the City Council in fulfilling its fiduciary responsibilities to oversee the financial activities and financial condition of the City of Tracy and its jurisdiction may include the review, discussion, and input on the following areas:

    4.1.1. Annual audits and compliance reporting

    4.1.2. Annual and quarterly budget updates, augmentations, and forecast

    4.1.3. Long-term planning, including but not limited to

    4.1.3.1. City revenues and expenses, including related fee and tax studies

4.1.3.2. Deferred maintenance and capital planning

4.1.3.3. Long-term liabilities, debt, and other finance planning

5. The Committee will not have jurisdiction to discuss any budget approaches that would require good faith bargaining with labor groups.

B. Action by Subject Matter Committees -

The assigned subject matter Committee shall have initial jurisdiction over any item assigned to it by the City Council as well as any items being advanced by the City Manager that implement or relate to the overall jurisdictional purpose of such Committee and may take any of the following actions with respect to the assigned item:

The Committee may, by a vote of the consensus of the members present, decide to postpone, continue, or table an item on the agenda. On any item on an agenda, the Committee may allow for an informational presentation by City staff relating to the item. With respect to an action item, and after discussion and consideration of the item, the Committee may take one of the following actions:

1. Vote by consensus to approve the recommendation of staff or the originator of the proposed action item and forward the recommendation onto the full Council. The Committee may, as a condition of approval, request additional information to be presented for consideration when the full Council hears the item.
2. Fail to approve any recommended action, in which case the item shall not be forwarded to the full City Council; provided that the City Council shall have jurisdiction to place the item on the agenda for a future City Council meeting, in accordance with the requirements of the Meeting Protocols for agenda setting, if no action was taken on the item due to any one of the following reasons:

   2.1. Due to the cancellation of a Committee meeting or

   2.2. Due to lack of a quorum, or

   2.3. the Committee was not able to approve any recommended action
3. Propose by a consensus vote of those present one or more alternative recommendation(s) be forwarded to the full City Council for consideration and final action. The Committee may request additional information to be presented for consideration when the full Council hears the item.
4. Reject by a consensus vote, jurisdiction over the action item and refer the action item back to the City Council with a recommendation for reassignment to another appropriate subject-matter committee.
5. Request, by consensus vote, additional, specified information from staff or the originator of the proposed action item. The action item may be continued or rescheduled for further consideration at the soonest feasible date available, allowing time for appropriate notice pursuant to the Meeting Protocols and the Brown Act.
6. With respect to an informational item, following discussion and consideration, Committee shall take one of the following actions:

   6.1. Receive the informational report by majority vote without forwarding the report to the full City Council;

6.2. Receive the informational report and forward the report onto the full City Council by majority vote;

6.3. Request by consensus vote from staff or the originator of the proposed informational item. The item may be continued or rescheduled for further consideration at the soonest feasible date available, allowing time for appropriate notice pursuant to the Meeting Protocols.

C. ROLE AND RESPONSIBILITIES

The role of the Finance Committee is to provide quarterly updates to the full City Council as part of the regular agenda, to inform City Council members and the public; and the multi-year fiscal sustainability plan will be presented to the City Council by the Finance Director for the body's review and approval.

D. MEMBERSHIP GUIDELINES

1. **Membership.** The Finance Committee shall consist of two (2) City Councilmembers.
2. **Term.** Each member shall serve a one-year term; selected as part of the City Councill's annual appointment process outlined in the Council's Code of Conduct.
3. **Attendance.** If a member of the Finance Committee fails to attend four (4) regular meetings in any calendar year, his or her position on the Finance Committee shall automatically become vacant. For quorum confirmation, a member who is unable to attend a meeting shall inform the staff liaison designated by the relevant City Department at least 48 hours before the next meeting.

E. QUORUM

A quorum of the Finance Committee shall consist of a majority of the members (including any vacancies). A quorum must be present in order for the Finance Committee to hold a meeting.

Meetings of the Committees may be noticed as a Special Meeting of the City Council if a majority of the members of the Council plan to attend and participate as part of the Committee.

F. OFFICERS

1. The officers of the Finance Committee shall be:
   1.1. The Chairperson and
   1.2. The Vice-Chairperson.
2. The Chairperson shall:
   2.1. Preside at all regular and special meetings.
   2.2. Rule on all points of order and procedure during the meetings.

G. DUTIES OF THE COMMITTEE

1. Review, discuss, and provide direction to facilitate in the preparing and presenting of accurate, timely, and meaningful financial statements to the Council from City staff
2. Monitor the finances of the City
3. Develop an annual work plan and presentation to the City Council
4. Review and update from time to time, as necessary the financial policies
5. Be familiar with, approve, and review periodically the organization's annual budget; Ensuring that the financial elements of the City are in accord with the City Council's Strategic Priorities
6. Set long-range financial goals along with financial strategies to achieve them
7. Develop policies and plans for financial awareness in cooperation with other public and private agencies
8. Provide recommendations to the City Council on such matters that may be referred to the City Council by the community

H. MEETINGS

1. Regular meetings of the Finance Committee shall be held on the 3rd Wednesday of each month and shall begin at 7:00 p.m.
2. If the scheduled date of a regular meeting conflicts with a holiday period, staff shall reschedule that meeting to be conducted within that month.
3. Any regular meeting may be adjourned, or any item on the agenda continued to the next or any subsequent regular meeting of the Finance Committee, by a majority of the quorum. If a meeting is adjourned or an item is continued to a special meeting to be held on a date other than a regular meeting date, the time, place, and date of such special meeting shall be specified in the motion for adjournment or continuance.
4. All meetings are subject to the Brown Act as set forth in Government Code Sections 54950 and following. Accordingly, all meetings shall be noticed and agendas for all meetings shall be prepared and distributed in accordance with the current City Council meeting procedures and the Brown Act.
5. All meetings shall be conducted in accordance with the current City Council meeting procedures.

I. FUNDING

Any funding necessary for operation of the Finance Committee shall be included in the City of Tracy budget, which shall be approved by the City Council.

J. ADMINISTRATIVE PROCEDURES AND POLICIES

City Boards and Committees shall follow all applicable City administrative policies and

procedures.

K. STAFF LIAISON

The Finance Committee shall have a staff liaison designated by the relevant City Department. The staff liaison shall:

1. Receive and record all exhibits, petitions, documents, or other material presented to the Committee in support of, or in opposition to, any question before the Committee.
2. Sign all meetings minutes and resolutions upon approval.
3. Prepare and distribute agendas and agenda packets.

L. ADOPTION

This document, as adopted by City Council, on March 7, 2023, by Resolution 2023-027, and shall serve as the Bylaws for the Finance Committee.

August 15, 2023

Agenda Item 3.F

RECOMMENDATION

Staff recommends that the City Council, by motion, appoint five adult City residents to serve on the Environmental Sustainability Commission.

EXECUTIVE SUMMARY

On January 17, 2023, City Council provided direction to staff to return with a resolution to form an Environmental Sustainability Commission (Commission). On April 18, 2023, City Council adopted Resolution 2023-068, which approved the formation and bylaws of a City of Tracy Environmental Sustainability Commission. Per the bylaws, the Commission is to consist of a total of seven (7) members - five (5) adult residents and two (2) youth residents (High School students up to and including their senior graduation year).

BACKGROUND AND LEGISLATIVE HISTORY

To fill the seats on the newly formed Environmental Sustainability Commission, the City Clerk's office opened a recruitment on May 15, 2023 and closed it on June 5, 2023. A total of 3 applications were received.

Another recruitment was then opened on June 9, 2023 and closed on June 23, 2023. That recruitment did not include the youth recruitment due to schools being on summer break, and 6 applications were received.

A recruitment for the two youth positions on the Environmental Sustainability Commission was opened on July 24, 2023 and will close on September 1, 2023. The youth commissioners will be interviewed and appointed at a later date.

ANALYSIS

On August 2, 2023, a Council subcommittee consisting of Council Member Arriola and Mayor Pro Tem Davis interviewed nine (9) applicants for the Environmental Sustainability Commission.

The following applicants were selected to serve 4-year terms that begin on August 16, 2023 and end December 31, 2027; Dotty Nygard, Antonio Acosta and Nicolas Sese.

The following applicants were selected to serve 2-year terms that begin August 16, 2023 and end December 31, 2025; Navi Kahlon and James Damasco.

Jenny Wood was placed on the eligibility list.

FISCAL IMPACT

None

PUBLIC OUTREACH/ INTEREST

Notification of the Environmental Sustainability Commission recruitment was posted on the City's Social Media pages, Tracy Press, the City's website, and Channel 26.

STRATEGIC PLAN

This item supports Quality of Life Strategic Goal 6; Support climate initiatives to reduce Tracy's carbon footprint and preserve its natural resources and 6.A; Form an Environmental Sustainability Committee and adopt bylaws.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council, by motion, appoint Dotty Nygard, Antonio Acosta and Nicolas Sese to serve 4-year terms that begin on August 16, 2023 and end December 31, 2027 and Navi Kahlon and James Damasco to serve 2-year terms that begin August 16, 2023 and end December 31, 2025 on the Environmental Sustainability Commission.

Prepared by: Necy Lopez, Deputy City Clerk

Reviewed by: Adrianne Richardson, City Clerk
Bijal Patel, City Attorney
Brian MacDonald, Interim Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

Attachment A: Resolution 2021-200

ATTACHMENT A

RESOLUTION 2021-200

ADOPTING A COUNCIL POLICY ESTABLISHING A SELECTION PROCESS FOR APPOINTMENTS TO CITY ADVISORY BODIES AND REPEALING RESOLUTION NO. 2021-131

WHEREAS, On September 7, 2021, the Tracy City Council adopted Resolution 2021-131 establishing a policy for the selection process for appointments to City advisory Bodies and repealing Resolution 2020-009;

WHEREAS, The current policy states that Council shall appoint two Council Members to serve on a subcommittee to review applications, interview applicants and recommend a candidate for appointment to the board, commission or committee, and

WHEREAS, Council wishes to amend the language of Section 2 (D)(1) to state that Council shall appoint two members *and an alternate* to serve on a subcommittee to review applications, interview applicants and recommend a candidate for appointment to the board, commission or committee.

NOW, THEREFORE BE IT RESOLVED, the City Council of the City of Tracy hereby adopts the Council Policy Establishing a Selection Process for Appointments to City Advisory Bodies, attached as Exhibit A, and thereby repeals and supersedes Resolution No. 2021-131.

****

The foregoing Resolution 2021-200 was passed and adopted by the Tracy City Council on the 21st day of December, 2021, by the following vote:

AYES: COUNCIL MEMBERS: ARRIOLA, BEDOLLA, DAVIS, VARGAS, YOUNG
NOES: COUNCIL MEMBERS: NONE
ABSENT: COUNCIL MEMBERS: NONE
ABSTAIN: COUNCIL MEMBERS: NONE

MAYOR

ATTEST:

CITY CLERK

COUNCIL POLICY ESTABLISHING A SELECTION PROCESS FOR APPOINTMENTS TO CITY ADVISORY BODIES

(Exhibit "A" to Resolution No. 2021-200)

SECTION 1: PURPOSE

To establish a selection process for appointments to City advisory bodies including defining residency requirements, in accordance with Government Code sections 54970 et seq.

SECTION 2: SELECTION PROCESS FOR APPOINTEE BODIES

A. On or before December 31st of each year, the City Clerk shall prepare an appointment list of all regular and ongoing boards, commissions and committees that are appointed by the City Council of the City of Tracy. The list shall contain the following information:

   1. A list of all appointee terms which will expire during the next calendar year, with the name of the incumbent appointee, the date of the appointment, the date the term expires and the necessary qualifications for the position.

   2. A list of all boards, commissions and committees whose members serve at the pleasure of the Council and the necessary qualifications of each position.

   3. The list of appointments shall be made available to the public for a reasonable fee that shall not exceed actual cost of production. The Tracy Public Library shall receive a copy of the list.

B. Whenever a vacancy occurs in any board, commission or committee, whether due to expiration of an appointee's term, resignation, death, termination or other causes, a special notice shall be posted in the office of the City Clerk, The Tracy Public Library, the City website, and in other places as directed within twenty (20) days after the vacancy occurs. Final appointment to the board, commission or committee shall not be made by the City Council for at least ten (10) working days after the posting of the notice in the Clerk's office. If Council finds an emergency exists, the Council may fill the unscheduled vacancy immediately.

C. Appointments shall be made for the remainder of the term created by the vacancy except as follows:

   1. If appointee will fill an un-expired term with six months or less remaining, the appointment shall be deemed to be for the new term.

   2. If the vacancy is filled by an emergency appointment the appointee shall serve only on an acting basis until the final appointment is made pursuant to section 2.

D. The Council shall use the following selection process to provide an equal opportunity for appointment to a board, commission or committee:

1. Council shall appoint two Council members and an alternate to serve on a subcommittee to review applications, interview applicants and recommend a candidate for appointment to the board, commission or committee.

2. If the Council subcommittee determines there are multiple qualified candidates, the subcommittee may recommend the Council establish an eligibility list that will be used to fill vacancies that occur in the following twelve (12) months.

3. At the Council subcommittee's discretion, the chair (or designee) of the board, committee or commission for which a member will be appointed, can participate in the interviews.

E. An individual already serving on a City of Tracy board, committee or commission may not be appointed to serve on an additional City of Tracy board, committee, or commission concurrently.

SECTION 3: **DEFINITION OF RESIDENCY REQUIREMENTS**

A. The following definitions shall be used to determine whether residency requirements are met for boards and commissions to which the Tracy City Council appoints members:

1. Tracy Planning Area means the geographical area defined in the City of Tracy General Plan and any amendments thereto.

2. City of Tracy means within the city limits of the City of Tracy.

3. Citizen means a resident of the City of Tracy.

4. Tracy School District means the geographical area served by the Tracy Unified School District.

5. Sphere of Influence shall be the geographical area approved by the Local Agency Formation Commission (LAFCo) of San Joaquin County and any amendments thereto.

B. Residency, as defined above and as set forth in the applicable bylaws for each board or commission, shall be verified annually by the City Clerk. The residency must be verifiable by any of the following means:

1. Voter registration,

2. Current California Driver's License or Identification,

3. Utility bill information (phone, water, cable, etc.),

4. Federal or State tax returns.

C. Members of boards or commissions shall notify the City Clerk in writing within thirty (30) days of any change in residency. If the change in residency results in the board member or commissioner no longer meeting the residency requirements, the member shall tender their resignation to the City Clerk who shall forward it to the City Council.

August 15, 2023

Agenda Item 3.G

RECOMMENDATION

Staff recommends that the City Council appoint, by separate motions, subcommittees of two Councilmembers, and an alternate, to interview applicants to fill the following: 1) four vacancies on the Board of Appeals, 2) one vacancy on the Measure V Residents' Oversight Committee, 3) two vacancies on the Planning Commission, and 4) one vacancy on the Tracy Arts Commission.

EXECUTIVE SUMMARY

This item requests that City Council appoint two members of the City Council, and an alternate, to subcommittees to interview applicants to fill the following: 1) four vacancies on the Board of Appeals, 2) one vacancy on the Measure V Residents' Oversight Committee, 3) two vacancies on the Planning Commission, and 4) one vacancy on the Tracy Arts Commission. This action can be completed by separate motions on the floor.

BACKGROUND AND LEGISLATIVE HISTORY

On February 28, 2023, three current City of Tracy representatives on the Board of Appeals terms came to an end and on March 17, 2023 an additional member resigned. Multiple recruitments have been opened since December 12, 2022.

On April 6, 2023 three applicants were interviewed for the Measure V Residents' Oversight Committee and two were selected. An additional recruitment was opened on June 28, 2023 and closed on July 21, 2023 to fill that additional vacancy on the Measure V Residents' Oversight Committee.

Two City of Tracy representatives on the Planning Commission notified staff that they would be resigning effective immediately. One resignation was received June 9, 2023 and the second on June 28, 2023. A recruitment was opened on June 29, 2023 and closed on July 21, 2023.

On April 12, 2023 one of the City of Tracy representatives on the Tracy Arts Commission notified staff that he would be resigning effective immediately. A recruitment was opened on June 29, 2023 and closed on July 21, 2023.

ANALYSIS

In accordance with Resolution No. 2021-200 (attached to this report as Attachment A), two-member subcommittees of Councilmembers, and an alternate, needs to be appointed to interview the applicants for the Board of Appeals, Measure V Residents' Oversight Committee, Planning Commission and Tracy Arts Commission and make a recommendation to the full City Council.

FISCAL IMPACT

None

PUBLIC OUTREACH/ INTEREST

Notification of the Board of Appeals, Measure V Residents' Oversight Committee, Planning Commission and Tracy Arts Commission recruitments were posted on the City's Social Media pages, Tracy Press, the City's website, and Channel 26.

STRATEGIC PLAN

This item is a routine operational item and does not relate to any of the Council's strategic plans.

ACTION REQUESTED OF THE CITY COUNCIL

Staff recommends that the City Council appoint, by separate motions, subcommittees of two Councilmembers, and an alternate, to interview applicants to fill the following: 1) four vacancies on the Board of Appeals, 2) one vacancy on the Measure V Residents' Oversight Committee, 3) two vacancies on the Planning Commission, and 4) one vacancy on the Tracy Arts Commission.

Prepared by: Necy Lopez, Deputy City Clerk

Reviewed by: Adrianne Richardson, City Clerk
Bijal Patel, City Attorney
Brian MacDonald, Interim Assistant City Manager

Approved by: Midori Lichtwardt, Interim City Manager

Attachment A: Resolution 2021-200

RESOLUTION 2021-200

ADOPTING A COUNCIL POLICY ESTABLISHING A SELECTION PROCESS FOR APPOINTMENTS TO CITY ADVISORY BODIES AND REPEALING RESOLUTION NO. 2021-131

WHEREAS, On September 7, 2021, the Tracy City Council adopted Resolution 2021-131 establishing a policy for the selection process for appointments to City advisory Bodies and repealing Resolution 2020-009;

WHEREAS, The current policy states that Council shall appoint two Council Members to serve on a subcommittee to review applications, interview applicants and recommend a candidate for appointment to the board, commission or committee, and

WHEREAS, Council wishes to amend the language of Section 2 (D)(1) to state that Council shall appoint two members *and an alternate* to serve on a subcommittee to review applications, interview applicants and recommend a candidate for appointment to the board, commission or committee.

NOW, THEREFORE BE IT RESOLVED, the City Council of the City of Tracy hereby adopts the Council Policy Establishing a Selection Process for Appointments to City Advisory Bodies, attached as Exhibit A, and thereby repeals and supersedes Resolution No. 2021-131.

****

The foregoing Resolution 2021-200 was passed and adopted by the Tracy City Council on the 21st day of December, 2021, by the following vote:

AYES: COUNCIL MEMBERS: ARRIOLA, BEDOLLA, DAVIS, VARGAS, YOUNG

NOES: COUNCIL MEMBERS: NONE

ABSENT: COUNCIL MEMBERS: NONE

ABSTAIN: COUNCIL MEMBERS: NONE

MAYOR

ATTEST:

CITY CLERK

COUNCIL POLICY ESTABLISHING A SELECTION PROCESS FOR APPOINTMENTS TO CITY ADVISORY BODIES

(Exhibit "A" to Resolution No. 2021-200)

SECTION 1: PURPOSE

To establish a selection process for appointments to City advisory bodies including defining residency requirements, in accordance with Government Code sections 54970 et seq.

SECTION 2: SELECTION PROCESS FOR APPOINTEE BODIES

A. On or before December 31st of each year, the City Clerk shall prepare an appointment list of all regular and ongoing boards, commissions and committees that are appointed by the City Council of the City of Tracy. The list shall contain the following information:

   1. A list of all appointee terms which will expire during the next calendar year, with the name of the incumbent appointee, the date of the appointment, the date the term expires and the necessary qualifications for the position.

   2. A list of all boards, commissions and committees whose members serve at the pleasure of the Council and the necessary qualifications of each position.

   3. The list of appointments shall be made available to the public for a reasonable fee that shall not exceed actual cost of production. The Tracy Public Library shall receive a copy of the list.

B. Whenever a vacancy occurs in any board, commission or committee, whether due to expiration of an appointee's term, resignation, death, termination or other causes, a special notice shall be posted in the office of the City Clerk, The Tracy Public Library, the City website, and in other places as directed within twenty (20) days after the vacancy occurs. Final appointment to the board, commission or committee shall not be made by the City Council for at least ten (10) working days after the posting of the notice in the Clerk's office. If Council finds an emergency exists, the Council may fill the unscheduled vacancy immediately.

C. Appointments shall be made for the remainder of the term created by the vacancy except as follows:

   1. If appointee will fill an un-expired term with six months or less remaining, the appointment shall be deemed to be for the new term.

   2. If the vacancy is filled by an emergency appointment the appointee shall serve only on an acting basis until the final appointment is made pursuant to section 2.

D. The Council shall use the following selection process to provide an equal opportunity for appointment to a board, commission or committee:

1. Council shall appoint two Council members and an alternate to serve on a subcommittee to review applications, interview applicants and recommend a candidate for appointment to the board, commission or committee.

2. If the Council subcommittee determines there are multiple qualified candidates, the subcommittee may recommend the Council establish an eligibility list that will be used to fill vacancies that occur in the following twelve (12) months.

3. At the Council subcommittee's discretion, the chair (or designee) of the board, committee or commission for which a member will be appointed, can participate in the interviews.

E. An individual already serving on a City of Tracy board, committee or commission may not be appointed to serve on an additional City of Tracy board, committee, or commission concurrently.

SECTION 3: **DEFINITION OF RESIDENCY REQUIREMENTS**

A. The following definitions shall be used to determine whether residency requirements are met for boards and commissions to which the Tracy City Council appoints members:

1. Tracy Planning Area means the geographical area defined in the City of Tracy General Plan and any amendments thereto.

2. City of Tracy means within the city limits of the City of Tracy.

3. Citizen means a resident of the City of Tracy.

4. Tracy School District means the geographical area served by the Tracy Unified School District.

5. Sphere of Influence shall be the geographical area approved by the Local Agency Formation Commission (LAFCo) of San Joaquin County and any amendments thereto.

B. Residency, as defined above and as set forth in the applicable bylaws for each board or commission, shall be verified annually by the City Clerk. The residency must be verifiable by any of the following means:

1. Voter registration,

2. Current California Driver's License or Identification,

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C. Members of boards or commissions shall notify the City Clerk in writing within thirty (30) days of any change in residency. If the change in residency results in the board member or commissioner no longer meeting the residency requirements, the member shall tender their resignation to the City Clerk who shall forward it to the City Council.