



South Livermore Sewer Expansion Project

Final Supplemental Environmental Impact Report
State Clearinghouse Number 2021 120386

prepared by

City of Livermore
Community Development Department
1052 South Livermore Avenue
Livermore, California 94550
Contact: Andy Ross, Senior Planner

prepared with the assistance of

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June 2022



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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Responses to Comments on the Draft Supplemental EIR

This section includes comments received during the circulation of the Draft Supplemental Environmental Impact Report (EIR) prepared for the South Livermore Sewer Expansion Project (project).

The Draft Supplemental EIR was circulated for a 47-day public review period that began on May 6, 2022, and ended on June 22, 2022. The City of Livermore received 10 comment letters on the Draft Supplemental EIR, and accepted comments during the June 21, 2022, Planning Commission Hearing. The commenters and the page number on which each commenter's letter appear are listed below.

Letter Number and Commenter Name		Page No.
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The comment letters and responses follow. The comment letters have been numbered sequentially and each separate issue raised by the commenter, if more than one, has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.1, for example, indicates that the response is for the first issue raised in comment Letter 1).



LAFCO

Alameda Local Agency Formation Commission

June 20, 2022

SENT VIA EMAIL

Andy Ross, Senior Planner
 City of Livermore, Planning Division
 1052 South Livermore Avenue
 Livermore, CA 94550
aaross@livermoreca.gov

SUBJECT: Draft Supplemental Environmental Impact Report for South Livermore Sewer Expansion Project

Dear Mr. Ross:

Thank you for allowing the Alameda Local Agency Formation Commission (LAFCO) to provide comments on the Draft Supplemental Environmental Impact Report (EIR) for the South Livermore Sewer Expansion Project. The proposed “South Livermore Sewer Expansion” project aims to extend existing sanitary sewer lines of approximately 5 miles to the unincorporated community of Buena Vista located in Alameda County. The purpose of the project is to enhance the economic viability of agriculture and viticulture by allowing existing residences and wineries in the South Livermore Valley area to connect to the City of Livermore’s public wastewater system and remove their on-site septic systems in an effort to reduce groundwater quality issues from nitrates associated with residential septic systems and livestock. The proposed project is presently located within the adopted sphere of influence of the City, but outside of the City’s established jurisdictional boundary as well as Urban Growth Boundary (UGB). Development of the sewer extension to the currently unincorporated territory would be subject to LAFCO’s approval for the delivery of wastewater services at a future date.

1.1

Under the California Environmental Quality Act (CEQA), LAFCO is a Responsible Agency for this proposal, and will have regulatory authority towards future applications involving boundary changes for the delivery of public wastewater service. It is in this role the Alameda LAFCO is commenting on the Draft Supplemental EIR.

Comments on the Draft Supplemental Environmental Impact Report:

1. LAFCO as a Responsible Agency

LAFCO’s statutory authority is derived from the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Section 56000, et seq.). From our reading of the Draft Supplemental EIR, we notice that the proposed project calls for LAFCO approval of one or more applications requesting the delivery of wastewater service to the affected territory following the certification of the EIR.

In reviewing this project, LAFCO will be asked to rely on the City’s environmental document for either the required annexation or out-of-area service agreement. Therefore, the Final EIR for this project should list Alameda LAFCO as a Public Agency whose approval is required (In reference to Section 1.7 *Lead, Responsible and Trustee Agencies*, Page 1-9).

↑
1.1

2. Consideration of Governance Options

Generally, LAFCOs were created to identify the most logical service providers for municipal services, including but not limited to water, wastewater, fire, etc. Such determinations can be accomplished through various changes of organizations such as annexations, consolidations and approvals of out-of-area service agreements. These governance options allow cities, special districts, and county governments to provide municipal services to landowners throughout the county.

Given that the proposed project is outside of the City of Livermore’s jurisdictional boundary, in order to comply with state law and local policies, LAFCO has identified two governance options for the City’s consideration that we would like evaluated.

a. Consider an out-of-area service agreement

- Based on the proposed project area, the affected territory is located outside the City’s jurisdictional boundary. Such discrepancy would require LAFCO approval.
- Under this scenario, the City can request an out-of-area service agreement from LAFCO if it meets the statutory criteria outlined in Government Code Section 56133 and the Commission’s adopted policies. If so, this would allow the City to provide wastewater services to the affected territory without amending its City limits.

1.2

b. Consider annexation of the affected territory

- Based on the proposed project area, the development of the sanitary sewer lines are located outside the City of Livermore.
- Under this scenario, the City can request annexation of the affected territory. This would allow the City to complete its proposed project without building in two different jurisdictions.

Thank you again for the opportunity to comment on the Draft Supplemental EIR and for the consideration of our comments. Please contact the LAFCO office if you have any questions

Respectfully,



Rachel Jones
Executive Officer

Attachments: none

Letter 1

COMMENTER: Rachel Jones, Executive Officer, Alameda LAFCO

DATE: June 20, 2022

Response 1.1

The commenter summarizes the project, its purpose, and its location. The commenter asserts that LAFCO is a Responsible Agency under the California Environmental Quality Act (CEQA) for the proposal. The commenter explains LAFCO's statutory authority and explains that the Draft Supplemental EIR should list Alameda LAFCO as a Public Agency whose approval is required in Section 1.7, *Lead, Responsible and Trustee Agencies* (Page 1-9 of the Draft Supplemental EIR).

The commenter is correct that LAFCO has discretionary approval authority over future municipal sewer connections within the County. However, LAFCO is not considered a responsible agency for the proposed sewer extension project and Urban Growth Boundary (UGB) language modification, which is the proposed project considered in the Draft Supplemental EIR. The required approvals are described in Section 2.6 of the Draft Supplemental EIR, which does not include any discretionary approvals from LAFCO for the proposed project but does include approvals for future subsequent actions including out of area service agreements or annexation required to receive sewer service.

Response 1.2

The commenter states that the project is outside of the City's jurisdictional boundary, and LAFCO has identified two governance options to comply with state and local regulations: an out-of-area service agreement from LAFCO to allow the City to provide wastewater services to the affected territory without amending City limits; or annexation of the affected areas currently outside of City limits to allow the City to complete the proposed project without building in two different jurisdictions.

This comment will be passed to decision-makers for consideration. It has not been determined at this time whether parcels will be annexed into the City should sewer service be requested.



ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY

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June 20, 2022

Andy Ross, Senior Planner
City of Livermore
1052 S. Livermore Avenue
Livermore, California 94550

RE: Draft Supplemental Environmental Impact Report (Draft SEIR) for the proposed South Livermore Sewer Expansion Project, State Clearinghouse Number 2021120386

Dear Mr. Ross:

Thank you for the opportunity to review the Draft SEIR prepared by the City of Livermore for the South Livermore Sewer Expansion Project. The Alameda County Planning Department submits the following remarks on the Draft SEIR. The proposed project would amend the City of Livermore’s South Livermore Valley Urban Growth Boundary (UGB) language to allow the extension of sanitary sewer lines to serve land uses permitted by the City’s South Livermore Valley Specific Plan, and the County’s East County Area Plan (ECAP) and South Livermore Valley Area Plan (SLVAP). The sewer extension would be installed in phases on South Livermore Avenue from approximately 520 feet northwest of Concannon Boulevard to Tesla Road, Tesla Road from South Livermore Avenue to approximately 3,000 feet east of Greenville Road, Buena Vista Avenue between East Avenue and Tesla Road, and Greenville Road from Tesla Road to approximately 5,900 feet south of Tesla Road, enabling existing and future wineries, visitor-serving commercial uses, and residences along the alignment to connect to the City’s wastewater system.

2.1

Page 2-2 of the SEIR includes a description of the City’s general plan designations and the City’s and County’s zoning designations for property in the vicinity of the proposed sewer extension alignment. ECAP serves as the County’s General Plan for the Sewer Expansion Project area. The SLVAP was incorporated into ECAP upon ECAP’s adoption in 1994. The general plan land use designation for the parcels on either side of Buena Vista Avenue along the proposed sewer expansion alignment is “Rural Density Residential,” which allows a maximum density of one housing unit per five-acre parcel. These parcels are in the “R-1-L-B-E” zoning district which allows single family residences and limited agricultural uses.

2.2

The general plan designation for the unincorporated parcels along the expansion project alignment on South Livermore Avenue, Tesla Road, and Greenville Road is “Large Parcel Agriculture” which allows a minimum parcel size of 100 acres. The zoning is “Planned Development” and “A-CA” (Agriculture with Cultivated Agriculture overlay). The ECAP policies pertaining to the South Livermore Valley and the CA overlay district allow a density bonus of up to four additional building sites per 100 acres if certain criteria are met, including permanently setting aside a minimum of 90% of the parcel for viticulture or other cultivated agriculture. To support and enhance the development of the South Livermore Valley as a flourishing wine region, the CA overlay district allows wineries, winery-related uses, and various visitor-serving commercial uses. Because the Sewer Expansion Project

would not change the land uses currently allowed adjacent to the proposed alignment, it is consistent with the County’s current general plan and zoning designations.

2.2

Consistent with ECAP Policies 343 and 344, the sewer expansion project would contribute to fulfilling the vision of South Livermore as an important wine region by enabling the development of future wineries and visitor-serving uses that is permitted by the County General Plan and Zoning Ordinance but is currently constrained by groundwater issues and lack of available infrastructure.

Policy 343: The County shall encourage the development of additional wineries with a range of sizes, and other wine-country uses that promote the South Livermore Valley as a premier wine-producing area.

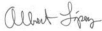
2.3

Policy 344: The County shall encourage the promotion of the South Livermore Valley as a premier wine-producing center by encouraging appropriate tourist attracting and supporting uses, such as bed and breakfast establishments, bicycle and equestrian facilities, a conference center, a wine museum, or other uses, and by establishing clear, well-signed travel corridors from major highways to the area.

The County Planning Department supports the goal of the Sewer Expansion Project to enhance the South Livermore Valley wine region. Please contact Liz McElligott at (510) 670-6120 or elizabeth.mcelligott@acgov.org with any questions.

Sincerely,

DocuSigned by:



D02F4F0AC22C429...

Albert Lopez
Planning Director

Letter 2

COMMENTER: Albert Lopez, Planning Director, Alameda County Community Development Agency

DATE: June 20, 2022

Response 2.1

The commenter states that because the project would not change the land uses currently allowed adjacent to the proposed alignment, it is consistent with the County's current General Plan and zoning designations. The commenter also states that the project would be consistent with the East County Area Plan Policies 343 and 344. Overall, the commenter states that the Alameda County Planning Department supports the goal of the Sewer Expansion Project to enhance the South Livermore Valley wine region.

This comment is noted and no response is warranted.

Letter 3

From: Alex Abey <[REDACTED]>

Sent: Saturday, June 11, 2022 1:54:47 PM

To: Planning Web email <planning@livermoreca.gov>; Gina DiPrima <[REDACTED]>

Subject: Sewer Extension Plans

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Mr. Ross and Planning Department,

I will not be able to attend the June 21, 2022 meeting in person, so I wanted to submit written comments in advance.

I am a long-time resident on Buena Vista Ave and my comments are related to possible impacts of the extension specifically related to Buena Vista Ave.

My understanding (based on comments recently in The Independent) is that Buena Vista is not covered by the South Livermore Valley plan and therefore does not inherit any of the zoning protections provided under that plan to other rural areas.

I am not an authority on zoning laws, but I believe that current Alameda County zoning provides certain protections against sub-division of properties and against having more than one primary residence and one sub-1200 square-foot auxiliary residence on the same property.

Furthermore, I believe one of the justifications for this zoning, in addition to the street's quasi-rural history, is that there are prohibitions against additional septic systems (for ground water quality reasons) and that this limit on septic systems is a primary rationale against allowing greater residential density on the street.

Given the above, my primary concern is that making sewer available on Buena Vista will remove the rationale for maintaining rural zoning and pave the way for changes in zoning that allow landowners to subdivide or build additional units. This would eventually turn Buena Vista into another generic subdivision. It may also pave the way for the City of Livermore to annex Buena Vista, which is something I do not support.

Therefore, my position on this topic is to only support the sewer line on Buena Vista if the City and County agree to not change the zoning and/or create protections that preserve the rural nature of the street and prevent subdivision or additional units beyond what is allowed today.

Thank you for considering my opinion in this matter.

Sincerely,

Alex Abey

3.1

Letter 3

COMMENTER: Alex Abey

DATE: June 11, 2022

Response 3.1

The commenter states they are concerned that the sewer extension on Buena Vista Avenue will allow for changes to current zoning that restricts landowners from subdividing their properties or building additional units on their property, and that the sewer extension will allow for the annexation of Buena Vista Avenue into the City of Livermore.

The project being analyzed within the Draft Supplemental EIR does not propose the annexation of parcels along Buena Vista Avenue into the City of Livermore, nor does the project propose a change to any existing land use designations or zoning of parcels adjacent to the proposed alignment. As stated in Section 2 of the Draft Supplemental EIR, the project would only “support uses that are consistent with the City’s General Plan, SLVSP [South Livermore Valley Specific Plan], or current zoning; should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, additional CEQA review would be required” (page 2-10 of the Draft Supplemental EIR). Furthermore, parcels along Buena Vista Avenue would not be required to connect to the City’s wastewater system. As stated on page 2-12 of the Draft Supplemental EIR, “[f]ollowing project completion, individual properties would require subsequent approvals including permitting and service agreements with the City subject to Alameda County Local Agency Formation Commission approval, County, and/or Livermore-Amador Valley Water Management Agency, prior to connection to the wastewater system.”

Letter 4

From: Donna Governor <[REDACTED]>
Sent: Monday, June 13, 2022 6:47 PM
To: Andy Ross <aaross@livermoreca.gov>
Cc: Eddie Governor <[REDACTED]>
Subject: Question regarding Sewer Extension Project

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Good Evening,

We are Buena Vista Avenue residents and have a couple of questions and concerns. Unfortunately we are not available to attend the meeting scheduled for the 21st of June, so thought I would send you an email.

If you are not able assist us, maybe you can point us in the right direction.

1) The NOA states "the project would also allow existing residences on Buena Vista Avenue to connect to the City's wastewater system and cease the use of their on-site septic systems." Therefore we have the following questions and concerns;

a) Because it says "allow" does this mean that it is at the property owners discretion to tie into the City's

wastewater system ?

b) Is there a time table that the residents need to make a decision?

c) If the property owners decide to tie-in, what is the cost to the property owners?

c) Would any pre-work for these tie-in connections happen when the main is installed and exposed?

d) When would these connections be made?

4.1

2) In the "Appendix Initial Study" it states that approximately 20' access will be required for the daily work area during construction. As you are most likely aware, Buena Vista does not have sidewalks therefore property fence lines (or lack of fences) and mail box alignment (on the west side of the street) varies. Therefore we have the following questions and concerns;

a) Who would have the responsibility to determine if something needs to be relocated or removed (such as mailboxes) and who would be responsible for that cost?

b) If there is any private property damage as a result of the construction activities what recourse does the property owners have to ensure repairs are completed at the cost of the project?

c) If access to these mailboxes are blocked during construction, whose responsibility will it be to coordinate with the Livermore Post Office to ensure delivery of mail?

d) How far in advance will property owners be notified if access to their property will be impacted due to lane closure or construction activities? We ask that consideration is made for the many residents who have trailers (i.e. Utility, Horse, RV and flat bed) that require larger radius to access driveways/property.

e) What is a reasonable duration where property owners may not have access to their driveway/property?

f) What provisions will be put into place in the event of an emergency where emergency vehicles need to access blocked property?

4.2

I think those are all of our initial questions and concerns. Again, if you are not the correct person to contact please let me know.

Thank you for your time.
Donna Governor

Letter 4

COMMENTER: Donna Governor

DATE: June 13, 2022

Response 4.1

The commenter asks if it is at the discretion of the property owner to tie into the City's wastewater system; if there is a timeframe within which a decision must be made regarding individual property tie-ins; what the tie-in cost would be to property owners; if any pre-work would be required during the installation of the main sewer line extension for the tie-in connections to happen; and when the tie-in connections would be made.

As described in Response 3.1, the project would not require property owners along Buena Vista Avenue to tie into the City's wastewater system. No pre-work would be required during initial construction of the main sewer line extension for properties on Buena Vista Avenue to be able to tie into the City's wastewater system in the future. There are currently no details available regarding the timeline for decision and connection to the City's wastewater system. In addition, there are currently no details available regarding the cost to an individual property desiring to connect to the City's wastewater system; however, a connection fee (pricing to be determined) would be required. This comment will be passed on to City decision-makers for consideration.

Response 4.2

The commenter asks who is responsible for determining if private property would need to be relocated or removed during construction of the project, and who would be responsible for those costs; what recourse is available to property owners if private property is damaged as a result of project construction; who will be responsible for coordinating with the Livermore Post Office to ensure delivery of mail if mailboxes are blocked during construction; how far in advance property owners will be notified if access to private property is impacted due to lane closures and construction activities; how long private property access will be disturbed; and what provisions will be put in place for emergency vehicle access during construction.

Page 2-11 of the Draft Supplemental EIR states: "Construction staging, laydown areas, and worker parking would be provided along the project alignment into one travel lane, one bike lane, and one shoulder.... Approximately 20 feet of width in the daily work area would be required. There is approximately 40 feet of pavement width on South Livermore Avenue, Tesla Road, Buena Vista Avenue, and Greenville Road." Project construction would take place within the existing right-of-way and would not require the relocation or removal of structures or facilities located on private property. Damage to private property is unlikely; it is reasonable to assume no private property damage would occur during construction activities, as construction would be limited to the existing right-of-way and any accidental damage to private property would be compensated. Construction duration and staging is discussed page 2-11 of the Draft Supplemental EIR. It is anticipated that the contractor would install up to 150 linear feet (LF) of sewer line per day; therefore, disturbed access to an individual private property is expected to be limited to a few days over the entire span of the construction period. Furthermore, Section 2.5 of the Draft Supplemental EIR states:

Construction staging, laydown areas, and worker parking would be provided along the project alignment into one travel lane, one bike lane, and one shoulder. The contractor may work with private property owners as feasible, or use the City's Maintenance Service Center for additional staging. The City would post signage along the alignment and on roadways leading up to it before and during construction to give advance warning of road closures and detours.

As staging areas would be limited to designated locations, it is not anticipated that delivery of mail would be inhibited or delayed during project construction. Signage would be posted along the project alignment and on roadways leading up to the alignment at least 72 hours prior to construction activities, which is standard practice in construction contracts and would be enforced by the City.

Emergency vehicle access is discussed in Section 17, *Transportation*, of the Initial Study, attached as Appendix IS to the Draft Supplemental EIR. Specifically, page 103 of Appendix IS states:

Project construction would require one lane of public roadways to be temporarily closed at any given time. A county-approved traffic control plan would be implemented to regulate worker parking, construction staging, roadway improvements and potential traffic detours during construction. Signage would be posted along the alignment and on roadways leading up to the alignment it before and during construction to give advance warning of road closures and detours. Additionally, lane closures during project construction would only occur along limited segments of the alignment, as approximately 150 linear feet of pipeline would be constructed each day. As a result, the project would not result in inadequate emergency access and impacts would be less than significant.

Letter 5

From: [REDACTED] <[REDACTED]>
Sent: Saturday, June 18, 2022 4:14 AM
To: Andy Ross <aaross@livermoreca.gov>
Subject: Question regarding proposed Livermore Sewer extension

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi Andy,

I see you are the city contact for the proposed Livermore sewer extension.

As you know, laws in California around CEQA mandate the disclosure of significant environmental effects of a proposed project. In conjunction with this, I have not read anything about any reports the city is conducting on the ramifications on increasing the vineyards scale due to this project in terms of the increased exposure to pesticides our community will face.

Numerous studies have shown that living near vineyards increases rates of cancer, childhood asthma and other health conditions due to pesticide drift.

Therefore, in order to understand the effects of the sewer line project in terms of increasing the winemakers footprint, it is paramount that the city of Livermore includes this in their reporting.

I look forward to hearing from you.

Kind regards,
Victoria

5.1

Letter 5

COMMENTER: Victoria Kamerzell

DATE: June 18, 2022

Response 5.1

The commenter states that there is no discussion of the ramifications of increasing the vineyards scale on increased exposure to pesticides.

Air quality is discussed beginning on page 25 of Appendix IS to the Draft Supplemental EIR; and hazardous materials are discussed beginning on page 65 of Appendix IS to the Draft Supplemental EIR. As stated in Section 2 of the Draft Supplemental EIR, the project would only “support uses that are consistent with the City’s General Plan, SLVSP, or current zoning; should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, additional CEQA review would be required” (page 2-10 of the Draft Supplemental EIR).

Letter 6

From: Tim Johnston <[REDACTED]>
Sent: Monday, June 20, 2022 3:43 PM
To: Andy Ross <aaross@cityoflivermore.net>
Subject: South Livermore Draft SEIR comments

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

The following comments are in response to the "South Livermore Sewer Expansion Project, Draft Supplemental Environmental Impact Report"

As a lifelong resident of the local area with nearly always living on Buena Vista Avenue, I have much concern on the ramifications of a sewer servicing the area.

There are numerous flaws in the apparently bias, hastily, and superficially prepared report including:

- There are comments about only allowing existing residences to the sewer. There currently are properties that are entitled to building a house (primary dwelling as well as an Accessory Dwelling Unit) and the report is saying they will not be able to connect to sewer thereby restricting property rights of owners.

- There are conflicting and unclear statements on development that cannot happen with septic systems but will happen with a sewer but other comments saying there will be no development simply as a result of a sewer being available.

- There is incorrect information on pavement width. This includes discussion of width and impact during possible construction. There appears to be unrealistic expectations of production and length of construction time.

- There is reference to Civil Engineering work but the report lacks any reference to reports by a Civil Engineer.

- The report makes broad assumptions on need to remove septic systems and restrictions supposedly in place. Where is supporting documentation of restrictions from State Regional Water Quality Control Board? Where is any project that has been restricted due to septic system where a complete and realistic proposal was rejected?

- There is a statement of recycled paper content on a report that is transmitted electronically. This taints a reader's understanding and detracts for the point of the report.

- The discussion of noise is not complete. Very subjective statements are made and not supported with any fact. There is a comment that no major project is planned, perhaps implying nothing will occur simultaneously and compounding noise. This is flawed in that a nearby project unknow will have impact on the vicinity, there does not

6.1

6.2

6.3

6.4

6.5

6.6

need to be a “major” project to compound noise from the construction of the possible sewer.

6.6

- There is inadequate justification for not addressing noise issues past the initial study.

There are conflicting statements:

- Impact Analysis a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? The proposed project would not involve the construction of new residences or businesses, nor would it extend existing roadways. The project would involve the construction of sanitary sewer infrastructure intended to support existing uses and serve existing development potential consistent with the vision of the General Plan and SLVSP. The project would not support uses that are not consistent with the City’s General Plan, SLVSP, or current zoning. The project would not cause unanticipated growth in the City. Therefore, the project would not induce substantial unplanned growth, directly or indirectly. Impacts to population or housing would be less than significant. This topic will not be discussed in the Supplemental EIR

6.7

- There is a statement that this project will not create new jobs in the City. If this proposed project does will not create jobs (within or out of the city as support, secondary jobs) then why consider this work? If there are to be new wineries then by definition there will be new jobs and these new jobs will need staff.

6.8

Other discrepancies that should be addressed:

- There is reference to a library . The use of the Library is not limited to just citizens of Livermore.
- If there is an increase in visitors then there will be increase use of parks, within and out of Livermore as a result of increased visitors to new facilities. If a 1997 report said otherwise then this is not valid in today’s conditions.
- There is a statement that, *the project would not result in impacts related to recreation.*

6.9

The project, through the building of visitor facilities, will therefore increase visitors, some of these visitors who will use recreation and park facilities. Use of recreational facilities is not limited to City of Livermore residences.

- The county is considering work on Tesla Road. Work on Tesla Road can impact the timing and noise.

6.10

- There is a statement that the project will not change existing roadways, increase commercial or residential development... or create an increase in traffic in the project vicinity. This cannot be correct, there will be an increase in traffic if there are people using (going to) additional facilities. If not, then the project has no purpose.

6.11

Project Objectives discrepancies:

- Improve groundwater quality. The means of improvement of groundwater quality is not explained.

- The members of the community outside of the city should be able to have a vote in elections both for the allowing of modifications to Measure D and for choosing elected officials that make decisions controlling use of their property.

6.12

Alternatives:

- The no project alternative incorrectly states:

Parcels adjacent to the alignment are constrained from growth by existing septic systems, which are not eligible for expansion due to water quality concerns in the county.

6.13

This is false. There are mitigation means that have been and can continue to be used to provide for the requirements as a result of the alleged nitrate issue.

- There is mention of groundwater improvement. But there is not mention of how groundwater would improve. Nitrate will persist for decades and it is very possible that the source is other than from sewage going into septic systems. There is no firm data provided showing the sources of elevated nitrate.

6.14

- Alternative 2: This mentioned WWTP but failed to mention use of septic systems with pretreatment which are currently in use and can serve additional properties.

6.15

- Alternative 3: mentioned objectives of sewer on Buena Vista Avenue to reduce groundwater quality issues but there is not mention of how sewer would help groundwater nor is there appropriate explanation of an existing water quality issue.

6.16

- *Impact 6a. The 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. This impact would be less than significant*

- *Impact 6b. The project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. No impact would occur*

6.17

- *Impact 7a.3. The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related*

ground failure, including liquefaction. This impact would be less than significant. This area includes an area with liquefaction concerns. No Engineering proposed document.

- *Impact 7a.4. The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. This impact would be less than significant.*

- Answering this requires an engineering study which has not been done or has not been referenced.

- The same engineering need applies for Impact 7b, 7c, 7d.

- *Impact 7e. The 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 would occur.*

- Impact 7e, is self service. The claim of not have capacity for septic system should be properly supported or not made. This statement of the entire basis of the supposed need

- This concern, of soil supporting septic systems or sewers being available, was reported as being n/a in the 1997 EIR. This is a major blunder of the 1997 report and should invalidate the 1997 report or at least have a major revision and update. The sewer or septic system issues is the entire motivation of the current project consideration, but the need is being pushed aside and ignored.

- Impact 9g, wildland fire. The 1997 report if flawed, according to current witness of fire spread, there have been changes in the area from local response to state response. Need to have this evaluated

- Impact 11b: This is an issue, this should be addressed.

- Impact 13a, noise. There will be increase in noise from ongoing activities in the new facilities to be created. This should be evaluation on current understanding of noise and sound.

- Impact 13b, Ground borne noise. There is no engineering information presented to answer this concern.

- Impact 14b: This project can induce growth. This should be adequately answered.

- Impact 15a: Increased governmental facilities likely will be needed, this should be addressed.

6.17

6.18

6.19

6.20

6.21

- Impact 15a-b: Park facilities use can be expected if there is an increase in recreational uses, such as winery visitations. ↑ 6.21
- Impact 20a-d: there will be increase for fires including wildland fires with increases facilities. | 6.22
- Impact There is a claim that groundwater would improve. There is no supplied evidence to support improvement expectations. There is no supporting evidence of source. The current natural attenuation of nitrate is not being considered. | 6.23
- Impact UTIL-1: This is wrong in statement of no development. Impact util-2: This is wrong, there are concerns for water rationing recommendations therefore cannot state there is sufficient supply for the demand. | 6.24
- Groundwater will be encountered at the depth mentioned for sewer excavation. There is no mention on how this will be mitigated. | 6.25
- There is very vague mention of impact to property owners along the sewer alignment. Will there be requirements to connect to the sewer and abandoning an operating septic system? Will connection be required when a septic system receives maintenance or repair? Will connection be required for house expansions? Will connections be required if a property owner does building or additions, such as an ADU? |
- What is the consideration for costs to public agencies and to property owners for connections and ongoing fees? | 6.26
- Has there been any analysis of costs for sewer connection?

To continue with this project, I see the need for the above comments to be adequately addressed and recirculated for public comment.

Submitted by,

Tim Johnston

██████████

████████████████████

Livermore, CA 94550

Letter 6

COMMENTER: Tim Johnston

DATE: June 20, 2022

Response 6.1

The commenter expresses concern regarding the addition of sewer service to Buena Vista Avenue, and asks if the project would only allow existing residences to connect or if new residences or other future development would also be allowed to connect to the proposed pipeline. The commenter also states that the EIR provides conflicting statements regarding future sewer connections.

The commenter's concerns are noted and will be passed on to City decision-makers for consideration.

As stated in Section 2.5 of the Draft Supplemental EIR, the proposed sewer pipeline would allow adjacent parcels to connect to support existing and future development consistent with the City General Plan, SLVSP, and current zoning.

Response 6.2

The commenter states that the Draft Supplemental EIR provides incorrect pavement widths, and states that construction assumptions are unrealistic.

Project construction details are provided on page 2-11 of the Draft Supplemental EIR. The description provided here in is based on the City's experience with past pipeline installation projects. As stated therein, construction would occur within existing rights-of-way, last for approximately 12 months for the entire pipeline length, with approximately 150 LF of sewer pipeline installed per day.

Response 6.3

The commenter states that a Civil Engineering work is referenced but not provided.

It is unclear what report the commenter is referring to, as a page reference is not provided. References used in preparation of the EIR are cited in Section 7 of the Draft Supplemental EIR.

Response 6.4

The commenter requests supporting documentation from State Water Resources Control Board (SWRCB) regarding septic system restrictions and projects that have been restricted due to septic systems.

The following reference cited in the Draft Supplemental EIR describes the constraints to development related to septic systems in the area: HydroScience. 2022. *Sewer System Extension Hydraulic Analysis*. Livermore, CA. January 31, 2022. The following information is provided:

Most of the wineries in this region receive potable water from California Water Service Company (Cal Water), are connected to Zone 7 raw water or well water for irrigation on the vineyards, and operate on septic systems for disposal of their wastewater. These septic systems are believed to be contributing to groundwater contamination in the area. Development

approval in this area has been paused until/unless the area is able to obtain wastewater collection services to alleviate the groundwater contamination.

The SWRCB identifies nitrates as a specific constituent of concern found within groundwater. In their groundwater information sheet, the SWRCB cites septic systems and discharges from wastewater as common anthropogenic sources of nitrate in groundwater.¹ Septic systems collect organic nitrogen in the form of human wastes. Organic nitrogen within the septic tank is first converted into ammonium in a process called ammonification; the ammonium is then converted into nitrites, which are then converted into nitrates, by aerobic bacteria in a separate process called nitrification.² Nitrates are water-soluble and can therefore be easily passed through soils into the groundwater table when treated septic tank effluent is discharged into the drain field. Once in groundwater, nitrates attenuate slowly and have been known to persist for decades. When multiple sources of nitrates are located in close proximity to one another, such as in neighborhoods with multiple septic systems, nitrate concentrations in the groundwater can concentrate at unacceptable levels (James R. Taylor 2003).³

Zone 7 Water Agency prepared a Nutrient Management Plan for the Livermore Valley Groundwater Basin in July 2015, which provides an assessment of existing and future groundwater nutrient concentrations, and describes planned actions to address existing nutrient loads and high groundwater nitrate concentrations in identified Areas of Concern.⁴ Additionally, the County of Alameda prepared a Local Agency Management Program for Onsite Wastewater Treatment Systems in June 2018, which describes on-site wastewater treatment system requirements within the county; identifies areas of concern within the county regarding nitrate concentrations from on-site systems (including the Tesla Avenue and Greenville Road, and Buena Vista Avenue areas in the South Livermore Valley); and describes corrective actions, requirements, procedures, and prohibitions.⁵

Response 6.5

The commenter states that the EIR provides a statement of being printed on recycled paper.

Hard copies of the Draft Supplemental EIR were printed and provided for public review at Livermore City Hall and Civic Center Library. These documents were printed on 50% recycled paper with 50% post-consumer content. The note was not removed from the electronic version.

¹ State Water Resources Control Board (SWRCB). 2017. Groundwater Information Sheet. Nitrates. https://www.waterboards.ca.gov/water_issues/programs/gama/docs/coc_nitrate.pdf (accessed June 2022).

² Zhu, Y., Ye, M., Roeder, E., Hicks, R. W., Shi, L., and Yang, J. 2016. Estimating ammonium and nitrate load from septic systems to surface water bodies within ArcGIS environments. *Journal of Hydrology*, Volume 532, pp. 177-192.

³ James R. Taylor. 2003. Evaluating Groundwater Nitrates from On-Lot Septic Systems, a Guidance Model for Land Planning in Pennsylvania. Pennsylvania State University.

⁴ Zone 7 Water Agency. 2015. Nutrient Management Plan Livermore Valley Groundwater Basin. July 2015. https://www.zone7water.com/sites/main/files/file-attachments/nmp-2015_final.pdf?1619906689 (accessed June 2022).

⁵ Alameda, County of. 2018. Local Agency Management Program for Onsite Wastewater Treatment Systems. June 5, 2018. <https://deh.acgov.org/landwater-assets/docs/OWTS-LAMP.PDF> (accessed June 2022).

Response 6.6

The commenter expresses the opinion that the noise discussion is incomplete. The commenter states that the EIR implies no major project is planned and no simultaneous noise would occur. The commenter states that an adjacent construction project need not be 'major' to compound noise impacts. The commenter expresses the opinion that noise should have been addressed in the EIR.

Noise impacts are addressed in Appendix IS to the Draft Supplemental EIR, beginning on page 79. As described therein, construction noise would not exceed applicable thresholds following the implementation of Mitigation Measure NOI-1 to reduce construction noise levels. Cumulative projects are listed in Table 3-1 (page 3-3 of the Draft Supplemental EIR). None of these projects would result in substantial construction noise directly adjacent to the proposed alignment during the anticipated project construction schedule, as the construction periods would not likely overlap; therefore, cumulative construction noise impacts are correctly characterized on page 112 of Appendix IS. Additionally, the noise analysis included in Appendix IS concludes that noise impacts resulting from the project would be less than significant; therefore, additional discussion in the Supplemental EIR is not warranted.

Response 6.7

The commenter quotes page 89 of Appendix IS to the Draft Supplemental EIR, and does not provide a comment. No response is required.

Response 6.8

The commenter asks why the project is being considered if it would not create new jobs.

The following project objectives are provided in Section 2.4 of the Draft Supplemental EIR:

- Improve groundwater quality in the South Livermore Valley area relative to nitrates, which is associated with residential septic systems and livestock keeping.
- Facilitate the development potential of existing and new wineries, visitor serving commercial uses, and residences consistent with the City's General Plan, SLVSP, and South Livermore Valley Area Plan (SLVAP) subject to Alameda County Measure D.
- Enhance the short- and long-term economic viability of agriculture and viticulture in the South Livermore Valley area, consistent with Goals LU-13 and LU-14 of the City's General Plan.

Response 6.9

The commenter states that a library is referenced, and use of the library is not limited to city citizens. The commenter states that if visitors to the area are increased, the use of nearby parks and recreation facilities would also increase.

Page 93 of Appendix IS states:

The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the vision of the General Plan and SLVSP.... The project would not involve construction of residences and would not generate new jobs in the City; therefore, the project would not result in impacts to Livermore library services or facilities, or other public facilities in City.

Page 96 of Appendix IS states:

The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP. Additionally, the project would not involve construction of residences and would not generate new jobs in the City. Therefore, the project would not increase the demand for existing recreational services.

Based on the above, the commenter's concerns were addressed in Appendix IS. Because the project would not induce unanticipated growth, no increase in demand for libraries, parks, or recreational facilities would occur.

Response 6.10

The commenter states that the County is considering work on Tesla Road, which could impact noise. The City is aware of the County's proposed improvement project along Tesla Road, and is working in conjunction with the County to determine an appropriate timeline for constructing both projects.⁶ As described in Response 6.6, noise impacts are addressed in Appendix IS.

Response 6.11

The commenter expresses the opinion that the EIR incorrectly states that the project will not change existing roadways, increase development, or increase traffic.

Page 2-11 of the Draft Supplemental EIR describes the proposed construction:

Daily construction tasks would include excavation/grading, installing pipe, backfilling, patching pavement, and coordinating traffic control. Once an area is complete, final paving would be installed over the trench.

No other modifications to the roadways would occur as a result of the project.

As described on page 2-10 of the Draft Supplemental EIR: "The project is intended to support uses that are consistent with the City's General Plan, SLVSP, or current zoning; should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, additional CEQA review would be required." Construction of the proposed sewer pipeline would not directly result in the construction of new development along the pipeline. Additionally, operation of the sewer pipeline would not result in new daily vehicle trips in the project vicinity (please refer to page 102 of Appendix IS).

Response 6.12

The commenter states that the project objectives do not describe how groundwater quality will be improved. The commenter also states that community members outside of the City should be allowed to vote on the proposed modification to Measure D.

The proposed project would provide an opportunity for municipal sewer connections in the South Livermore Valley area, which is experiencing groundwater quality issues related to nitrates from

⁶ Altman, Larry. 2022. *Livermore's Tesla Road Safety Project Beginning First Stages*. April 3, 2022. The Independent. https://www.independentnews.com/news/livermore_news/livermores-tesla-road-safety-project-beginning-first-stages/article_a28ba9ba-b3ad-11ec-acc5-8fc95b2883b2.html (accessed June 2022).

residential septic systems and livestock keeping (refer to page 2-7 of the Draft Supplemental EIR). Page 4.1-23 states: “project operation would allow residences and existing wineries to connect to the City’s wastewater system, and the existing septic systems at these properties would be abandoned or removed. As a result, groundwater quality in the South Livermore Valley would be improved due to reduced reliance on septic systems.”

As described on page 2-7 of the Draft Supplemental EIR, Measure D was passed by Alameda County voters in November 2000. Measure D was not limited to voters within the City of Livermore. However, the vote to amend to the UGB language will be restricted to the residents of the City, as the UGB is specific to the City of Livermore and certain policies within the City’s General Plan.

Response 6.13

The commenter asserts that parcels adjacent to the alignment are not constrained from growth as there is mitigation available to address the nitrate issue.

Please refer to Response 6.4 regarding groundwater contamination from septic systems and existing restrictions on development in the area.

Response 6.14

The commenter states that it is not explained how groundwater would improve as a result of the project, and states there is no firm data showing sources of elevated nitrate.

Please refer to Response 6.4 regarding groundwater contamination from septic systems, and Response 6.12 regarding how the project would improve groundwater quality.

Response 6.15

The commenter states that Alternative 2 does not mention the use of septic systems with pretreatment.

Alternative 2 includes the construction of “shared small-scale WWTPs [wastewater treatment plants] to treat and dispose of additional wastewater generated by the maximum development of each property under the General Plan and SLVSP” (page 6-3 of the Draft Supplemental EIR). The commenter is suggesting a similar alternative of wastewater treatment prior to septic system disposal. This suggested alternative is not substantially different from Alternative 2; therefore, a discussion of this suggested alternative has not been added to the Draft Supplemental EIR, as pursuant to *CEQA Guidelines* Section 15126.6(a), “an EIR need not consider every conceivable alternative to a project.”

Response 6.16

The commenter states that Alternative 3 does not explain how sewer would help alleviate groundwater issues and does not explain the existing water quality issue.

Please refer to Response 6.12 for an explanation of how municipal sewer service would improve groundwater quality. The existing groundwater quality issue is described in Section 2, *Project Description*, of the Draft Supplemental EIR. Specifically, Section 2.3 states:

In South Livermore Valley, the Regional Water Quality Control Board, County Department of Environmental Health, and Zone 7 Water Agency (Agencies) have restricted issuing permits for new septic systems or replacing failing septic systems.

The Agencies' positions reflect their missions to protect the Tri-Valley's groundwater basin. The Agencies have identified high nitrate concentrations in groundwater throughout the Tri-Valley resulting from past livestock operations and failing, undersized, or inefficient septic systems. These issues have the potential to adversely affect water quality and public health, safety, and quality of life.

Response 6.17

The commenter references Impacts 6a, 6b, 7a.3, 7a.5, and 7b through 7d of Appendix IS, and states that the alignment is in an area of liquefaction concerns and no engineering study for landslide risk has been completed.

Page 53 of Appendix IS states: "The project alignment is located in an area of the city with low liquefaction susceptibility (City of Livermore 2015)." The commenter has not provided a source for their claim that the area is within an area of high liquefaction susceptibility; therefore, no additional response is required.

Page 52 of Appendix IS states: "Landslide risk is low throughout most of Livermore, including the project alignment (City of Livermore 2015)." The commenter has not provided a source for their claim that the area is within an area of high landslide susceptibility; therefore, no additional response is required.

Overall, the project would not result in the construction of new habitable structures or workplaces not already contemplated under with the City's General Plan and SLVSP. As such, the project would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death from liquefaction or landslides.

Response 6.18

The commenter references Impact 7e of Appendix IS, and states that there is no support for the claim of not having septic system capacity. The commenter states that the 1997 EIR should be invalidated for reporting "n/a" for the impact related to soils capable of supporting septic systems.

The statute of limitations for challenging the 1997 EIR closed following its certification in September 1997. The CEQA Appendix G checklist question related to soils capable of supporting septic systems is addressed on page 58 of Appendix IS as it relates to the proposed project. As stated therein, no septic systems or alternative wastewater disposal systems are proposed, and no impact would occur.

Please refer to Response 6.12 for an explanation of how municipal sewer service would improve groundwater quality.

Response 6.19

The commenter states that there have been changes to wildland fire hazards since 1997, and it should be evaluated. The commenter states that conflicts with land use plans is an issue that should be addressed.

CEQA Appendix G checklist question 9g is addressed on page 70 of Appendix IS. As stated therein, “[t]here are no wildland conditions on or adjacent to the project alignment,” as the surrounding area is developed with primarily agricultural and residential land uses.

CEQA Appendix G checklist question 11b is addressed on page 75 of Appendix IS. As stated therein: “The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City’s General Plan and SLVSP. No development beyond the current vision of the General Plan and SLVSP would occur as a result of the project.”

Response 6.20

The commenter states that there will be ongoing noise from proposed facilities, which should be addressed, and states that no engineering information is presented regarding groundborne noise.

As described in Response 6.6, potential noise impacts would be limited to project construction. Project operation would not result in operational noise, as proposed sewer pipelines would be installed underground and no lift stations or other noise-generating infrastructure is proposed as part of the project. Please refer to Amendments to the Draft Supplemental EIR regarding an addition to Appendix IS describing operational noise.

Groundborne noise is caused by groundborne vibration.⁷ Because no groundborne vibration would be generated by project operation (refer to page 87 of Appendix IS), no groundborne noise would occur. Please refer to Amendments to the Draft Supplemental EIR regarding an addition to Appendix IS describing groundborne noise.

Response 6.21

The commenter references questions 14b, 15a, and 16a-b of Appendix IS, and states that the project will induce growth, require increased governmental facilities, and increase demand for parks and recreational uses from winery visitors.

CEQA Appendix G checklist question 14b is addressed on page 90 of Appendix IS. As stated therein, “[t]he project would not involve the demolition of existing residences and would not displace existing housing units or people.”

CEQA Appendix G checklist question 15a is addressed on pages 92 and 93 of Appendix IS. CEQA Appendix G checklist question 16a-b is addressed on page 96 of Appendix IS. As stated therein, “[t]he project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City’s General Plan and SLVSP.” No additional analysis is required.

Response 6.22

The commenter references questions 20a-d of Appendix IS, and states the project would increase wildland fires.

⁷ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/researchinnovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf (accessed October 2021).

CEQA Appendix G checklist questions 20a through 20d are addressed on page 110 of Appendix IS. As stated therein:

Although the project alignment is located in an SRA [State Responsibility Area], the project would be constructed within paved rights-of-way. The project would not result in population growth or expose new residents to wildfire risks. As such, the project would not substantially impair an adopted emergency evacuation plan, exacerbate wildfire risks, require the installation or maintenance of associated infrastructure that may exacerbate fire risk, or expose people or structures to significant risks. Overall, the project would not generate impacts from wildfire hazards.

The commenter has not provided support for their claim that underground sewer infrastructure would increase wildland fires and no additional response is required.

Response 6.23

The commenter states that no evidence is provided to support the claim that groundwater would improve, and the current natural attenuation of nitrate was not considered.

As described in Response 6.4 and Response 6.12, groundwater quality concerns in the South Livermore Valley area are related to septic systems in the area. The project would install a sewer pipeline allowing for the connection of adjacent parcels to municipal sewer service, which would result in the abandonment or removal of existing septic systems. The disuse of these septic systems would improve groundwater quality by removing the identified source of the local water quality issue.

Nitrate attenuation within the groundwater is not related to the proposed project, as the project is not a groundwater remediation project.

Response 6.24

The commenter asserts that the project would result in development, and asserts that water rationing recommendations indicate there is not sufficient water supply.

As described in Section 2 of the Draft Supplemental EIR, the project would install a sewer pipeline, but does not propose the development of any parcels adjacent to the alignment. However, the project would allow adjacent parcels to connect to support existing and future development that is consistent with the City General Plan, SLVSP, and current zoning.

As described in Response 7.6, Groundwater supply is discussed in Section 4.2, *Utilities and Service Systems*. Table 4.2-1 on page 4.2-1 of the Draft Supplemental EIR shows Cal Water's total water supply, and Table 4.2-2 on page 4.2-3 of the Draft Supplemental EIR shows total demand for potable and raw water is projected to meet the projected water supply in future years. Furthermore, page 4.2-3 of the Draft Supplemental EIR states:

According to the 2020 UWMP [Urban Water Management Plan], the combination of groundwater and purchased water supply is expected to be enough to support Cal Water's projected water demand through 2045 (Cal Water 2021).

There is adequate water supply available to meet anticipated future year demands, as described in the 2020 UWMP.

Response 6.25

The commenter states that groundwater would be encountered during project excavation and mitigation is required.

Page 2-11 of the Draft Supplemental EIR provides excavation depths:

Excavation depths would vary by location, with most depths between 5 and 15 feet below ground surface. Approximately 1,000 LF [linear feet] along Greenville Road south of Tesla Road would require excavation between 15 and 18 feet, and approximately 1,200 LF along Tesla Road east of Vasco Road would require excavation between 15 and 26 feet.

Page 4.1-21 of the Draft Supplemental EIR describes the requirements of the City of Livermore Stormwater Requirements Checklist for the City's Municipal Separate Storm Sewer System (MS4) Permit, which includes water quality controls related to dewatering. Dewatering would be required if groundwater is encountered during excavation and construction activities along the proposed alignment. Dewatering is a standard construction procedure, and mitigation would not be required. Because construction dewatering would be temporary and limited to the construction period, a permanent reduction in available groundwater would not occur as a result of the project. This clarification has been added to Impact HYD-2 of the Draft Supplemental EIR, as shown in Amendments to the Draft Supplemental EIR.

Response 6.26

The commenter asks for more details related to impacts to property owners along the alignment, including requirements to connect, and fees to connect.

As described in Response 3.1, the project would not require property owners along Buena Vista Avenue to tie into the City's wastewater system. As described in Response 4.1, there are currently no details available regarding the cost to an individual property desiring to connect to the City's wastewater system. This comment will be passed on to City decision-makers for review.

Letter 7

From: cindraw <[REDACTED]>
Sent: Monday, June 20, 2022 12:32:06 PM
To: Michele Donley <[REDACTED]>
Subject: RE: June 21 Public Hearing

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am reading through the EIR, but I have a few other questions.

Will Buena Vista residents be required to hook up or can we continue using our septic system? I hope we will be able to continue with our septic.

7.1

Will this allow a higher density on lots? I hope not.

7.2

Is this a signal that Livermore will annex Buena Vista? I hope not.

7.3

Which side of Buena Vista will this pipe system be on, west or east?

7.4

When finished, it sounds like Buena Vista would be repaved. If so, can it be widened just a bit or a sidewalk installed at least on one side? It is hazardous for pedestrians and horse traffic.

7.5

In Table 4.2-1, California Water Water Supplies, I see that ground water is projected to increase as a source from 1066 (2020) to 3069 (2025). I am concerned about the impact of that on current well owners. We rely on that source for our animals and forage for the animals.

7.6

I appreciate your attention to my questions. Please note my opinion on these matters for the public hearing. While I plan to attend the public hearing, this will allow me to not take up someone else's time for comments.

Cindy Wheeler

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: Michele Donley <[REDACTED]>
Date: 6/20/22 7:13 AM (GMT-08:00)
To: cindraw <[REDACTED]>
Subject: RE: June 21 Public Hearing

Good morning Cindra,

The EIR is accessible by clicking on the link on the cover page. The document is too large to attach.

Please see the link below:

Please let me know if you have any other questions.

Thanks,

Michele

From: cindraw <[REDACTED]>
Sent: Sunday, June 19, 2022 2:30 PM
To: Planning Web email <planning@LivermoreCA.gov>
Subject: June 21 Public Hearing

Exercise Caution: This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I need additional information regarding the proposed extension of city sewer including Buena Vista Avenue. I tried accessing the EIR, but only see the cover page.

Thank you.

Cindra Wheeler

[REDACTED]

[REDACTED]

Sent from my Verizon, Samsung Galaxy smartphone

Letter 7

COMMENTER: Cindy Wheeler

DATE: June 10, 2022

Response 7.1

The commenter asks if Buena Vista residents would be required to hook up to the City's wastewater system, or if they can continue to use existing septic.

As described in Response 3.1, Buena Vista Avenue residents would not be required to connect to the City's wastewater system. While the project would allow existing residences to connect to the City's wastewater system and phase out the use of their on-site septic systems, such connection would be optional and subject to approvals by the City of Livermore, the Alameda Local Agency Formation Commission, and other responsible agencies.

Response 7.2

The commenter asks if the project would allow higher density on lots.

As stated in Section 2 of the Draft Supplemental EIR, the project would only "support uses that are consistent with the City's General Plan, SLVSP, or current zoning; should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, additional CEQA review would be required" (page 2-10 of the Draft Supplemental EIR).

Response 7.3

The commenter asks if this is a signal that Livermore will annex Buena Vista.

As described in Response 3.1, the project being analyzed within the Draft Supplemental EIR does not propose the annexation of parcels along Buena Vista Avenue into the City of Livermore, nor does the project propose a change to any existing land use designations or zoning of parcels adjacent to the proposed alignment. As stated in Section 2 of the Draft Supplemental EIR, the project would only "support uses that are consistent with the City's General Plan, SLVSP, or current zoning; should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, additional CEQA review would be required" (page 2-10 of the Draft Supplemental EIR).

Response 7.4

The commenter asks if the sewer extension pipe would be on the east or west side of Buena Vista.

The sewer extension would be constructed underneath the existing Buena Vista Avenue roadway, with the exact location within the roadway right-of-way to be determined.

Response 7.5

The commenter asks if Buena Vista Avenue can be widened or if a sidewalk could be installed during the project's construction re-pavement phase.

The project does not include roadway widening or sidewalk improvements. The overall project elements and detailed information on construction activities are provided in Section 2, *Project Description*, on Draft Supplemental EIR page 2-10 and 2-11. This request will be passed on to City decision-makers for consideration.

Response 7.6

The commenter states that EIR Table 4.2-1 shows that groundwater is projected to increase as a source from 1,066 acre-feet per year (AFY; 2020) to 3,069 AFY (2025), and expresses concern regarding that impact on current well owners.

Page 4.2-1 of the Draft Supplemental EIR states:

Cal Water provides a combination of local groundwater, pumped from 12 wells across the Livermore Valley, and surface water purchased from the Zone 7 Water Agency.

As described in Section 2.4.1(a) of the Draft Supplemental EIR, Cal Water relies on groundwater as a portion of its overall water supply, with a total Groundwater Pumping Quota of 3,069 AFY, pursuant to a contract with Zone 7 Water Agency. The 2020 and 2025 groundwater usage by Cal Water noted by the commenter is based on information from the 2020 Urban Water Management Plan (UWMP). The 2020 data shows the actual groundwater from 2020 Cal Water used, whereas the 2025 estimate equals the maximum groundwater usage Cal Water has been allocated.

It should be noted that groundwater used by Cal Water in the Livermore District is sourced from the Livermore-Amador Valley aquifer through 12 separate wells across the Livermore Valley. Annual rainfall and the flow of local surface waters help to replenish the groundwater that was used in previous years. This groundwater recharge in combination with the distribution of wells used to source Cal Water's groundwater supply would ensure the use of such groundwater supplies would not create an impact to individual well owners in the vicinity of the project alignment.

Groundwater supply is discussed in Section 4.2, *Utilities and Service Systems*. Table 4.2-1 on page 4.2-1 of the Draft Supplemental EIR shows Cal Water's total water supply, and Table 4.2-2 on page 4.2-3 of the Draft Supplemental EIR shows total demand for potable and raw water is projected to meet the projected water supply in future years. Furthermore, page 4.2-3 of the Draft Supplemental EIR states:

According to the 2020 UWMP, the combination of groundwater and purchased water supply is expected to be enough to support Cal Water's projected water demand through 2045 (Cal Water 2021).

South Livermore Sewer Expansion - Comments

Letter 8

Questions:

1. Who is going to pay for the city's sewer extension?
2. Will the residents on Tesla Rd have to pay for it?
3. If the residents have to pay for it, how much will each residence be charged?
4. Will each residence be required to hookup to the sewer system?
5. What if we don't want it or can't afford it?
6. Will our property taxes go up because of this? And how much?

8.1

Concannon Winery used to be a nice quiet family winery. They have become a large wine factory that is so big that they now want to amend the Urban Growth Boundary for their benefit.

Extending the sewer line down Tesla Rd WILL encourage development in this rural area, and WILL attract larger noisier wine factories, which in turn would cause even more noise and traffic.

8.2

8.3

John Marchand said "the infrastructure is needed to attract larger wineries." The smaller wineries should be worried about being swallowed up by the larger wineries if this happens.

Sewer system infrastructure IS DEVELOPMENT. Build it and they will come. It will also lure developers to this rural area.

The Tri-Valley Conservancy has said "it will not spur any unforeseen growth in the city or it's sphere of influence." Key word being unforeseen. So they have foreseen growth and development of this rural area, and are encouraging it with this extension.

8.4

If it is nitrates and ground water that people are worried about, why are the wineries still dumping tons of manure and fertilizer in the vineyards every year?

8.5

I'm a senior citizen, and hope to be retiring soon. Our property is paid off, so it might be possible for us to live on social security. Our property is our nest egg for old age. If we are forced to pay the exorbitant cost to hookup it would ruin the rest of our lives. I feel that forcing seniors into this kind of debt is a form of elder abuse. Maybe they can fund it so Seniors have no added expenses.

Why should we be forced to have such a devastatingly huge unexpected and unwanted debt for the rest of our lives, because of something that the Concannon Wine Factory and others want?

8.6

If they want it so bad maybe they should pay ALL of the costs for ALL of the residents that they will be affecting, including any monthly fees, costs and repairs. and any increase in our property taxes.

It would be a lot shorter distance and cheaper if they extended their sewer hookup down Almond Ave. to Concannons buildings. That route would also put far fewer families into such a huge debt.

8.7

We say NO to this whole plan. NO CHANGE OF THE URBAN GROWTH BOUNDARY, NO SEWER HOOKUP, NO DEVELOPMENT, NO LARGE WINE FACTORIES, NO HUGE DEBT FOR OUR FAMILIES.

8.8

I am a 6th generation Livermore resident, who just wants to be left alone to live the rest of my life in peace.

Christine Massey

Letter 8

COMMENTER: Christine Massey

DATE: June 21, 2022

Response 8.1

The commenter asks if the City will be paying for the sewer extension or if the residents will have to pay for it.

The total project costs are estimated at \$11.5 million. Phase 1 of the project is estimated to cost approximately \$8 million. The city has secured \$6.5 million from Alameda County for the construction of the sewer extension project. As described in Response 4.1, there are currently no details available regarding the cost to an individual property desiring to connect to the City's wastewater system. This comment will be passed on to City decision-makers for consideration.

Response 8.2

The commenter asks if all residents would be required to hook up to the City's wastewater system, or if they can continue to use existing septic.

As described in Response 3.1, the project would not require property owners along Buena Vista Avenue to tie into the City's wastewater system.

Response 8.3

The commenter asks if the property taxes will go up as a result of the project.

Pursuant to *CEQA Guidelines* Section 15131, economic or social effects of a project shall not be treated as a significant effect on the environment. As such, formal analysis of economic or social impacts is not required, which includes property values and property taxes.

Response 8.4

The commenter states that Concannon Winery has become a large wine factory and raises concern about the growth that would occur as a result of the project. The commenter also states that the project will attract larger wineries that could cause more traffic and noise.

The past and future growth of Concannon Winery is not relevant to the proposed project. This comment does not pertain to the adequacy of the Draft Supplemental EIR, or the CEQA process. Therefore, no further response is required. As stated in Section 2 of the Draft Supplemental EIR, the project would only "support uses that are consistent with the City's General Plan, SLVSP, or current zoning; should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, additional CEQA review would be required" (page 2-10 of the Draft Supplemental EIR). Transportation is discussed beginning on page 97 of Appendix IS to the Draft Supplemental EIR. Noise is discussed beginning on page 79 of Appendix IS to the Draft Supplemental EIR.

Response 8.5

The commenter questions why wineries are still dumping manure and fertilizer in the vineyards each year if nitrates and groundwater are a concern.

As described in Response 6.4, the HydroScience report, *Sewer System Extension Hydraulic Analysis*, states that both residences and wineries in the region operate on septic systems for disposal of their wastewater, which are believed to be contributing to groundwater contamination in the area. Furthermore, as described in Response 6.16, existing groundwater quality issues are described in Section 2.3 of the Draft Supplemental EIR, and Response 6.12 provides explanation of how municipal sewer service would improve groundwater quality.

Response 8.6

The commenter expresses concern about who would pay for the project expenses and if it would be added to the taxes of residents.

Response 8.1 describes the estimated construction costs associated with the project. As described in Response 4.1, there are currently no details available regarding the cost to an individual property desiring to connect to the City's wastewater system; the City would charge a connection fee, the amount of which is not known at this time. This comment will be passed on to City decision-makers for consideration. Furthermore, as described in Response 8.3, *CEQA Guidelines* Section 15131 states that economic or social effects of a project shall not be treated as a significant effect on the environment. As such, formal analysis of economic or social impacts is not required, which includes property taxes.

Response 8.7

The commenter suggests that the location of the sewer extension location be changed to Almond Avenue to Concannon's buildings.

Municipal sewer service is already available along Almond Avenue, and Concannon is connected to that sewer pipeline. Furthermore, as described on page 6-6 in Section 6, *Alternatives*, of the Draft Supplemental EIR, Alternative 3 would include 3,800 LF of pipeline within agricultural land located approximately 1,200 feet east of Buena Vista Avenue rather than the proposed 5,400-LF alignment along Buena Vista Avenue. The commenter is suggesting a similar alternative regarding different placement and alignment of the extended sewer pipeline. This suggested alternative is not substantially different from Alternative 3; and, pursuant to *CEQA Guidelines* Section 15126.6(a), "an EIR need not consider every conceivable alternative to a project."

Response 8.8

The comment expresses opposition to the project, including the changes to the urban growth boundary and additional sewer hookups.

This comment is acknowledged and will be passed on to City decision-makers for consideration. However, this comment does not pertain to the adequacy of the Draft Supplemental EIR or the CEQA process. Therefore, no further response is required.

June 20, 2022

TO: Livermore City Planning Commission

FROM: Owen Parker – Resident on Buena Vista Ave.

SUBJECT: Extension of Sewer Line Down Buena Vista Avenue and South Valley Area

- | | |
|---|-----|
| 1. I have concerns about the construction of a pipe line down Buena Vista. There was no information addressing the impact on the Buena Vista residents regarding traffic and the loss of quality of life during construction. | 9.1 |
| 2. Information needs to be provided to residents regarding cost of connecting to the sewer line and the mechanisms in doing so when excessive length is involved for those residences further off the road. | 9.2 |
| 3. When and if Buena Vista is annexed into the City of Livermore, will the rural residential ambiance of the road be maintained with the existing 20' roadway as it is currently? | 9.3 |
| 4. I would embrace hooking into the Buena Vista sewer line, but would also like the city to consider addressing other areas in the South Valley Region such as Almond Ave., Arroyo Road, Lomas and Marina Ave. | 9.3 |

Thank you for your consideration of my concerns.

Owen Parker , [REDACTED]

Phone: [REDACTED]

Letter 9

COMMENTER: Owen Parker

DATE: June 21, 2022

Response 9.1

The commenter expresses concerns regarding project construction on Buena Vista Avenue. The comment adds that there was no information regarding traffic and the change in quality of life during construction.

Transportation is discussed beginning on page 97 of Appendix IS to the Draft Supplemental EIR. As indicated on pages 102 and 103 of Appendix IS, transportation impacts were found to be less than significant. Additionally, as stated on pages 97 and 98 of Appendix IS, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable transportation mitigation measures from the 1997 EIR.

Regarding quality of life, potential impacts related to air quality, greenhouse gas emissions, hazards and hazardous materials, and noise were discussed in Appendix IS to the Draft Supplemental EIR. As indicated on pages 31 through 35 of Appendix IS, air quality impacts were found to be less than significant. Additionally, as stated on pages 25 through 27 of Appendix IS, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable air quality mitigation measures from the 1997 EIR. As indicated on pages 63 and 64 of Appendix IS, As indicated on pages 68 through 70 of Appendix IS, hazards and hazardous materials impacts were found to be less than significant. As indicated on pages 84 through 87 of Appendix IS, noise impacts were found to be less than significant with mitigation incorporated.

Response 9.2

The commenter requests that information be provided regarding the costs for residents to connect to the sewer system and other details regarding connection.

As described in Response 4.1, there are currently no details available regarding the cost to an individual property desiring to connect to the City's wastewater system. This comment will be passed on to City decision-makers for consideration.

Response 9.3

The commenter asks if the rural residential ambiance will be maintained within the existing roadway. Furthermore, the comment provides support for the project; however, the comment suggests that the City should also consider the needs of other parts of the city.

Visual resources are discussed beginning on page 15 of Appendix IS to the Draft Supplemental EIR. As indicated on page 16 of Appendix IS, the project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and the SLVSP. Therefore, the project would not have an impact on existing scenic vistas or scenic resources. Furthermore, as indicated on page 17 of Appendix IS, the project would be subject to current regulations governing scenic qualities, including Goal LU-15 of the City's General Plan Land Use Element that specifically aims to preserve South Livermore's unique rural and scenic qualities.

Transportation is discussed beginning on page 97 Appendix IS to the Draft Supplemental EIR. As indicated on page 102 of Appendix IS, the project would not change the existing roadways, increase commercial or residential development in the area, generate growth, or create an increase in traffic in the project vicinity. Therefore, the “rural ambience” along the project alignment would not change.

Livermore, CA 94550

June 21, 2022

Andy Ross, Senior Planner
City of Livermore
1052 South Livermore Avenue
Livermore, CA 94550

Planning Commission
c/o Community Development Department
1052 South Livermore Avenue
Livermore, CA 94550

BY E-MAIL TO: planning@LivermoreCA.gov; aaross@LivermoreCA.gov

Re: (1) Comment on Draft SEIR – South Livermore Sewer Expansion Project
(2) Planning Commission meeting of June 21, 2022, Item 5.1

To the City of Livermore Planning Commission, Planning Division, and Mr. Ross:

This communication is to serve two purposes. First, it is a comment on the Draft Supplemental Environmental Impact Report (SEIR) for the South Livermore Sewer Expansion Project. Second, it is a “Public Comment on the Draft Supplemental Environmental Impact Report for South Livermore Valley Specific Plan to extend sewer infrastructure and service to protect water quality and agriculture in the South Livermore Valley,” Item 5.1 on the June 21, 2022 Planning Commission agenda.

10.1

The June 21, 2022 Planning Commission meeting agenda packet states on page 97 (Item 5.1): “A draft document was published on May 6 for a 45-day comment period, which closes on Wednesday, June 22 at 5 pm.” I am submitting this comment on June 21.

I have lived on the parcel at [REDACTED] for nearly 48 years. My parcel at the southeasterly corner of South Livermore Avenue and Concannon Boulevard long has been described as “The Gateway to the Vineyards.” **I support the South Livermore Sewer Expansion Project in general concept, but I am strongly opposed to the “Phase 1” project alignment**, which omits my South Livermore Avenue neighborhood without good reason.

A sewer line extension should be included in “Phase 1” a few hundred feet down South Livermore Avenue to my neighborhood, which includes Page Mill Winery and several homes and small vineyards between Concannon Boulevard and Tesla Road. South Livermore Avenue in this neighborhood already is within City limits, with a nearby existing sewer line.

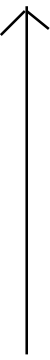
The Staff Report for tonight’s SEIR public hearing claims, “The purpose of the project is to improve groundwater quality and enhance the economic viability of agriculture and viticulture in the South Livermore Valley area.” (p. 99.)

10.2

The SEIR describes the “project objectives” as:

- “Improve groundwater quality in the South Livermore Valley area relative to nitrates, which is associated with residential septic systems and livestock keeping

- Facilitate the development potential of existing and new wineries, visitor serving commercial uses, and residences consistent with the City’s General Plan, SLVSP, and SLVAP subject to Alameda County Measure D
- Enhance the short- and long-term economic viability of agriculture and viticulture in the South Livermore Valley area, consistent with Goals LU-13 and LU-14 of the City’s General Plan” (SEIR, p. 6-1.)



My neighborhood on South Livermore Avenue is closer to an arroyo (Arroyo Mocho) than any other parcels served by the “Phase 1” alignment. See the map in Figure 4.1-2 in the SEIR. Yet my neighborhood is excluded from “Phase 1.”

10.2

My neighborhood is “The Gateway to the Vineyards” at the very edge of city limits. Yet it is excluded from “Phase 1.” After the John Madden-owned bed and breakfast notoriously failed nearly 15 years ago near me in the historic Gordon-Nielsen House due to a prohibitively expensive septic system as a condition of project approval, many wine-related businesses refused to consider opening up operations in the South Livermore Valley, including on my property. Several prospective winery operators have approached me in recent years to explore placing operations on my property, but they have turned out to be infeasible because of septic tank-related issues.

10.3

The SEIR is deficient because it should have considered hooking up the “South Livermore Sewer Expansion” to the existing line on South Livermore Avenue instead of to East Avenue. That would avoid burdening the East Avenue sewer “Bottlenecks” (capacity constraints) described in the SEIR.

10.4

If “Improve groundwater quality” is an authentic project objective, then the SEIR is deficient because it does not quantify the environmental benefits (e.g., amount of nitrates diverted from septic systems) associated with various alignments.

10.5

The proposed “Phase 1” alignment also is not cost effective relative to the supposed environmental benefits. The “dollars spent per ton of nitrates diverted” is much lower for my neighborhood than for the proposed “Phase 1” alignment. My neighborhood, which is along a road already within city limits and just a few hundred feet away from an existing City sewer line, is excluded from “Phase 1,” yet more than 1.5 miles of sewer line extension from Vasco Rd. is proposed in “Phase 1” in order to serve the politically-powerful Poppy Ridge Golf Course. (Traversing the Vasco/Tesla hill might incur additional operating expense.) The City and County should not be making what appears to be an unconstitutional “gift of public funds” (multi-million subsidies, including at least \$6.5 million in County funds) to big wineries and golf courses while excluding small property owners like my neighbors and me. (See California Constitution, art. XVI, section 6.)

10.6

This project and its SEIR should provide real environmental and economic benefits to all South Livermore Valley property owners, not just to the big winery and golf course owners. **Unless the “Phase 1” alignment is amended to include my neighborhood on South Livermore Avenue, I intend to join with other small property owners to strongly and vociferously oppose the South Livermore Sewer Expansion Project.**

Sincerely,

/s/ John Bezis

JOHN BEZIS

Letter 10

COMMENTER: John Bezis

DATE: June 21, 2022

Response 10.1

The commenter states they live at the southeast corner of South Livermore Avenue and Concannon Boulevard. The commenter expresses support for the project concept but is strongly opposed to Phase 1 of the project alignment because it omits his South Livermore Avenue neighborhood.

Section 2, *Project Description*, of the Draft Supplemental EIR, specifically, Section 2.2 states:

The project also includes two potential future phases of the sewer alignment. The western future phase would be located on South Livermore Avenue from approximately 520 feet northwest of Concannon Boulevard to Tesla Road, and on Tesla Road from South Livermore Avenue to Buena Vista Avenue.

As described on page 2-1 and shown on Draft Supplemental EIR's Figure 2-1, the western future phase of the project would extend sewer service to the commenter's South Livermore Avenue neighborhood. It is the intent of the City to expand sewer service to this area.

Response 10.2

The commenter summarizes the Staff Report's public hearing purpose and states the project objectives. The commenter states their parcel is closer to Arroyo Mocho than any of the parcels along the Phase 1 alignment.

Water Quality is addressed beginning on page 4.1-1 of the Draft Supplemental EIR in Section 4, *Hydrology and Water Quality*. As indicated on pages 4.1-21 through 4.1-29, water quality impacts to Arroyo Mocho were found to be less than significant. Furthermore, as described in Section 2, *Project Description*, of the Draft Supplemental EIR, water quality issues in the South Livermore Valley are related to high nitrate concentrations in groundwater, whereas Arroyo Mocho is a surface water feature.

Response 10.3

The commenter states they are unable to support wine-related business operations on their property due to septic tank-related issues.

Response 10.1 explains that the western future phase of the project would extend sewer service to the commenter's South Livermore Avenue neighborhood.

Response 10.4

The commenter states the Supplemental EIR is deficient because it does not consider hooking up to an existing line on South Livermore Avenue rather than on East Avenue to avoid the Bottleneck capacity constraints.

Section 2.5 of the Draft Supplemental EIR on page 2-10 states:

The City's 2017 Sewer Master Plan also identifies a Bottleneck Project (BO-CIP-P06) located on East Avenue. Preliminary analysis of the proposed project identified four segments of 12-inch sewer pipes that may need to be upsized on East Avenue between Maple Street and Buena Vista Avenue (City of Livermore 2017).

The Bottleneck Project has been identified by the City of Livermore since 2017. The Bottleneck Project would need to be undertaken on East Avenue, regardless of the proposed Sewer Expansion Project. Furthermore, as described in Response 10.1 and Response 10.3, the western future phase of the project would extend sewer service to the South Livermore Avenue neighborhood. As such, the extended sewer pipeline would connect to the existing pipeline on South Livermore Avenue.

Response 10.5

The commenter states that the EIR does not quantify the environmental benefits associated with the alignment.

The purpose of CEQA review is to identify adverse environmental impacts. If a project undergoing CEQA review will result in environmental benefits, that can also be included in the analysis. It is unknown at this time how many existing and future residences and wineries located along the alignment would choose to connect to the extended sewer pipeline, as connection to the City's wastewater system would be optional and left to the discretion of individual property owners. Therefore, quantification of environmental benefits is not possible as there is not enough information available at this time.

Response 10.6

The commenter states the proposed Phase 1 is not cost effective relative to the environmental benefits because the cost would be lower if Phase 1 of the project were to serve the South Livermore Avenue neighborhood. The commenter states that the project would only provide an environmental and economic benefit to the golf course and to wineries. The commenter also mentions that traversing the hill on Vasco Road/Tesla Road could incur additional operating expenses.

As described in Response 4.1, there are currently no details available regarding the cost to an individual property desiring to connect to the City's wastewater system; the City would charge a connection fee, the amount of which is not known at this time. This comment will be passed on to City decision-makers for consideration.

As stated in Response 10.1, Response 10.3, and Response 10.4, the western future phase of the project would extend sewer service to the South Livermore Avenue neighborhood. Furthermore, as described in Response 6.4, the HydroScience report, *Sewer System Extension Hydraulic Analysis*, states that both the residences and wineries operating on septic systems for disposal of their wastewater are believed to be contributing to groundwater contamination in the area. As such, groundwater quality degradation is concentrated along Buena Vista Avenue due to the number of existing septic tanks used by property owners in the area. Page 2-7 in Section 2, *Project Description*, of the Draft Supplemental EIR describes the project's intent to improve groundwater quality in the South Livermore Valley area relative to nitrates, which are associated with the residential septic systems. Therefore, the project would provide environmental benefits to the golf course, to the wineries, to the residents along Buena Vista Avenue, and to the entire Livermore Valley Groundwater Basin.

The city is aware of the topography along Tesla Road, and anticipates drilling depths between 15 and 26 feet along this section; please refer to page 2-11 of the Draft Supplemental EIR.

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Planning Commission Meeting June 21, 2022
Public Comments Submitted

Item 5.1

Anonymous Attendee 7:14pm

Re: Proposed South Livermore Sewer Alignment

Laws in California around CEQA mandate the disclosure of significant environmental effects of a proposed project. In conjunction with this, I have not read anything about any reports the city is conducting on the ramifications of increasing the vineyards scale due to this project regarding the increased pesticide exposure our community will face.

Numerous studies have shown that living near vineyards increases rates of cancer and childhood asthma.

ALAN 7:45pm

Is this project in conjunction with the County's slated powerline undergrounding and sewer project on Tesla/S Livermore? Or is this in complement to that project? We live at [REDACTED] in the County near the Concannon/S Livermore streetlight.

Back ground: The county has indicated that as planning, our property and two others would not be included in it's planned improvements. They claim the road in front of our properties is in City bounds and that would prevent the project continuing to our location. This does not seem logical as we are within the County (paying taxes and receiving our services). The County explained that laying sewer line /undergrounding would occur within our property lines not on the road.

We find this to be short-sighted (just finish the job up to the City) and frustrating since our property is within the County (expectation to benefit from this improvement).

Would you please describe the timeline and staging of this project?

Meaganw 8:11pm

What is the timeline on this project?

Chris Grimes 8:13pm

Enable but not require residents of Buena Vista to hookup to sewer line? How long is that "enable but not require" to last. Will there be any eminent domain land seizures for sewer line installation on Buena Vista?

Lyn Gomes 8:15pm

I am a resident of Buena Vista Ave. I support this project because it will preserve groundwater quality. I wish this would happen sooner. Can the committee also designate a representative to help facilitate coordination with County Sanitation for residents actively considering replacement of their septic tanks vs connecting to the sewer?

Anonymous Attendee 8:23pm

Yes, how is the City's sewer development related to the County's planned development on Tesla?

Christina Danskin 8:27pm

Thank you Commissioner Anderson for recommending a meeting with the Buena Vista residents so their concerns can be acknowledged and considered in the planning of this project.

Chris Grimes 8:28pm

@ John Stein - there is no bike lane on Buena Vista as you stated. Separate Buena Vista meetings for undersatnding would be greatly appreciated by our neighborhood!!! THANK YOU!

Anonymous Attendee 8:35pm

It would be appreciated if a meeting would also include other stakeholders along the project - not only Buena Vista residents

Public Hearing Comments

Public comments received during the June 21, 2022, Planning Commission meeting are summarized and responded to below.

Response 1

One commenter expressed concern related to increased pesticide exposure from expansion of vineyards.

Please refer to Response 5.1 regarding pesticide exposure.

Response 2

Several commenters asked about the project timeline and staging, and mentioned the County's powerline undergrounding project on Tesla Road and South Livermore Avenue.

Please refer to Response 6.10 regarding the County's project on Tesla Road. The anticipated project timeline for the proposed project is described in Section 2.5 of the Draft Supplemental EIR on page 2-11: "Construction is anticipated to commence in 2024 and last for approximately 12 months, ending in 2025." Additional details on project timing are not available at this time.

Response 3

Several commenters asked if adjacent parcels would be required to connect to the proposed sewer line, if there is a timeline or restrictions regarding the connection of adjacent parcels, and what the associated costs with connecting to the sewer line would be. Commenters asked if the project includes zoning changes along the proposed alignment.

Please refer to Response 3.1 and Response 4.1. As stated therein, parcels would not be required to connect, and there is no timeline for adjacent property owners to make a decision on sewer connection. There are currently no details available regarding the costs of tying in, although a connection fee will be required; and no zoning changes are proposed as part of the project.

Response 4

One commenter asked if a representative can be designated to help facilitate coordination with the County for residents wishing to replace their septic tanks rather than connecting to the sewer line. One commenter suggested the City provide a Frequently Asked Questions sheet to address common concerns.

This comment is acknowledged and will be passed on to decision-makers for consideration.

Response 5

Commenters asked how the City handle will noticing for construction and sewer connection.

Please refer to Response 4.2 regarding construction notification; as stated therein, it is the City's standard practice to require notification at least 72 hours prior to construction activities.

Response 6

One commenter suggested a project alternative of underground storage tanks that are pumped and transferred by truck to the wastewater treatment plant for disposal.

Alternative 2 includes the construction of “shared small-scale WWTPs to treat and dispose of additional wastewater generated by the maximum development of each property under the General Plan and SLVSP” (page 6-3 of the Draft Supplemental EIR). The commenter is suggesting a similar alternative of one-site wastewater treatment prior to off-site disposal. This suggested alternative is not substantially different from Alternative 2; therefore, a discussion of this suggested alternative has not been added to the Draft Supplemental EIR, as pursuant to *CEQA Guidelines* Section 15126.6(a), “an EIR need not consider every conceivable alternative to a project.”

Response 7

One commenter noted that Section 1, *Introduction*, of the Draft Supplemental EIR could be clarified to state that development of parcels adjacent to the proposed alignment would be consistent with existing land use and zoning designations, subject to Alameda County Measure D.

The requested clarification has been added to page 1-1 of the Draft Supplemental EIR, as shown in Amendments to the Draft Supplemental EIR.

Response 8

Commenters asked where within Buena Vista Avenue the sewer pipeline would be installed.

Please refer to Response 7.4 regarding the location of the pipeline within Buena Vista Avenue; as stated therein, the exact location has not yet been determined.

Response 9

Commenters mentioned the knoll on Tesla Road, which may require increased depths of drilling.

As described in Response 10.6, the City is aware of the topography along Tesla Road, and anticipates drilling depths between 15 and 26 feet along this section; please refer to page 2-11 of the Draft Supplemental EIR.

Amendments to the Draft Supplemental EIR

The following pages provide a summary record of all proposed text amendments to the Draft Supplemental EIR. Most amendments are the result of comments received during the public review period, and directly respond to those comments, or correction of typographical errors within the Draft Supplemental EIR. These amendments serve as clarifications and amplifications on the content of the Draft Supplemental EIR. None of the changes would warrant recirculation of the EIR pursuant to CEQA Guidelines Section 15088.5. The amendments serve to clarify and strengthen the content of the EIR, but do not introduce significant new information.

Changes in text are signified by strikeouts (~~strikeouts~~) where text is removed and by underlined font (underline font) where text is added. Other minor clarifications and corrections to typographical errors are also shown as corrected in this format, including corrections not based on responses to comments.

Draft Supplemental EIR

Section 1, Introduction

Page 1-1:

The proposed project alignment is located southeast of the City of Livermore, with most of the alignment within unincorporated Alameda County. The 1997 EIR discusses the environment impacts of the South Livermore Valley Specific Plan, which was designed to combat urban sprawl, and preserve existing vineyards and prime vineyard soil within the southern Livermore Valley. This Supplemental EIR discusses the potential environmental impacts of the proposed project, which would amend the urban growth boundary (UGB) language to allow the extension of sanitary sewer lines to serve residences and wineries within or near the City of Livermore. This amendment would allow for the installation of approximately 5 miles of new sewer lines to support existing uses and future development consistent with the General Plan, SLVSP, and SLVAP in South Livermore Valley, subject to Alameda County Measure D.

Page 1-2:

In 1997, the City of Livermore certified the Final EIR for the South Livermore Valley Specific Plan (SLVSP). ~~This document planned development for 30 residential lots in the City of Livermore, in Alameda County.~~ The SLVSP is a policy document that establishes criteria and a regulatory framework for future development in South Livermore Valley. In March 2000, City voters approved the UGB Initiative, which aims to prevent uncontrolled urban development.

Section 4.1, Hydrology and Water Quality

Page 4.1-5:

... These materials consist of continental deposits from alluvial fans, outwash plains, and lakes (DWR 2006). Groundwater in the vicinity of the project alignment is known to occur at depths between approximately 10 and 50 feet below ground surface (Zone 7 Water Agency 2021b).

Page 4.1-24:

... Project construction water use would also comply with California Green Building Standards Code water use efficiency requirements (additional details provided in Appendix IS: Environmental Checklist Section 3, *Air Quality*). Necessary dewatering during excavation, should groundwater be encountered, would be conducted consistent with the City's MS4 Permit requirements and would not result in a permanent reduction in available groundwater supplies. Facilitation of adjacent development potential...

Section 7, References

Page 7-3:

Zone 7 Water Agency. 2021b. Alternative Groundwater Sustainability Plan for the Livermore Valley Groundwater Basin. December 2021.
https://www.zone7water.com/sites/main/files/fileattachments/alt_gw_sustainability_plan.pdf?1619903254 (accessed June 2022).

Appendix IS

Environmental Checklist Section 13, Noise

Page 84:

a. Would the project result in generation of 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?

Operation of the proposed sewer pipeline would not result in permanent sources of noise, as no lift stations or other associated noise-generating infrastructure is proposed. No impact would occur.

Construction activity would generate temporary noise in the project vicinity, exposing surrounding sensitive receivers to increased noise levels....

Page 87:

There would be no groundborne vibration or groundborne noise generated by project operation.

Mitigation Monitoring and Reporting Program

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This mitigation monitoring and reporting program is intended to track and ensure compliance with adopted mitigation measures during the project implementation phase. For each mitigation measure recommended in the Final Supplemental Environmental Impact Report (EIR), specifications are made herein that identify the action required, the monitoring that must occur, and the agency or department responsible for oversight.

City of Livermore
South Livermore Sewer Expansion Project

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Biological Resources							
BIO-1: Nesting Bird Avoidance and Minimization Efforts							
<p>If project construction activities occur during the nesting season (between February 1 and August 31), a qualified biologist shall conduct a pre-construction survey for nesting birds no more than 14 days prior to construction. The survey shall include the entire project alignment and a 300-foot buffer to account for nesting raptors. If nests are found, the qualified biologist shall establish an appropriate species-specific avoidance buffer of sufficient size to prevent disturbance by project activity to the nest (up to 300 feet for raptors, up to 150 feet for other birds). The qualified biologist shall perform at least two hours of pre-construction monitoring of the nest to characterize “typical” bird behavior.</p> <p>During construction, active nests identified during the pre-construction survey shall be monitored by the qualified biologist to determine if construction activities are causing disturbance to the bird and shall increase the buffer if it is determined the birds are showing signs of unusual or distressed behavior associated with project activities. Atypical nesting behaviors that may cause nest abandonment include, but are not limited to, defensive flights, vocalizations directed towards project personnel/activities, standing up from a brooding position, and flying away from the nest. The qualified biologist shall have authority to order the cessation of construction activities if the nesting birds exhibit atypical behavior that may cause nest failure (nest abandonment and loss of eggs and/or young) until a refined appropriate buffer is established. To prevent</p>	<p>If initial disturbing activities occur outside February 1 and August 31, retain a qualified biologist to conduct pre-construction surveys. Review and approve the report prepared by the qualified biologist recording the results of protective measures.</p>	Prior to construction	Once	City of Livermore Community Development			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established buffer(s) shall remain in effect until the young have fledged or the nest has been abandoned as confirmed by the qualified biologist. The monitoring biologist shall determine the appropriate protection for active nests on a case-by-case basis using the criteria described above. The qualified biologist shall prepare a nest monitoring report at the time monitoring has been completed. The report will document the methods and results of the monitoring, and the final status of the nest (i.e., successful fledging of the nest, nest depredation, nest failure due to construction activity). The report shall be submitted to the City for approval.							
Cultural Resources							
CR-1: Unanticipated Archaeological Resources							
If archaeological resources are encountered during ground-disturbing activities, work within 50 feet of the find shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to archaeological resources.	Require in the construction contract that work within 50 feet of archaeological finds be halted. Retain an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards for archaeology following discovery of cultural artifacts to evaluate the find.	Prior to grading permit approval and during construction	Once and as needed	City of Livermore Community Development			

City of Livermore
South Livermore Sewer Expansion Project

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Geology and Soils							
GEO-1: Unanticipated Discovery of Paleontological Resources							
<p>Prior to the commencement of project construction, a qualified paleontological monitor (i.e., a paleontologist who meets the Society of Vertebrate Paleontology [2010] standards as a Paleontological Resource Monitor) shall be retained to conduct paleontological monitoring during ground-disturbing activities (including, but not limited to site preparation, grading, excavation, and trenching) of intact (i.e., previously undisturbed) areas mapped as high sensitivity geologic units (QTlp) located along the alignment. This includes areas along Tesla Road near Vasco Road and along Greenville Road approximately 3,000 feet south of Tesla Road (refer to geologic unit map prepared by Dibblee and Minch [2006a]), which are anticipated to require ground disturbance to depths greater than 15 feet. Monitoring shall be performed by a Qualified Paleontologist (i.e., a paleontologist who meets the Society of Vertebrate Paleontology [2010] standards as a Qualified Professional Paleontologist).</p> <p>Full-time monitoring shall be conducted for all ground-disturbing activities that impact previously undisturbed geologic units mapped at the surface as Pliocene to Pleistocene age Livermore Gravel (Qtlp), which has a high paleontological sensitivity. Additionally, initial part-time monitoring (i.e., spot-checking) shall be conducted for all ground-disturbing activities that impact previously undisturbed geologic units mapped at the surface as middle to late Holocene alluvial deposits (Qa) to check for the presence of geologic units of high sensitivity</p>	<p>Retain a qualified paleontological monitor who meets the Society of Vertebrate Paleontology standards to conduct paleontological monitoring during ground-disturbing activities of intact sensitive geologic units.</p> <p>Require in the construction contract that the monitor have the authority to temporarily divert construction equipment around paleontological finds until the resource is assessed.</p> <p>Review and approve the report prepared by the qualified paleontologist.</p>	<p>Prior to grading permit approval and during ground-disturbing activities of intact sensitive geologic units</p>	<p>Once and as needed</p>	<p>City of Livermore Community Development</p>			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
<p>(i.e., early Holocene older alluvium [Qoa, QTlp]).</p> <p>If older sediments are observed at depth, then full-time monitoring shall be conducted.</p> <p>Ground-disturbing activities that impact previously disturbed sediments only do not require paleontological monitoring.</p> <p>The duration and timing of the monitoring shall be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time or part-time monitoring is no longer warranted, they may recommend reducing monitoring to periodic spot-checking or may recommend that monitoring cease entirely. Monitoring shall be reinstated if any new ground disturbances of previously undisturbed areas are required, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time.</p> <p>If a paleontological resource is discovered, the monitor shall have the authority to temporarily divert construction equipment around the find until it is assessed for scientific significance and collected. Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology). Curation fees are the responsibility of the project owner.</p> <p>A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and</p>							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
<p>recommendations. The report shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.</p>							
Noise							
NOI-1: Construction Noise Reduction							
<p>The following requirements are provided to reduce construction noise:</p> <ul style="list-style-type: none"> ▪ Prior to the start of and for the duration of construction, the contractor shall properly maintain and tune all construction equipment in accordance with the manufacturer’s recommendations to minimize noise emissions. ▪ Prior to use of any construction equipment, the contract shall fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer. ▪ During construction, the construction contractor shall place stationary construction equipment and material delivery (loading/unloading) areas to maintain the greatest distance from the nearest residences, or within noise reducing enclosures. ▪ The construction contractor shall post a sign along the work alignment that is clearly visible to the public, providing a contact name and telephone number for filing a noise complaint. 	<p>Review and approve pre-construction and construction plans to ensure that all recommendations are incorporated into project construction.</p> <p>Monitor compliance with required measures during active construction activities.</p>	<p>Prior to grading permit approval and during construction.</p>	<p>Once and as needed</p>	<p>City of Livermore Community Development</p>			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
<ul style="list-style-type: none"> These measures shall be listed on all grading plans and monitored by the City of Livermore during construction. 							
Tribal Cultural Resources							
TCR-1: Unanticipated Discovery of Tribal Cultural Resources							
<p>If cultural resources of Native American origin are identified during project construction, all earth-disturbing work within 50 feet of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. If the City determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared in accordance with state guidelines and in consultation with Native American groups and reviewed and approved by the City prior to implementation. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American groups, as necessary.</p>	<p>Require in the construction contract that work within 50 feet of discovered tribal cultural resources be temporarily suspended or redirected.</p> <p>Retain a qualified archaeologist and contact the proper Native American representative to evaluate the resource.</p> <p>Consult with Native American groups to create a mitigation plan for the unanticipated significant tribal cultural resources.</p>	<p>Prior to grading permit approval and during construction.</p>	<p>Once and as needed</p>	<p>City of Livermore Community Development</p>			

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South Livermore Sewer Expansion Project

Draft Supplemental Environmental Impact Report
State Clearinghouse Number 2021 120386

prepared by

City of Livermore
Community Development Department
1052 South Livermore Avenue
Livermore, California 94550
Contact: Andy Ross, Senior Planner

prepared with the assistance of

Rincon Consultants, Inc.
449 15th Street, Suite 303
Oakland, California 94612

May 2022



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Appendices

Appendix IS Initial Study for South Livermore Sewer Expansion Project
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Acronyms and Abbreviations

af	acre-foot
ABAG	Association of Bay Area Governments
AGTV	Agriculture/Viticulture
amsl	above mean sea level
AB	Assembly Bill
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Water Quality Control Plan
BMP	best management practices
CALGreen	California Green Building Standards Code
CCR	California Code of Regulations
CF	Community Facility
CFR	Code of Federal Regulations
CEQA	California Environmental Quality Act
CIWMA	California Integrated Waste Management Act
CTR	California Toxics Rule
CWA	Federal Clean Water Act
DOC	California Department of Conservation
DOF	California Department of Finance
DWR	California Department of Water Resources
DWP	Drinking Water Program
E	Education and Institutions
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
GHG	greenhouse gas
GSP	groundwater sustainability plan
I-580	Interstate 580
IRWMP	San Francisco Bay Area Integrated Regional Water Management Plan
LF	linear feet
LMC	Livermore Municipal Code
LTS	Less than Significant

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LTS-M	Less than Significant with Mitigation Incorporated
LWRP	Livermore Water Reclamation Plant
MCL	maximum contaminant levels
MMRP	Mitigation Monitoring and Reporting Program
MS4	Municipal Separate Storm Sewer System
NI	No Impact
NOA	Notice of Availability
NOC	Notice of Completion
NOD	Notice of Determination
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
OPR	Office of Planning and Research
OS-A	Open Space Agricultural
OSP	Parks, Trailways, Recreation Areas
PD-SLVSP	Planned Development – South Livermore Valley Specific Plan
PFAS	perfluoroalkyl and polyfluoroalkyl substances
PG&E	Pacific Gas and Electric Company
PRC	Public Resources Code
RR	Rural Residential
RWQCB	San Francisco Bay Regional Water Quality Control Board
SB	Senate Bill
SDWA	Safe Drinking Water Act
SGMA	Sustainable Groundwater Management Act
SLV-AG	South Livermore Valley Agricultural
SLVAP	South Livermore Valley Area Plan
SLVSP	South Livermore Valley Specific Plan
SR	State Route
SU	Significant and Unavoidable
SV-AP	Agricultural Preserve
SV-VC	Vineyard Commercial
SWMP	stormwater quality management plan
SWPPP	stormwater pollution prevention plan

SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
UC	University of California
USGS	United States Geological Survey
UGB	Urban Growth Boundary
UH	Urban High Residential
UMH	Urban Medium High Residential
USACE	United States Army Corps of Engineers
USC	United States Code
USEPA	United States Environmental Protection Agency
UV	ultraviolet
UWMP	Urban Water Management Plan
WWTP	wastewater treatment plants

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Executive Summary

This document is a Supplemental Environmental Impact Report (EIR) to the South Livermore Valley Specific Plan EIR ("1997 EIR," State Clearinghouse #1996052025), analyzing the environmental effects of the South Livermore Sewer Extension Project (proposed project). This section summarizes the characteristics of the proposed project, alternatives to the proposed project, and the environmental impacts and mitigation measures associated with the proposed project.

Project Synopsis

Lead Agency Name and Address

City of Livermore
Community Development Department
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Contact Person and Phone Number

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Project Description

This Supplemental EIR has been prepared to examine the potential environmental effects of the proposed project. The following is a summary of the full project description, which can be found in Section 2, *Project Description*.

The project alignment is located southeast of the City of Livermore, within unincorporated Alameda County, California. In addition, a portion of the project alignment is located within the City of Livermore, and another portion aligns with the City's Sphere of Influence boundary. The project alignment would be located on South Livermore Avenue (western future phase), Tesla Road (Phase 1, western future phase, and eastern future phase), Buena Vista Avenue (Phase 1), and Greenville Road (Phase 1). The Bottleneck Project (2017 Sewer Master Plan (BO-CIP-P06); would be completed as part of Phase 1) is located within the City of Livermore, in segments along East Avenue. Interstate 580 (I-580), which is located approximately 2.6 miles north of the project alignment and approximately 1.5 miles north of the Bottleneck Project, provides regional access to the project alignment.

The project alignment is currently fully developed and would take place within existing paved rights-of-way. The alignment is predominantly flat, with a slope from approximately 566 feet above mean sea level (amsl) at the northern portion of project alignment, to approximately 591 amsl at the southern portion along Tesla Road. The alignment generally drains from southeast to northwest.

Project Characteristics

The proposed project would amend the South Livermore Valley Urban Growth Boundary (UGB) language to allow the extension of sanitary sewer lines to serve residences and wineries located within and near the City of Livermore. The proposed sewer extension would be installed in phases within South Livermore Avenue from approximately 520 feet northwest of Concannon Boulevard to Tesla Road, within Tesla Road from South Livermore Avenue to approximately 3,000 feet east of Greenville Road, within Buena Vista Avenue from East Avenue to Tesla Road, and within Greenville Road from Tesla Road to approximately 5,900 feet south of Tesla Road.

The City's 2017 Sewer Master Plan also identifies a Bottleneck Project (BO-CIP-P06) located on East Avenue. Preliminary analysis of the proposed project identified four segments of 12-inch sewer pipes that may need to be upsized on East Avenue between Maple Street and Buena Vista Avenue. In total, approximately 950 Linear Feet (LF) would need to be upsized to accommodate the proposed project. Therefore, the proposed project may require the Bottleneck Project to be undertaken sooner than originally anticipated. The Bottleneck Project will also be included in this environmental analysis.

The expanded sewer facilities would allow existing and future wineries, visitor serving uses, and residences to connect to the City's wastewater system in conformance with the Livermore General Plan, South Livermore Valley Specific Plan, and/or South Livermore Valley Area Plan, subject to the provisions of Alameda County Measure D. The project would also allow existing residences on Buena Vista Avenue to connect to the City's wastewater system and cease the use of their on-site septic systems. The project would not induce unanticipated growth in the City or its Sphere of Influence because it would serve existing and permitted uses to achieve the vision of the Livermore General Plan, the South Livermore Valley Specific Plan (SLVSP), and the South Livermore Valley Area Plan (SLVAP), in conformance with Alameda County Measure D.

Construction and Grading

Construction is anticipated to commence in 2024 for approximately 12 months, ending in 2025. The project may be constructed in phases based on funding availability. Daily construction tasks would include excavation/grading, installing pipe, backfilling, patching pavement, and coordinating traffic control. The proposed project would implement a Stormwater Pollution Prevention Plan (SWPPP) that would include use of best management practices (BMP) during project construction, as well as a traffic control plan to regulate worker parking, construction staging, and potential traffic detours during construction. The proposed project would require approximately 27,000 cubic yards of excavation, 26,400 cubic yards of backfill, and 2,140 cubic yards of asphalt is anticipated to be imported.

Project Objectives

The objectives for the proposed project are as follows:

- Improve groundwater quality in the South Livermore Valley area relative to nitrates, which is associated with residential septic systems and livestock keeping
- Facilitate the development potential of existing and new wineries, visitor serving commercial uses, and residences consistent with the City's General Plan, SLVSP, and South Livermore Valley Area Plan (SLVAP) subject to Alameda County Measure D

- Enhance the short- and long-term economic viability of agriculture and viticulture in the South Livermore Valley area, consistent with Goals LU-13 and LU-14 of the City’s General Plan

Alternatives

As required by the California Environmental Quality Act (CEQA), this Supplemental EIR examines alternatives to the proposed project. Studied alternatives include the following three alternatives. Based on the alternatives analysis, Alternative 3 was determined to be the environmentally superior alternative.

- Alternative 1: No Project/No Construction
- Alternative 2: No Project/On-Site Wastewater Treatment
- Alternative 3: Alternative Alignment

Alternative 1 (No Project/No Construction) assumes that the Urban Growth Boundary (UGB) language revision is not approved by a majority of voters, and that the proposed pipeline and upsizing of existing pipeline along East Avenue are not constructed. The current uses of adjacent parcels for residential and agricultural uses would continue, and wastewater would continue to be discharged to on-site septic systems. Parcels adjacent to the alignment are constrained from growth by existing septic systems, which are not eligible for expansion due to water quality concerns in the county. Alternative 1 would not achieve any project objectives because groundwater quality would not be improved in the South Livermore Valley, existing wineries and residences would be unable to realize their development potential under the General Plan and SLVSP, and economic viability of agriculture and viticulture in the region would not be enhanced.

Alternative 2 (No Project/On-Site Wastewater Treatment Systems) would not require a revision to the UGB language or install municipal sewer pipelines. Under this alternative, individual wineries and property owners would coordinate to construct small-scale wastewater treatment plants (WWTP) on individual properties to treat and dispose of additional wastewater generated by the maximum development of each property under the General Plan and SLVSP. It is anticipated that approximately five or six such small-scale WWTPs would be required to treat anticipated wastewater associated with implementation of the General Plan and SLVSP. Treated wastewater could be used for crop irrigation. It is likely that biosolids would need to be trucked off site for disposal, and the WWTPs could include lift stations, screening through a rotary screen, and equalization with automated pH aeration. The final design of the small-scale WWTP would be up to individual wineries and property owners. This alternative would require approvals from the County of Alameda, which would act as the CEQA lead agency for small-scale WWTPs on parcels within the unincorporated county. However, Alternative 2 would not fulfill all project objectives to the same degree as the proposed project because it would not enhance the short-term economic viability of agriculture and viticulture in the area, as the construction and installation of individual WWTPs would likely have high individual costs and have uncertain timing due to the necessary coordination between landowners and permit approval process.

Alternative 3 (Alternative Alignment) would involve pipeline upsizing associated with the Bottleneck Project and installation of new sewer pipelines along South Livermore Avenue, Tesla Road, and Greenville Road. Instead of the proposed 5,400-linear foot (LF) alignment along Buena Vista Avenue, Alternative 3 would include 3,800 LF of pipeline within agricultural land located approximately 1,200 feet east of Buena Vista Avenue, to connect to an existing pipeline in Carnegie Loop. Carnegie Loop is located northwest of Bruno Canziani Neighborhood Park. The advantage of

connecting to the existing pipeline in Carnegie Loop would be that the total length of new sewer pipeline would be 1,600 LF shorter than under the proposed project. This alternative would require the same change to the UGB language as the proposed project. However, Alternative 3 would not achieve all of the project objectives because it would not extend municipal sewer service to existing residences along Buena Vista Avenue and reduce groundwater quality issues.

Refer to Section 6, *Alternatives*, for the complete alternatives analysis.

Areas of Known Controversy

The EIR scoping process did not identify areas of known controversy for the proposed project. Responses to the Notice of Preparation of a Draft EIR are summarized in Section 1, *Introduction*.

Issues to be Resolved

The proposed project would require approval from the Livermore City Council to modify the UGB and place it on the ballot, and approval by the majority of voters of the modified UGB language.

Issues Not Studied in Detail in the Supplemental EIR

As indicated in the Initial Study (Appendix IS), there is no substantial evidence that significant impacts would occur to the following issue areas: Aesthetics, Agricultural Resources, Air Quality, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation, and Wildfire. Impacts to Biological Resources, Cultural Resources, Geology and Soils, Noise, and Tribal Cultural Resources were found to be less than significant with mitigation incorporated in the Initial Study. Mitigation measures for those issue areas are listed below in Table ES-1 and will be carried forward into the Mitigation Monitoring and Reporting Program. Impacts to Hydrology and Water Quality, and Utilities and Service Systems were found to be potentially significant and are addressed in this Supplemental EIR.

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Table ES-1 also provides the 1997 EIR impact conclusions for Subareas 1 and 2 of the SLVSP. Mitigation measures from the 1997 EIR are only included if they would apply to construction of the Livermore Sewer Extension Project (please note that those measures are still applicable to development along the alignment as studied in the 1997 EIR and allowed in the relevant adopted plans and zoning regulations). Impacts are categorized as follows:

- **Significant and Unavoidable (SU).** An impact that cannot be reduced below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per *CEQA Guidelines* Section 15093.
- **Less than Significant with Mitigation Incorporated (LTS-M).** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under *CEQA Guidelines* Section 15091.

- **Less than Significant (LTS).** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact (NI).** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-1 Summary of Environmental Impacts Areas, Mitigation Measures, and Residual Impacts

Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
Initial Study Impacts (refer to Appendix IS)				
Aesthetics (Environmental Checklist Section 1)				
Impact 1a. The project would have no substantial adverse effect on a scenic vista. No impact would occur.	LTS	NI	None required	NI
Impact 1b. The project would not substantially damage scenic resources. No impact would occur.	LTS	NI	None required	NI
Impact 1c. The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. No impact would occur.	LTS	NI	None required	NI
Impact 1d. The project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area. No impact would occur.	LTS	NI	None required	NI
Agriculture and Forestry Resources (Environmental Checklist Section 2)				
Impact 2a. The project would not convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland) to non-agricultural use. No impact would occur.	LTS-M	NI	None required	NI
Impact 2b. The project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.	LTS-M	NI	None required	NI
Impact 2c-d. The project would not conflict with existing zoning for, or cause rezoning of, forest land; timberland; or timberland zoned Timberland Production. The project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.	N/A	NI	None required	NI
Impact 2e. The project would not involve other changes in the existing environment which could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.	LTS-M	NI	None required	NI

Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
Air Quality (Environmental Checklist Section 3)				
Impact 3a. The project would not conflict with or obstruct implementation of the applicable air quality plan. This impact would be less than significant.	N/A	LTS	None required	LTS
Impact 3b. The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. This impact would be less than significant.	SU	LTS	None required	LTS
Impact 3c. The project would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.	LTS	LTS	None required	LTS
Impact 3d. The project would not result in other emissions adversely affecting a substantial number of people. This impact would be less than significant.	LTS-M	LTS	None required	LTS
Biological Resources (Environmental Checklist Section 4)				
Impact 4a. The project would potentially have a substantial adverse effect 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 U.S. Fish and Wildlife Service. Impacts to nesting birds during project construction activities would be potentially significant.	LTS	PS	<p>BIO-1 Nesting Bird Avoidance and Minimization Efforts. If project construction activities occur during the nesting season (between February 1 and August 31), a qualified biologist shall conduct a pre-construction survey for nesting birds no more than 14 days prior to construction. The survey shall include the entire project alignment and a 300-foot buffer to account for nesting raptors. If nests are found, the qualified biologist shall establish an appropriate species-specific avoidance buffer of sufficient size to prevent disturbance by project activity to the nest (up to 300 feet for raptors, up to 150 feet for other birds). The qualified biologist shall perform at least two hours of pre-construction monitoring of the nest to characterize “typical” bird behavior.</p> <p>During construction, active nests identified during the pre-construction survey shall be monitored by the qualified biologist to determine if construction activities are causing disturbance to the bird and shall increase the buffer if it is determined the birds are showing signs of unusual or distressed behavior associated with project activities. Atypical nesting behaviors that may cause</p>	LTS-M

Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
			<p>nest abandonment include, but are not limited to, defensive flights, vocalizations directed towards project personnel/activities, standing up from a brooding position, and flying away from the nest. The qualified biologist shall have authority to order the cessation of construction activities if the nesting birds exhibit atypical behavior that may cause nest failure (nest abandonment and loss of eggs and/or young) until a refined appropriate buffer is established. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established buffer(s) shall remain in effect until the young have fledged or the nest has been abandoned as confirmed by the qualified biologist. The monitoring biologist shall determine the appropriate protection for active nests on a case-by-case basis using the criteria described above. The qualified biologist shall prepare a nest monitoring report at the time monitoring has been completed. The report will document the methods and results of the monitoring, and the final status of the nest (i.e., successful fledging of the nest, nest depredation, nest failure due to construction activity). The report shall be submitted to the City for approval.</p>	
<p>Impact 4b-c. The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; or on State or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. No impact would occur.</p>	LTS	NI	None required	NI
<p>Impact 4d. The project would not 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 native wildlife nursery sites. No impact would occur.</p>	LTS	NI	None required	LTS

Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
Impact 4e. The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact would occur.	LTS	NI	None required	LTS
Impact 4f. 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. No impact would occur.	N/A	NI	None required	NI
Cultural Resources (Environmental Checklist Section 5)				
Impact 5a. The project would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5. No impact would occur.	LTS	NI	None required	LTS
Impact 5b. The project has the potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. Impacts to archaeological resources during project construction activities would be potentially significant.	LTS	PS	CR-1 Unanticipated Archaeological Resources. If archaeological resources are encountered during ground-disturbing activities, work within 50 feet of the find shall be halted and an archaeologist meeting the Secretary of the Interior’s Professional Qualification Standards for archaeology shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to archaeological resources.	LTS-M
Impact 5c. The project would not disturb any human remains, including those interred outside of formal cemeteries. This impact would be less than significant.	LTS	LTS	None required	LTS
Energy (Environmental Checklist Section 6)				
Impact 6a. The 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. This impact would be less than significant.	N/A	LTS	None required	LTS

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Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
Impact 6b. The project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. No impact would occur.	N/A	NI	None required	NI
Geology and Soils (Environmental Checklist Section 7)				
Impact 7a.1-a.2. The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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; or strong seismic ground shaking. This impact would be less than significant.	LTS-M	LTS	None required	LTS
Impact 7a.3. The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. This impact would be less than significant.	LTS	LTS	None required	LTS
Impact 7a.4. The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. This impact would be less than significant.	LTS	LTS	None required	LTS
Impact 7b. The project would not result in substantial soil erosion or the loss of topsoil. This impact would be less than significant.	LTS	LTS	None required	LTS
Impact 7c. The project would not 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. This impact would be less than significant.	LTS	LTS	None required	LTS
Impact 7d. The project would not be located on expansive soil creating substantial direct or indirect risks to life or property. This impact would be less than significant.	LTS	LTS	None required	LTS

Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
<p>Impact 7e. The 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 would occur.</p>	N/A	NI	None required	NI
<p>Impact 7f. The project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Impacts would be potentially significant.</p>	N/A	PS	<p>GEO-1 Unanticipated Discovery of Paleontological Resources. Prior to the commencement of project construction, a qualified paleontological monitor (i.e., a paleontologist who meets the Society of Vertebrate Paleontology [2010] standards as a Paleontological Resource Monitor) shall be retained to conduct paleontological monitoring during ground-disturbing activities (including, but not limited to site preparation, grading, excavation, and trenching) of intact (i.e., previously undisturbed) areas mapped as high sensitivity geologic units (QTlp) located along the alignment. This includes areas along Tesla Road near Vasco Road and along Greenville Road approximately 3,000 feet south of Tesla Road (refer to geologic unit map prepared by Dibblee and Minch [2006a]), which are anticipated to require ground disturbance to depths greater than 15 feet. Monitoring shall be performed by a Qualified Paleontologist (i.e., a paleontologist who meets the Society of Vertebrate Paleontology [2010] standards as a Qualified Professional Paleontologist).</p> <p>Full-time monitoring shall be conducted for all ground-disturbing activities that impact previously undisturbed geologic units mapped at the surface as Pliocene to Pleistocene age Livermore Gravel (Qtlp), which has a high paleontological sensitivity. Additionally, initial part-time monitoring (i.e., spot-checking) shall be conducted for all ground-disturbing activities that impact previously undisturbed geologic units mapped at the surface as middle to late Holocene alluvial deposits (Qa) to check for the presence of geologic units of high sensitivity (i.e., early Holocene older alluvium [Qoa, QTlp]). If older sediments are observed at depth, then full-time monitoring shall be conducted. Ground-disturbing activities that impact previously</p>	LTS-M

Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
			<p>disturbed sediments only do not require paleontological monitoring.</p> <p>The duration and timing of the monitoring shall be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time or part-time monitoring is no longer warranted, they may recommend reducing monitoring to periodic spot-checking or may recommend that monitoring cease entirely. Monitoring shall be reinstated if any new ground disturbances of previously undisturbed areas are required, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time.</p> <p>If a paleontological resource is discovered, the monitor shall have the authority to temporarily divert construction equipment around the find until it is assessed for scientific significance and collected. Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology). Curation fees are the responsibility of the project owner.</p> <p>A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.</p>	
Greenhouse Gas Emissions (Environmental Checklist Section 8)				
<p>Impact 8a. The project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. This impact would be less than significant.</p>	N/A	LTS	None required	LTS

Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
Impact 8b. The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. No impact would occur.	N/A	NI	None required	NI
Hazards and Hazardous Materials (Environmental Checklist Section 9)				
Impact 9a-b. The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. This impact would be less than significant.	N/A	LTS	None required	LTS
Impact 9c. The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. This impact would be less than significant.	N/A	LTS	None required	LTS
Impact 9d. The project would not be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment This impact would be less than significant.	N/A	LTS	None required	LTS
Impact 9e. The 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 thus would not result in a safety hazard or excessive noise for people residing or working in the project area. No impact would occur.	N/A	NI	None required	NI
Impact 9f. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. This impact would be less than significant.	N/A	LTS	None required	LTS

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Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
Impact 9g. The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. No impact would occur.	N/A	NI	None required	NI
Land Use and Planning (Environmental Checklist Section 11)				
Impact 11a. The project would not physically divide an established community. No impact would occur.	LTS-M	NI	None required	NI
Impact 11b. The 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. No impact would occur.	LTS	NI	None required	NI
Mineral Resources (Environmental Checklist Section 12)				
Impact 12a-b. The project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No impact would occur.	LTS	NI	None required	NI
Noise (Environmental Checklist Section 13)				
Impact 13a. The project would potentially result in generation of 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. Impacts are potentially significant.	LTS	PS	NOI-1. Construction Noise Reduction. The following requirements are provided to reduce construction noise: <ul style="list-style-type: none"> ▪ Prior to the start of and for the duration of construction, the contractor shall properly maintain and tune all construction equipment in accordance with the manufacturer’s recommendations to minimize noise emissions. ▪ Prior to use of any construction equipment, the contract shall fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer. ▪ During construction, the construction contractor shall place stationary construction equipment and material delivery (loading/unloading) areas to maintain the greatest distance from the nearest residences, or within noise reducing enclosures. 	LTS-M

Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
			<ul style="list-style-type: none"> ▪ The construction contractor shall post a sign along the work alignment that is clearly visible to the public, providing a contact name and telephone number for filing a noise complaint. ▪ These measures shall be listed on all grading plans and monitored by the City of Livermore during construction. 	
Impact 13b. The project would not result in generation of excessive groundborne vibration or groundborne noise levels. This impact would be less than significant.	LTS	LTS	None required	LTS
Impact 13c. The project would not be 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; and thus would not expose people residing or working in the project area to excessive noise levels. No impact would occur.	N/A	NI	None required	NI
Population and Housing (Environmental Checklist Section 14)				
Impact 14a. The project would not induce substantial unplanned population growth in an area, either directly or indirectly. This impact would be less than significant.	N/A	LTS	None required	LTS
Impact 14b. The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. No impact would occur.	N/A	NI	None required	NI
Public Services (Environmental Checklist Section 15)				
Impact 15a.1-a.3, a.5. The project would not result in substantial adverse physical 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, response times or other performance objectives for any of the public services: fire protection, police protection, schools, or other public facilities. No impact would occur.	LTS	NI	None required	NI

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Impact 15a.4. The project would not result in substantial adverse physical 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, response times or other performance objectives for parks. No impact would occur.	LTS	NI	None required	NI
Recreation (Environmental Checklist Section 16)				
Impact-15a-b. The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No impact would occur.	LTS	NI	None required	NI
Transportation (Environmental Checklist Section 17)				
Impact 17a. The project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. This impact would be less than significant.	SU	LTS	None required	LTS
Impact 17b. The project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). No impact would occur.	N/A	NI	None required	LTS
Impact 17c. The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment). No impact would occur.	LTS	NI	None required	NI
Impact 17d. The project would not result in inadequate emergency access. No impact would occur.	N/A	NI	None required	NI

Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
Tribal Cultural Resources (Environmental Checklist Section 18)				
<p>Impact 18a-b. The project would potentially cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 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) or that is 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. Impacts to tribal cultural resources during project construction activities would be potentially significant.</p>	N/A	PS	<p>TCR-1. Unanticipated Discovery of Tribal Cultural Resources. If cultural resources of Native American origin are identified during project construction, all earth-disturbing work within 50 feet of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. If the City determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared in accordance with state guidelines and in consultation with Native American groups and reviewed and approved by the City prior to implementation. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American groups, as necessary.</p>	LTS-M
Wildfire (Environmental Checklist Section 20)				
<p>Impact 20a-d. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan; 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; 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; or expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impact would occur.</p>	LTS	NI	None required	NI

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Supplemental EIR Impacts and Mitigation Measures				
Hydrology and Water Quality (Section 4.1)				
Impact HYD-1. Construction of the proposed project could result in an increase in pollutants in stormwater and wastewater via runoff during grading and excavation activities in the vicinity of existing surface water resources and storm drain infrastructure. Compliance with NPDES permit requirements, Livermore Municipal Code requirements, Alameda County Codes and Ordinances, and Livermore General Plan goals, objectives, and policies would prevent substantial discharges of pollutants via stormwater runoff. Such compliance would minimize adverse effects on water quality. In addition, the disuse and removal of existing residential septic systems would result in an overall improvement in groundwater quality in the project vicinity. Therefore, this impact would be less than significant.	LTS	LTS	None required	LTS
Impact HYD-2. The proposed project would not create an incremental increase in demand for groundwater supplies, nor would it directly interfere with the groundwater table or its recharge. This impact would be less than significant.	LTS	LTS	None required	LTS
Impact HYD-3. The proposed project would not alter the existing drainage pattern of the project alignment, alter the course of a stream or river, or add new impervious surfaces. This impact would be less than significant.	LTS	LTS	None required	LTS
Impact HYD-4. The proposed project is not subject to flooding from a tsunami or seiche, and regulations for development within a Federal Emergency Management Agency-designated flood zone would reduce the risk of pollutant release. This impact would be less than significant.	SU	LTS	None required	LTS
Impact HYD-5. The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This impact would be less than significant.	LTS	LTS	None required	LTS

Environmental Impact	1997 EIR Impact Conclusion	Project Impact Conclusion	Mitigation Measures	Residual Project Impact
Utilities and Service Systems (Section 4.2)				
<p>Impact UTIL-1. The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the General Plan and SLVSP. Further, the project would not directly result in wastewater generation; however, the project would indirectly increase wastewater in the City’s conveyance and treatment system by replacing septic systems as the primary treatment method of parcels along the project alignment. Impacts from the proposed project related to water, wastewater, stormwater, electricity, natural gas, and telecommunication facilities would be less than significant; however, water and wastewater facility impacts from the development potential of the SLVSP would remain significant and unavoidable, consistent with the findings in the 1997 EIR.</p>	SU	LTS	None required	LTS
<p>Impact UTIL-2. The project would not directly result in increased water demand. Based on Cal Water’s water supply and demand projections, projected water supplies are sufficient to meet the anticipated water demand of reasonably foreseeable future development during normal, dry, and multiple dry years, as shown in Table 4.2-3 and Table 4.2-4. This impact would be less than significant.</p>	N/A	LTS	None required	LTS
<p>Impact UTIL-3. The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure. The project would not impair the attainment of solid waste reduction goals and would comply with federal, state, and local statutes and regulations related to solid waste. This impact would be less than significant.</p>	N/A	LTS	None required	LTS
<p>NI = no impact; LTS = less than significant impact; LTS-M = less than significant impact with mitigation; PS = potentially significant impact; SU = significant and unavoidable impact; N/A = impact not addressed 1997 EIR; EIR = Environmental Impact Report; SLVSP = South Livermore Valley Specific Plan; BAAQMD = Bay Area Air Quality Management District; CEQA = California Environmental Quality Act; MT = Metric Tons; CO₂e = Carbon Dioxide Equivalent</p>				

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1 Introduction

The City of Livermore has prepared this Supplemental Environmental Impact Report (EIR) to the South Livermore Valley Specific Plan EIR (“1997 EIR”), State Clearinghouse #1996052025, certified in September 1997, in accordance with *California Environmental Quality Act (CEQA) Guidelines* Section 15163.

The proposed project alignment is located southeast of the City of Livermore, with most of the alignment within unincorporated Alameda County. The 1997 EIR discusses the environment impacts of the South Livermore Valley Specific Plan, which was designed to combat urban sprawl, and preserve existing vineyards and prime vineyard soil within the southern Livermore Valley. This Supplemental EIR discusses the potential environmental impacts of the proposed project, which would amend the urban growth boundary (UGB) language to allow the extension of sanitary sewer lines to serve residences and wineries within or near the City of Livermore.

This section discusses (1) the basis for preparation of a Supplemental EIR; (2) the project requiring environmental analysis; (3) the EIR background; (4) the legal basis for preparing a Supplemental EIR; (5) the scope and content of the Supplemental EIR; (6) lead, responsible, and trustee agencies; (7) the environmental review process required under CEQA; and (8) an overview of the content of the Supplemental EIR. The proposed project is described in detail in Section 2, *Project Description*.

1.1 Basis for a Supplemental EIR

When an EIR has been adopted and a project is modified or expanded upon, additional CEQA review may be necessary. The key considerations in determining the need for the appropriate type of additional CEQA review are outlined in Public Resources Code Section 21166 and *CEQA Guidelines* Section 15162.

Pursuant to *CEQA Guidelines* Section 15162(a), no subsequent EIR shall be prepared unless one or more of the following conditions is present:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - The project will have one or more significant effects not discussed in the previous EIR or Negative Declaration;
 - Significant effects previously examined will be substantially more severe than shown in the previous EIR;

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- Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

As discussed in Section 2, *Project Description*, the proposed project would amend UGB language to allow the extension of approximately 27,000 linear feet of sanitary sewer lines, as well as upsize approximately 950 linear feet of pipe to accommodate the proposed sewer expansion. Pursuant to *CEQA Guidelines* Section 15163, a supplemental EIR may be prepared when no substantial changes are proposed in the project which would require major revisions of the previous EIR due to the involvement of new significant environmental effects (pursuant to *CEQA Guidelines* Section 15162). A supplemental document may only be used when minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation (*CEQA Guidelines* Section 15163[a][2]). The proposed project has not substantially changed from the South Livermore Valley Specific Plan, and the general environmental conditions have largely remained the same. Consistent with *CEQA Guidelines* Section 15150, the 1997 EIR is incorporated into this document by reference.

1.2 Project Requiring Environmental Analysis

The proposed project would include the following:

- Amendment to the UGB to allow extension of sanitary sewer lines
- Construction of new sanitary sewer lines to serve winery, agricultural, and residential parcels south of the City of Livermore
- Implementation of the Bottleneck Project, consisting of upsizing existing pipes to accommodate the extended sewer system

For additional information on the proposed project, see Section 2, *Project Description*.

1.3 Environmental Impact Report Background

In 1997, the City of Livermore certified the Final EIR for the South Livermore Valley Specific Plan. This document planned development for 30 residential lots in the City of Livermore, in Alameda County. In March 2000, City voters approved the UGB Initiative, which aims to prevent uncontrolled urban development.

The City of Livermore distributed a Notice of Preparation (NOP) of a Draft Supplemental EIR for the proposed project for a 30-day agency and public scoping period, which started on December 16, 2021, and ended on January 17, 2022. The City received one written response to the NOP regarding the scope and content of the Supplemental EIR, which is summarized in Table 1-1. The NOP and the NOP responses are included in Appendix NOP. Written comments applicable to the environmental analyses under CEQA are addressed, as appropriate, in the analysis contained in the various subsections of Section 4, *Environmental Impact Analysis*, and/or in the Initial Study (Appendix IS).

Table 1-1 NOP Comments and Supplemental EIR Response

Commenter	Comment/Request	How and Where It Was Addressed
Native American Heritage Commission	The commenter recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project as early as possible. The purpose of this early consultation is to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.	Tribal cultural resources and Assembly Bill 52 consultation are addressed in Environmental Checklist Section 18 of the Initial Study (Appendix IS).

1.4 Purpose and Legal Authority

The proposed project requires the discretionary approval of the City of Livermore; therefore, the project is subject to the environmental review requirements of CEQA. In accordance with *CEQA Guidelines* Section 15121 (California Code of Regulations, Title 14), the purpose of this Supplemental EIR is to serve as an informational document that:

“will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.”

As discussed above, this document is a Supplemental EIR to the 1997 EIR pursuant to *CEQA Guidelines* Section 15162 and Section 15163. A Supplemental EIR is appropriate when “(1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and (2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.” The general environmental conditions along the proposed alignment have not substantially changed since preparation of the 1997 Final EIR for the South Livermore Valley Specific Plan; thus, a Supplemental EIR is appropriate to achieve CEQA compliance.

This Supplemental EIR is intended to serve as an informational document for the public and City of Livermore decision makers. The process would include public hearings before the Planning Commission and City Council to consider certification of a Final Supplemental EIR and approval of the proposed project.

1.5 Scope and Content

This EIR addresses impacts identified in the Initial Study to be potentially significant (Appendix IS). The following issues were found to include potentially significant impacts and have been studied in the EIR:

- Hydrology and Water Quality
- Utilities and Service Systems

In preparing this EIR, pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, and other background documents were referenced. A full reference list is contained in Section 7, *References and Preparers*.

The alternatives section of the EIR (Section 6) was prepared in accordance with *CEQA Guidelines* Section 15126.6. Section 6 focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives section identifies the “environmentally superior” alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required “No Project” alternative and two alternative development scenarios for the project area.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. *CEQA Guidelines* Section 15151 provides the standard of adequacy on which this document is based. The *CEQA Guidelines* Section 15151 states:

“An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.”

1.6 Issues Not Studied in Detail in the EIR

Table 1-2 summarizes issues from the environmental checklist that were addressed in the Initial Study (Appendix IS). As indicated in the Initial Study, there is no substantial evidence that significant impacts would occur in any of these issue areas.

Table 1-2 Issues Not Studied in the EIR

Issue Area	Initial Study Findings
Aesthetics	<p>The proposed project would not impact the distant views of Altamont Hills and the Diablo Mountain Range from South Livermore Road and Tesla Road. There would be no impact to scenic vistas.</p> <hr/> <p>The proposed project is located approximately 1.6 miles south of the nearest eligible state scenic highway, and would not damage scenic resources such as trees, rock outcroppings, or historic buildings. There would be no impacts to scenic resources.</p> <hr/> <p>The proposed project would not conflict with current applicable zoning or other regulations governing scenic qualities, and would not change or disrupt existing uses in the area. There would be no impacts regarding conflict with applicable regulations governing scenic quality.</p> <hr/> <p>The proposed project would not add sources of substantial light or glare; thus it would not cause adverse effects to daytime or nighttime views in the area. There would be no impacts to light or glare.</p>
Agriculture and Forestry Resources	<p>The project alignment is adjacent to agricultural land but would be constructed within existing paved rights-of-way. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be affected by project implementation, and no impact to agricultural land would occur. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p> <hr/> <p>Multiple parcels of land adjacent to the project alignment are enrolled under the California Land Conservation Act and are subject to Williamson Act contracts. However, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impacts would occur. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p>

Issue Area	Initial Study Findings
	<p>The project alignment and surrounding areas are not designated as, nor adjacent to lands zoned for forest land, timberland, or timberland zoned for Timberland Production. Therefore, the project would not conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned for Timberland Production; result in the loss of forest land; or convert forest land to non-forest use. No impacts to forest land would occur.</p> <hr/> <p>Proposed project construction would not directly or indirectly result in the conversion of farmland or forestland adjacent to the project alignment to non-agricultural use or non-forest use. There would be no impact regarding conversion of forest land to non-forest use or farmland to non-agricultural use. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p>
Air Quality	<p>The proposed project would not generate new operational emissions. Emissions generated during construction would be temporary and cease upon completion. Construction activities would adhere to air quality plan control measures and construction-related emissions would not exceed the applicable Bay Area Air Quality Management District significance thresholds. Impacts regarding obstruction of applicable air quality plans would be less than significant.</p> <hr/> <p>Project operation would not increase energy use in the form of electricity, natural gas, or gasoline and diesel fuel consumption. No buildings would be constructed, no vehicle traffic would be generated, and the project would not result in unanticipated growth in its vicinity. Impacts regarding the net increase of criteria pollutants would be less than significant. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p> <hr/> <p>Construction-related activities would result in temporary emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy duty diesel equipment. However, DPM generated by project construction would not create conditions where the probability is greater than 10 in one million of contracting cancer for the Maximally Exposed Individual; or generate ground-level concentrations of non-carcinogenic toxic air contaminants that exceed a Hazard Index greater than one for the Maximally Exposed Individual. Project operation would not result in new toxic air contaminant emissions. Impacts regarding exposure of sensitive receptors to substantial pollutant concentrations would be less than significant. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p> <hr/> <p>Heavy equipment and vehicles used during construction would temporarily emit odors associated with engine exhaust. The proposed project does not include any odor-generating uses. Impacts regarding other emissions that adversely affect a substantial number of people would be less than significant. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p>
Biological Resources	<p>The proposed alignment is within previously disturbed and existing paved rights-of-way and would not require additional ground disturbance. Given these factors, no special status species have the potential to occur along project alignment, and there would be no impacts to special status plant species. The alignment could be used by numerous species of migratory birds that utilize sparse ground cover or ornamental shrubs and landscaping as nesting habitat. Potential impacts to nesting birds would be reduced to less than significant levels through implementation of Mitigation Measure BIO-1 (as described in the <i>Executive Summary</i> and Appendix IS).</p> <hr/> <p>The proposed alignment is located within riparian habitat, sensitive natural communities, or wetlands located in its vicinity. Thus, the project would not have a substantial adverse effect on riparian habitat, sensitive natural community, or state or federally protected wetlands, and no impact would occur.</p> <hr/> <p>The proposed alignment is not located directly adjacent to intact wildlife habitat, corridor, aquatic habitat, or suitable connected natural areas. No impacts would occur.</p> <hr/> <p>The proposed project would not result in the removal of existing trees. The project would not conflict with local policies or ordinances protecting biological resources, and there would be no impacts.</p>

Issue Area	Initial Study Findings
	<p>Currently, there are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other habitat conservation plans in the City and County. Therefore, the proposed project would have no impact.</p>
Cultural Resources	<p>There are currently two designated resources listed in the California Register of Historical Places located adjacent to the project alignment on Tesla Road. The project would not involve the demolition of existing buildings or structures or construction of new buildings near the project alignment; therefore, the built environment in the City of Livermore or adjacent unincorporated areas would not be altered. No changes in significance of a historical resource would occur, and no impact would occur.</p> <p>The proposed project would not result in ground disturbance in previously undisturbed areas. However, there is always a possibility that previously undiscovered archaeological resources are encountered during project ground disturbance. Potential impacts to archaeological resources would be reduced to less than significant levels through implementation of Mitigation Measure CR-1 (as described in the <i>Executive Summary</i> and Appendix IS).</p> <p>The proposed project would not result in ground disturbance in previously undisturbed areas. With adherence to existing regulations, impacts to unanticipated human remains would be less than significant.</p>
Energy	<p>Project-related energy consumption would be limited to energy consumed during project construction, such as fuel consumed by vehicles and equipment. Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. Project operation would not increase energy use in the form of electricity, natural gas, or gasoline and diesel fuel consumption. Therefore, the proposed project would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.</p> <p>The proposed project would not result in unplanned growth, alter energy efficiency, or affect existing renewable energy resources. The proposed project would not conflict with state or local plans for renewable energy or energy efficiency, and no impact would occur.</p>
Geology and Soils	<p>There is the potential for fault rupture along the project alignment and construction workers would be present at the site and working on a mapped fault; however, no structures are proposed as part of the project. Therefore, the project would not cause direct or indirect adverse effects resulting from fault ruptures or seismic activities. With adherence to the requirements of the California Building Code the project would result in less than significant impacts related to seismically-induced ground shaking from nearby faults. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p> <p>The project alignment is located within a low liquefaction hazard zone, and liquefaction-related impacts would be less than significant. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p> <p>The project alignment is in a very low landslide risk area, and impacts involving landslides would be less than significant. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p> <p>Construction activities would disturb soil along the project alignment, resulting in potential for soil erosion and loss of topsoil. Implementation of Bay Area Air Quality Management District regulations would reduce the potential for project construction to result in substantial wind erosion or loss of topsoil. Compliance with other existing regulatory requirements, including implementation of applicable best management practices related to wind and water erosion control, would reduce potential soil loss and erosion from the alignment. Impacts would be less than significant. Additional discussion of the project’s potential to cause erosion or siltation off-site are discussed in Section 4.1, <i>Hydrology and Water Quality</i>, Impact HYD-3. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p>

Issue Area	Initial Study Findings
	<p>Given the nature of the proposed project and existing conditions along the alignment, the potential for lateral spreading is very low. Project construction would not cause the ground to become unstable or result in landslide, lateral spreading, or liquefaction because the existing roadway would be maintained, and proper construction techniques and regulations would be followed. Impacts would be less than significant. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p> <hr/> <p>The project alignment overlays soils that are not expansive; therefore, impacts regarding expansive soils would be less than significant. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p> <hr/> <p>The proposed project would not include any septic systems or alternative wastewater disposal systems. Thus, there would be no impact.</p> <hr/> <p>The proposed project would not result in ground disturbance in previously undisturbed areas. However, there is always a possibility that previously undiscovered paleontological resources are encountered during project ground disturbance. Potential impacts to paleontological resources would be reduced to less than significant levels through implementation of Mitigation Measure GEO-1 (as described in the <i>Executive Summary</i> and Appendix IS).</p>
Greenhouse Gas Emissions	<p>Project construction would generate approximately 734 metric tons of carbon dioxide equivalent, which would be temporary GHG emissions due to the operation of construction equipment. Project operation would not generate GHG emissions. Therefore, impacts would be less than significant.</p> <hr/> <p>The State's 2017 Scoping Plan was created to outline goals for California to achieve Greenhouse Gas reductions; one strategy is water conservation. Upgrading the pipes would promote wastewater conveyance efficiency and would minimize the existing system wastewater losses associated with leaks and reduced efficiencies due to age. The project would be consistent with energy efficiency goals and policies in the City's General Plan. Therefore, no impact would occur.</p>
Hazards and Hazardous Materials	<p>Project construction would temporarily increase the use and transport of hazardous materials in the project area through the operation of vehicles and equipment. These materials would not be transported, stored, or used in quantities which would pose a significant hazard to the public or construction workers themselves. Project operation would not require transport, use, storage, or disposal of hazardous materials. Impacts would be less than significant.</p> <hr/> <p>There are four schools located within 0.25 mile of the project alignment. Hazardous materials used during project construction would be disposed of offsite in accordance with all applicable federal and state laws and regulations. Therefore, potential impacts associated with an accidental emission or release of hazardous materials in proximity to a school would be less than significant.</p> <hr/> <p>The project alignment and adjacent properties are not included on existing lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, this impact would be less than significant.</p> <hr/> <p>The project alignment is not located within a Safety Compatibility Zone as designated by the Livermore Executive Airport Land Use Compatibility Plan. Therefore, the proposed project would not subject people working along the alignment to safety hazards or excessive noise, and there would be no impact.</p> <hr/> <p>The proposed project would require temporary lane closures throughout the duration of construction, but traffic would be managed by a County-approved traffic control plan. Project operation would not change or disrupt the existing roadway and traffic patterns, and no streets would be closed once construction is complete. Thus, the project would have a less than significant impact regarding interference with emergency response or evacuation plans.</p> <hr/> <p>The project alignment is adjacent to existing residential and commercial uses. There are no wildland conditions on or adjacent to the project alignment, and the project is not located in a designated Very High Fire Hazard Severity Zone. The project would be constructed within</p>

Issue Area	Initial Study Findings
	existing paved rights-of-way, and it would not expose people or structures to a significant loss, injury, or death involving wildland fires. There would be no impact.
Land Use and Planning	<p>Project construction would not physically or socially divide an established community or limit movement, travel, or other interaction between established land uses. Therefore, no impact would occur. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.</p> <p>No development beyond projected buildout of the City and County General Plans would occur as a result of the proposed project. Therefore, the project would have no impact regarding conflicts with existing land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.</p>
Mineral Resources	The project alignment is within existing paved rights-of-way, and no existing mineral resource mining operations occur along the alignment. The proposed project would not require the use of mineral resources valuable to the region and residents of the state, and no mining activity is planned as part of the project. The proposed project would not result in the loss of availability of mineral resources. Therefore, no impacts would occur.
Noise	<p>Construction activity would generate temporary noise in the project vicinity, exposing adjacent sensitive receivers to increased noise levels. Project construction noise would be generated by heavy-duty diesel construction equipment used for site preparation, excavation/grading, construction, and paving activities. Potential noise impacts would be reduced to less than significant levels through implementation of Mitigation Measure NOI-1 (as described in the <i>Executive Summary</i> and Appendix IS).</p> <p>No change to existing operations would result from the proposed project. Construction would intermittently generate vibration on and adjacent to the project alignment. Construction activity would be limited to daytime hours and would not disrupt residential receivers during recognized hours of sleep. Overall, vibration caused by project construction would result in a less than significant impact.</p> <p>The project alignment is not within an area covered by an airport land use plan, nor is it located in the vicinity of a private air strip. The proposed project would not expose people residing or working in the project area to significant aircraft-generated noise. No impact would occur.</p>
Population and Housing	<p>The proposed project would not involve the construction of new residences, businesses, or roadways. The proposed project would not cause unanticipated growth in the city or county, either directly or indirectly, and impacts would be less than significant.</p> <p>While there are housing units in the project vicinity, the project would not involve the demolition of existing residences and would not displace existing housing units or people. No impact would occur.</p>
Public Services	The project would not result in unanticipated new development or generate direct or indirect population growth in the City. Thus, the project would not increase the demand for fire, police, school, library, or other public facility services beyond the development currently anticipated in the City and County General Plans. No impact would occur.
Recreation	The proposed project would not impact existing recreational areas. The project would not result in new development or generate direct or indirect population growth in the City. Therefore, the project would not increase the demand for existing recreational services in its vicinity, and there would be no impacts.
Transportation	Construction would require one lane of public roadways to be closed at any given time. The City would post signage along the alignment and on roadways leading up to the project alignment before and during construction to give advance warning of road closures and detours. Once completed, the project would not alter roadways or transit stops, increase commercial or residential development, generate growth, or cause an increase in traffic in the vicinity of the project alignment. Therefore, the proposed project would not conflict with the goals, objectives, or policies addressing bicycle and pedestrian facilities in the City's General Plan Circulation Elements or the City's Bicycle, Pedestrian, & Trails Active Transportation Plan. Impacts would be less than significant. Additionally, development on adjacent parcels within the South Livermore

Issue Area	Initial Study Findings
	<p>Valley Specific Plan area would continue to be required to implement applicable mitigation measures from the 1997 Environmental Impact Report.</p> <hr/> <p>The proposed project would not generate vehicle trips for project operation, and there would be no change to existing roadways or increase in vehicle miles travelled. As such, the project would not conflict or be inconsistent with <i>CEQA Guidelines</i> Section 15064.3(b) and no impact would occur.</p> <hr/> <p>The proposed project would not alter or affect the existing street and intersection networks in its vicinity, nor increase hazards due to a new geometric design feature. The proposed project would not introduce incompatible uses, including vehicles or equipment, to the alignment or the surrounding area, and would have no impact.</p> <hr/> <p>Project construction would require one lane of public roadways to be temporarily closed at any given time. Signage would be posted along the alignment and on roadways leading up to the alignment it before and during construction to give advance warning of road closures and detours. As a result, the project would not result in inadequate emergency access and impacts would be less than significant.</p>
Tribal Cultural Resources	<p>The proposed project would not result in ground disturbance in previously undisturbed areas. However, there is always a possibility that previously undiscovered tribal cultural resources are encountered during project ground disturbance. Potential impacts to tribal cultural resources would be reduced to less than significant levels through implementation of Mitigation Measure TCR-1 (as described in the <i>Executive Summary</i> and Appendix IS).</p>
Wildfire	<p>Although the project alignment is located in a State Responsibility Area, the project would not result in population growth or expose new residents to wildfire risks. As such, the project would not substantially impair an adopted emergency evacuation plan, exacerbate wildfire risks, require the installation or maintenance of associated infrastructure that may exacerbate fire risk, or expose people or structures to significant risks. There would be no impact with regards to wildfire.</p>

Notes: EIR = Environmental Impact Report; SLVSP = South Livermore Valley Specific Plan

1.7 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible and trustee agencies. The City of Livermore is the lead agency because it holds principal responsibility for approving the proposed project. The proposed project would require approval by the City of Livermore City Council for the following items:

- Approval of language to modify the UGB and place the amendment on the ballot
- Certification of an EIR prepared in accordance with CEQA prior to approving the modified language

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the proposed project. There are no responsible agencies for the proposed UGB amendment and sewer expansion project.

Trustee agencies have jurisdiction over certain resources held in trust for the people of California but do not have a legal authority over approving or carrying out the project. *CEQA Guidelines* Section 15386 designates four agencies as trustee agencies: the California Department of Fish and Wildlife with regards to fish and wildlife, native plants designated as rare or endangered, game refuges, and ecological reserves; the State Lands Commission, with regard to State-owned “sovereign” lands, such as the beds of navigable waters and State school lands; the California Department of Parks and Recreation, with regard to units of the State park system; and, the

University of California, with regard to sites within the Natural Land and Water Reserves System. There are no trustee agencies for the proposed UGB amendment and sewer expansion project.

1.8 Environmental Review Process

The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

1. **Determination that Supplemental EIR is warranted.** When an EIR has been certified for a project, a lead agency must determine if a Supplemental EIR should be prepared due to minor changes to the project, circumstances under which the project was approved, or new information. As described in Section 1.1, *Basis for a Supplemental EIR*, the proposed project would involve minor changes to make the 1997 EIR applicable to the proposed project. Therefore, the City has determined that the preparation of a Supplemental EIR is the appropriate approach to CEQA compliance.
2. **Notice of Preparation (NOP).** Pursuant to the provision of *CEQA Guidelines* Section 15082, the City (as lead agency) issued a NOP for public review and comment (see Appendix NOP). As required by *CEQA Guidelines* Section 15375, an NOP is a brief document sent by the lead agency to notify the responsible agencies, trustee agencies, the Governor’s Office of Planning and Research (OPR), and other involved agencies that the lead agency plans to prepare a Supplemental EIR for a project. The purpose of the notice is to solicit guidance from those agencies as to the scope and content of the environmental information to be included in the Supplemental EIR and to solicit recommendations and develop information regarding the scope, focus, and content of the Supplemental EIR.

The public review and scoping period for the project NOP began on December 16, 2021, and ended on January 17, 2022, in accordance with *CEQA Guidelines* Section 15082. Comments on the scope and content of the Supplemental EIR were received and written comments are included in Appendix NOP of this Supplemental EIR.

3. **Draft Supplemental EIR.** Public and agency review of the environmental documentation will be further encouraged through distribution of the Draft Supplemental EIR for at least the required 45-day public review period. Written comments should be submitted by mail or email with appropriate contact information, to the following:

Andy Ross, Senior Planner
Community Development Department
1052 South Livermore Avenue
Livermore, California 94550
Email: aaros@LivermoreCA.gov

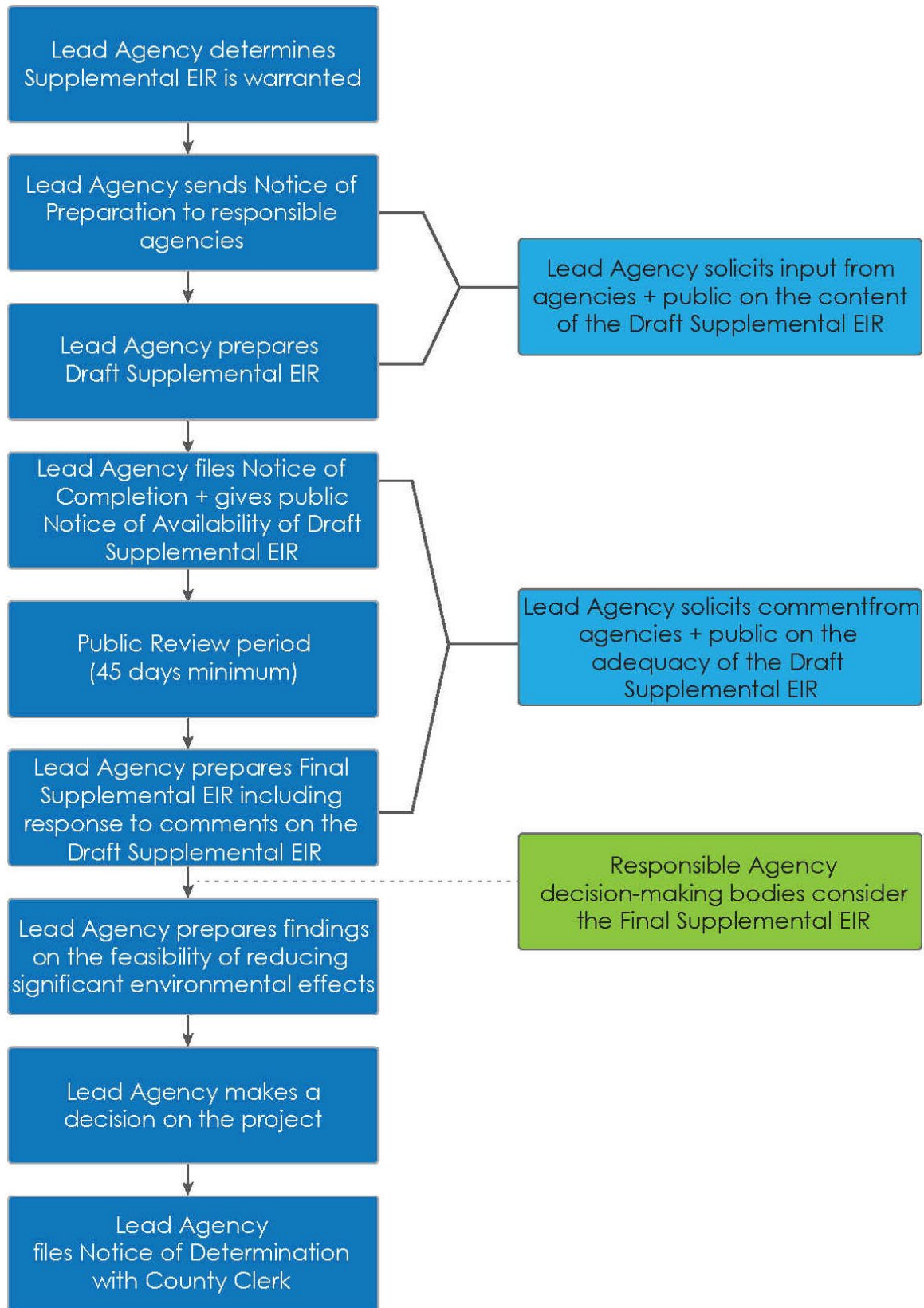
Any agency, organization, or members of the public desiring to comment on the Supplemental EIR must submit their comments prior to the end of the public comment period.

4. **Notice of Completion.** The provisions of *CEQA Guidelines* Section 15085(a) and Section 15087(a)(1) require that as soon as the Draft Supplemental EIR is completed, the lead agency must file a Notice of Completion (NOC) with OPR and that a public Notice of Availability (NOA) be provided to all organizations and individuals who have previously requested notification. The City, serving as the lead agency, will provide the NOC to OPR and circulate an NOA of the Draft Supplemental EIR to public agencies, special districts, tribal representatives,

organizations, and individuals that commented on the NOP and/or requested to be kept informed of the proposed project.

5. **Final Supplemental EIR.** A Final Supplemental EIR consists of the Draft Supplemental EIR; revisions to the Draft Supplemental EIR; responses to comments addressing concerns raised by individuals, organizations, and public agencies or other reviewing parties; and a Mitigation Monitoring and Reporting Program (MMRP). According to Public Resources Code Section 21081.6, for projects in which significant impacts would be minimized by mitigation measures, the lead agency must include an MMRP. The purpose of an MMRP is to ensure compliance with required mitigation measures during implementation of the project. After the Final Supplemental EIR is completed, and at least 10 days prior to its certification, a copy of the response to comments on the Draft Supplemental EIR will be provided or made available to all commenting parties.
6. **Certification of Final Supplemental EIR.** Prior to deciding on the proposed project, the lead agency must certify that: (a) the Final Supplemental EIR has been completed in compliance with CEQA; (b) the Final Supplemental EIR was presented to the decision-making body of the lead agency; and (c) the decision-making body reviewed and considered the information in the Final Supplemental EIR prior to approval (*CEQA Guidelines* Section 15090).
7. **Lead Agency Project Decision.** The lead agency may: (a) disapprove the project because of its significant environmental effects; (b) require changes to the project to reduce or avoid significant environmental effects; or (c) approve the project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Section 15042 and Section 15043).
8. **Findings/Statement of Overriding Considerations.** For each significant impact of the proposed project identified in the Supplemental EIR, the lead agency must find, based on substantial evidence, that either: (a) the proposed project has been changed to avoid or substantially reduce the magnitude of the impact; (b) changes are within another agency's jurisdiction and such changes have or should be adopted; or (c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
9. **Mitigation Monitoring/Reporting Program.** When the lead agency makes findings on significant effects identified in the Supplemental EIR, it must adopt an MMRP for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
10. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a project for which a Supplemental EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

Figure 1-1 Environmental Review Process



1.9 Draft Supplemental EIR Content

The contents of the Supplemental EIR include the following:

- **Executive Summary** – presents a brief synopsis of the proposed project, including project objectives, and an overview of project alternatives. This section also provides a table summarizing project environmental impacts, mitigation measures, and the level of significance of impacts after mitigation.
- **Section 1, Introduction** – provides an overview of the purpose and type of Supplemental EIR, the Supplemental EIR process, the intended uses of the Supplemental EIR, and an overview of the format and contents of the Supplemental EIR.
- **Section 2, Project Description** – provides a detailed description of the proposed project, including its location, background information, objectives, and physical characteristics.
- **Section 3, Environmental Setting** – provides a general overview of the environmental setting for the proposed project, including the regional setting and the project site setting.
- **Section 4, Environmental Impact Analysis** – presents an analysis of environmental impacts for each environmental factor. Each subsection contains a description of the environmental setting (or existing conditions); identifies the significance criteria used to determine whether impacts would be significant or less than significant; discusses the impacts; describes mitigation measures to reduce significant environmental impacts; and describes cumulative impacts.
- **Section 5, Other CEQA Considerations** – summarizes impacts that would result from the proposed project, including significant environmental effects, significant and unavoidable environmental effects, irreversible changes to the environment, and growth-inducing impacts.
- **Section 6, Alternatives** – describes potentially feasible alternatives to the proposed project that may attain most of the basic project objectives while avoiding or substantially lessening any of its significant effects. The analysis evaluates the environmental effects resulting from each alternative, compares these effects to those resulting from the proposed project, and describes the relationship of each alternative to the project objectives.
- **Section 7, References** – lists the documents and materials referenced in the text of the document, and lists report preparers.

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2 Project Description

The South Livermore Sewer Expansion Project (proposed project) would consist of an amendment to the voter-approved South Livermore Urban Growth Boundary (UGB) Initiative within the City of Livermore, to extend sanitary sewer lines. This section describes the proposed project, including the project proponent, lead agency, existing setting of the project site, project objectives, key elements of the project, potential buildout under the project, and the approvals needed to implement the proposed project.

2.1 Project Proponent/Lead Agency

City of Livermore
Community Development Department
1052 South Livermore Avenue
Livermore, California 94550

Andy Ross, Senior Planner
aaross@LivermoreCA.gov
(925) 960-4475

2.2 Project Location and Setting

The project alignment is generally located southeast of the City of Livermore within unincorporated Alameda County, California. A portion of the project alignment is located within the City of Livermore and another portion aligns with the City's Sphere of Influence boundary. Phase 1 of the alignment would be located on Tesla Road from Buena Vista Avenue to Greenville Road, Buena Vista Avenue from East Avenue to Tesla Road, and Greenville Road from Tesla Road to approximately 5,900 feet south of Tesla Road. The alignment along Tesla Road is adjacent to the City's Sphere of Influence, with the western portion of the alignment along South Livermore Avenue within the city boundary and UGB. The portion along Buena Vista Avenue is within the City's Sphere of Influence and adjacent to the city boundary and UGB at East Avenue. The alignment along Greenville Road is outside the City's Sphere of Influence. The alignment along Buena Vista Avenue and Tesla Road from Buena Vista Avenue to Greenville Road is adjacent to SLVSP Subareas 1 and 2.

The project also includes two potential future phases of the sewer alignment. The western future phase would be located on South Livermore Avenue from approximately 520 feet northwest of Concannon Boulevard to Tesla Road, and on Tesla Road from South Livermore Avenue to Buena Vista Avenue. The eastern future phase would be located on Tesla Road from Greenville Road to approximately 3,000 feet east of Greenville Road.

An additional component of the project that would involve sewer improvements in the City limits (the Bottleneck Project) is located within the City of Livermore, in segments along East Avenue (three segments between 7th Street and Dolores Street and one segment just west of Buena Vista Avenue). The Bottleneck Project would be completed as part of Phase 1.

The project alignment (all phases) is located within existing paved rights-of-way.

Figure 2-1 shows the regional context of the project alignment and Bottleneck Project, Figure 2-2 shows the project alignment, and Figure 2-3 shows the Bottleneck Project in its vicinity context. Regional access to the project alignment and Bottleneck Project is available via Interstate 580 (I-580), which is located approximately 2.6 miles north of the project alignment and approximately 1.5 miles north of the Bottleneck Project.

General Plan Designation

The project alignment is located within existing public roadways rights-of-way and does not have a land use designation. Land use adjacent to much of the project alignment is designated in the City's General Plan Map as Agriculture/Viticulture (AGVT). Additional parcels alongside the alignment are designated as Rural Residential (RR), Urban Medium High Residential (UMH), and Urban High Residential (UH), Community Facility (CF) Parks, Trailways, Recreation Areas (OSP), Agricultural Preserve (SV-AP), and Vineyard Commercial (SV-VC) land uses (City of Livermore 2015).

Zoning

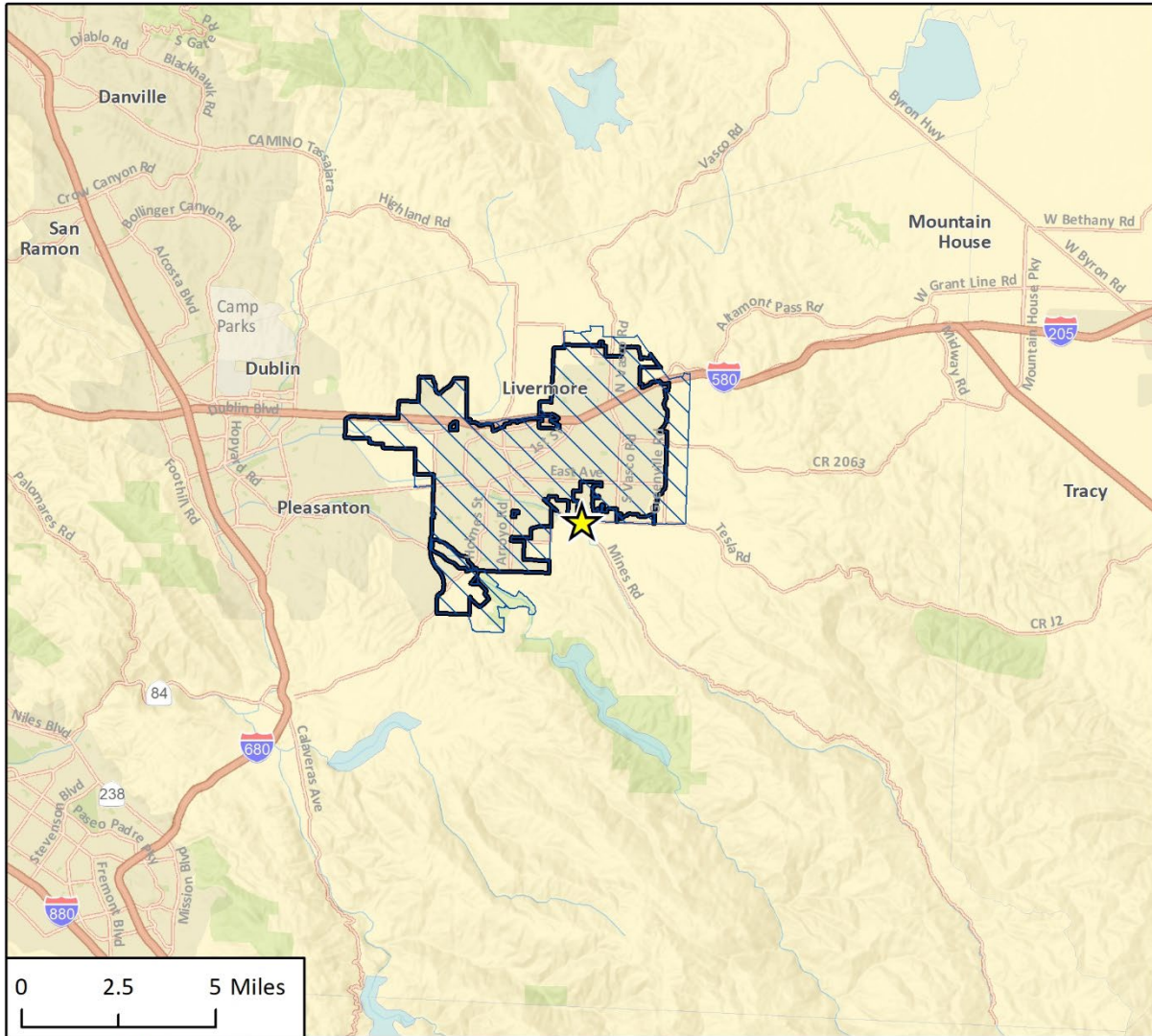
The project alignment is located within existing public roadway rights-of-way and is not zoned. A portion of the parcels adjacent to the project alignment are zoned by the City of Livermore, while others are zoned by Alameda County. Parcels zoned by the City primarily include Planned Development – South Livermore Valley Specific Plan (PD-SLVSP), along with one adjacent parcel zoned as Education and Institutions (E), one adjacent parcel zoned as Open Space Agricultural (OS-A), and one adjacent parcel zoned as South Livermore Valley Agricultural (SLV-AG) (City of Livermore 2015). Parcels zoned by Alameda County include Agriculture, Single Family Residential, and Planned Development (County of Alameda 2021). Generally, surrounding and adjacent parcels in the area consist of residential development, commercial development, vineyards and wineries, and open space uses compliant with City's General Plan Land Use element and the County's Zoning Ordinance. Furthermore, the project alignment is also located within the Vineyard Area of the SLVAP.

Surrounding Land Uses and Setting



The project alignment is currently fully developed and would take place within existing paved rights-of-way. The alignment is predominately flat, with a gentle slope from approximately 566 feet above mean sea level (amsl) at the northern portion of the project alignment to approximately 591 feet amsl at the southern portion along Tesla Road. The alignment generally drains from the southeast to the northwest. The Bottleneck Project alignment is also predominately flat and currently a fully developed roadway and the project would take place within existing paved rights-of-way.

The SLVSP includes two Subareas (1 and 2) that are located adjacent to the project alignment. Subarea 1 is described as including horse ranches, the Stivers Academy elementary school, and Rios-Lovell Winery in the SLVSP, and is located north of the project alignment along Tesla Road east of South Vasco Road. Subarea 1 has since been developed with single-family residences, with the existing vineyard and winery still present within the subarea. Subarea 2 is described as including vineyards in the SLVSP, and is located north of the project alignment along Tesla Road between Buena Vista Avenue and South Vasco Road. Subarea 2 has since been developed with residences along Buena Vista Avenue and single-family residences surrounding the Bruno Canziani Neighborhood Park, with vineyards and wineries still present adjacent to Tesla Road and between the Buena Vista residences and Bruno Canziani neighborhood.

Figure 2-1 Regional Location



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-  Project Location
-  Livermore City Boundary
-  Livermore Sphere of Influence

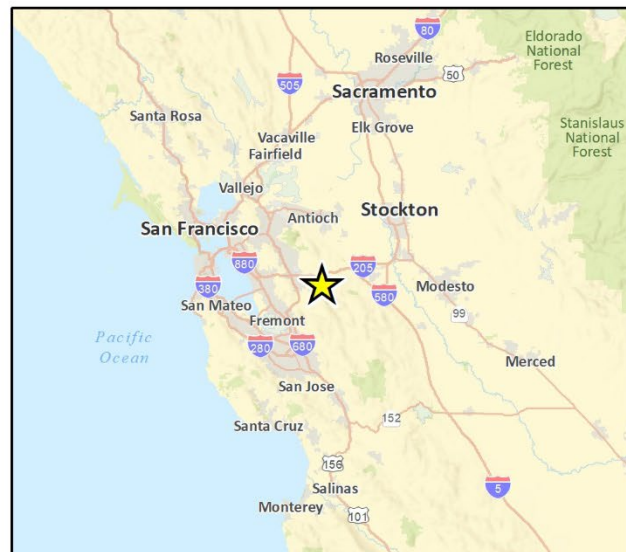
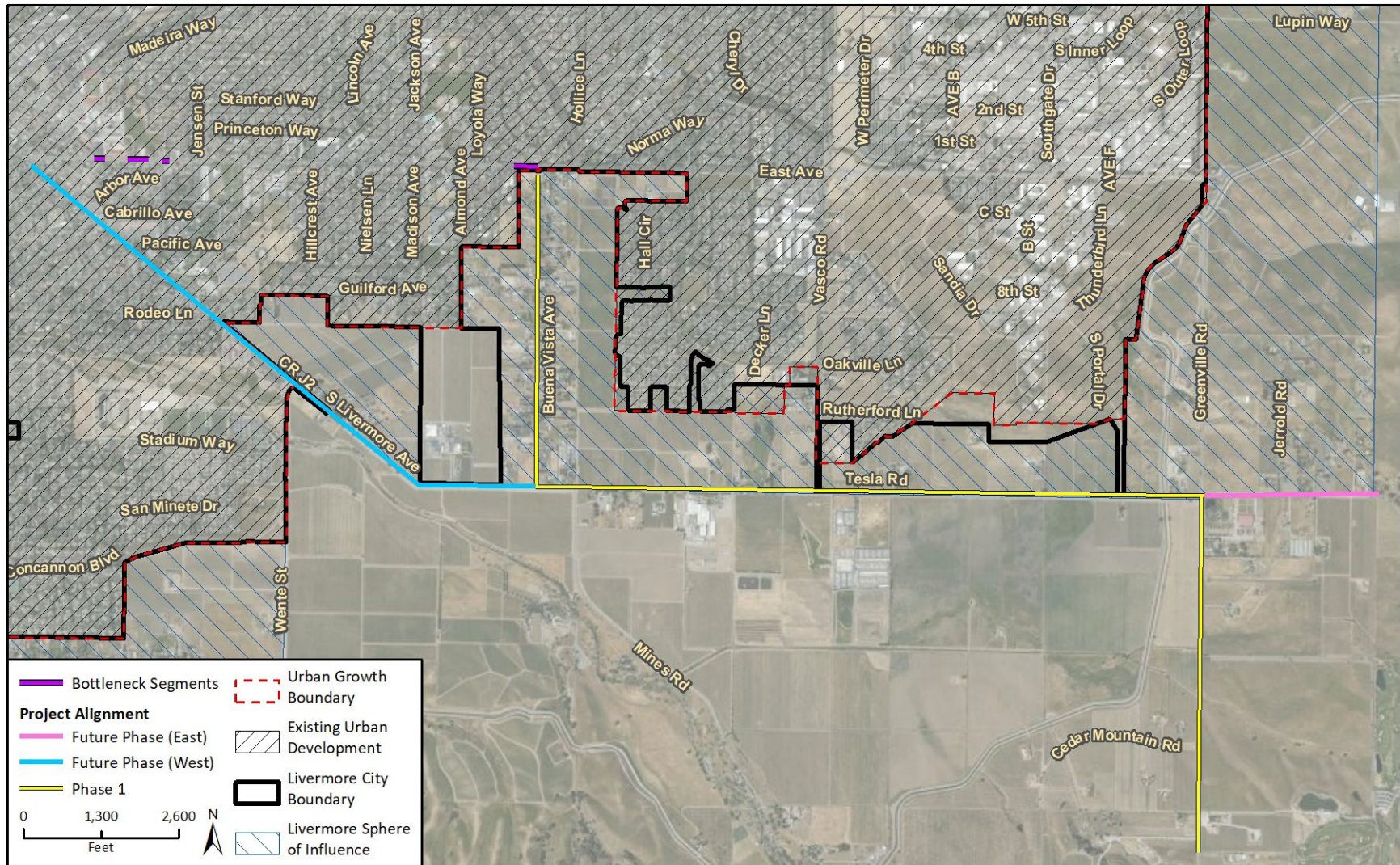


Fig 1 Regional Location

Figure 2-2 Project Location



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Fig 2 Project Location - Landscape 20220504

Figure 2-3 Bottleneck Segment Locations

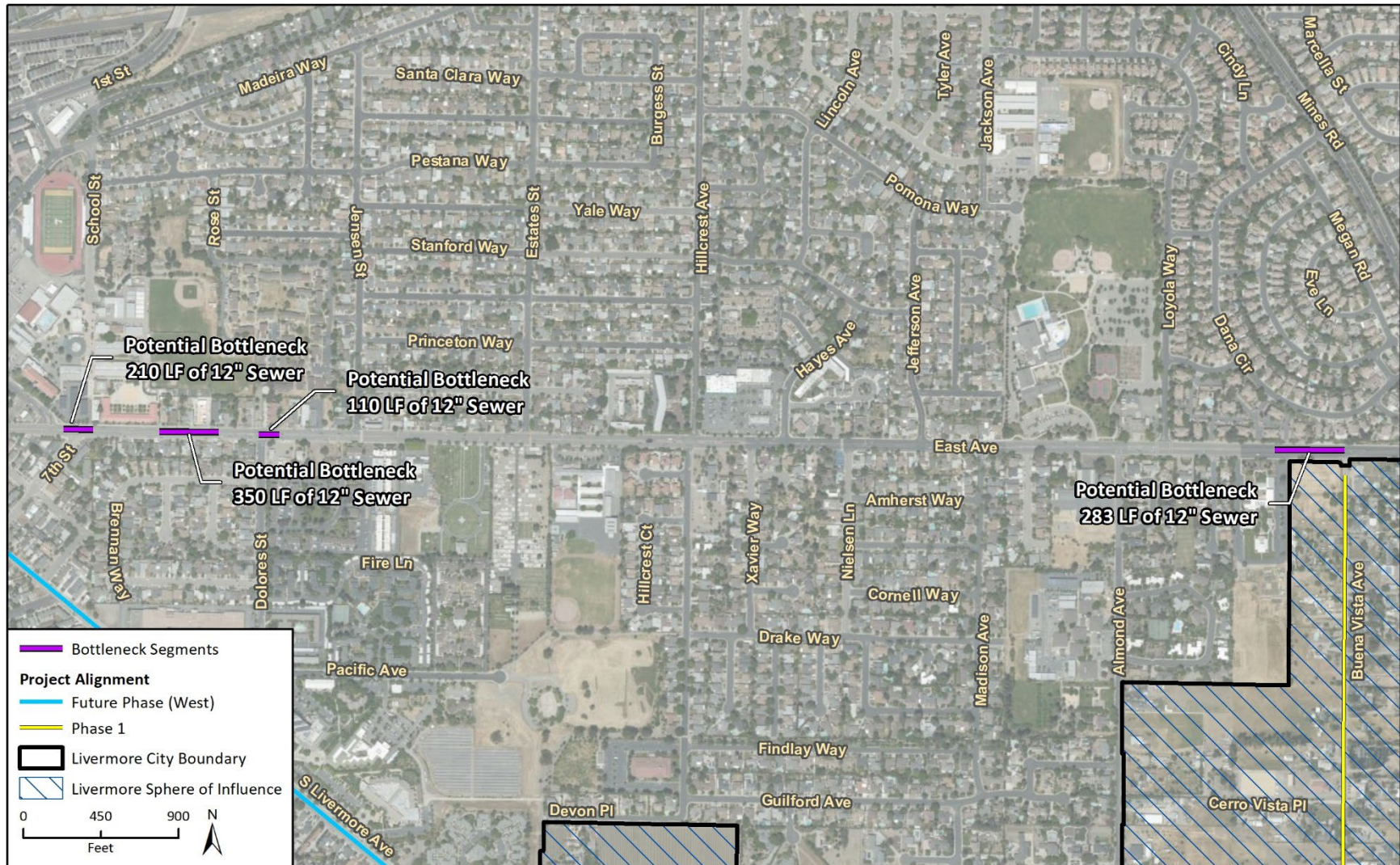


Fig 5 Bottleneck Segment Locations 20220426

Figure 2-2 shows the project alignment and surrounding land uses, which are primarily residential and agriculture, located directly along the alignment. The parcels directly bordering South Livermore Avenue and Tesla Road are in active agricultural uses (viticulture). Several parcels that directly border Buena Vista Avenue and Greenville Road are residential. Parcels located adjacent to the project alignment are zoned as PD - SLVSP with a General Plan designation of SLVSP. The nearest school, Livermore High School, is located adjacent to the Bottleneck Project on East Avenue.

2.3 Project Background

South Livermore Valley Area Plan

The County of Alameda adopted the South Livermore Valley Area Plan (SLVAP) in November 1992 as part of a collaborative effort between the cities of Pleasanton and Livermore, and Alameda County to create a planned area that preserves, promotes, and enhances viticulture and other cultivated agriculture. The SLVAP is a policy document that establishes criteria for future development for approximately 15,500 acres of undeveloped land in unincorporated areas south and east of the City of Livermore. The SLVAP limits development to areas that do not conflict with current or proposed agricultural uses in order to preserve and enhance viticulture and other cultivated agriculture. The County prepared a Draft EIR for the SLVAP (State Clearinghouse No. 1996052025). The Alameda County Planning Department certified the Final EIR (1992 EIR) and approved the project in November 1992 (County of Alameda 2003).

South Livermore Valley Specific Plan

The City adopted the SLVSP on November 17, 1997, and amended it in February 2004. In 1993, the City initiated the specific planning process to implement the urban component of the County's Area Plan to guide development and promote and enhance viticulture and agriculture in South Livermore Valley. The SLVSP is a policy document that establishes criteria and a regulatory framework for future development in South Livermore Valley, which is located south of the City of Livermore boundary. The SLVSP incorporates several goals, development standards and policies that aim to conserve agricultural and natural resources in the plan area. The City prepared a Draft Environmental Impact Report (EIR) for the SLVSP and General Plan Amendment (State Clearinghouse No. 96052025). The City certified the Final EIR and General Plan Amendment (1997 EIR) and approved the SLVSP in September 1997.

The proposed sewer expansion would remove a constraint to and serve development potential of adjacent parcels as envisioned under the SLVSP; therefore, this analysis relies on the 1997 EIR for the SLVSP.

South Livermore Urban Growth Boundary Initiative

In March 2000, the City of Livermore voters approved the South Livermore Urban Growth Boundary (UGB). This voter initiative adopted policies into the City's General Plan for the establishment of the UGB in South Livermore. The UGB forms a southern border, beyond which urban development (including extended sewer and water service) is permitted only under limited exceptions. In addition, the UGB further protects and enhances agriculture and open space in the South Livermore Valley Specific Plan (SLVSP) area by regulating where development is permitted within South Livermore. Finally, the initiative reduces urban sprawl by preventing uncontrolled urban development that could otherwise encroach into existing agricultural land or open space areas.

Figure 2-4 and Figure 2-5 show the UGB in relation to the proposed east and west segments of the project.

Because connection to urban services such as sanitary sewer is limited by the UGB, many residential and commercial uses in South Livermore Valley rely on on-site wastewater treatment systems (septic systems). In South Livermore Valley, the Regional Water Quality Control Board, County Department of Environmental Health, and Zone 7 Water Agency (Agencies) have restricted issuing permits for new septic systems or replacing failing septic systems.

The Agencies' positions reflect their missions to protect the Tri-Valley's groundwater basin. The Agencies have identified high nitrate concentrations in groundwater throughout the Tri-Valley resulting from past livestock operations and failing, undersized, or inefficient septic systems. These issues have the potential to adversely affect water quality and public health, safety, and quality of life. The inability to construct, expand, or replace septic systems or connect to the sanitary sewer is negatively affecting the South Livermore Valley wine industry and related uses thus preventing the vision of the Livermore General Plan, SLVAP and SLVSP.

Alameda Urban Growth Boundary Initiative

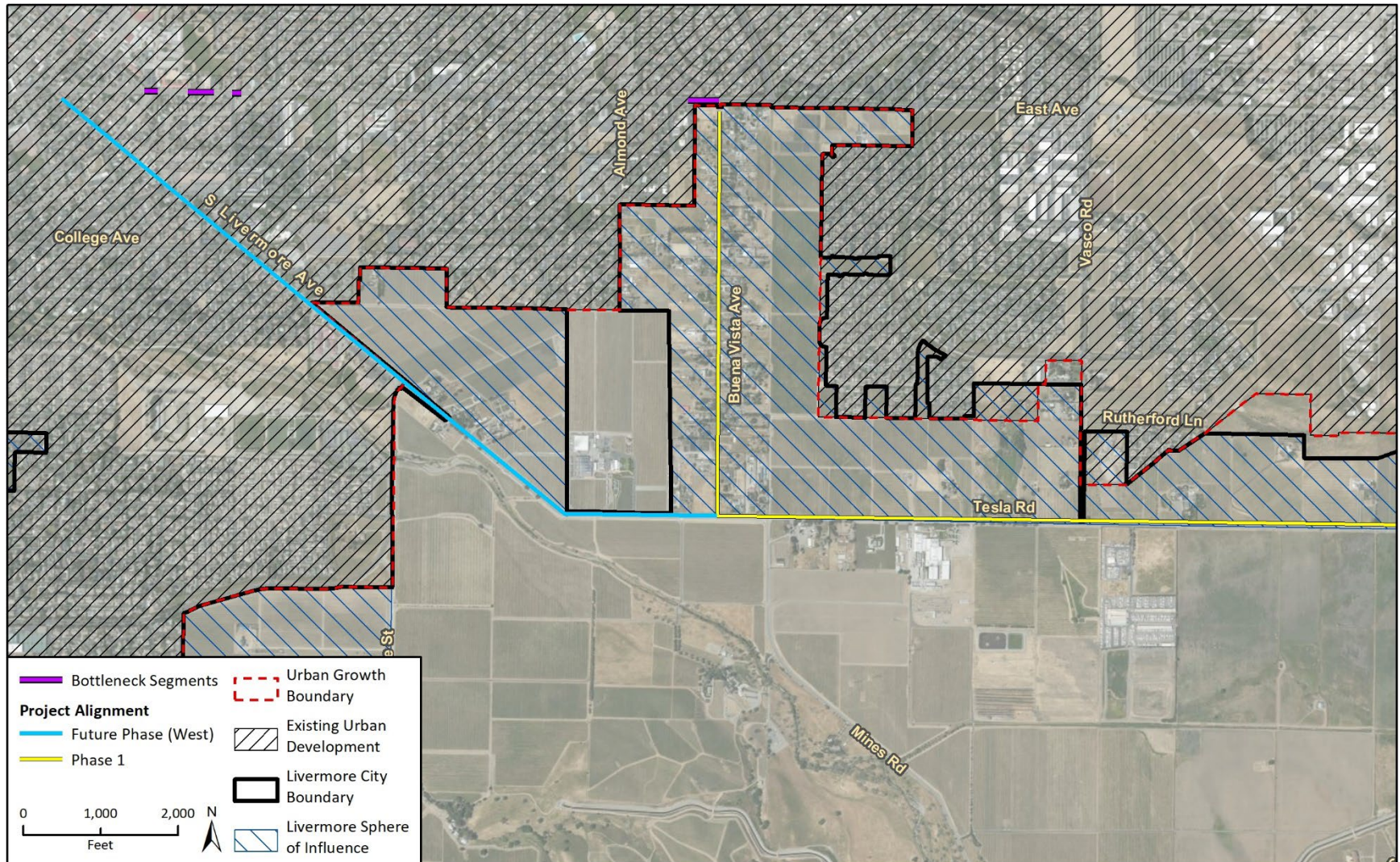
In November 2000, Alameda County voters passed Measure D. The purpose of Measure D is to preserve agricultural lands and to protect open space, watersheds, and wildlife habitat. Measure D set a county urban growth boundary that restricts subdivisions of the farms and ranches in eastern Alameda County, including North Livermore and the South Livermore Valley. Measure D amended portions of the County General Plan, including the East County Area Plan (ECAP). The initiative did not supersede or change the provisions of the SLVAP in the area to which the plan applied on February 1, 2000. However, the amended ECAP programs and policies place limits on density, development standards, and the geographical extent of the SLVAP.

2.4 Project Objectives

The objectives for the proposed project are as follows:

- Improve groundwater quality in the South Livermore Valley area relative to nitrates, which is associated with residential septic systems and livestock keeping
- Facilitate the development potential of existing and new wineries, visitor serving commercial uses, and residences consistent with the City's General Plan, SLVSP, and SLVAP subject to Alameda County Measure D.
- Enhance the short- and long-term economic viability of agriculture and viticulture in the South Livermore Valley area, consistent with Goals LU-13 and LU-14 of the City's General Plan

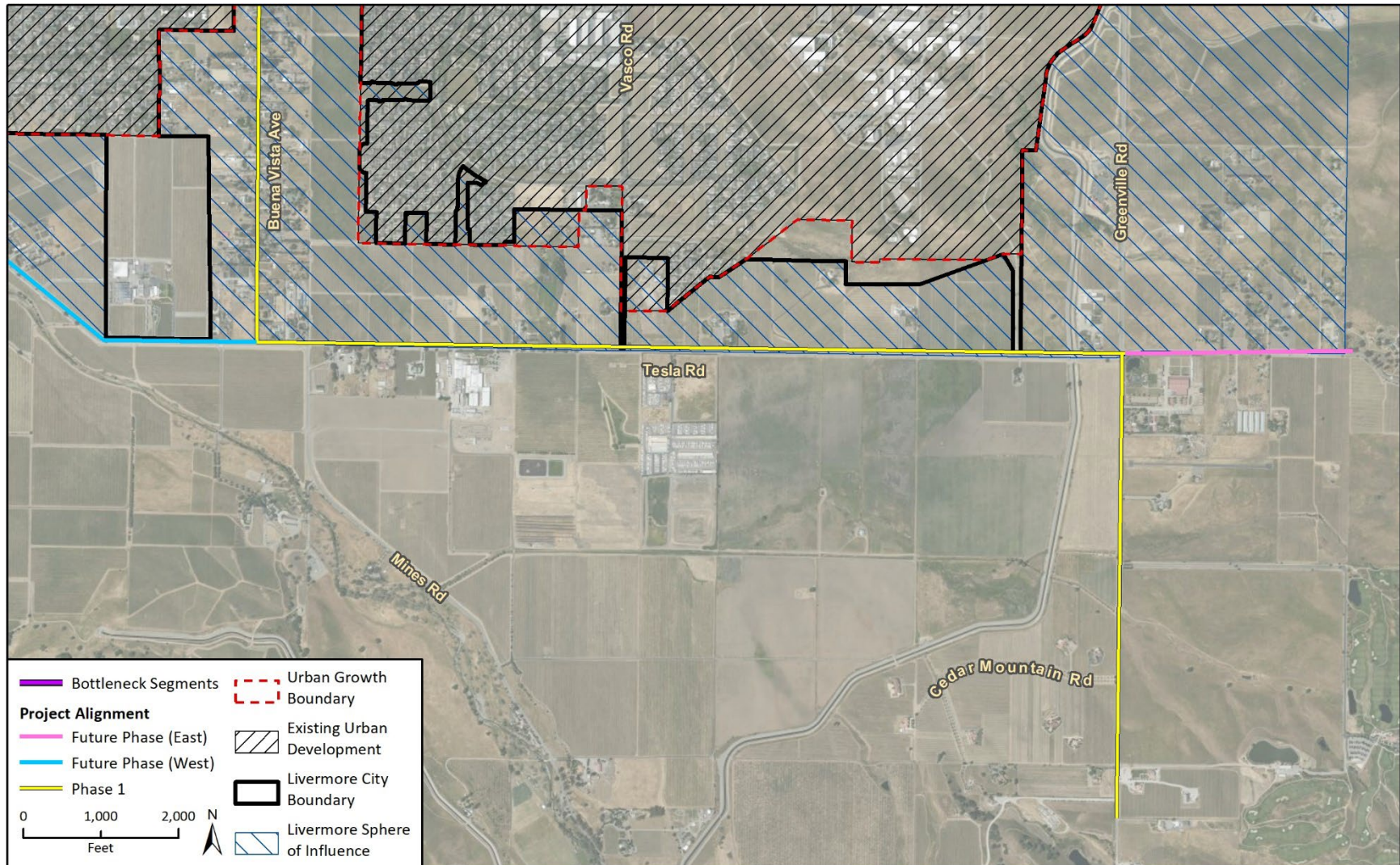
Figure 2-4 Sewer Extension and Urban Growth Boundary – West



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Fig 3 Conceptual Plans_West

Figure 2-5 Sewer Extension and Urban Growth Boundary – East



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Fig 3 Conceptual Plans_West

2.5 Proposed Project Elements

The project would amend the South Livermore Valley UGB language to allow the extension of sanitary sewer lines to serve adjacent parcels containing residences and wineries located within and near the City of Livermore. This amendment would allow for the installation of approximately 5 miles of new sewer lines to support existing uses and future development consistent with the General Plan, SLVSP, and SLVAP in South Livermore Valley, subject to Alameda County Measure D. The purpose of the project is to improve groundwater quality in the South Livermore Valley area, serve existing development potential consistent with the City's General Plan and SLVSP, and enhance the short- and long-term economic viability of agriculture and viticulture in the South Livermore Valley area. Subject to necessary approvals and annexation into the City, the project would also allow existing residences to connect to the City's wastewater system and cease the use of their on-site septic systems. The project is intended to support uses that are consistent with the City's General Plan, SLVSP, or current zoning; should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, additional CEQA review would be required.

Phase 1 of the proposed sewer extension would be installed Tesla Road from Buena Vista Avenue to Greenville Road, within Buena Vista Avenue from East Avenue to Tesla Road, and within Greenville Road from Tesla Road to approximately 5,900 feet south of Tesla Road. The expanded sewer facilities would allow existing and future wineries, visitor serving uses, and residences to connect to the City's wastewater system in conformance with the Livermore General Plan, South Livermore Valley Specific Plan, and/or South Livermore Valley Area Plan, subject to the provisions of Alameda County Measure D.

The City's 2017 Sewer Master Plan also identifies a Bottleneck Project (BO-CIP-P06) located on East Avenue. Preliminary analysis of the proposed project identified four segments of 12-inch sewer pipes that may need to be upsized on East Avenue between Maple Street and Buena Vista Avenue (City of Livermore 2017). The locations of each segment are shown in Figure 2-3. In total, approximately 950 linear feet (LF) would need to be upsized to accommodate the proposed project. Therefore, the proposed project may require the Bottleneck Project to be undertaken sooner than originally anticipated.

Two potential future phases of the sewer alignment would install sewer pipelines within South Livermore Avenue from approximately 520 feet northwest of Concannon Boulevard to Tesla Road, and on Tesla Road from South Livermore Avenue to Buena Vista Avenue (western future phase); and within Tesla Road from Greenville Road to approximately 3,000 feet east of Greenville Road (eastern future phase). The western future phase would provide redundancy within the sewer collection system, and the eastern future phase would expand the availability of services to several parcels east of Greenville Road.

The project would not require ground disturbance in agricultural or other natural areas, nor would it require vegetation removal.

Construction

Construction is anticipated to commence in 2024 and last for approximately 12 months, ending in 2025. The project may be constructed in phases based on available funding. Construction would require one lane of the affected public roadways to be closed at any given time. To that end, a traffic control plan is proposed that would regulate worker parking, construction staging, roadway improvements and potential traffic detours during project construction. Construction staging, laydown areas, and worker parking would be provided along the project alignment into one travel lane, one bike lane, and one shoulder. The contractor may work with private property owners as feasible, or use the City's Maintenance Service Center for additional staging. The City would post signage along the alignment and on roadways leading up to it before and during construction to give advance warning of road closures and detours. Detour signs for bicycle lane users would also be provided to facilitate safe crossing while portions of the bicycle lanes are closed.

Construction would occur 5 days per week to expedite the work and minimize traffic impacts. Limited weekend work may occur to accommodate the project schedule at the discretion of the City; however, total working days per month are not expected to exceed 22 days. Construction of the project would involve the installation of approximately 27,000 LF of sewer. If the contractor installs 150 LF per day as anticipated, then this would take approximately 180 working days. Equipment would include excavators, backhoes, front loaders, dump trucks, and shoring and paving equipment.

Excavation depths would vary by location, with most depths between 5 and 15 feet below ground surface. Approximately 1,000 LF along Greenville Road south of Tesla Road would require excavation between 15 and 18 feet, and approximately 1,200 LF along Tesla Road east of Vasco Road would require excavation between 15 and 26 feet.

Daily construction tasks would include excavation/grading, installing pipe, backfilling, patching pavement, and coordinating traffic control. Once an area is complete, final paving would be installed over the trench. Approximately 20 feet of width in the daily work area would be required. There is approximately 40 feet of pavement width on South Livermore Avenue, Tesla Road, Buena Vista Avenue, and Greenville Road. Therefore, construction would either require one-way traffic around the active work zone with one bike lane open, or two-way traffic without a bike lane. Once an area is completed, final paving over the trench and one foot beyond the trench would be installed. The County may require the entire road to be slurry sealed. The project would not increase the total impervious area.

In accordance with the Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ), the proposed project would implement a Stormwater Pollution Prevention Plan (SWPPP) that would include the use of best management practices (BMPs) during project construction. The project would require approximately 27,000 cubic yards of excavation, of which approximately 26,400 cubic yards would be used as backfill. Approximately 2,140 cubic yards of asphalt is anticipated to be exported. The Bottleneck Project may require roadway closures similar to the expansion project, and construction staging would occur on an adjacent property.

2.6 Required Approvals

The City of Livermore is the lead agency for the CEQA documentation and process. The modified UGB language must be approved by the voters of the City of Livermore. The project would require the following approvals from the City of Livermore:

- City Council certification of a Supplemental EIR prepared in accordance with CEQA prior to approving the modified UGB language.
- City Council approval of language to modify the UGB and place on the ballot.

The project would also require the following:

- Approval of the modified UGB language by a majority of voters.

The project would require the following approvals from the County of Alameda:

- Encroachment Permit
- Traffic Control Plan

Following project completion, individual properties would require subsequent approvals including permitting and service agreements with the City subject to Alameda County Local Agency Formation Commission approval, County, and/or Livermore-Amador Valley Water Management Agency, prior to connection to the wastewater system.

2.7 Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

In accordance with Public Resources Code (PRC) Section 21080.3.1, the City sent consultation request letters to two tribes (Amah Mutsun Tribal Band of Mission San Juan Bautista and Lone Band of Miwok Indians).

3 Environmental Setting

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional Setting

The project alignment is located within unincorporated Alameda County, in the East Bay region of the San Francisco Bay Area. The East Bay region generally includes cities along the eastern shores of the San Francisco Bay and San Pablo Bay and inland communities in Alameda and Contra Costa counties. Approximately one-third of the Bay Area's population resides in the East Bay. Figure 2-1 in Section 2, *Project Description*, shows the regional location of the project alignment.

The City of Livermore has a population of 91,216 people and is the fifth largest city in Alameda County in population, following Oakland, Fremont, Hayward, and Berkeley (California Department of Finance 2021). Livermore is bordered by the City of Pleasanton to the west, the City of Dublin to the northwest, and unincorporated Alameda County to the north, east, and south.

Since the certification of the 1997 EIR, the regional setting has not changed substantially. Livermore is located in the San Francisco Bay Hydrologic Region. Drainage flows generally to the west towards the San Francisco Bay. Livermore is in a seismically active region, with the Greenville Fault, Las Positas Fault, and Calaveras Fault all in the project vicinity. The nearest active fault is the Las Positas Fault, which intersects a portion of the project alignment along Tesla Road (Appendix IS).

Roadways, including arterials, collectors, and local streets, provide vehicular access throughout the city. Major roadways include Livermore Avenue, First Street, East Stanley Boulevard, Holmes Street, Murrieta Boulevard, and East Avenue; these roadways converge in the City's Downtown in a radial system. Interstate 580 (I-580) and State Route 84 (SR 84) provide regional access to Livermore and connect the Bay Area with San Joaquin County.

Livermore enjoys a mild climate characterized by cool winters and warm summers. Average high temperatures range from 56°F in January to 83°F in June. Annual rainfall averages approximately 15.2 inches, with most rainfall occurring between December and March (U.S. Climate Data 2022).

3.2 Project Site Setting

The project alignment is located in southern Livermore, along South Livermore Avenue, Tesla Road, Buena Vista Avenue, and Greenville Road. One portion of the project alignment is located within the City's Sphere of Influence boundary, and another portion is located within the City of Livermore. I-580 is approximately 2.6 miles north of the proposed alignment. The Bottleneck Project is located in segments along East Avenue.

As discussed in Section 2, *Project Description*, the project alignment is located within existing public roadways rights-of-way and does not have a land use or zoning designation. Parcels along the alignment are designated as Agriculture/Viticulture (AGVT), Rural Residential (RR), Urban High Residential (UH), Urban Medium High Residential (UMH), Community Facility (CF) Parks, Trailways, Recreation Area (OSP), Agricultural Preserve (SV-AP), and Vineyard Commercial (SV-VC) land uses.

City-zoned parcels adjacent to the proposed alignment included Planned Development—South Livermore Valley Specific Plan (PD-SLVSP), Education and Institutions (E), Open Space Agriculture (OS-A), and South Livermore Valley Agricultural (SLV-AG) (City of Livermore 2015). County-zoned parcels adjacent to the project alignment include Agriculture, Single Family Residential, and Planned Development (County of Alameda 2021).

3.3 Cumulative Development

As defined in *CEQA Guidelines* Section 15335, “cumulative impacts” refers to two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, transportation impacts of two nearby projects may be insignificant when analyzed separately but could have a significant impact when analyzed together. Cumulative impacts analysis provides a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects. According to *CEQA Guidelines* Section 15130(b), a discussion of significant cumulative impacts shall include a list of past, present, and probably future projects related to cumulative impacts; or a summary of projections contained in an adopted local, regional, or statewide plan that describes or evaluates conditions contributing to the cumulative effect.

The cumulative setting for each environmental issue area is described in Section 4, *Environmental Impact Analysis*. The project alignment is located geographically in the southern portion of Livermore; however, cumulative impacts as analyzed in this Supplemental EIR may be spread throughout Livermore or the region. Cumulative impact discussions of hydrology and water quality, and utilities and service systems, rely on larger geographic areas such as the hydrologic region, watershed, or utility district boundary.

CEQA requires cumulative impact analysis in Supplemental EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. Currently planned and pending projects in Livermore and surrounding areas are listed in Table 3-1. In particular, the 220 Greenville Road Project, 3258/3322 East Avenue Project, 3356 East Avenue Project, and 3451 East Avenue Project are either located in proximity or along the same major arterial as the project alignment or Bottleneck Project. This list of projects is an update to the cumulative setting from the 1997 EIR. The 1997 EIR considered development of cumulative projects through the year 2020; therefore, the cumulative time frame has also been extended in this EIR to account for the passage of time. It should be noted that the projections provided in the 1997 EIR for anticipated growth in the City of Livermore for 2010 exceed the actual growth experienced. In fact, in 2021 the City had a population of 91,216 and 33,004 housing units (California Department of Finance 2021). The 1997 EIR anticipated a population of 98,200 and 35,100 housing units in 2010 for the city.

Table 3-1 Cumulative Projects List

Project No.	Project Location	Land Use	Project Details
County of Alameda¹			
1	8588 Tesla Road	Agriculture: cannabis cultivation	Outdoor cannabis cultivation project on a 4.36-acre parcel.
City of Livermore²			
2	220 Greenville Road	Commercial	111-room Fairfield Inn and Suites hotel
3	2108 Third Street	Mixed-Use	Three-story mixed-use building
4	4696 Bennett Drive	Residential	437-unit residential subdivision, with mixed-unit type buildings
5	3258/3322 East Avenue	Residential	33-unit, three-story residential care facility
6	3356 East Avenue	Residential	7,668-square foot addition to an existing Senior Living Facility, with 13 new beds
7	1934 First Street	Residential/Commercial	221 new apartment units and 12,000 square feet of new commercial development
8	3733 First Street	Residential	101 new townhomes
9	4260 First Street	Residential	Six new apartment buildings with 44 units
10	460 N. Livermore Avenue	Mixed-Use	Mixed-use development with three separate buildings containing 24 total units of low-income housing, a resource center, and a food service kitchen
11	2855 Old First Street	Residential	Subdivision of two parcels with 7 new residential units
12	2787 Old First Street	Residential	Subdivision of two parcels with 7 new residential units
13	3541 East Avenue	Residential	9 new townhomes
14	434-454 School Street	Residential	Three-lot residential subdivision

¹ County of Alameda planned project details were sourced from the County of Alameda Community Development Agency (2021).

² City of Livermore planned project details were sourced from the City of Livermore Community Development Department (2021).

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4 Environmental Impact Analysis

This section discusses the possible environmental effects of the South Livermore Sewer Expansion Project (proposed project) for the specific issue areas that were identified through the scoping process as having the potential to experience significant effects. “Significant effect” is defined by the *CEQA Guidelines* Section 15382 as:

“a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment but may be considered in determining whether the physical change is significant.”

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by the City and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved pursuant to *CEQA Guidelines* Section 15093.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under *CEQA Guidelines* Section 15091.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). These are also summarized in the Executive Summary of this Supplemental EIR. In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other planned and pending developments in the area listed in Section 3, *Environmental Setting*.

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4.1 Hydrology and Water Quality

This section evaluates the potential environmental effects of the proposed project related to water quality, drainage, groundwater, and flooding. The analysis includes a review of surface water, groundwater, inundation zones, and water quality. Water supply is discussed in Section 4.2, *Utilities and Service Systems*. Wetlands and waters of the U.S. are discussed in the Initial Study in Environmental Checklist Section 4, *Biological Resources*, provided as an attachment to this document (Appendix IS). Assessment of impacts is based partially on pertinent analysis provided in the 1997 EIR, which evaluated impacts of development potential under the SLVSP.

4.1.1 Setting

The City of Livermore is located in the easternmost portion of the San Francisco Bay Area of California, approximately 34 miles east of Oakland and 46 miles east of San Francisco within Alameda County. Weather in the City is characterized by a warm and temperate climate with hot, arid summers and cold, wet winters. Rainfall is concentrated in the winter months with the wettest months being January and February, which each have average monthly rainfall totals of 2.9 inches (U.S. Climate Data 2021).

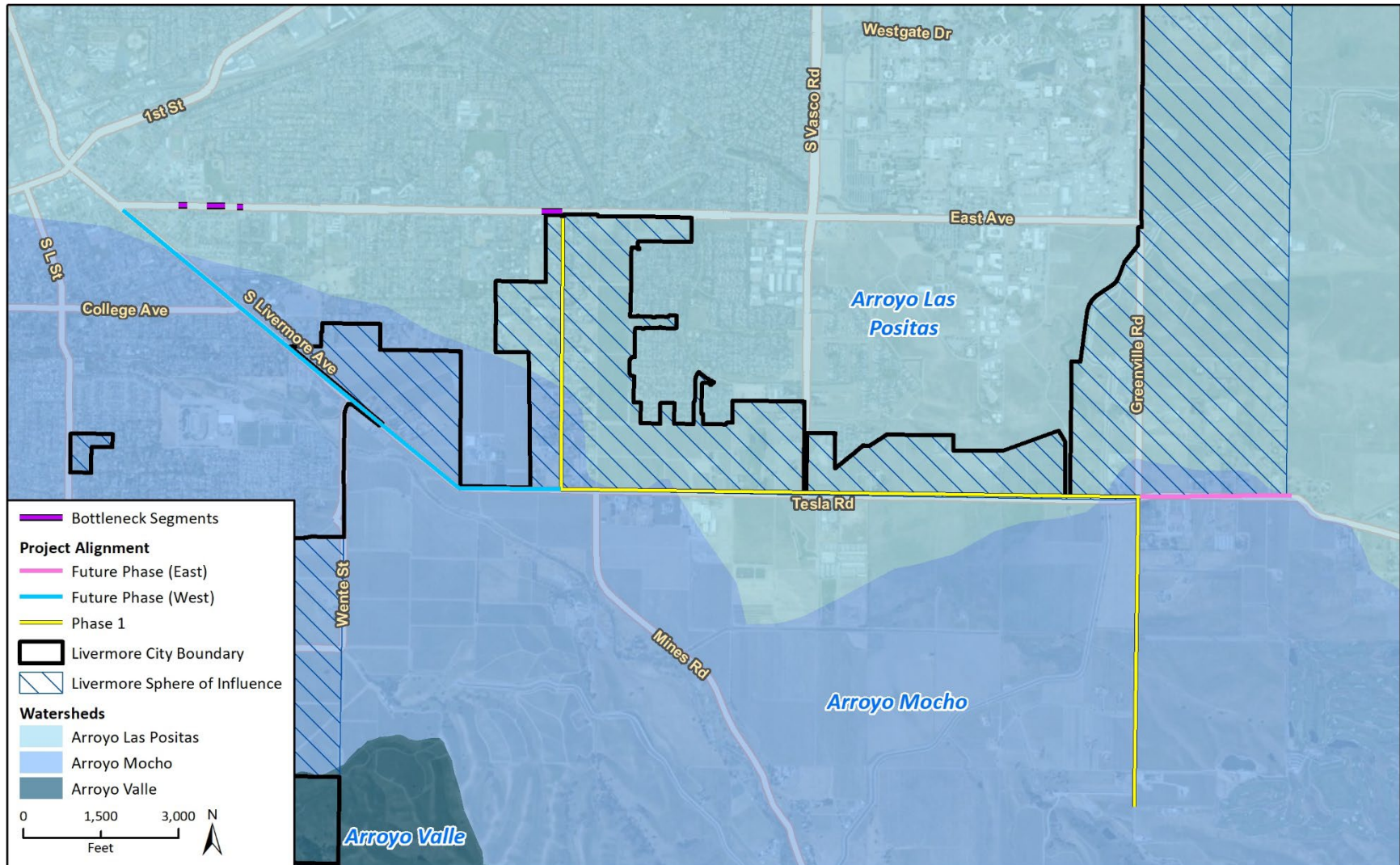
a. Surface Water and Drainage

The California Department of Water Resources (DWR) divides surface watersheds in California into 10 hydrologic regions. The project alignment is within the San Francisco Bay hydrologic region, which covers approximately 4,500 square miles of California. The San Francisco Bay is an estuary with a deep central channel, broad mudflats, and fringing marsh. Water features in the region either flow into the estuary or into the Pacific Ocean. The San Francisco Bay Hydrological Region includes all of San Francisco County and parts of Marin, Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda Counties. Significant geographic features include the Santa Clara, Napa, Sonoma, Petaluma, Suisun-Fairfield, and Livermore valleys; the Marin and San Francisco peninsulas; San Francisco, Suisun, and San Pablo bays; and the Santa Cruz Mountains, Diablo Range, Bolinas Ridge, and Vaca Mountains of the Coast Ranges (DWR 2015).

DWR subdivides hydrologic regions into hydrologic units. Within the San Francisco Bay hydrologic region, the City is located entirely in the South Bay hydrologic unit and is under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB) (Region 2). The State Water Board administers water rights, water pollution control, and water quality functions for the state and provides both policy guidance and budgetary authority to Regional Water Control Boards, who are then able to conduct planning, permitting, and enforcement activities (San Francisco Bay RWQCB 2019).

Within the South Bay hydrologic unit, the project alignment extends across two watersheds: the Arroyo Mocho Watershed (hydrologic unit code 1805000403) and the Arroyo Las Positas Watershed (hydrologic unit code 1805000402) (refer to Figure 4.1-1). The southwestern and southeastern portion of the project alignment, including most of South Livermore Avenue, the western and eastern portions of Tesla Road, the southern portion of Buena Vista Avenue, and all of Greenville Road, is within the Arroyo Mocho Watershed. The remainder of the project alignment including East Avenue, the northern portion of South Livermore Avenue, the central portion of Tesla Road, and the northern half of Buena Vista Avenue, is within the Arroyo Las Positas Watershed.

Figure 4.1-1 Watershed Map



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 Additional data provided by NHD, 2021.

Fig 4.1-1 Watershed Map 20220426

The Arroyo Mocho Watershed drains approximately 97 square miles (University of California [UC] Davis 2021a). Arroyo Mocho originates near Mount Mocho of the Diablo Range in the northeastern corner of Santa Clara County and flows west to meet South San Ramon Creek near Pleasanton and Dublin, where it becomes Arroyo de la Laguna. Arroyo de la Laguna continues west to converge with Alameda Creek, and eventually drains into the San Francisco Bay (United States Geological Survey [USGS] 2021). The Arroyo Mocho Watershed is dominated by agricultural land use designations, but also includes urban areas of Livermore and Pleasanton.

The Arroyo Las Positas Watershed drains approximately 81 square miles (UC Davis 2021b). Arroyo Las Positas originates north of I-580 near the City of Livermore at the confluence of Altamont Creek and Arroyo Seco, and converges with Arroyo Mocho between Pleasanton and Dublin (USGS 2021). The Arroyo Las Positas Watershed is also dominated by agricultural land use designations and includes a portion of Livermore's eastern urban areas.

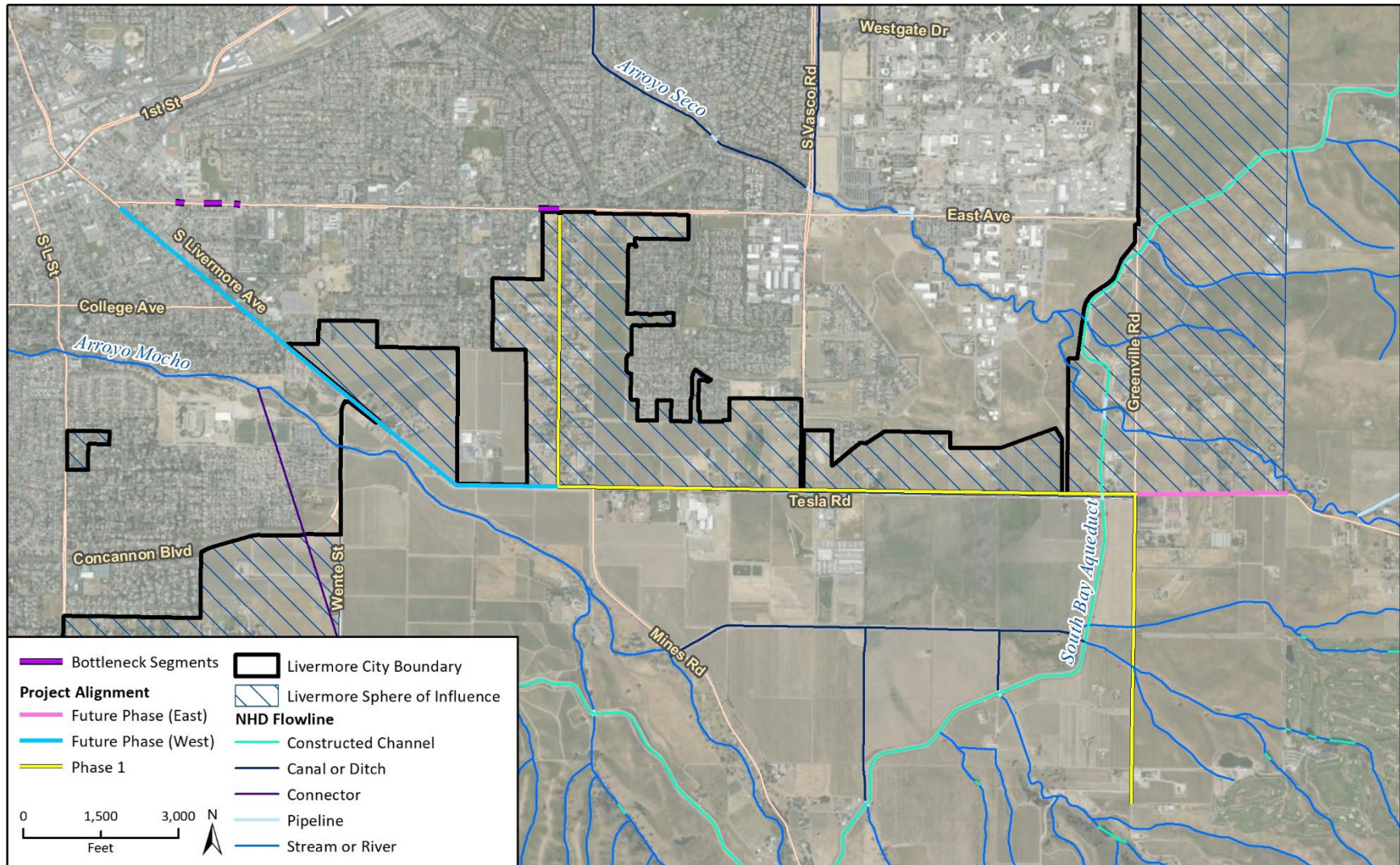
Figure 4.1-2 identifies surface waters and existing drainages, both natural and manmade, in the vicinity of the project alignment. The major surface water features near the project alignment are Arroyo Mocho and Arroyo Seco (City of Livermore 2015). The project alignment is predominately flat, with a gentle slope from approximately 510 feet above mean sea level at the northwestern portion of the project alignment at the intersection of South Livermore Avenue and East Avenue to approximately 720 feet above mean sea level at the southeastern portion of the project alignment at the intersection of Tesla Road and Greenville Road. Overall, surface waters in Livermore Valley drain westerly to the Arroyo de la Laguna and Alameda Creek, eventually reaching the San Francisco Bay and Pacific Ocean. Impervious surfaces within the project alignment include major and minor roadways and impervious surfaces alongside the alignment include residential and commercial development.

Storm drains generally serve the roadways and developed areas of the City. The existing storm drainage system largely consists of underground pipes and local creeks that carry runoff within the drainage basin to nearby flood control channels and arroyos (City of Livermore 2015). The Alameda County Flood Control and Water Conservation District's Zone 7 (Zone 7) owns and maintains the majority of storm drainage facilities, while the City owns the storm drain mains, collection pipes, culverts, and drainage ditches. Storm drain infrastructure (i.e., curb and gutter) is located along East Avenue, South Livermore Avenue, and the portion of Tesla Road west of Mines Road. Catch basins are located on South Livermore Avenue, on Tesla Road at its intersection with Mines Road, and on East Avenue. There is no storm drain infrastructure located along the portion of Tesla Road east of Mines Road, Buena Vista Avenue, or Greenville Road. Stormwater along these roads is transported via roadside ditches. The Alameda County Flood Control and Water Conservation District is ultimately responsible for flood control and stream management along the project alignment (City of Livermore 2015). Stormwater from the project alignment primarily drains from the southeast to the northwest, and eventually to the San Francisco Bay.

b. Groundwater Resources

According to the California Department of Water Resource's Groundwater Bulletin 118, the City of Livermore and the project alignment overlies the Livermore Valley Groundwater Basin (Basin 2-10), which is managed by the Zone 7 Water Agency (Zone 7). The basin is located approximately 40 miles east of San Francisco and 30 miles southwest of Stockton within a structural trough of the Diablo Range. The basin spans from the Altamont Hills 14 miles east to the Pleasanton Ridge and stretches from the Livermore Upland 3 miles north to the Orinda Upland (DWR 2006). The basin includes approximately 772 wells, including water supply wells, domestic and livestock supply wells, and

Figure 4.1-2 Surface Water and Drainage Map



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 Additional data provided by NHD, 2021.

Fig 4.1-2 Surface Waters 20220426

monitoring wells to track groundwater quality and flow patterns. Overall, approximately 30 percent of the total water supply for the Zone 7 service area is extracted from the groundwater basin (Groundwater Exchange 2021).

The general groundwater gradient is east to west, and south towards the Arroyo de la Laguna. Faults are the major structural features that restrict the lateral movement of groundwater in the basin, and the resulting groundwater levels are higher on the up-gradient side (east) in Livermore Valley. Groundwater-bearing materials can be found beneath the entire floor of Livermore Valley and portions of the upland areas surrounding the valley. These materials consist of continental deposits from alluvial fans, outwash plains, and lakes (DWR 2006).

In 2002, the total storage capacity of the Livermore Valley Groundwater Basin was estimated at 500,000 acre-feet (af). Zone 7 maintains an annual hydrologic inventory of supply and demand in the basin. At the end of water year 2020, the total storage capacity of the Livermore Valley Groundwater Basin was estimated at 247,232 af (Zone 7 Water Agency 2021). Table 4.1-1 identifies the inflow and outflow volumes of groundwater in the basin for water year 2020.

Table 4.1-1 Groundwater Basin Inflow and Outflow Volumes

Category	Water Year 2020 (acre-feet)
Total Groundwater Inflow	13,515
Stream Recharge Artificial	2,461
Stream Recharge Natural	3,511
Rainfall Recharge	2,869
Applied Water Recharge	2,465
Pipe Leakage	1,209
Subsurface Inflow	1,000
Total Groundwater Outflow	21,447
Zone 7 Pumping	11,101
Other Pumping	5,248
Agricultural Pumping	112
Mining Losses	700
Evapotranspiration	4,140
Subsurface Outflow	146

Source: Zone 7 Water Agency 2021

Artificial recharge is the practice of increasing the amount of water that enters an aquifer through human-controlled means, which is managed by Zone 7. Natural recharge is not managed or pumped by Zone 7, and rather occurs as water infiltrates into soils and moves through pore spaces down to the water table. Applied water recharge is considered natural recharge because of its steady, sustainable, contribution to groundwater recharge from irrigation (Zone 7 Water Agency 2021). Subsurface inflow comes from the natural flow of water beneath earth’s surface as part of the water cycle; for the Livermore Valley Groundwater Basin, subsurface inflow is from the Northern Fringe Basin, which is a water-bearing area outside of the Main Livermore Valley Groundwater Basin (Zone 7 Water Agency 2021). Similarly, subsurface outflow is overflow groundwater leaving the Basin. Other pumping demands include pumping by the City of Pleasanton, California Water Service, San Francisco Public Utilities Commission, Alameda County Fairgrounds, domestic pumping from active

domestic, supply, and potable wells, and pumping by golf courses (Zone 7 Water Agency 2021). Agricultural pumping in the Livermore Valley Groundwater Basin is unmetered and strictly for agricultural use.

c. Water Quality

Surface Water

Stormwater runoff transports pollutants from urban development, agricultural areas, streets, parking lots, and other sources to local waterways. Major sources of surface water pollution, such as construction sites, parking lots, and household and industrial sites, contribute petroleum hydrocarbons, metals, fertilizers, insecticides, and other chemicals to the water system (City of Livermore 2015). Activities such as land clearing, excavation and filling, illegal dumping, municipal operations, improper disposal of pet waste, and use of fertilizers, pesticides, and herbicides can exacerbate stormwater pollution.

Water quality in the area is governed by the San Francisco Bay RWQCB, which sets water quality standards in the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan, San Francisco Bay RWQCB 2019). The Basin Plan identifies beneficial uses for surface water and groundwater and establishes water quality objectives to attain those beneficial uses. The identified beneficial uses and water quality objectives to maintain or achieve those uses are together known as water quality standards. The San Francisco Bay RWQCB designates beneficial uses for some individual water bodies in the San Francisco Bay Basin. All other water bodies not designated individually are assigned the designated uses of municipal and domestic water supply and protection of recreation and aquatic life. Table 4.1-2 presents the designated beneficial uses listed in the Basin Plan for the surface waters in the vicinity of the project alignment.

Table 4.1-2 Beneficial Uses for Surface Waters

Water Body	Beneficial Uses
Arroyo Mocho	Groundwater Recharge, Cold Freshwater Habitat, Fish Migration, Fish Spawning, Warm Freshwater Habitat, Wildlife Habitat, Water Contact Recreation, Noncontact Water Recreation
Arroyo Las Positas	Groundwater Recharge, Cold Freshwater Habitat, Fish Migration, Preservation of Rare and Endangered Species, Fish Spawning, Warm Freshwater Habitat, Wildlife Habitat, Water Contact Recreation, Noncontact Water Recreation
Arroyo Seco	Groundwater Recharge, Cold Freshwater Habitat, Fish Migration, Preservation of Rare and Endangered Species, Fish Spawning, Warm Freshwater Habitat, Wildlife Habitat, Water Contact Recreation, Noncontact Water Recreation

Source: San Francisco Bay Regional Water Quality Control Board, Basin Plan 2019

Groundwater

As designated in the Basin Plan, existing beneficial uses of groundwater in the Livermore Valley Groundwater Basin include municipal and domestic water supply, industrial process supply, industrial service supply, and agricultural water supply. The four main constituents of concern in groundwater in the main basin, where the majority of the project alignment is located, include total dissolved solids, nitrate, boron, and chromium. Additionally, perfluoroalkyl and polyfluoroalkyl substances (PFAS) were added to the list of analytes for all municipal supply wells and select monitoring wells in the 2019 water year (Zone 7 Water Agency 2021).

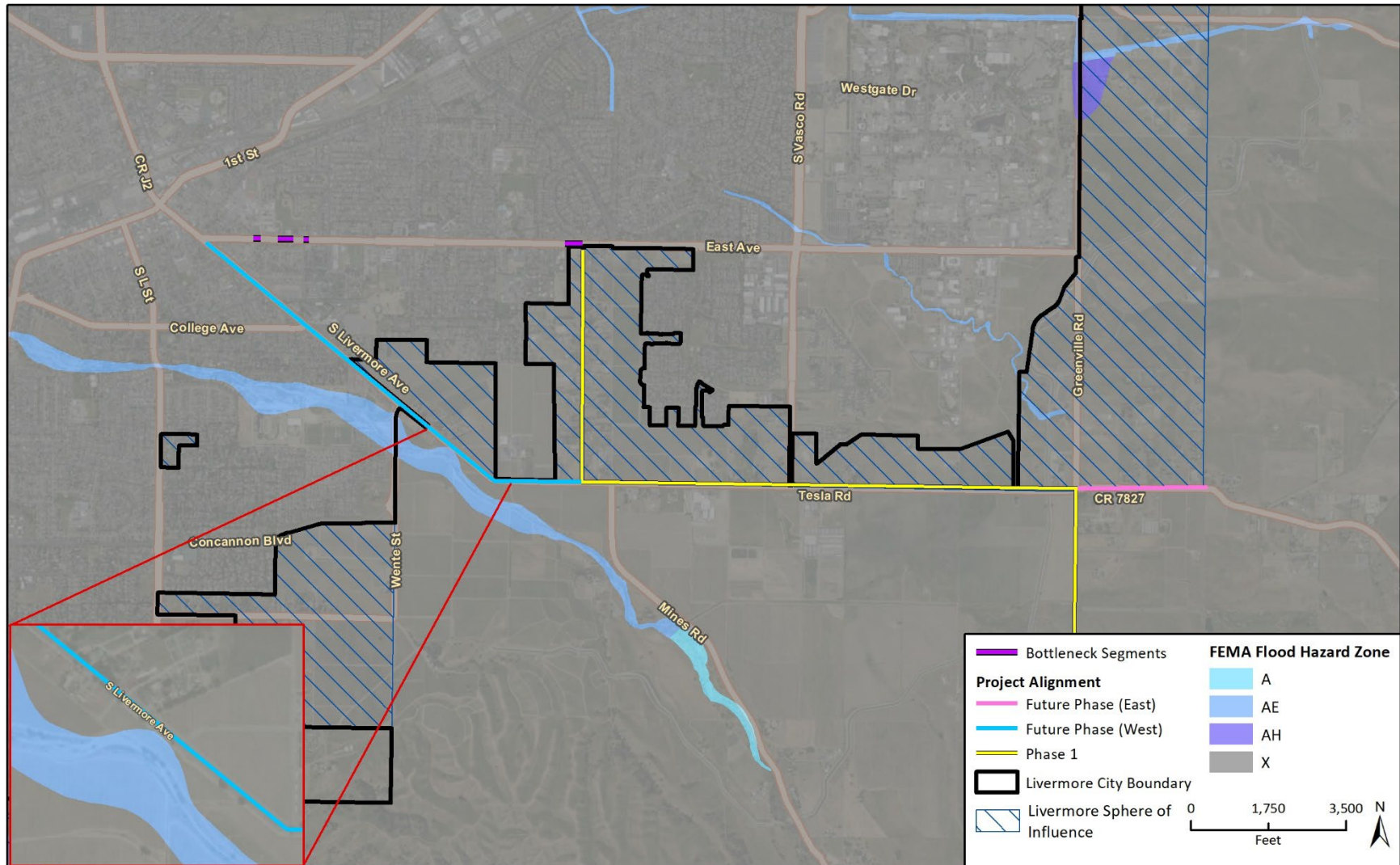
d. Flooding

Flooding during storm events occurs when the amount of rainfall exceeds the infiltration capacity of the surrounding landscape or the conveyance capacity of the stormwater drainage system. Most flooding within the City of Livermore is caused by heavy rainfall and subsequent runoff volumes that cannot be adequately conveyed by the existing storm drainage system combined with surface water bodies (City of Livermore 2015). The Federal Emergency Management Agency (FEMA) delineates regional flooding hazards on Flood Insurance Rate Maps (FIRM) as part of the National Flood Insurance Program. Higher flood risk zones are called Special Flood Hazard Areas; these areas have a 1 percent chance or greater of flooding in any given year (also called the 100-year floodplain). Areas that have a 0.2 percent chance of flooding in any given year are called the 500-year floodplain. As shown in Figure 4.1-3, the project alignment is located outside areas designated by FEMA as being outside of FEMA high flood risk zones. The alignment is located within FEMA Flood Zone X, an area of minimal flood hazard. However, an existing Flood Hazard Zone associated with low-lying areas near Arroyo Mocho is located directly adjacent to South Livermore Avenue, south and southwest of the project alignment near South Livermore Avenue's intersection with Concannon Boulevard (FEMA 2021).

Inundation can sometimes occur as a result of tsunamis and seiches. A tsunami is a wave generated by the sudden displacement of a large amount of water. Tsunamis can be triggered by earthquakes, volcanic eruptions, or similar events that occur under the water or the shore. Impacts of tsunamis can be both immediate and long-term. The project alignment is located approximately 40 miles east of the Pacific Ocean. According to the State of California Tsunami Inundation Map for Emergency Planning, the City of Livermore is not located within a tsunami inundation area (California Department of Conservation 2021). Seiches are a related hazard that can occur when a sudden displacement event or very strong winds happen in an enclosed or semi-enclosed body of water such as a lake or reservoir.

According to the City of Livermore General Plan Public Safety Element, portions of the city are located within the dam failure inundation hazard areas for Lake Del Valle and Patterson Reservoir. Patterson Dam is located east of Greenville Road and north of Patterson Pass Road, approximately 2.25 miles northeast of the project alignment, while the Del Valle Dam is located at the northern end of Lake Del Valle south of Tesla Road and west of Mines Road, approximately 4 miles south of the project alignment. The depth of inundation resulting from dam failure would vary from near zero at topographic highs or uplands to many feet in low-lying areas and in creek channels. However, the project alignment falls outside of the inundation hazard areas.

Figure 4.1-3 FEMA Flood Zones



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 Additional data provided by FEMA, 2021.

Fig 4.1-3 Floodplain Map 20220426

4.1.2 Regulatory Setting

a. Federal

Clean Water Act

The Federal Clean Water Act (CWA), enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The Clean Water Act established the basic structure for regulating discharges of pollutants into the waters of the United States. The Clean Water Act gave the United States Environmental Protection Agency (USEPA) the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the Clean Water Act is administered by the USEPA and United States Army Corps of Engineers (USACE). At the state and regional levels in California, the Clean Water Act is enforced by the State Water Resources Control Board (SWRCB) and the nine RWQCBs.

Section 303(d): List of Impaired Water Bodies

Section 303(d) of the Clean Water Act requires states to identify water bodies that do not meet water quality objectives and are not supporting their beneficial uses. Each state must submit an updated biennial list identifying which water bodies are impaired, called the 303(d) list, to the USEPA. In addition to identifying the water bodies that are not supporting beneficial uses, the list also identifies the pollutant or stressor causing impairment and establishes a priority for developing a control plan to address the impairment. If a water body is designated as “impaired,” then a Total Maximum Daily Load (TMDL) is developed and identified for the affected water body. A TMDL establishes the maximum daily amount of a pollutant from point, nonpoint, and natural sources that a water body can receive without exceeding applicable water quality standards (often with a “factor of safety” included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body.

Arroyo Mocho is listed on the 303(d) list as impaired for diazinon, a pesticide, and for eutrophication (SWRCB 2018). Arroyo Las Positas is listed on the 303(d) list as impaired for diazinon and for water temperature (SWRCB 2018). The potential source of diazinon is urban runoff and storm sewers, while the potential source of eutrophication and water temperature impairment is unknown (SWRCB 2018). A TMDL was approved by the USEPA for both Arroyo Mocho and Arroyo Las Positas for diazinon impairment on May 16, 2017, with an expected TMDL completion date of 2021 (SWRCB 2018).

Section 401

Under Section 401 of the Clean Water Act, the State RWQCBs have regulatory authority over actions in waters of the United States and the State of California through the issuance of water quality certifications, which are issued in conjunction with any federal permit (e.g., permits issued by the USACE under Section 404 of the Clean Water Act, described below). Section 401 of the Clean Water Act provides the SWRCB and the RWQCBs with the regulatory authority to waive, certify, or deny any proposed activity that could result in a discharge to surface waters of the State. To waive or

certify an activity, these agencies must find that the proposed discharge would comply with State water quality standards, including those protecting beneficial uses and water quality. If these agencies deny the proposed activity, the federal permit cannot be issued. This water quality certification is generally required for projects involving the discharge of dredge or fill material to wetlands or other bodies. Jurisdictional streambeds and associated riparian habitat are also regulated by the California Department of Fish and Wildlife under Section 1602 of the California Fish and Game Code.

Section 402: National Pollutant Discharge Elimination System

In 1987, amendments to the CWA added Section 402, which established a framework to protect water quality by regulating industrial, municipal, and construction-related sources of pollutant discharges to waters. In California, the NPDES program is administered by the SWRCB through the RWQCBs, and requires municipalities to obtain permits outlining programs and activities to control wastewater and stormwater pollution.

The CWA prohibits discharges of stormwater from construction projects unless the discharge is in compliance with an NPDES permit. The SWRCB, which is the permitting authority in California, adopted an NPDES *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit) (Order 2009-0009, as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). Compliance with the Construction General Permit is required for projects that result in more than one acre of ground disturbance, including through clearing, grading, grubbing, excavating, stockpiling, and removing or replacing existing facilities. The Construction General Permit requires the landowner and/or contractor to file permit registration documents prior to commencing construction and pay a fee annually throughout the duration of construction. These documents include a notice of intent, risk assessment, site map, stormwater pollution prevention plan (SWPPP), and signed certification statement. The Construction General Permit specifies minimum BMP requirements for stormwater control based on the risk level of the site. The SWPPP must include measures to ensure the following:

- All pollutants and their sources are controlled;
- Non-stormwater discharges are identified and eliminated, controlled, or treated;
- Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges; and
- BMPs installed to reduce or eliminate pollutants post-construction are completed and maintained.

Section 404

Under Section 404 of the Clean Water Act, proposed discharges of dredged or fill material into waters of the United States require USACE authorization. Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), and wetlands (with the exception of isolated wetlands). The USACE identifies wetlands using a multi-parameter approach, which requires positive wetland indicators in three distinct environmental categories: hydrology, soils, and vegetation. According to the USACE (1987) Wetlands Delineation Manual, except in certain situations, all three parameters must be satisfied for an area to be considered a jurisdictional wetland. When an application for a Section 404 permit is made, the applicant must show it has:

- Taken steps to avoid impacts to wetlands or waters of the U.S. where practicable;
- Minimized unavoidable impacts on waters of the U.S. and wetlands; and
- Provided mitigation for unavoidable impacts.

National Flood Insurance Program

The National Flood Insurance Program is a program administered by the Federal Emergency Management Agency (FEMA) to provide subsidized flood insurance for property owners in communities. The National Flood Insurance Program established regulations that limit development in flood-prone areas. The boundaries of flood-prone areas are delineated on FEMA's Flood Insurance Rates Maps, which provide flood information and identify the flood hazard in the community. In certain high-risk areas, federally regulated or insured lenders require property owners to have flood insurance before issuing a mortgage.

b. State

Porter-Cologne Water Quality Control Act of 1970

The federal Clean Water Act places the primary responsibility for the control of water pollution and planning the development and use of water resources with the states, although it does establish certain guidelines for the states to follow in developing their programs. California's primary statute governing water quality and water pollution is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code). The Porter-Cologne Act grants the SWRCB and RWQCBs the authority and responsibility to adopt plans and policies, to regulate discharges to surface water and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product. Each RWQCB must formulate and adopt a water quality control plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that an RWQCB may include in its region a regional plan with water discharge prohibitions applicable to particular conditions, areas, or types of waste. The project alignment is within the jurisdictional boundaries of the San Francisco Bay RWQCB (Region 2), which has adopted a Water Quality Control Plan, discussed below.

California Toxics Rule

Because California had not established a complete list of acceptable water quality criteria for toxic pollutants, EPA Region IX established numeric water quality criteria for toxic constituents in the form of the California Toxics Rule (CTR). The CTR provides water quality criteria for certain potentially toxic compounds for inland surface waters, enclosed bays, estuaries, and waters designated for human health or aquatic life uses. The CTR is often used by the RWQCBs when establishing water quality objectives and TMDLs. Although the CTR criteria do not apply directly to discharges of stormwater runoff, they are utilized as benchmarks for toxics in urban runoff. The CTR is used as a benchmark to evaluate the potential ecological impacts of stormwater runoff to receiving waters. The CTR establishes acute and chronic surface water quality standards for certain water bodies. Acute criteria provide benchmarks for the highest permissible concentration below which aquatic life can be exposed for short periods of time without deleterious effects. Chronic criteria provide benchmarks for an extended period of time (i.e., four days or more) without

deleterious effects. The acute CTR criteria have a shorter relevant averaging period (less than four days) and provide a more appropriate benchmark for comparison for stormwater flows.

CTR criteria apply to the receiving water body and are calculated based on the probable hardness values of the receiving waters. At higher hardness values for receiving waters, certain constituents (including copper, lead, and zinc) are more likely to be complexed (bound with) components in the water column. This in turn reduces the bioavailability and resulting potential toxicity of these metals.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) of 2014 is a comprehensive three-bill package that provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention, if necessary, to protect the resource. The plan is intended to ensure a reliable groundwater supply for California for years to come. The SGMA requires governments and water agencies of high- and medium-priority basins to halt overdrafts of groundwater basins. The SGMA requires the formation of local groundwater sustainability agencies that are required to adopt groundwater sustainability plans to manage the sustainability of the groundwater basins.

The project alignment falls within the jurisdiction of the Zone 7 Water Agency, which has been designated as the exclusive Groundwater Sustainability Agency within its service area. Zone 7 adopted its first Groundwater Management Plan in 2005, prior to the enactment of SGMA, to document ongoing policies and programs for managing groundwater to support existing and beneficial uses in Livermore Valley. Zone 7 adopted an Alternative Groundwater Sustainability Plan for the Livermore Valley Groundwater Basin in December 2016, and prepares an annual report of the groundwater basin that summarizes the basin conditions over the standard water year from October to September.

c. Regional and Local

Municipal Regional Stormwater Permit

The Municipal Stormwater Permitting Program regulates stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s). The NPDES MS4 permits in California are generally issued in two phases by the SWRCB and RWQCBs. Phase I MS4 permits are issued by the RWQCBs to medium (i.e., serving between 100,000 and 250,000 people) and large (i.e., serving more than 250,000 people) municipalities. Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. Phase II MS4 permits are issued by the SWRCB and is applicable to smaller municipalities (i.e., populations of less than 100,000 people) and nontraditional small MS4s (e.g., military bases, public campuses, and prison and hospital complexes).

On November 19, 2015, the San Francisco Bay RWQCB re-issued county-wide Phase 1 municipal stormwater permits as one Municipal Regional Stormwater NPDES Permit to regulate stormwater discharges from municipalities and local agencies in Alameda, Contra Costa, San Mateo, and Santa Clara counties, and the cities of Fairfield, Suisun City, and Vallejo. The Municipal Regional Stormwater NPDES Permit (California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049, NPDES No. CAS612008) became effective on November 19, 2015 and covers Phase I permittees regionwide, including the City of Livermore and unincorporated areas of Alameda County. The Phase I, Phase II, and Regional MS4 Permits require the permittees to develop a stormwater management program

and individual dischargers to develop and implement Stormwater Quality Management Plans (SWMP) to manage discharges to municipal storm drain systems.

San Francisco Bay Water Quality Control Plan

The San Francisco Bay RWQCB has adopted a Water Quality Control Plan (Basin Plan) for their region of responsibility that delineates water resource area boundaries based on hydrological features. For the purposes of achieving and maintaining water quality protection, specific beneficial uses have been identified for each of the surface waters and groundwater management zones described in the Basin Plan. Once beneficial uses are designated, appropriate water quality objectives are established, and programs that maintain or enhance water quality are implemented to ensure the protection of beneficial uses.

The Basin Plan also established implementation programs to achieve water quality objectives to protect beneficial uses and require monitoring to evaluate the effectiveness of the programs. These objectives must comply with the State antidegradation policy (SWRCB Resolution No. 68-16), which is designed to maintain high-quality waters while allowing some flexibility if beneficial uses are not unreasonably affected.

Zone 7 Water Agency Alternative Groundwater Sustainability Plan

The Zone 7 Alternative Groundwater Sustainability Plan (GSP) fulfils the requirement for a Groundwater Sustainability Agency to prepare either a GSP or an Alternative Plan that covers the entire groundwater basin. The Zone 7 Alternative GSP demonstrates that the basin has been operating within a sustainable yield for at least 10 years. A sustainable yield is defined by SGMA as the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin, that can be withdrawn annually from a groundwater supply without causing an undesirable result (Zone 7 Water Agency 2016). The purpose of the Alternative GSP is to characterize current and historical groundwater conditions in the basin and to detail groundwater use, groundwater occurrence and flow, groundwater levels, groundwater in storage, groundwater quality, potential subsidence, and surface water-groundwater interactions in order to evaluate the sustainability of Zone 7's groundwater management criteria. The Alternative GSP also develops a current water budget while identifying the projected water budget and future groundwater management.

Overall, Zone 7's ongoing sustainable management goal is to continue to operate the Livermore Valley Groundwater Basin within its sustainable yield and to manage the groundwater resources to prevent significant and unreasonable lowering of groundwater levels, reduction in basin storage, degradation of groundwater quality, inelastic land subsidence, or depletion of surface water supplies that may adversely impact beneficial uses (Zone 7 Water Agency 2016). To achieve this sustainable management goal, the Alternative GSP adopted a series of policies, ordinances, and basin management objectives. Primary objectives outlined in the Alternative GSP include, but are not limited to, maintaining the balance between the combination of natural and artificial recharge and withdrawal; preventing overdraft that would otherwise occur from too much pumping; protecting and enhancing the quality of the groundwater; minimizing threats of groundwater pollution through groundwater protection; and protecting the storage capacity of the aquifer.

Alameda Clean Water Program

The Alameda Countywide Clean Water Program works to facilitate local compliance with the Federal Clean Water Act by reducing or eliminating the pollution of receiving waters. The Alameda County Public Works Clean Water Program works closely with the Countywide Clean Water Program to prevent water pollution from urban runoff in unincorporated areas of Alameda County. The program includes public outreach, inspection of industrial areas, assessment and monitoring of watersheds, and monitoring of construction sites. Overall, the Clean Water Program ensures that Alameda County meets the requirements of its Municipal Regional Stormwater Permit with the San Francisco Bay RWQCB.

Alameda County General Plan

The Alameda County General Plan was adopted by the County Board of Supervisors in on November 23, 1976 and amended in May 1994. The General Plan acts as a long-range policy document to guide physical, economic, and environmental growth in Alameda County. The Plan expresses the County's vision for the future and is the roadmap for achieving the community's desired quality of life. The Plan also includes an assessment of current and future needs, and the resources needed to implement the goals and policies established within (County of Alameda 2022). The General Plan Conservation Element and Safety Element contain the following goals and objectives relevant to the proposed project (County of Alameda 2022):

Conservation Element Goal: To insure and maintain a continuing supply of high water quality for the citizens of Alameda County.

- Objective 1:** To insure sufficient water supplies of high quality for all beneficial uses.
- Objective 2:** To conserve ground water resources and prevent overdraft of existing ground water supplies.
- Objective 3:** To define areas of periodic flooding and reduce loss through the application of sound land use planning.
- Objective 4:** To reduce man-caused stream and ground water pollution and general resource degeneration through cumulative impacts on surface and ground water systems.
- Objective 5:** To maintain all water resources in their highest quality.
- Objective 6:** To educate government, business and citizens to assist in the conservation of water and energy and to minimize pollution.
- Objective 7:** Through sound design of drainage systems throughout the County and by regulation of land use, erosion or soil caused by water could be controlled.
- Objective 8:** To achieve coordination of state, regional, and local water management agencies and policies throughout the County.

Safety Element Goal 3: To reduce hazards related to flooding and inundation.

Policy P1: Within flood hazard areas, all new construction of buildings, structures, and portions of buildings and structures, including substantial improvement and restoration of substantial damage to buildings and structures, shall be designed and constructed to resist the effects of flood hazards and flood loads.

Policy P2: Surface runoff from new development shall be controlled by on-site measures including, but not limited to structural controls and restrictions regarding changes in topography, removal of vegetation, creation of impervious surfaces, and periods of construction such that the need for off-site flood and drainage control improvements is minimized and such that runoff from development will not result in downstream flood hazards.

Policy P10: The County shall work with the Alameda County Flood Control and Water Conservation District and Zone 7 Water Agency to provide for development of adequate storm drainage and flood control systems to serve existing and future development.

Policy P13: The County shall regulate new development on a case-by-case basis to ensure that project storm drainage facilities shall be designed so that peak rate flow of storm water from new development will not exceed the rate of runoff from the site in its undeveloped state.

South Livermore Valley Area Plan

The County of Alameda adopted the South Livermore Valley Area Plan (SLVAP) in November 1992 to create a planned area that preserves, promotes, and enhances viticulture and other cultivated agriculture. The SLVAP is a policy document that establishes criteria for future development for approximately 15,500 acres of undeveloped land in unincorporated areas south and east of the City of Livermore. SLVAP policies relevant to the proposed project include the following (County of Alameda 2003):

Agricultural Preservation and Enhancement Policy 9: Encourage the development of additional sources of irrigation water for vineyards and other cultivated agriculture by investigating wastewater reclamation and development of other supply and delivery resources. Encourage Zone 7 to consider developing a pump monitoring and cost allocation system to cover the cost of new water in the event that additional supplies are needed.

Land Use Vineyard Area Policy 2A: The applicant must show, to the satisfaction of the County, that adequate water supplies are available to the proposed parcels for both domestic and irrigation needs, and that all proposed homesites can be served by individual septic systems. The County shall consult with the appropriate water purveyor.

Land Use Vineyard Area Policy 2G: The applicant must meet the following site development review standards: (i) Parcels that include, or are adjacent to, arroyos shall maintain a minimum 100 foot uncultivated and undeveloped buffer, as measured from top of bank.

Annexation and Urban Development Policy 2: Require any urban development proposal within the Vineyard Area to meet the following criteria, at a minimum:

- A. All necessary public utilities and services are available.
- B. The project will contribute funds for a recycled water treatment system. Contributions should equal or exceed the cost of providing recycled water equal in volume to 120% of anticipated water use of the development,

East County Area Plan

The East County Area Plan was adopted by the County Board of Supervisors on May 5, 1994, and amended in 2000 with intent to provide a clear statement concerning future development and resource conservation in East County. The East County encompasses 418 square miles of eastern Alameda County including the cities of Dublin, Livermore, Pleasanton, a portion of Hayward, and surrounding unincorporated areas. The policies and implementation programs discussed within the East County Area Plan are similar to the components within the Alameda County General Plan. The policies and implementation programs in the East County Area Plan relevant to meeting water quality goals are listed below (County of Alameda 2000).

Policy 306: The County shall protect surface and groundwater resources by:

- Preserving areas with prime percolation capabilities and minimizing placement of potential sources of pollution in such areas;
- Minimizing sedimentation and erosion through control of grading, quarrying, cutting of trees, removal of vegetation, placement of roads and bridges, use of off-road vehicles, and animal-related disturbance of the soil;
- Not allowing the development of septic systems, automobile dismantlers, waste disposal facilities, industries utilizing toxic chemicals, and other potentially polluting substances in creekside, reservoir, or high groundwater table areas when polluting substances could come in contact with flood waters, permanently or seasonally high groundwaters, flowing stream or creek waters, or reservoir waters; and
- Avoiding establishment of excessive concentrations of septic systems over large land areas.

- **Implementation Program 108.** The County shall implement all federal, state and locally imposed statutes, regulations, and orders that apply to stormwater quality. Examples of these include, but are not limited to:
 - National Pollutant Discharge Elimination System (NPDES) stormwater permit issued by the California Regional Water Quality Control Board (RWQCB) to the Alameda County Urban Runoff Clean Water Program and amendments thereto;
 - State of California NPDES General Permit for Stormwater Discharges (General Industrial Permit, General Construction Permit) and amendments thereto;
 - Water Quality Control Plan, San Francisco Bay Basin Region (Basin Plan) and amendments thereto; and
 - Letters issued by the RWQCB under the California Porter-Cologne Water Quality Act.
- **Implementation Program 109.** The County shall endeavor to minimize herbicide use by public agencies by reviewing existing use and applying integrated pest management principles, such as mowing and mulching, in addition to eliminating or scaling back the need for vegetation control in the design phase of a project.
- **Implementation Program 110.** The County shall conform with Zone 7 Wastewater Management Plan and the Regional Water Quality Control Board's San Francisco Bay Basin Plan.

Alameda County Codes and Ordinances

Section 13.08.070 of the Alameda County Codes and Ordinances prohibits the discharge of non-stormwater discharges to the waters of the United States or to the county storm drain system

unless it is regulated under an NPDES permit issued to the discharger and administered by the state under the authority of the USEPA. Similarly, Section 13.08.080 prohibits any discharge that would result in or contribute to a violation of the county NPDES permit. Section 13.08.100 requires any person engaged in activities that could result in pollutants entering the waters of the United States or the county storm drain system to undertake all practicable measures to reduce or eliminate such pollutants. In addition, Section 13.08.100 requires each discharger identified in a Municipal NPDES permit relating to stormwater discharges to comply with and undertake all activities required by the NPDES permit, including compliance with Best Management Practices (BMPs). Section 13.12.090 prohibits any person to discharge or connect to any pipe or channel to a watercourse.

Section 15.36.060 prohibits grading to be undertaken in such a manner that quantities of dirt, soil, rock, debris, or other material substantially in excess of natural levels are washed, eroded, or otherwise discharged into a watercourse, a flood control facility, or other drainage system by the forces of nature, or could be so washed, eroded, or discharged onto, within, or from the site. Similarly, Section 15.36.070 prohibits grading that obstructs, impedes, or interferes with the natural flow of stormwater in such manner as to cause flooding where it would not otherwise occur, aggravate any existing flooding condition, cause accelerated erosion, or result in an illicit discharge, except where said grading is in accordance with all applicable laws, ordinances, and regulations of the county, including but not limited to the requirement to obtain a permit or permits where so specified. Section 15.36.600 outlines the requirements that apply to erosion and sediment controls from grading operations, and Section 15.36.652 prohibits grading work within any area designated as a floodplain.

City of Livermore General Plan 2003-2025

The City of Livermore General Plan Infrastructure and Public Services Element contains goals, policies, and actions that support the protection and availability of water resources within the City. The General Plan Open Space and Conservation Element contains goals, policies, and actions that ensure the comprehensive and long-range preservation and management of open space land for the protection of natural resources. Finally, the General Plan Public Safety Element contains goals, policies, and actions that are designed to protect the community as much as possible from seismic, flood, geologic and wildfire hazards. The following goals, objectives, and policies from the City's General Plan apply to the proposed project (City of Livermore 2015):

Goal INF-1: Provide sufficient water supplies and facilities to serve the City in the most efficient and financially sound manner, while maintaining the highest standards required to enhance the quality of life for existing and future residents.

Policy INF-1.1 P5: Development will not result in a reduction of water quality below those standards set forth in State and federal laws and regulations.

Goal INF-3: Collect, store, and dispose of stormwater in ways that are safe, sanitary, environmentally acceptable, and financially sound while maintaining the highest standards required to enhance the quality of life for existing and future residents.

Policy INF-3.1 P1: Design local storm drainage improvements to carry appropriate design-year flows resulting from build out of the General Plan.

Objective INF-3.2: Encourage coordination between land use planning, site design and stormwater pollution control.

South Livermore Sewer Expansion Project

Policy INF-3.2 P3: The City shall take all necessary measures to regulate runoff from urban uses to protect the quality of surface and ground-waters and other resources from detrimental conditions.

Objective INF-3.3: Maintain creeks and arroyos in as natural a state as possible, while maintaining the health and safety of residents, providing flood control, preserving habitat and providing recreational use.

Policy INF-3.3 P5: New development shall be required to incorporate appropriate measures to minimize the impacts of stormwater runoff to local creeks and channels.

Goal OSC-2: Conserve Livermore’s waterways, tributaries and associated riparian habitats.

Objective OSC-2.1: Continue efforts to ensure that development does not harm the quality or quantity of Livermore’s surface or ground water.

Policy OSC-2.1 P1: Require the implementation of BMPs to minimize erosion, sedimentation, and water quality degradation resulting from the construction of new impervious surfaces.

Policy OSC-2.1 P2: The City shall take all necessary measures to regulate runoff from urban uses to protect the quality of surface and ground water.

Goal PS-2: Reduce hazards related to flooding or inundation.

Objective PS-2.1: Minimize flood risks to development.

Policy PS-2.1 P2: When feasible, arroyos and creeks shall be preserved in their natural state, and shall not be channelized or otherwise altered. Floodways should remain undeveloped and be allowed to function as natural flood protection features where flood waters are temporarily stored and conveyed during intense storms.

City of Livermore Municipal Code

Section 13.25.100 of the Livermore Municipal Code (LMC) requires grading of a project site be designed to minimize soil erosion, runoff, and water waste. Section 13.32.050 prohibits unauthorized discharges to the City’s sanitary sewer system. Section 13.45.030 prohibits discharge of non-stormwater discharges to the city storm sewer system, and Section 13.45.040 prohibits discharge that would result in or contribute to a violation of the most currently-issued and effective NPDES permit. Section 13.45.090 requires construction contractors to provide filter materials at catch basins to retain debris and dirt flowing into the City’s storm sewer system. Section 13.45.110 requires use of best management practices for any activity, operation, or facility which may cause or contribute to stormwater pollution or contamination. Section 16.08.070 prohibits any person from degrading the water quality of flowing water. Chapter 16.12 of the LMC regulates development within flood hazard zones, including the control of filling, grading, dredging and other development which may increase erosion or flood damage.

South Livermore Valley Specific Plan

The South Livermore Valley Specific Plan (SLVSP) was adopted by the City of Livermore in November 1997 and amended in February 2004. Subareas 1 and 2 of the SLVSP are located adjacent to the project alignment. The following policies from the SLVSP apply to the proposed project and/or development potential of parcels served by the proposed project (City of Livermore 1997):

Policy 8-19: A detailed drainage design plan will be prepared for each development area and submitted as part of each tentative subdivision map application. The drainage plan must document pre- and post-development flows in the critical channel reaches within the project watershed and the available flow capacity in any off-site drainage systems proposed for discharge from planning area development.

Policy 8-20: Peak period discharge rates shall not increase off-site flood hazards or exceed the design capacity of any off-site drainage facility. Before designing and building any drainage improvements, sponsors of individual projects should consult the City of Livermore's Master Drainage Plan and the supplemental Drainage Facilities Planning Guidelines. All improvements should adhere to those City requirements and guidelines. In addition, hydraulic structures (such as storm drains and culverts) should be over-sized to accommodate sediment and debris conveyed in stormwater runoff.

Policy 8-21. Consistent with the rural image of the planning area, encourage the use of permeable surface drainage and runoff detention systems both inside and outside the development areas. The use of grass-lined swales and detention basins is encouraged wherever feasible as a means of: 1) minimizing the increase in the rate and volume of stormwater runoff associated with new urban development, 2) maximizing the potential for groundwater recharge, and 3) filtering the urban pollutants that get carried into the major drainage channels.

Policy 8-22. Require proposed development to provide drainage facilities which minimize impact upon existing streams and arroyos.

Policy 8-23: For all agricultural mitigation land required by Specific Plan development, require preparation of an agricultural sediment management plan for each parcel of grassland converted to vineyard cultivation within the proposed City limits. Such plans should describe appropriate erosion control measures and schedules to operate and maintain related facilities (such as detention / sediment basins). Each plan should reflect consultation with and input of the Natural Resource Conservation Service (NRCS) in Livermore and should implement NRCS recommendations. Sufficient optional measures are available to enable each property owner flexibility to satisfy the requirements for erosion and sedimentation control for the particular parcel without significant loss of arable land.

Policy 8-24: Prepare and implement a comprehensive Stormwater Pollution Prevention Plan (SWPPP) for each residential development project and / or commercial facility built in the SLVSPA. The SWPPP must accompany any application to the Regional Water Quality Control Board for General Construction Activity Stormwater Permit (required for any development which would disturb more than five acres of land) The SWPPP should be submitted to the City of Livermore Engineering Department for review and approval before construction begins. No grading should occur during the winter season, and, therefore, grading activities should be restricted to the period between April 1 and October 15.

Policy 8-25: Install adequate energy dissipation at all culvert outlets to deter local channel incision and erosion.

Policy 8-26: For all earthen (defined) channel reaches within new or established drainageways, install geosynthetic stabilization or targeted natural stabilization to deter erosion and channel incision. Full lining of earthen channels with concrete or rock rip rap shall be prohibited in favor of vegetated channels. The vegetated channels can be

stabilized with occasional rock grade checks and / or biodegradable or geosynthetic elements (such as long-life erosion control blanket or geoweb).

4.1.3 Impact Analysis

a. Methodology and Significance Thresholds

This section identifies the potential environmental impacts from construction of the proposed project related to hydrology and water quality. Assessment of impacts is based on review of site information and conditions, pertinent analysis provided in the 1997 EIR, and an assessment of baseline conditions in the project vicinity including watersheds and surface waters, groundwater, and inundation areas, as described above under Section 4.1.1, *Setting*. Potential impacts to hydrology and water quality are evaluated based on the adherence to local, State, and federal standards and implementation of BMPs for control of surface runoff and reduction of pollutants in stormwater runoff.

The following thresholds of significance are based on *CEQA Guidelines* Appendix G. For the purposes of this Supplemental EIR, implementation of the proposed project may have a significant impact if it would:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface of ground water quality.
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
3. 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 that 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.
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

b. Prior Environmental Analysis

Chapter 4.3 (Hydrology, Drainage, and Water Quality) of the 1997 EIR analyzes the SLVSP's impacts related to water quality standards, groundwater supplies, impervious surfaces, and flooding. The 1997 EIR does not address the issues of conflicts or obstruction of implementation of a water quality control plan or sustainable groundwater management plan, as this was not yet included as a significance criterion used to analyze project impacts to hydrologic conditions under CEQA. The project would involve the construction of new sewer pipelines that were not analyzed in the 1997 EIR and could therefore result in new impacts related to hydrology and water quality. Therefore, all

the CEQA checklist items listed above under the *Methodology and Significance Thresholds* section are addressed in this analysis.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact HYD-1 CONSTRUCTION OF THE PROPOSED PROJECT COULD RESULT IN AN INCREASE IN POLLUTANTS IN STORMWATER AND WASTEWATER VIA RUNOFF DURING GRADING AND EXCAVATION ACTIVITIES IN THE VICINITY OF EXISTING SURFACE WATER RESOURCES AND STORM DRAIN INFRASTRUCTURE. COMPLIANCE WITH NPDES PERMIT REQUIREMENTS, LIVERMORE MUNICIPAL CODE REQUIREMENTS, ALAMEDA COUNTY CODES AND ORDINANCES, AND LIVERMORE GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES WOULD PREVENT SUBSTANTIAL DISCHARGES OF POLLUTANTS VIA STORMWATER RUNOFF. SUCH COMPLIANCE WOULD MINIMIZE ADVERSE EFFECTS ON WATER QUALITY. IN ADDITION, THE DISUSE AND REMOVAL OF EXISTING RESIDENTIAL SEPTIC SYSTEMS WOULD RESULT IN AN OVERALL IMPROVEMENT IN GROUNDWATER QUALITY IN THE PROJECT VICINITY. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Construction

Project construction would occur along existing paved roadways and would involve removal of the existing roadbed, grading and excavation, installation of the new sewer pipe, backfill of the trench, and repaving. Once an area is complete, the contractor would install final paving over the trench. Construction activities could result in temporary impacts to water quality due to runoff leaving active construction areas along the project alignment in the proximity of nearby water resources and storm drain infrastructure. Such nearby water resources include Arroyo Mocho, located approximately 265 feet southwest of the project alignment at its closest point to South Livermore Avenue, and Arroyo Seco, located approximately 150 feet east of the easternmost portion of the project alignment on Tesla Road. Arroyo Mocho flows generally parallel to the project alignment along South Livermore Avenue while Arroyo Seco crosses Greenville Avenue approximately 1,200 feet north of the project alignment and flows parallel to the project alignment as it nears Tesla Road. Such nearby storm drain infrastructure includes curb and gutter along East Avenue, South Livermore Avenue, and the portion of Tesla Road west of Mines Road, and catch basins on South Livermore Avenue, on Tesla Road at its intersection with Mines Road, and on East Avenue.

Excavation activities during construction have the potential to impact water quality through erosion and debris carried in runoff. Project construction would involve heavy equipment that could also result in an increase in fuel, oil, and lubricants in stormwater runoff due to leaks or accidental releases. These contaminant sources could degrade the water quality of receiving water bodies (i.e., the Arroyo Mocho located approximately 265 feet southwest of the project alignment on South Livermore Avenue, Arroyo Seco located approximately 150 feet east of the project alignment on Tesla Road, and local flood control channels and creeks that collect stormwater from catch basins and storm drains), potentially resulting in a violation of water quality standards. To minimize these impacts, the project would be required to maintain the following BMPs for site design and stormwater treatment, as outlined in the City of Livermore Stormwater Requirements Checklist for the MS4 Permit:

- Establish temporary erosion controls to stabilize all denuded areas until roadways are repaved;
- Use sediment controls or filtration to remove sediment when dewatering;

South Livermore Sewer Expansion Project

- Protect all storm drain inlets in vicinity of the project alignment using sediment controls such as berms, fiber rolls, or filters;
- Trap sediment on-site, using BMPs such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for soil stock piles, etc.;
- Divert on-site runoff around exposed areas; divert off-site runoff around the project alignment (e.g., swales and dikes);
- Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate;
- Avoid cleaning, fueling, or maintaining vehicles on-site, except in a designated area where washwater is contained and treated;
- Store, handle, and dispose of construction materials and wastes properly to prevent contact with stormwater; and/or
- Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, and non-stormwater discharges to storm drains and watercourses.

Further, in accordance with Chapter 13.45 of the LMC (Stormwater Management and Control Program) and Chapter 13.08 of the Alameda County Codes and Ordinances (Stormwater Management and Discharge Control), the proposed project would be required to undertake all practicable measures to reduce pollutants. The contractor would also be required to provide filter materials at the nearest catch basins, such as those located on South Livermore Avenue, on Tesla Road at its intersection with Mines Road, and on East Avenue, to retain any debris and dirt flowing into the City's stormwater system, which would ultimately empty into local flood control channels and creeks.

The proposed project would also be subject to the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit No. CAS612008, issued by Order No. R2-2015-0049 on November 19, 2015, to discharge stormwater runoff to storm drains and watercourses. Under the conditions of the permit, the project would be required to eliminate or reduce non-stormwater discharges to waters of the nation, develop and implement a SWPPP for construction activities, and perform inspections of the stormwater pollution prevention measures and control practices to ensure conformance with the SWPPP. Additionally, because the proposed project would disturb at least one acre of land, the project must provide stormwater treatment and would be required to obtain coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ).

In addition to compliance with mandatory CWA requirements (NPDES Construction General Permit and MS4 General Permit), LMC requirements, and the San Francisco Bay RWQCB's post-construction requirements for stormwater management, implementation of the goals, policies, and actions outlined in the City's General Plan, described under Section 4.1.2, *Regulatory Setting*, above, would minimize erosion and siltation, prevent substantial discharges of contaminated stormwater to the municipal storm drain system or surface waters, and reduce the potential for violations of water quality standards or waste discharge requirements.

Operation

Impervious surfaces can cause stormwater runoff to carry a variety of pollutants, such oil, grease, metals, sediment, and pesticide residues from roadways into adjacent waterways via the storm

drain system. After completion, the proposed project would maintain the same area of impervious surfaces along the alignment compared to existing conditions, as no buildings or expansion of paved areas would be constructed. In addition, the project would not induce unanticipated growth in the City or the surrounding area because it would serve development potential consistent with the City's General Plan and SLVSP. As such, the proposed project would not contribute to an unanticipated increase in impervious surfaces within its vicinity.

Following construction, the project would not modify stormwater flow or introduce additional urban pollutants to the stormwater system through runoff. Since the proposed project would not introduce new impervious surfaces and no substantial change to existing roadway operations would result from the project, the project would not result in operational impacts to water quality. However, project operation would allow residences and existing wineries to connect to the City's wastewater system, and the existing septic systems at these properties would be abandoned or removed. As a result, groundwater quality in the South Livermore Valley would be improved due to reduced reliance on septic systems.

The 1997 EIR concluded that the development potential of the SLVSP would result in increased stormwater runoff, resulting in increased potential for pollution to be conveyed in runoff; however, potential impacts would be reduced by SLVSP Policies 8-21 through 8-26 because they would require the use of permeable surfaces and detention basins to maximize groundwater recharge and minimize impacts on local surface waters; and erosion control measures in agricultural land, implementation of SWPPPs, and channel stabilization to control stormwater quality.

Since the project would not result in an increase in the development potential of sites within the SLVSP and General Plan area, impacts related to water quality would not be more severe than those analyzed in the 1997 EIR. Therefore, the direct impact of the proposed project on water quality would be less than significant, and impacts from the development potential of the General Plan and SLVSP would remain less than significant. Pursuant to *CEQA Guidelines* Sections 15162(a)(3) and 15163(a), because the proposed project would not result in a significant effect that is substantially more severe than determined in the 1997 EIR, no additional mitigation measures would be required.

Conclusion

Overall, compliance to the applicable laws, regulations, and policies discussed above, adherence to identified BMPs, and implementation of relevant SWPPP requirements would reduce the risk of water quality degradation from pollutants related to construction activities in the vicinity of the proposed project. In addition, operation of the proposed project would allow residences and wineries to connect to the City's wastewater system, which would result in an overall improvement in groundwater quality in the South Livermore Valley. Because violations of water quality standards would be minimized and groundwater quality would be improved, impacts to water quality related to the proposed project would be less than significant.

Mitigation Measures

None required.

Significance After Mitigation

Less than significant without mitigation.

Threshold 2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact HYD-2 THE PROPOSED PROJECT WOULD NOT RESULT IN A SUBSTANTIAL INCREASE IN DEMAND FOR GROUNDWATER SUPPLIES, NOR WOULD IT DIRECTLY INTERFERE WITH THE GROUNDWATER TABLE OR ITS RECHARGE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The proposed project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP. Project construction would require minimal amounts of water for dust suppression, in order to comply with Bay Area Air Quality Management District Regulations regarding dust suppression during construction activities. Project construction water use would also comply with California Green Building Standards Code water use efficiency requirements (additional details provided in Appendix IS: Environmental Checklist Section 3, *Air Quality*). Facilitation of adjacent development potential would be consistent with the City and County General Plans, and SLVSP, and operation of the proposed project would not result in an unanticipated demand for groundwater as a result of adjacent development potential. Therefore, no substantial increase in demand on groundwater supplies would occur.

The proposed project would maintain the same area of impervious surfaces along the alignment compared to existing conditions, as no buildings or expanded paved areas would be constructed and the project would not induce unanticipated growth in the City or the surrounding area. The existing drainage system would not be modified by the project, and stormwater would continue to runoff from the repaved roadway into the existing stormwater drainage system. Because the project would not result in an increase in impervious surfaces, groundwater recharge would continue as it does under existing conditions. Impacts related to depletion of groundwater supplies and groundwater recharge would be less than significant.

Mitigation Measures

None required.

Significance After Mitigation

Less than significant without mitigation.

Threshold 3: Would the project 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 that 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; and/or
- (iv) Impede or redirect flood flows?

Impact HYD-3 THE PROPOSED PROJECT WOULD NOT ALTER THE EXISTING DRAINAGE PATTERN OF THE PROJECT ALIGNMENT, ALTER THE COURSE OF A STREAM OR RIVER, OR ADD NEW IMPERVIOUS SURFACES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Construction activities would involve site preparation, excavation and grading, paving, and other earth-disturbing activities that could temporarily alter existing drainage patterns. However, compliance with the NPDES Construction General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ) and LMC Chapter 13.45 would reduce the risk of short-term erosion and increased runoff resulting from drainage alterations during construction. Additionally, the proposed project would maintain the same area of impervious surfaces and would maintain the existing drainage pattern along the project alignment following completion of construction. Project construction would not require additional ground disturbance in previously undisturbed areas. Rather, construction would take place within existing roadways and would not directly alter Arroyo Mocho or Arroyo Seco, which are located within 300 feet of the alignment. As such, the project would not permanently alter the course of either the Arroyo Mocho or the Arroyo Seco, as both resources flow generally parallel to the project alignment along South Livermore Avenue and Tesla Road.

In addition, the City of Livermore General Plan includes goals and policies, such as Goal INF-3, Policy INF-3.1 P1, Objective INF-3.2, Policy INF-3.2 P3, Policy INF-3.3 P5, and Policy OSC-2.1 P2, identified in Section 4.1.2, *Regulatory Setting*, that are intended to ensure efficiency in the stormwater drainage system and regulate runoff from existing uses. Implementation of these goals and policies would reduce the potential for substantial erosion or siltation on- or off-site, reduce the rate and amount of surface runoff, reduce the potential to exceed the capacity of existing or planned stormwater drainage systems, and reduce the potential to redirect flood flows. This impact would be less than significant.

The 1997 EIR concluded that the development potential of the SLVSP would result in increased impervious surfaces, runoff, and erosion potential; however, potential impacts would be reduced by compliance with state, regional, and local erosion control requirements, including SWPPPs and the NPDES Construction General Permit. Additionally, SLVSP Policies 8-19 through 8-26 would further reduce potential impacts because these policies would require drainage plans that specify stormwater flow controls; limit peak discharge rates and properly size storm drainage facilities; require the use of permeable surfaces and detention basins; and require erosion control measures in agricultural land, implementation of SWPPPs, and channel stabilization to control stormwater quality.

Since the project would not result in an increase in the development potential of sites within the SLVSP and General Plan area, impacts related to drainage patterns would not be more severe than those analyzed in the 1997 EIR. Therefore, the direct impact of the proposed project on drainage patterns would be less than significant, and impacts from the development potential of the General Plan and SLVSP would remain less than significant. Pursuant to *CEQA Guidelines* Sections 15162(a)(3) and 15163(a), because the proposed project would not result in a significant effect that is substantially more severe than determined in the 1997 EIR, no additional mitigation measures would be required.

Mitigation Measures

None required.

Significance After Mitigation

Less than significant without mitigation.

Threshold 4: Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact HYD-4 THE PROPOSED PROJECT IS NOT SUBJECT TO FLOODING FROM A TSUNAMI OR SEICHE, AND REGULATIONS FOR DEVELOPMENT WITHIN A FEMA-DESIGNATED FLOOD ZONE WOULD REDUCE THE RISK OF POLLUTANT RELEASE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

As described in Section 4.1.1, *Setting*, the proposed project is located within FEMA Flood Zone X, which is an area of minimal flood hazard that has been determined to be outside of the 500-year floodplain and is protected by a levee from 100-year flooding. The nearest regulatory floodway to the proposed project is the Arroyo Mocho, located approximately 265 feet south of South Livermore Avenue. A Zone AE floodplain associated with the Arroyo Mocho is located adjacent to the regulatory floodway approximately 50 feet southwest of South Livermore Avenue. A 500-year floodplain is also associated with Arroyo Mocho, located approximately 15 feet southwest of South Livermore Avenue. The Zone AE floodplain identifies an area that is subject to inundation by a 100-year flood. The 500-year floodplain identifies an area with a 0.2-percent-annual-chance of flooding. However, the project would ultimately result in the replacement of existing roadway surfaces after the sewer pipelines are installed, which would not introduce new pollutants to the roadway and would result in no change to the existing flood patterns within the project alignment. In addition, compliance with Chapter 15.36 of the Alameda County Codes and Ordinances would ensure that construction would not interfere with the natural flow of stormwater in a way that would cause flooding where it would not otherwise occur or aggravate an existing flooding condition. Similarly, compliance with LMC Chapter 16.12 would ensure the control of grading and other development that could increase erosion or create flood damage.

The project alignment is located approximately 40 miles east of the Pacific Ocean and is not located within a tsunami inundation area (California Department of Conservation 2021). Therefore, the project alignment is not subject to flooding from tsunami. Similarly, seiches are a related hazard that can occur when a sudden displacement event or very strong winds happen in an enclosed or semi-enclosed body of water, such as a lake or reservoir. The closest body of water, Lake Del Valle, is located approximately 3 miles south of the project alignment. Therefore, inundation by seiche is not a potential hazard.

The project alignment falls outside of the inundation hazard areas for both the Patterson Dam and the Del Valle Dam. In addition, regular DWR inspections and required maintenance of the Patterson Dam and the Del Valle Dam substantially reduces the potential for dam failure. As a result, flooding due to dam failure is not a potential hazard.

Overall, the project alignment is not expected to experience inundation from a tsunami, seiche, or flooding. Additionally, implementation of the goals and policies in the Livermore General Plan, such as Objective PS-2.1 that focuses on minimizing flood risks, and Policy PS-2.1 P2 that requires arroyos and creeks be preserved in their natural state with regard to flooding, would further reduce the possibility of flooding in the vicinity of the project alignment. This impact would be less than significant.

The 1997 EIR concluded that the development potential of the SLVSP would result in increased development and thus potential for flooding of development in the SLVSP area; however, potential impacts would be reduced by proper siting of future development based on land use. Since the project would not result in an increase in the development potential of sites within the SLVSP and General Plan area, impacts related to flooding and inundation would not be more severe than those analyzed in the 1997 EIR. Therefore, the direct impact of the proposed project on flooding would be less than significant, and impacts from the development potential of the General Plan and SLVSP would remain less than significant. Pursuant to *CEQA Guidelines* Sections 15162(a)(3) and 15163(a), because the proposed project would not result in a significant effect that is substantially more severe than determined in the 1997 EIR, no additional mitigation measures would be required.

Mitigation Measures

None required.

Significance After Mitigation

Less than significant without mitigation.

Threshold 5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact HYD-5 THE PROPOSED PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

San Francisco Bay RWQCB's Basin Plan identifies specific beneficial uses and water quality objectives for each of the surface waters and groundwater management zones described in the Basin Plan, including for Arroyo Mocho and Arroyo Seco, which are located in the vicinity of the project alignment (San Francisco Bay RWQCB 2010). The proposed project would require compliance with the NPDES Construction General Permit and the LMC Chapter 13.45, which would reduce the risk of short-term erosion and increased runoff resulting during construction. The proposed project would also be subject to the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit No. CAS612008, which would require the contractor to eliminate or reduce non-stormwater discharges to waters of the nation, develop and implement a SWPPP for construction activities, and perform inspections of the stormwater pollution prevention measures and control practices to ensure conformance with the SWPPP. Compliance with such regulations would ensure that the project does not conflict with the Basin Plan, and beneficial uses would be protected for Arroyo Mocho and Arroyo Seco in the vicinity of the project alignment.

The Zone 7 Water Agency’s Alternative GSP, which applies to the groundwater basin underlying the project alignment, outlines sustainable management goals and objectives, including the prevention of overdraft that would otherwise occur from too much pumping and the protection/enhancement of groundwater quality. The facilitation of adjacent development would be consistent with the City’s General Plan and SLVSP, and operation of the proposed project would not result in an unanticipated demand for groundwater at the adjacent development. Small amounts of water would be required for project construction, such as water needed for dust suppression. This temporary, construction-related water demand would be similar to other construction projects in the area and would not result in a substantial decrease in available water supplies. In addition, the project would facilitate the disuse of existing residential septic systems, which would result in an overall improvement in groundwater quality in the South Livermore Valley.

Overall, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. In fact, the project would result in improvements to groundwater quality aligned with the goals and objectives outlined in the Alternative GSP. This impact would be less than significant.

Mitigation Measures

None required.

Significance After Mitigation

Less than significant without mitigation.

4.1.4 Cumulative Impacts

A project’s environmental impacts are “cumulatively considerable” if the “incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects” (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative hydrology and water quality impacts is the Arroyo Mocho Watershed, Arroyo Las Positas Watershed, and Livermore Valley Groundwater Basin. This geographic scope is appropriate because water quality impacts along the project alignment would affect the water quality of the entire watershed, and groundwater impacts would affect the entire groundwater basin. Development that is considered part of the cumulative analysis includes construction of nearby projects in Livermore and Alameda County that are within the same watershed and/or draw water from the Livermore Valley Groundwater Basin.

Cumulative development would generally increase impermeable surface area, which could cumulatively increase peak flood flows, alter drainage patterns, reduce groundwater recharge, and increase pollutants in the regional stormwater. However, cumulative development would also be required to adhere to all applicable State and local regulations designed to control erosion and protect water quality, including the LMC, the NPDES Construction General Permit, and the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit. Any construction sites larger than one acre in size would be required to prepare and submit a SWPPP to obtain coverage under the NPDES Construction General Permit, thereby reducing the risk of water degradation on- and off-site from soil erosion and other pollutants. In addition, for certain projects, the San Francisco Bay RWQCB post-construction requirements for stormwater management encourage and require on-site treatment and infiltration of stormwater runoff. This would reduce the quantity of stormwater runoff that enters the storm drainage system which ultimately discharges to the San Francisco Bay and the Pacific Ocean. In addition, implementation of NPDES and LMC requirements would reduce

the potential for increased pollutants in stormwater and groundwater. Compliance with mandatory state and regional permitting requirements as well as implementation of the goals and policies in the City of Livermore General Plan would reduce the potential for water quality degradation and violations of water quality standards as a result of cumulative development.

Overall, potential impacts associated with hydrology and water quality would not be cumulatively considerable. Cumulative impacts related to hydrology and water quality would be less than significant.

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4.2 Utilities and Service Systems

This section analyzes the effects of the proposed project on utilities and service systems. It considers potential impacts with respect to water supply and infrastructure, wastewater conveyance and treatment facilities, stormwater and drainage facilities, solid waste disposal, and electricity, natural gas, and telecommunications facilities. Assessment of impacts is based partially on pertinent analysis provided in the 1997 EIR, which evaluated impacts of development under the SLVSP.

4.2.1 Setting

The following section describes the existing setting with respect to wastewater treatment providers, water suppliers, stormwater drainage facilities, solid waste facilities, electricity and natural gas providers, and telecommunications facilities serving the project alignment.

a. Water

Water Supply

The project area is served by Cal Water’s Livermore District. Cal Water provides water service to approximately 69 percent of the City of Livermore’s population and covers 48 percent of the area incorporated by the City of Livermore. The Cal Water Livermore District had a service population of approximately 59,814 in 2020. The Cal Water Livermore District’s service population and growth projections are based on Association of Bay Area Governments census tract level projections of population, housing, and employment. Cal Water delivers water to residential, commercial, and governmental customers. Residential customers account for most of the Cal Water’s service connections and 73 percent of its water uses. Cal Water provides a combination of local groundwater, pumped from 12 wells across the Livermore Valley, and surface water purchased from the Zone 7 Water Agency. Table 4.2-1 summarizes Cal Water’s current and projected water supplies. Cal Water Livermore District’s groundwater supply is pumped from the Livermore Valley Basin, which is not adjudicated and is not considered to be critically over-drafted. Non-residential water uses account for 22 percent of total demand and system water losses account for 5 percent (Cal Water 2021). Figure 4.2-1 shows Cal Water Livermore District’s service area and the project alignment.

Table 4.2-1 Cal Water’s Water Supplies – Current and Projected (acre feet per year)

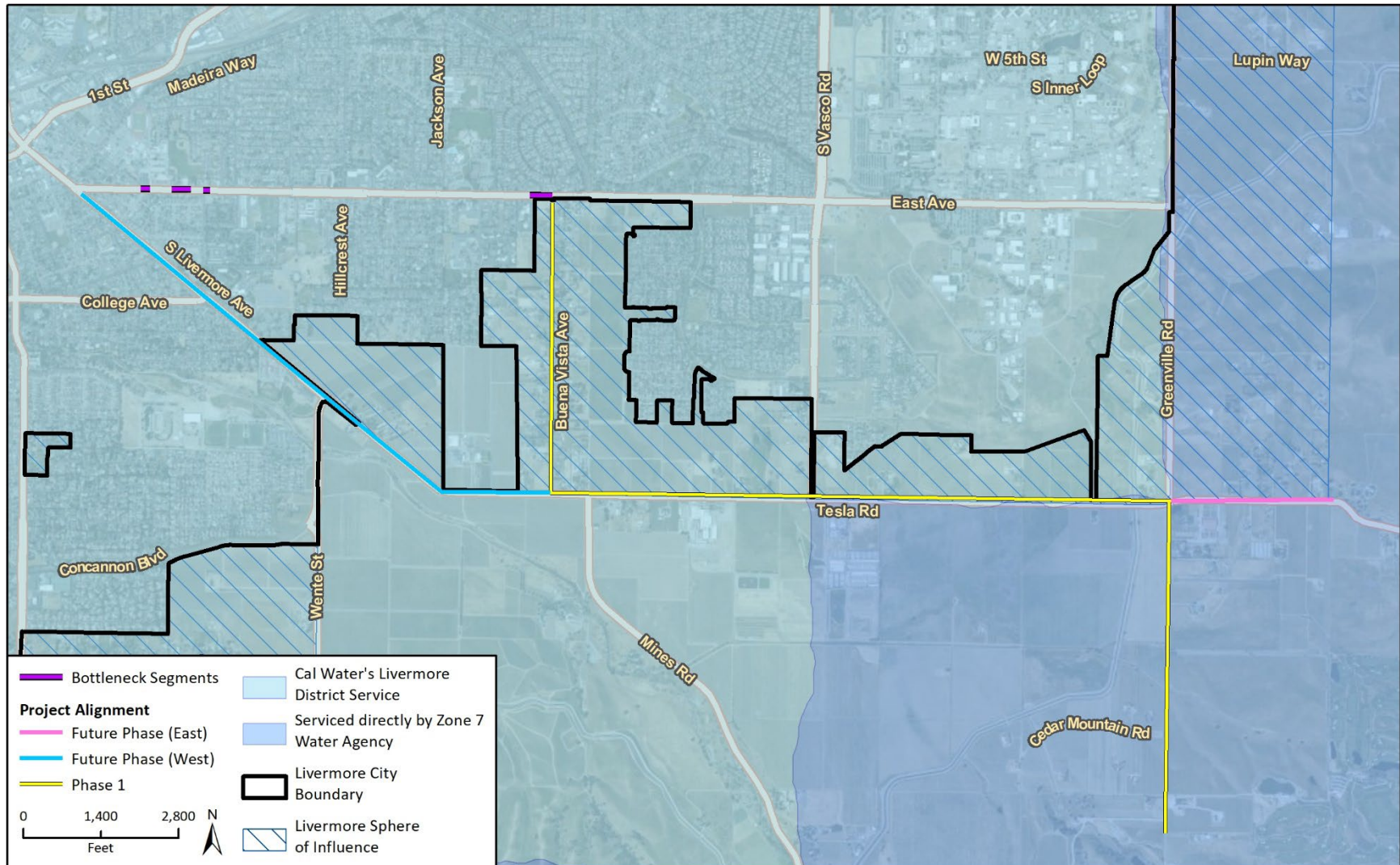
Water Supplies	2020 ¹	2025	2030	2035	2040	2045
Zone 7 Water Agency						
Purchased or Imported Water	8,505	6,264	6,292	6,446	6,486	6,563
Livermore Valley Basin						
Groundwater (not desalinated)	1,066	3,069	3,069	3,069	3,069	3,069
Supply Total	9,571	9,333	9,361	9,515	9,555	9,632

The groundwater supply values shown are equivalent to the District’s Groundwater Pumping Quota, pursuant to the contract with Zone 7. The purchased water supply values are the difference between total projected demand and the Groundwater Pumping Quota.

¹Actual supplies in 2020.

Source: Cal Water 2021 (Tables 6-8 and 6-9)

Figure 4.2-1 Local Water Provider Service Areas



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Fig 4.2-1 Cal Water's Livermore District Service Area

Water Demand

All Cal Water customers are considered urban (i.e., non-agricultural water users). Zone 7 provides water for agricultural uses. The Cal Water 2020 Urban Water Management Plan (UWMP) details water demand from 2016 to 2020 by sector, including single-family residential, multi-family residential, commercial/institutional, industrial, and landscape irrigation (Cal Water 2021). Water demand increased steadily from 2016 to 2020 due to statewide drought and water conservation measures, including conservation pricing applied by Cal Water and increased appliance water use efficiency standards. Water demand was 7,625 af in 2016, 8,110 af in 2017, and 9,571 af in 2020. Zone 7's 2020 UWMP determined that agricultural water demand was 5,810 af in 2020 (Zone 7 Water Agency 2021).

The 2020 UWMP projects future water demand through 2045 based on a water and sewer capacity rate study prepared in 2016. The executive summary of this study is included in Appendix H of the 2020 UWMP. According to the 2020 UWMP, the combination of groundwater and purchased water supply is expected to be enough to support Cal Water's projected water demand through 2045 (Cal Water 2021). Table 4.2-2 shows Cal Water Livermore District's and Zone 7's projected demands by sector, as stated in the 2020 UWMP.

Table 4.2-2 Projected Demands for Potable and Raw Water (acre feet per year)

Use Type	2025	2030	2035	2040	2045
Single Family	6,393	6,383	6,461	6,488	6,545
Multi-Family	524	662	773	814	858
Commercial	1,222	1,175	1,144	1,120	1,100
Institutional/Gov't	714	693	680	668	657
Industrial	0	0	0	0	0
Other Potable	10	10	10	10	10
Landscape	6	6	6	6	6
Losses ¹	464	431	441	449	457
Demand Total	9,333	9,361	9,515	9,555	9,632
Agricultural Irrigation ²	5,500	7,800	8,300	8,300	8,300

¹ Real and apparent losses.

² Zone 7 supplies water for agricultural uses in the City of Livermore.

Source: Cal Water 2021 (adapted from Tables 4-1 and 4-2), Zone 7 Water Agency 2021 (adapted from Table 4-3)

Dry Year Projections

Cal Water estimates future water supply availability under single- and multiple-dry year scenarios. Cal Water projects multiple-dry year demand based on measured water use data from the multi-year drought extending from 2016-2020. Cal Water assumes the first dry year through the fourth dry year would result in no change in demand as increasingly stringent conservation measures are implemented. Table 4.2-3 summarizes Cal Water's multiple-dry year supply and demand through 2045. Under all scenarios for all years, demand remains below anticipated supply.

Table 4.2-3 Cal Water Supply and Demand in Multiple Dry Years

Year-Type	2025	2030	2035	2040	2045
First Dry Year					
First Dry Year Supply	9,822	9,846	10,006	10,047	10,128
First Dry Year Demand	9,822	9,846	10,006	10,047	10,128
Difference	0	0	0	0	0
Second Dry Year					
Second Dry Year Supply	9,822	9,846	10,006	10,047	10,128
Second Dry Year Demand	9,822	9,846	10,006	10,047	10,128
Difference	0	0	0	0	0
Third Dry Year					
Third Dry Year Supply	9,822	9,846	10,006	10,047	10,128
Third Dry Year Demand	9,822	9,846	10,006	10,047	10,128
Difference	0	0	0	0	0
Fourth Dry Year					
Fourth Dry Year Supply	9,822	9,846	10,006	10,047	10,128
Fourth Dry Year Demand	9,822	9,846	10,006	10,047	10,128
Difference	0	0	0	0	0

Units in acre feet per year

Source: Cal Water 2021 (adapted from Table 7-4)

Zone 7 Water Agency estimates future water supply availability under single- and multiple-dry year scenarios. Zone 7 Water Agency predicts adequate water supply would be available under normal year, single dry year, and multiple dry year scenarios. Table 4.2-4 summarizes Zone 7 Water Agency’s multiple-dry year supply and demand through 2045. Under all scenarios for all years, demand remains below anticipated supply.

Table 4.2-4 Zone 7 Supply and Demand in Multiple Dry Years

Year-Type	2025	2030	2035	2040	2045
Normal Year					
Normal Year Supply	76,700	90,700	84,700	83,200	83,200
Normal Year Demand	50,300	52,800	53,800	55,300	55,300
Difference	26,400	37,900	30,900	27,900	27,900
Single Dry Year					
Single Dry Year Supply	65,600	92,100	94,200	92,500	92,300
Single Dry Year Demand	50,300	52,800	53,800	55,300	55,300
Difference	15,300	39,300	40,400	37,200	37,000
First Dry Year					
First Dry Year Supply	89,200	116,600	118,500	117,100	116,800
First Dry Year Demand	50,300	52,800	53,800	55,300	55,300
Difference	38,900	63,800	64,700	61,800	61,500
Second Dry Year					
Second Dry Year Supply	74,800	105,800	108,000	106,600	106,800
Second Dry Year Demand	51,700	53,360	54,200	55,300	55,300
Difference	23,100	52,440	53,800	51,300	51,500
Third Dry Year					
Third Dry Year Supply	69,100	100,600	102,700	102,300	102,300
Third Dry Year Demand	52,000	53,520	54,400	55,300	55,300
Difference	17,100	47,080	48,300	47,000	47,000
Fourth Dry Year					
Fourth Dry Year Supply	63,600	96,700	99,500	98,900	99,200
Fourth Dry Year Demand	52,250	53,580	54,700	55,300	55,300
Difference	11,350	43,120	44,800	43,600	43,900

Units in acre feet per year

Source: Zone 7 Water Agency 2021 (adapted from Tables 7-12 through 7-17)

b. Wastewater

The sewer collection system in the City of Livermore serves development within the City limits, which includes a population of approximately 87,000 people. In addition to the area within the City limits, the sewer service area includes small areas that are outside of the City limits but within the City's UGB, as well as the Ruby Hill portion of the City of Pleasanton. The City's sewer service area comprises approximately 28 square miles and the collection system consists of approximately 296 miles of gravity mains and approximately 3 miles of force mains and four pump stations (City of Livermore 2017). The City of Livermore receives sewer and wastewater treatment services from the Livermore Water Reclamation Plant (LWRP). The plant includes primary, secondary and tertiary treatment processes, and ultraviolet (UV) disinfection. LWRP solids undergo thickening,

stabilization, and dewatering prior to transport offsite for use as landfill cover. The LWRP can treat up to 8.5 million gallons per day and treats an average of 2.3 billion gallons of wastewater each year from throughout the Livermore area (City of Livermore 2021a).

In 2012, the City of Livermore assessed the operations at the LWRP and prepared an updated Master Plan. The master plan develops a roadmap for upgrading and expanding the LWRP in a manner that incorporates the appropriate technology, optimizes operations, and minimizes cost (City of Livermore 2012). Furthermore, the Sewer Master Plan was prepared in 2017 to define the City's long-term collection system infrastructure capacity needs, and to develop a plan that will provide the flexibility and system reliability that the City needs to accommodate changing future capacity needs.

Currently, most parcels along the project alignment dispose of wastewater via on-site septic systems. Parcels located along East Avenue and the western portion of Livermore Avenue are currently connected to the City's wastewater conveyance system. Parcels using septic systems for wastewater treatment and disposal are constrained from growth by existing septic systems, which are not eligible for expansion due to water quality concerns in the county.

c. Stormwater Drainage

The City of Livermore manages stormwater and regulates discharge into storm drains. The City's stormwater infrastructure includes 7,000 storm drains and miles of drainage ditches in public areas and along city streets. These drains and ditches divert rain and debris away from roads and other impermeable surfaces to prevent flooding. After stormwater flows into a storm drain, it then flows through a network of 225 miles of stormwater pipes that discharge into local flood control channels, detention ponds, and creeks. The stormwater then flows into the San Francisco Bay (City of Livermore 2021b). The City adheres with the SWRCB requirements for permitting for specific types of industrial and construction activities, such as obtaining a NPDES permit prior to construction. The City also participates in the Alameda County Clean Water Program, which facilitates local compliance with the CWA and provides BMPs for residents and businesses (County of Alameda 2017). Currently, existing drainage facilities along the project alignment are managed and operated by the City. Such facilities includes storm drain inlets and catch basins along South Livermore Avenue from East Avenue to Concannon Boulevard, along the south side of Tesla Road from South Livermore Avenue to Mines Road, along the north side of Tesla Road at Mines Road, and at the intersection of Buena Vista Avenue and East Avenue. No storm drain inlets are present along the remainder of Buena Vista Avenue, Tesla Road east of Mines Road, and Greenville Road along the project alignment.

d. Solid Waste

Solid waste generated by development in the city is collected by Livermore Sanitation. Approximately 98 percent of the City's solid waste was sent to seven landfills in 2019: Altamont Landfill, Fink Road Landfill, North County Landfill and Recycling Center, Potrero Hills Landfill, Recology Hay Road Landfill, Redwood Landfill, and Vasco Road Sanitary Landfill (CalRecycle 2021a). As shown in Table 4.2-5, all seven landfills have a substantial amount of remaining capacity. The Altamont Landfill has the most remaining capacity of 65.4 million cubic yards and has an anticipated closure date of 2025. Recology Hay Road Landfill has the latest closure date of 2077 and has a remaining capacity of 3.4 million cubic yards.

Table 4.2-5 Estimated Landfill Capacities and Closure Date

Landfill Facility	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Maximum Permitted Throughput (tons per day)	Anticipated Closure Date
Altamont Landfill	124,400,000	65,400,000	11,150	2025
Fink Road Landfill	14,640,000	7,184,701	2,400	2023
North County Landfill and Recycling Center	41,200,000	35,400,000	825	2048
Potrero Hills Landfill	83,100,000	13,872,000	4,330	2048
Recology Hay Road Landfill	37,000,000	30,433,000	2,400	2077
Redwood Landfill	26,077,000	26,000,000	2,300	2036
Vasco Road Sanitary Landfill	32,970,000	7,379,000	2,518	2022

Source: CalRecycle 2021b

e. Electricity and Natural Gas

Natural gas and electricity are provided by Pacific Gas and Electric Company (PG&E). PG&E has a service area of 70,000 square miles in northern and central California. The service area stretches from Eureka to Bakersfield, and from the Pacific Ocean to the Sierra Nevada. PG&E operates 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines. Furthermore, PG&E operates 42,141 miles of natural gas distribution pipelines and 6,438 miles of transmission pipelines (PG&E 2022). The company is regulated by the California Public Utilities Commission, which was created by the state Legislature in 1911.

f. Telecommunications

Numerous private wireless and cellular phone service providers serve the Livermore area (City of Livermore 2015). Telephone and residential internet services are provided by SBC Pacific Bell, Verizon, and Metro; and cable services are provided by Comcast Corporation.

4.2.2 Regulatory Setting

a. Federal Regulations

Clean Water Act

See the *Regulatory Setting* of Section 4.1 of this Supplemental EIR, *Hydrology and Water Quality*, for a detailed discussion of the federal Clean Water Act.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) regulates public water systems that supply drinking water (42 United States Code [USC] Section 300(f) et seq.; 40 Code of Federal Regulations [CFR] Section 141 et seq). The principal objective of the federal SDWA is to ensure that water from the tap is potable (safe and satisfactory for drinking, cooking, and hygiene). The main components of the federal SDWA are to:

South Livermore Sewer Expansion Project

- Ensure that water from the tap is potable
- Prevent contamination of groundwater aquifers that are the main source of drinking water for a community
- Regulate the discharge of wastes into underground injection wells pursuant to the Underground Injection Control program (see 40 CFR Section 144)
- Regulate distribution systems

Implementation of the federal SDWA is delegated to California.

b. State

California Green Building Standards Code

In January 2020, the State of California adopted the California Green Building Standards Code (CALGreen) which establishes mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels, including:

- Reducing indoor water use by 20 percent
- Reducing wastewater generation by 20 percent
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris
- Providing readily accessible areas for recycling by occupant

California Safe Drinking Water Act

The California SDWA (Health & Safety Code Section 116270 et seq.; 22 Cal. Code Regs. Section 64400 et seq.) regulates drinking water more rigorously than the federal law. Like the federal SDWA, California requires that primary and secondary maximum contaminant levels (MCL) be established for pollutants in drinking water; however, some California MCLs are more protective of health. The act also requires the SWRCB to issue domestic water supply permits to public water systems. The SWRCB enforces the federal and State SDWAs and regulates more than 7,500 public water systems. The SWRCB's Division of Drinking Water oversees the State's comprehensive Drinking Water Program (DWP). The DWP is authorized to issue public water system permits.

California Plumbing Code

The California Plumbing Code is codified in Title 24, California Code of Regulations, Part 5. The Plumbing Code contains regulations including, but not limited to, plumbing materials, fixtures, water heaters, water supply and distribution, ventilation, and drainage. More specifically, Part 5, Chapter 4, contains provisions requiring the installation of low flow fixtures and toilets. Existing development will also be required to reduce its wastewater generation by retrofitting existing structures with water efficient fixtures (Senate Bill [SB] 407 [2009] Civil Code Sections 1101.1 et seq.).

Regional Water Management Planning Act

Adopted by the State legislature in 2002, the Regional Water Management Planning Act, or SB 1672, authorizes preparation of integrated regional water management plans. Such plans are developed by regional water management groups, defined as three or more local public agencies, at least two of which have statutory authority over water supply. Integrated regional water management plans address qualified programs and projects relating to water supply, water quality, flood protection, or other water-related topics undertaken by the participating public agencies. Qualified projects, as detailed in the legislation, include but are not limited to groundwater, urban, and agricultural water management planning efforts, levee or flood control infrastructure maintenance or construction, water recycling projects, and water conservation programs.

UWMP Act

The California UWMP Act applies to municipal water suppliers that serve more than 3,000 customers or provide more than 3,000 acre-feet per year of water. The Act requires these water suppliers to update their UWMP every five years to identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years. The UWMP should include a description of existing and planned water sources, alternative sources, conservation efforts, reliability and vulnerability assessments, and a water shortage contingency analysis.

Integrated Solid Waste Management Act of 1989 (Assembly Bill [AB] 939)

The California Integrated Waste Management Act (CIWMA) of 1989 created the (former) California Integrated Waste Management Board, now CalRecycle. Responsible for oversight of waste management in California, CalRecycle assists cities, counties, businesses, and organizations with meeting state waste reduction, reuse, and recycling goals. The CIWMA requires that local jurisdictions meet waste diversion goals and establish a framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. The CIWMA was primarily intended to encourage minimization of the volume of solid waste disposed of through “transformation” (including incineration, pyrolysis, distillation, and bioconversion) and land disposal through the establishment of solid waste diversion goals for all cities and counties.

c. Regional and Local

Bay Area Integrated Regional Water Management Plan Report

Cal Water participated in the 2019 Update of the Bay Area Integrated Regional Water Management Plan (IRWMP), which covers the Livermore District. Groundwater in the region is managed by the Zone 7 Water Agency (Zone 7). As part of a regional groundwater management plan, Cal Water has agreed to a Groundwater Pumping Quota of 3,069 af annually. While the IRWMP focuses on long-range water planning needs in Cal Water’s service area, the document includes a regional-scale assessment of water planning efforts, infrastructure, and pending studies and projects. The IRWMP also discusses regional water management efforts in the context of other applicable water and environmental regional plans (IRWMP 2019).

Alameda County General Plan

Alameda County's General Plan provides the policy context for the County of Alameda to achieve its vision for adequate utility infrastructure in order to maintain the health and safety of residents of Alameda County. General Plan objectives and policies from the Conservation Element that are relevant to the proposed project include the following (County of Alameda 2022):

Conservation Element Goal: To insure and maintain a continuing supply of high water quality for the citizens of Alameda County.

- Objective 1:** To insure sufficient water supplies of high quality for all beneficial uses.
- Objective 2:** To conserve ground water resources and prevent overdraft of existing ground water supplies.
- Objective 4:** To reduce man-caused stream and ground water pollution and general resource degeneration through cumulative impacts on surface and ground water systems.
- Objective 5:** To maintain all water resources in their highest quality.
- Objective 6:** To educate government, business and citizens to assist in the conservation of water and energy and to minimize pollution.
- Objective 7:** Through sound design of drainage systems throughout the County and by regulation of land use, erosion or soil caused by water could be controlled.
- Objective 8:** To achieve coordination of state, regional, and local water management agencies and policies throughout the County.

South Livermore Valley Area Plan

The County's South Livermore Valley Area Plan (SLVAP) provides the policy context for the SLVAP Area to achieve its vision for water conservation and utility infrastructure. The SLVAP Area includes all portions of the project alignment that are outside city limits. The SLVAP identifies sources of water supply in the SLVAP Area, and various policies intended to manage utility infrastructure. SLVAP policies relevant to the proposed project include the following (County of Alameda 2003):

Agricultural Preservation and Enhancement Policy 9: Encourage the development of additional sources of irrigation water for vineyards and other cultivated agriculture by investigating wastewater reclamation and development of other supply and delivery resources. Encourage Zone 7 to consider developing a pump monitoring and cost allocation system to cover the cost of new water in the event that additional supplies are needed.

Land Use Vineyard Area Policy 2A: The applicant must show, to the satisfaction of the County, that adequate water supplies are available to the proposed parcels for both domestic and irrigation needs, and that all proposed homesites can be served by individual septic systems. The County shall consult with the appropriate water purveyor.

Annexation and Urban Development Policy 2: Require any urban development proposal within the Vineyard Area to meet the following criteria, at a minimum:

- A. All necessary public utilities and services are available.
- B. The project will contribute funds for a recycled water treatment system. Contributions should equal or exceed the cost of providing recycled water equal in volume to 120% of anticipated water use of the development.

City of Livermore General Plan 2003-2025

Chapter 7, *Infrastructure and Public Services Element*, of the City's General Plan provides the policy context for Livermore to achieve its vision for water conservation and utility infrastructure. The chapter identifies regional sources of water supply in Livermore, and various goals and policies intended to protect water supply and water quality. General Plan goals and policies relevant to the proposed project include the following (City of Livermore 2015):

Goal INF-1: Provide sufficient water supplies and facilities to serve the City in the most efficient and financially sound manner, while maintaining the highest standards required to enhance the quality of life for existing and future residents.

Policy INF-1.1 P1: Potable water shall be available to the City's residents and businesses.

Policy INF-1.1 P2: The City shall maintain a water system capable of sustaining required fire flows at all times. The City shall work with California Water Service Company to insure its system also meets required fire flows.

Policy INF-1.1 P3: Support the development of additional sources of irrigation water for vineyards and other cultivated agriculture by investigating recycled water and development of other supply and delivery resources.

Policy INF-1.1 P5: Development will not result in a reduction of water quality below those standards set forth in State and federal laws and regulations.

Policy INF-1.2 P3: Structures with plumbing that are located within City limits shall connect to the water system, unless distance from public water system or other factors indicate a need for an exemption.

Policy INF-1.3 P2: Projects deemed appropriate for the use of recycled water shall be required to use recycled water, when available, for uses outlined in the State Water Code.

Policy INF-1.3 P3: The City shall adopt a series of Best Management Practices for water conservation measures that will be mandatory in new development and strongly encouraged in existing developments.

Goal INF-2: Collect, treat and dispose of wastewater in ways that are safe, sanitary, environmentally acceptable and financially sound while maintaining the highest standards required to enhance the quality of life for existing and future residents.

Policy INF-2.1 P1: Municipal sewer treatment shall be available to the City's residents and businesses.

Policy INF-2.1 P3: The approval of new development shall be conditioned on the availability of adequate long-term capacity of wastewater treatment, conveyance and disposal sufficient to service the proposed development.

Policy INF-2.1 P4: The City shall implement a wastewater disposal master plan designed to provide for the disposal of peak wet weather flows anticipated under the current vision of the General Plan. No new development entitlements shall be granted once the Average Dry Weather Flow reaches 7.0 million gallons per day at the Water Reclamation Plant until a master plan for sewer has been adopted that addresses the capacity shortfall, including a schedule for implementation.

Policy INF-2.1 P5: All new development shall demonstrate to the City that the downstream sanitary sewer system is adequately sized and has sufficient capacity to accommodate anticipated sewage flows. If the downstream mains are found to be inadequate, the developer shall provide additional facilities to accept the additional sewage expected to be generated by the development.

Policy INF-2.1 P6: Structures with plumbing that are located within City limits shall connect to the public wastewater collection system, unless topography, or distance from the public sewer system indicate a need for an exemption.

Policy INF-2.1 P7: Major sewer collection and transmission systems shall be carefully planned where they cross a seismic fault. They shall cross at right angles, or nearly so, be accessible for rapid repair, and be provided with safety features such as automatic switches, expansion joints and sufficient drop between manholes to accommodate vertical displacement across faults. Other equipment shall be provided to ensure minimal adverse impact on adjacent and surrounding areas and to facilitate restoration of service in the event of fault displacement.

Policy INF-2.1 P8: Sewer collection and transmission systems shall be designed and constructed in such a manner as to minimize potential inflow and infiltration.

Policy INF-2.1 P9: The criteria used to design the sanitary sewer system shall be in the master plan prepared for sewer as well as the guidelines for facilities planning, including reliance on gravity drainage to minimize pumping to the extent feasible and basing pipe size on the wet weather flow required pursuant to the master plan prepared for sewer.

Policy INF-2.1 P10: All new development projects shall be responsible for construction of a sanitary sewer collection and conveyance system as part of the Citywide infrastructure plan. This system shall be designed to serve developments within the approved General Plan only and shall not be extended to serve uses outside of the Urban Area.

Policy INF-2.1 P11: The sanitary sewer system shall be designed and constructed in such a manner as to minimize potential environmental impacts.

Goal INF-3: Collect, store and dispose of stormwater in ways that are safe, sanitary, environmentally acceptable and financially sound while maintaining the highest standards required to enhance the quality of life for existing and future residents.

Policy INF 3.1 P1: Design local storm drainage improvements to carry appropriate design-year flows resulting from build out of the General Plan.

Policy INF 3.1 P3: The City shall take all necessary measures to regulate runoff from urban uses to protect the quality of surface and ground-waters and other resources from detrimental conditions.

Goal INF-4: Provide utilities in ways that are safe, environmentally acceptable and financially sound.

Policy INF-4.1 P1: The City shall ensure that utilities, including electricity, natural gas, telecommunications, and cable, are available or can be provided to serve the projected population within the City in a manner which is fiscally and environmentally responsible, aesthetically acceptable to the community, and safe for residents. However, the ultimate responsibility for ensuring that the utilities are available to support new development rests on the sponsor of proposed projects.

Policy INF-4.2 P2: Process permits and approvals for utility expansions in a fair and timely manner in accordance with the expansion of new development.

South Livermore Valley Specific Plan

Chapter 8, *Public Utilities Element*, of the City's SLVSP provides the policy context for the SLVSP Area to achieve its vision for water conservation and utility infrastructure. The chapter identifies sources of water supply in the SLVSP Area, and various policies intended to manage utility infrastructure. SLVSP policies relevant to the proposed project include the following (City of Livermore 1997):

Policy 8-1: City shall request that its water supply be augmented to allow development of up to an average of 200 units per year in accordance with the growth management policies of the Specific Plan. The City shall impose a condition on all tentative maps that prior to approval of a final subdivision map that (1) Zone 7 has agreed to provide the water supplier for the uses permitted by the map, an adequate and permanent domestic water supply and an emergency firefighting supply sufficient to service the proposed development and (2) the quality of the domestic water meets all applicable state and local standards. The City shall deny approval of a tentative subdivision map unless, at the time of tentative map approval, the City determines that the domestic water supply and emergency firefighting supply available from Zone 7 is sufficient to serve all existing domestic uses within the City and uses that may be permitted in accordance with the number of units available for allocation pursuant to the city's growth management program. Development that requires agricultural mitigation shall be prohibited if adequate and permanent irrigation water is unavailable for the land to be used for agricultural mitigation.

Policy 8-2: City shall condition adoption of individual development proposals for the planning area on adequate delineation of the capacity, phasing, and financing of required domestic water system improvements, including the full cost of securing, conveying, and storing new water sources. The City shall work with Zone 7 to determine water supply needs and sources.

Policy 8-5: New development in the Specific Plan area shall contribute funds for a recycled water treatment and distribution system. Each unit shall pay an additional 20% of the Zone 7 water connection fee to support the City's use of reclaimed water.

Goal: Provide an adequate, efficient, and environmentally compatible sanitary sewer system for the South Livermore Valley Specific Plan area.

Policy 8-13: Adequate sewage treatment and export capacity to accommodate Specific Plan development shall be reserved at the time of Specific Plan adoption.

Policy 8-14: The City shall investigate alternative methods for municipal sewage treatment and disposal, and give priority to alternatives which utilize water recycling or reclamation, such as the City's demonstration Reverse Osmosis plant.

Policy 8-16: In accordance with the policies of the San Francisco Bay Regional Water Quality Control Board policies, on-site wastewater treatment systems, such as package plants and septic systems, will be prohibited within the Specific Plan area, except that on-site septic systems that conform with the policies of the San Francisco Regional Water Quality Control Board and Zone 7 policies may be permitted for uses outside of the City's Urban Growth Boundary.

Livermore Municipal Code

Chapter 8.08 of the Livermore Municipal Code provides solid waste management provisions for the City and Chapter 13.32 discusses the City's provisions for wastewater collection and treatment. Specifically, Chapter 13.32 regulates direct and indirect discharge into the wastewater collection and treatment systems by establishing standards of discharge through regulations as necessary to control the quality and quantity of wastewater entering the system, to comply with all applicable state and federal laws required by the Clean Water Act and the general pretreatment regulations. Chapter 8.08 finds that a recyclable materials and compostable materials collection and processing program is necessary for the City to achieve the diversion goals mandated by the Integrated Waste Management Act of 1989. In addition, it also establishes regulations to properly store and dispose of solid waste safely.

4.2.3 Impact Analysis

a. Methodology and Significance Thresholds

Assessment of impacts is based on review of site information and conditions, pertinent analysis provided in the 1997 EIR, analysis provided in the CLWD's current UWMP, and City information regarding utility-related issues, including water supply and facilities, wastewater facilities, and solid waste. For the purposes of this Supplemental EIR and in accordance with the environmental checklist contained in CEQA Guidelines Appendix G, a utilities and service systems impact is considered significant if the project would:

1. 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 of which could cause significant environmental effects.
2. Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple-dry years.
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
4. 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.
5. Not comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

b. Prior Environmental Analysis

Chapter 4.9 (Public Services) of the 1997 EIR analyzes the SLVSP's impacts related to water supplies and wastewater treatment capacity. The 1997 EIR does not address the issues of construction or relocation of stormwater drainage, electric power, natural gas, or telecommunications facilities; sufficient water supplies during normal, dry, and multiple dry years; or of solid waste generation. The project would involve the construction of new sewer pipelines that were not analyzed in the 1997 EIR and could therefore result in new impacts related to utilities and service systems. Therefore, all the CEQA checklist items listed above under the *Methodology and Significance Thresholds* section are addressed in this analysis.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project 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?
Threshold 3: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact UTIL-1 THE PROJECT WOULD NOT INDUCE UNANTICIPATED GROWTH IN THE CITY OR SURROUNDING AREA BECAUSE IT WOULD SERVE EXISTING DEVELOPMENT POTENTIAL CONSISTENT WITH THE GENERAL PLAN AND SLVSP. FURTHER, THE PROJECT WOULD NOT DIRECTLY RESULT IN WASTEWATER GENERATION; HOWEVER, THE PROJECT WOULD INCREASE WASTEWATER IN THE CITY'S CONVEYANCE AND TREATMENT SYSTEM BY REPLACING SEPTIC SYSTEMS AS THE PRIMARY TREATMENT METHOD OF PARCELS ALONG THE PROJECT ALIGNMENT. IMPACTS FROM THE PROPOSED PROJECT RELATED TO WATER, WASTEWATER, STORMWATER, ELECTRICITY, NATURAL GAS, AND TELECOMMUNICATION FACILITIES WOULD BE LESS THAN SIGNIFICANT; HOWEVER, WATER AND WASTEWATER FACILITY IMPACTS FROM THE DEVELOPMENT POTENTIAL OF THE SLVSP WOULD REMAIN SIGNIFICANT AND UNAVOIDABLE, CONSISTENT WITH THE FINDINGS IN THE 1997 EIR.

Water

Water would be required for temporary construction activities on the project alignment, including dust suppression, grading and grubbing, compaction, construction equipment wheel washing, and concrete mixing and casting. Water consumption by construction workers and cleaning of portable toilets on the project alignment may also account for a small portion of overall construction water demand.

Watering for dust suppression would demand the most water during construction. The Bay Area Air Quality Management District (BAAQMD) has not established a quantitative threshold for fugitive dust emissions but rather states that projects that incorporate BMPs for fugitive dust control during construction, such as watering exposed surfaces and limiting vehicle speeds to 15 miles per hour, would have a less than significant impact related to fugitive dust emissions. The project would be required to include implementation of these BMPs consistent with Objective OSC-6.1 Policy 1 in City's General Plan (2015).

This small amount of water would be similar to other construction projects in the vicinity and would result in a similar temporary impact. Furthermore, as discussed in Section 4.2.1, *Setting*, there are adequate supplies available and the project would not include installation of new lateral extensions, valves, or other appurtenances for potable water; project operation would not require water supply. Lastly, the project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the General Plan and SLVSP. As such, no change to existing operations is expected to result from the project. The project would facilitate the development potential consistent with the General Plan and SLVSP, which could result in the construction of event center-type facilities and domestic water use on wineries adjacent to the project alignment. The additional water demand from this development potential would not

include increased water demand for agricultural uses, as the land adjacent to the project alignment is already in active agricultural use.

The 1997 EIR concluded that Zone 7 does not have adequate capacity to accommodate increased water demand from development potential of the SLVSP but that potential impacts from the construction of water infrastructure would be less than significant. Since the project would not result in an increase in the development potential of sites within the SLVSP and General Plan area, impacts related to water supplies and water infrastructure would not be more severe than those analyzed in the 1997 EIR. Therefore, proposed project would not result in the relocation or construction of new water infrastructure, and impacts would be less than significant; however, impacts from the development potential of the General Plan and SLVSP would remain significant and unavoidable. Pursuant to *CEQA Guidelines* Section 15162(a)(3) and Section 15163(a), because the proposed project would not result in a significant effect that is substantially more severe than determined in the 1997 EIR, no additional mitigation measures would be required.

Wastewater Treatment

The project would involve an extension of existing City sewer lines and the project itself would not generate wastewater during construction or operation. However, the project would enable increased wastewater in the system by replacing septic systems as the primary treatment method. Approximately 5 miles of sewer lines would be installed and would support the existing development potential consistent with the City's General Plan and SLVSP. The expanded sewer facilities would allow existing wineries to connect to the City's wastewater system. Subject to necessary approvals, the project would also allow existing residences to connect to the City's wastewater system and cease the use of their on-site septic systems. The project would also allow new development that is located along the sewer alignment and consistent with the General Plan and SLVSP to connect to the expanded sewer facilities. This would result in an increase in wastewater transported to and treated at the LWRP, consistent with the development potential of the adjacent parcels pursuant to the General Plan and SLVSP.

Most of a winery's typical wastewater generation occurs during the crush season (between September and November), based on the weather from year to year as well as winery size (HydroScience 2022). The highest organic loading that could impact facilities at the LWRP would occur during the crush season. Total peak sewer flow from all existing uses that could potentially discharge to the LWRP with implementation of the proposed project is estimated at 106,464 gallons per day during crush season. Peak sewer flow during crush season could increase to 141,335 gallons per day when buildout occurs along the sewer alignment. Peak sewer flows from the sewer expansion are predicted outside the crush season during wet weather. Peak wet weather sewer flows are estimated at 308,800 gallons per day and peak ultimate wet weather flows are estimated at 396,000 gallons per day. These peak wet weather flows are used to analyze impacts to the existing sewer collection system. A preliminary analysis indicates that, with implementation of the Bottleneck Project, the existing sewer conveyance system could handle the estimated peak wet weather instantaneous flow (HydroScience 2022).

Untreated sewer flows during crush and bottling activities have a biochemical oxygen demand¹ that is 14 to 28 times higher than typical residential sewage. Based on the 2012 WRP Plant Master Plan, the primary clarifiers and aeration tanks at the LWRP could handle an additional 400,000 gallons per day of average dry weather residential wastewater, or approximately 14,000 gallons per day of

¹ Definition: the amount of dissolved oxygen that must be present in water for microorganisms to decompose the organic matter in the water, used as a measure of the degree of pollution.

untreated winery sewage beyond currently projected General Plan buildout flows (City of Livermore 2021c). The preliminary analysis estimates that existing flows from South Livermore Valley wineries along the proposed sewer expansion alignment are approximately 33,715 gallons per day (HydroScience 2022). Therefore, untreated organic flows from wineries could overload the treatment processes at the LWRP. Livermore Municipal Code Section 13.32.060 prohibits discharge into the City's system that would interfere with the performance or operation of the LWRP. Therefore, pre-treatment of the organic flows from wineries that apply for a sewer connection to the proposed system may be required upon City approval of future connections to the proposed alignment to reduce the potential for the increased sewer flows to overload the treatment processes at the LWRP.

The project is intended to support uses that are consistent with the City's General Plan, SLVSP, SLVAP or current zoning, and subject to Alameda County Measure D; should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, additional environmental review would be required and, potentially, amendments to the governing land use plans and zoning. Furthermore, the project would comply with General Plan Goal INF-2 and all policies under Goal INF-2 as shown above in Section 4.2.2. These policies support the goal to collect, treat, and dispose of wastewater in ways that are safe, sanitary, environmentally acceptable, and financially sound while maintaining the highest standards required to enhance the quality of life for existing and future residents.

The 1997 EIR concluded that the LWRP would require expansion to accommodate increased wastewater generated from development potential of the SLVSP; however, potential impacts from the construction of wastewater infrastructure would be less than significant since they would be constructed during the construction of new streets and installation of other utilities. Since the project would not result in an increase in the development potential of sites within the SLVSP and General Plan area, impacts related to wastewater capacity would not be more severe than those analyzed in the 1997 EIR. Therefore, the proposed project would not result in the relocation or construction of wastewater infrastructure, and impacts would be less than significant; however, impacts from the development potential of the General Plan and SLVSP would remain significant and unavoidable. The impacts of organics in sewage from wine production on the treatment processes at the LWRP would need to be studied further to determine whether and what level of pre-treatment by individual users would be required. The City would conduct infrastructure analysis as part of the comprehensive 2045 General Plan Update and corresponding Sewer Master Plan Update, which would determine the types and thresholds of any necessary and future LWRP improvements needed to support city-wide wastewater treatment needs.

Stormwater Drainage

As discussed in Section 4.1, *Hydrology and Water Quality*, the project would maintain the same area of impervious surfaces because no buildings would be constructed as a result of the proposed project, and the project would not create unanticipated growth in its vicinity. The existing stormwater drainage system would not be modified by the project, and the repaved roadways would convey stormwater runoff to existing stormwater drainage systems consistent with existing conditions. In addition, no new drainage facilities would be needed, and the amount of surface runoff would not increase as a result of the project. Therefore, the project would not result in the relocation or construction of new stormwater drainage infrastructure, and impacts would be less than significant.

Electricity and Natural Gas

The project would not involve any components requiring electrical or natural gas service to the project alignment during both construction and operation. There would be no impacts with respect to new or expanded electric power or natural gas facilities. Additionally, the project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan, SLVSP, and SLVAP, in conformance with Alameda County Measure D. Therefore, the project would not result in the relocation or construction of new electricity or natural gas infrastructure, and impacts would be less than significant.

Telecommunications

The project would not involve any components requiring telecommunications infrastructure and would not involve the relocation of existing telecommunications facilities. Additionally, the project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan, SLVSP, and SLVAP, in conformance with Alameda County Measure D. Therefore, the project would not result in the relocation or construction of new telecommunications infrastructure, and no impact would occur.

Mitigation Measures

None required for the proposed project.

None adopted in the 1997 EIR related to the development potential of the SLVSP.

Significance After Mitigation

Less than significant without mitigation for the proposed project.

Significant and unavoidable water and wastewater facility impacts in the 1997 EIR related to the development potential of the SLVSP.

Threshold 2: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact UTIL-2 THE PROJECT WOULD NOT DIRECTLY RESULT IN INCREASED WATER DEMAND. BASED ON CAL WATER'S WATER SUPPLY AND DEMAND PROJECTIONS, PROJECTED WATER SUPPLIES ARE SUFFICIENT TO MEET THE ANTICIPATED WATER DEMAND OF REASONABLY FORESEEABLE FUTURE DEVELOPMENT DURING NORMAL, DRY, AND MULTIPLE DRY YEARS, AS SHOWN IN TABLE 4.2-3 AND TABLE 4.2-4. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

In order to mitigate potentially significant construction dust impacts, the City would require implementation of the BAAQMD's basic construction dust control measures as conditions of approval for all individual development projects or infrastructure improvement contracts in the SLVSP area which includes watering areas at least twice daily. This would result in demand for small quantities of water during construction. However, water demand would be temporary and would not result in a long-term strain on water supplies. Given the temporary and minimal nature of construction water demand, impacts related to construction water consumption would be less than significant.

The project would support existing and future permitted uses to achieve the vision of the General Plan, SLVSP, and SLVAP, in conformance with Alameda County Measure D. As a result, the project would not indirectly cause unanticipated growth in the area. Therefore, no significant increase in demand on water supplies would occur under project operation. Furthermore, as shown in Table 4.2-3, the 2020 UWMP shows that Cal Water will have sufficient water supplies to meet the City's water demand through 2045 for normal, single dry, and multiple dry year scenarios. Cal Water's 2020 UWMP considers all urban water demand from the development potential described in the City's General Plan; therefore, the 2020 UWMP projections of adequate water during normal, single dry, and multiple dry year scenarios incorporate the potential development of wineries and residences along the project alignment. Similarly, Zone 7's 2020 UWMP considers all agricultural irrigation water demand in the vicinity of the City and projects adequate water for agricultural uses along the project alignment (refer to Table 4.2-4). The project would not induce unanticipated growth in the City or surrounding area because it would serve development potential consistent with the City's General Plan, SLVSP, and SLVAP, in conformance with Alameda County Measure D. Therefore, there would be sufficient water supplies available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years, and impacts would be less than significant.

Mitigation Measures

None required.

Significance After Mitigation

Less than significant without mitigation.

Threshold 4: Would the project 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?

Threshold 5: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact UTIL-3 THE PROJECT WOULD NOT GENERATE SOLID WASTE IN EXCESS OF STATE OR LOCAL STANDARDS, OR IN EXCESS OF THE CAPACITY OF LOCAL INFRASTRUCTURE. THE PROJECT WOULD NOT IMPAIR THE ATTAINMENT OF SOLID WASTE REDUCTION GOALS AND WOULD COMPLY WITH FEDERAL, STATE, AND LOCAL STATUTES AND REGULATIONS RELATED TO SOLID WASTE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Project construction would generate construction debris, including concrete, asphalt, and land-clearing debris. Approximately 2,140 cubic yards of asphalt is anticipated to be exported. The project would be required to comply with federal, state, and local statutes and regulations related to solid waste. In accordance with 2016 CALGreen requirements, the project would be required to achieve a minimum of 65 percent diversion rate for construction waste. The project would also comply with the City's Solid Waste Ordinance, codified in LMC Chapter 8.08, which establishes regulations to properly store and dispose of solid waste safely. Pursuant to applicable regulatory requirements, the project would comply with construction waste BMPs to divert a minimum of 50 percent of construction and demolition debris and 100 percent of concrete, asphalt, and land-clearing debris. Furthermore, the project would not involve the development of solid waste-generating uses and project construction would generate minimal solid waste that would not exceed the capacity of the landfills, as shown in Table 4.2-5. Additionally, the project would not

induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan, SLVSP, and SLVAP, in conformance with Alameda County Measure D. Because the project would not generate solid waste in excess of the capacity of local infrastructure and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, impacts would be less than significant.

Mitigation Measures

None required.

Significance After Mitigation

Less than significant without mitigation.

4.2.4 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]).

a. Water

The geographic scope for cumulative water supply impacts is the Cal Water Livermore District service area, which includes areas located in eastern Alameda County, including the Livermore-Amador Valley. This geographic scope is appropriate because, as the local water purveyor, Cal Water is responsible for supplying potable water to all residential, commercial, industrial, and fire protection uses within its service area, including the project site. Development that is considered part of the cumulative analysis includes construction of nearby projects in Livermore and Alameda County that would be served by Cal Water. Land uses include residential, mixed-use development, senior living facilities, residential care facilities, commercial retail, and agricultural.

Cumulative development in the Cal Water service area would continue to increase demands on water supplies. By 2045, Cal Water anticipates a total normal year demand of 9,632 acre feet per year, an increase of 61 acre feet per year from the anticipated 2020 demands (Cal Water 2021). This anticipated increase in demand is based on planned and pending future development included in the 2020 UWMP. A substantial portion of the cumulative projects included in this analysis, as well as the project site, therefore, at least a portion of the cumulative water demand associated with these projects is accounted for in Cal Water's demand projections in the 2020 UWMP.

As demonstrated in *Impact UTIL-2*, above, the project would account require small quantities of water during construction, which would not affect Cal Water's excess water supply during all normal, single-dry, and multiple-dry year scenarios through 2040 and water demand from project construction would be both near-term and temporary. Cal Water has projected that it will be able to fulfill future demand associated with planned, pending, and reasonably foreseeable future projects in the Cal Water service area. Furthermore, future projects would be required to obtain service commitments from Cal Water prior to construction, and those meeting the definition of a project pursuant to SB 610 would be required to prepare project specific Water Supply Assessments. As such, cumulative impacts related to water would be less than significant.

b. Wastewater

The geographic scope for cumulative wastewater facilities impacts is the service area for the LWRP, which includes areas throughout Livermore and portions of the unincorporated County (City of Livermore 2022). This geographic scope is appropriate because the LWRP would receive wastewater flows from sites that would connect to the project alignment. Impacts would be cumulatively significant if cumulative development in the service area would exceed the capacity of the LWRP.

As described in *Impact UTIL-1*, the LWRP can currently treat approximately up to 8.5 million gallons per day and treats an average of 2.3 billion gallons of wastewater each year from throughout the Livermore area. Planned, pending, and reasonably foreseeable development would continue to increase demands on the existing wastewater treatment and conveyance facilities in the LWRP service area. However, the project itself would not generate additional wastewater and would solely convey wastewater. As such, the project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan, SLVSP, and SLVAP, in conformance with Alameda County Measure D. Furthermore, in accordance with Policy 3 under Goal INF-2.1 of the General Plan, future projects would be required to obtain commitments from the City of Livermore to provide wastewater treatment services prior to construction, which would be dependent on remaining treatment capacity at the LWRP. Therefore, cumulative impacts associated with wastewater services would be less than significant.

c. Stormwater

Cumulative impacts to stormwater/drainage facilities are discussed in Section 4.1, *Hydrology and Water Quality*. Individual projects would be subject to the stormwater capture and treatment requirements of the applicable MS4 Permit, reducing potential impacts to stormwater drainage facilities. Therefore, cumulative impacts to stormwater/drainage facilities would be less than significant.

d. Solid Waste

The geographic scope for cumulative solid waste impacts encompasses all areas in the region that contribute solid waste to the following landfills: Altamont Landfill, Fink Road Landfill, North County Landfill and Recycling Center, Potrero Hills Landfill, Recology Hay Road Landfill, Redwood Landfill and Vasco Road Sanitary Landfill. This geographic scope is appropriate because, as discussed in Section 4.2.1, *Setting*, 98 percent of the City's solid waste was sent to those seven landfills. These landfills would receive project-generated solid waste and, consequently, the project would contribute to capacity constraints at these solid waste disposal facilities.

Planned, pending, and reasonably foreseeable future development in the service area of these seven landfills would result in increased solid waste generation. As discussed in detail under *Impact UTIL-3*, the project does not propose the development of any solid waste-generating uses and project construction would generate minimal solid waste that would not exceed the capacity of the landfills (CalRecycle 2021a). Compliance with applicable solid waste regulations and, for projects in Livermore, General Plan policies that would maintain or improve upon solid waste diversion rates. Other cities in the region are also subject to solid waste diversion requirements and implementation of waste diversion programs and policies in order to meet State-mandated solid waste diversion rates. For example, AB 939 requires cities to divert 50 percent of solid waste from landfills. Given the nominal fraction of annual throughput accounted for by the project and local, regional, and

statewide efforts to improve solid waste diversion rates, cumulative impacts to solid waste facilities would be less than significant.

e. Electric Power and Natural Gas Facilities

The geographic scope for cumulative electricity and natural gas impacts is the service boundary of PG&E. This geographic scope is appropriate because local providers are responsible for providing adequate electricity and natural gas infrastructure to all land uses within Livermore, including parcels along the project alignment. Cumulative development projects would be subject to applicable local, regional, State, and federal policies regarding energy efficiency, in turn reducing the need for new or expanded electrical and natural gas facilities. As such, cumulative impacts would be less than significant.

f. Telecommunication

The geographic scope for cumulative telecommunications impacts is the service boundary of local telecommunications providers, such as SBC Pacific Bell, Verizon, Metro, and Comcast Corporation. This geographic scope is appropriate because local providers are responsible for providing adequate telecommunication infrastructure to all land uses within the City and surrounding area, including the project site.

As discussed above under *Impact UTIL-1*, the project would not involve undergrounding of telecommunications lines. Cumulative development would increase demand for telecommunications infrastructure in Livermore. However, cumulative projects would each be required to provide adequate telecommunications infrastructure upgrades on a project-by-project basis and would be subject to the appropriate level of project-specific environmental review. As with the project, such upgrades would typically be expected to occur within the development footprints of other cumulative projects. Therefore, cumulative impacts related to telecommunications infrastructure would be less than significant.

5 Other CEQA Required Discussions

This section discusses growth-inducing impacts, irreversible environmental impacts, and energy impacts that would be caused by the proposed project.

5.1 Growth Inducement

CEQA Guidelines Section 15126(d) requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth-inducing potential is therefore considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population Growth

As determined by the California Department of Finance and the Association of Bay Area Governments, Livermore has an estimated population of 91,216 with 33,004 housing units and the population growth forecast is 112,905 households by 2040 and 847,000 households in Alameda County by 2050 (California Department of Finance 2021, Association of Bay Area Governments 2021). As discussed in Environmental Checklist Section 14, *Population and Housing*, of the Initial Study (Appendix IS), the proposed project would not induce unanticipated growth in Livermore or the surrounding area because it would serve existing development potential consistent with the General Plan and SLVSP. The project would not result in an increase in population above the projections provided in the 1997 EIR (population of 4,160 people in the SLVSP area from the development potential of the SLVSP). Therefore, the project would not cause unanticipated growth in the City or surrounding area. The proposed project would not involve the construction of residences and would not generate new jobs in the City, aside from temporary construction jobs, which would be expected to be drawn from the existing regional work force. Therefore, the project would not induce substantial unplanned growth, directly or indirectly.

5.1.2 Economic Growth

The proposed project would generate temporary employment opportunities during construction. Because construction workers would be expected to be drawn from the existing regional work force, project construction would not be growth-inducing from a temporary employment standpoint. The proposed project would not induce substantial economic expansion to the extent that direct physical environmental effects would result. The project would amend the UGB language to allow the extension of sanitary sewer lines to serve adjacent parcels containing residences and wineries located within and near the City of Livermore. The expansion of wineries to meet existing development potential that is currently constrained by septic system limitations would contribute to the region's economy and is considered economic growth. However, the project is intended to support uses that are consistent with the City's General Plan, SLVSP, and/or current zoning. Should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, additional environmental review would be required. Because the project would

serve existing development potential consistent with the City's General Plan and SLVSP, no unanticipated economic growth would occur as a result of the project.

5.1.3 Removal of Obstacles to Growth

The project would amend the UGB language to allow the extension of sanitary sewer lines to serve adjacent parcels containing residences and wineries located within and near the City of Livermore. These adjacent parcels are currently constrained from meeting their development potential by septic systems, as the County Department of Environmental Health is not allowing for the expansion of existing septic systems or installation of new septic systems in this area due to documented groundwater quality issues. The project would involve the construction of sanitary sewer lines that would remove this development constraint, allowing adjacent parcels to meet their existing development potential consistent with the City's General Plan and SLVSP, the impacts of which were studied in the 1997 EIR. While the project would remove an obstacle to growth along the alignment, it would not result in unforeseen new construction or associated environmental impacts along the alignment. The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP. Should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, City or County approval of ordinance and/or plan amendments may be required, and additional environmental review would be required. Because the project would serve existing development potential consistent with the City's General Plan and SLVSP, no unanticipated growth would occur as a result of the project.

5.2 Irreversible Environmental Effects

The *CEQA Guidelines* require that EIRs contain a discussion of significant irreversible environmental changes. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed project.

Project construction would involve an irreversible commitment of construction materials and non-renewable energy resources. Construction would involve the use of materials and energy, some of which are non-renewable resources, to construct the expanded sewer lines. Consumption of these resources would occur with any development in the region and is not unique to the proposed project.

The proposed project would also irreversibly increase local demand for non-renewable energy resources such as petroleum products during construction. However, energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than 5 minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Pursuant to applicable regulatory requirements, the project would comply with construction waste BMPs to divert a minimum of 50 percent of construction and demolition debris and 100 percent of concrete, asphalt, and land-clearing debris. These practices would result in efficient use of energy necessary to construct the project. Furthermore, in the interest of cost-efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary.

Consequently, the project would not use unusual amounts of energy or construction materials and impacts related to consumption of non-renewable and slowly renewable resources would be less than significant. Again, consumption of these resources would occur with any development in the region and is not unique to the proposed project.

Additional vehicle trips associated with project construction would incrementally increase local traffic and regional air pollutant and GHG emissions. However, as discussed in Environmental Checklist Section 3, *Air Quality*, and Environmental Checklist Section 8, *Greenhouse Gas Emissions*, of the Initial Study (Appendix IS), project construction would not generate air quality or GHG emissions that would result in a significant impact. Project operation would not increase energy use in the form of electricity or gasoline and diesel fuel consumption. The project would not result in unanticipated growth in the vicinity; no change to existing operations would result from the project. Additionally, Environmental Checklist Section 17, *Transportation and Traffic*, of the Initial Study (Appendix IS) concluded that the proposed project would not change the existing roadways, increase commercial or residential development in the area, generate growth, or create an increase in traffic in the project vicinity. Project operation would not generate vehicle trips, and there would be no change to existing roadways or increase in vehicle miles travelled.

The project would not involve construction of residences and would not generate new jobs in the City; therefore, the project would not increase the demand for fire, police, or other public services beyond what is anticipated in the City's General Plan and SLVSP, the impacts of which were studied in the 1997 EIR. Therefore, as discussed in Environmental Checklist Section 15, *Public Services*, of the Initial Study (Appendix IS) and Section 4.2, *Utilities and Service Systems*, of this Supplemental EIR, impacts to public and utility service systems would not be significant. CEQA requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. The analysis contained in this Supplemental EIR concludes that the proposed project would not result in any significant and unavoidable impacts.

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6 Alternatives

As required pursuant to *CEQA Guidelines* Section 15126.6, this Supplemental EIR examines a range of reasonable alternatives to the proposed project that would attain most of the basic project objectives but would avoid or substantially lessen the significant adverse impacts. As described in Section 2, *Project Description*, the objectives for the proposed project, are as follows:

- Improve groundwater quality in the South Livermore Valley area relative to nitrates, which is associated with residential septic systems and livestock keeping
- Facilitate the development potential of existing and new wineries, visitor serving commercial uses, and residences consistent with the City’s General Plan, SLVSP, and SLVAP subject to Alameda County Measure D
- Enhance the short- and long-term economic viability of agriculture and viticulture in the South Livermore Valley area, consistent with Goals LU-13 and LU-14 of the City’s General Plan

Included in this analysis are three alternatives, including the CEQA-required “no project” alternative, that involve changes to the project that may reduce the project-related environmental impacts as identified in this Supplemental EIR. Alternatives have been developed to provide a reasonable range of options to consider that would help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed project. The following alternatives are evaluated in this Supplemental EIR:

- Alternative 1: No Project/No Construction
- Alternative 2: No Project/On-Site Wastewater Treatment
- Alternative 3: Alternative Alignment

Detailed descriptions of the alternatives are included in the impact analysis for each alternative. The potential environmental impacts of each alternative are analyzed in Sections 6.1 through 6.3.

6.1 Alternative 1: No Project/No Construction

6.1.1 Description

Alternative 1 assumes that the UGB language revision is not approved by a majority of voters, and that the proposed pipeline and upsizing of existing pipeline along East Avenue are not constructed. The current uses of adjacent parcels for residential and agricultural uses would continue, and wastewater would continue to be discharged to on-site septic systems. Parcels adjacent to the alignment are constrained from growth by existing septic systems, which are not eligible for expansion due to water quality concerns in the county. Alternative 1 would not achieve any project objectives because groundwater quality would not be improved in the South Livermore Valley, it would be economically infeasible for existing wineries and residences to realize their development potential under the General Plan and SLVSP, and the economic viability of agriculture and viticulture in the region would not be enhanced.

6.1.2 Impact Analysis

a. Hydrology and Water Quality

Alternative 1 would maintain the existing UGB, which would not allow for the construction of sewer pipeline outside of City limits. As a result, activities such as removal of the existing roadbed, grading and excavation, installation of the new sewer pipe, backfilling of the trench, and repaving would not take place. Alternative 1 would avoid the potential water quality impacts associated with construction and upsizing of the pipelines. However, Alternative 1 would not allow residential and agricultural parcels adjacent to the project alignment to connect to the City's wastewater system, and wastewater would continue to be discharged to on-site septic systems. Therefore, groundwater quality would not improve in the South Livermore Valley area. Overall, Alternative 1 would have less than significant impacts related to hydrology and water quality. However, this alternative would result in increased impacts to hydrology and water quality compared to the project due to the continued groundwater impacts resulting from discharging wastewater to on-site septic systems.

b. Utilities and Service Systems

Alternative 1 would result in no construction activities and would not facilitate the development potential of sites adjacent to the alignment. Alternative 1 would not result in additional demand for water from temporary construction activities and development of adjacent sites. Similar to the proposed project, Alternative 1 would result in no changes to operational stormwater runoff. Neither Alternative 1 nor the proposed project would require expanded electric power, natural gas facilities, or telecommunications infrastructure. Alternative 1 would not result in an increase in water demand or wastewater generation; therefore, the demand for wastewater treatment facilities would not increase. In addition, Alternative 1 would not generate solid waste from construction. Therefore, impacts to utilities and service systems would be less than significant under Alternative 1, and reduced as compared to the proposed project.

c. Other CEQA Topics

Overall, Alternative 1 would maintain the existing conditions along the project alignment and construction activities would not occur. As a result, there would be no impact to aesthetics, agriculture and forestry resources, land use and planning, mineral resources, public services, recreation, or wildfire, similar to the project.

Alternative 1 would not involve the construction or expansion of new residences or businesses, nor would it extend existing roadways. This alternative would not achieve the development potential of the SLVSP and would therefore not be consistent with the SLVSP development goals for the South Livermore Valley. Therefore, Alternative 1 would not support uses that are consistent with the City's General Plan, SLVSP, or current zoning and impacts to population and housing would be less than significant, similar to the proposed project.

Alternative 1 would not result in construction activities along the alignment and would therefore eliminate the potential for emissions of criteria pollutants and greenhouse gases (GHG) associated with construction, resulting in reduced impacts related to air quality and GHG emissions as compared to the proposed project. Similarly, Alternative 1 would not require energy to power construction equipment or worker vehicles, resulting in reduced impacts to energy as compared to the proposed project. Alternative 1 would result in no construction noise or groundborne vibration from construction equipment, resulting in reduced noise impacts as compared to the proposed

project. Alternative 1 would not require implementation of Mitigation Measure NOI-1 to reduce construction noise impacts. Impacts to air quality, energy, GHG emissions, and noise would be less than significant and reduced compared to the proposed project.

Because there would be no construction associated with Alternative 1 there would be no potential for accidental spills from construction vehicles and equipment, and there would be no need to excavate or transport paving materials and soils that could possibly be contaminated by vehicle-related pollution or asbestos containing materials. Therefore, impacts related to hazards and hazardous materials would be reduced as compared to the proposed project. Similarly, Alternative 1 would not need to temporarily close one lane of public roadway and the Class II bicycle lane during project construction, resulting in reduced impacts related to transportation as compared to the proposed project. Impacts to hazards and hazardous materials and transportation would be less than significant and reduced compared to the proposed project.

Alternative 1 would not require ground disturbance along the project alignment, resulting in no impacts to biological resources, cultural resources, tribal cultural resources, and geology and soils. With no ground disturbance there would be no potential for disturbance of unanticipated resources, such as archeological, paleontological, or tribal cultural resources. Alternative 1 would not require implementation of Mitigation Measures CR-1, GEO-1, and TCR-1 to reduce impacts related to the unanticipated discovery of archaeological, paleontological, and tribal cultural resources. Impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources would be less than significant and reduced compared to the proposed project.

6.2 Alternative 2: No Project/On-Site Wastewater Treatment

6.2.1 Description

Alternative 2 would not require a revision to the UGB language or installation of municipal sewer pipelines. Under this alternative, individual wineries and property owners would coordinate to construct shared small-scale WWTPs to treat and dispose of additional wastewater generated by the maximum development of each property under the General Plan and SLVSP. It is anticipated that approximately five or six such small-scale WWTPs would be required to treat anticipated wastewater associated with implementation of the General Plan and SLVSP along the entire project alignment. Treated wastewater could be used for crop irrigation. It is likely that biosolids would need to be trucked off site for disposal, and the WWTPs could include lift stations, screening through a rotary screen, and equalization with automated pH aeration. Individual wineries and property owners would select the placement and design of the small-scale WWTPs. This alternative would require approvals from the County of Alameda, which would act as the CEQA lead agency for small-scale WWTPs on parcels within the unincorporated county. However, Alternative 2 would not fulfill all project objectives to the same degree as the proposed project because it would not enhance the short-term economic viability of agriculture and viticulture in the area, as the construction and installation of individual WWTPs would likely have high individual costs and have uncertain timing due to the necessary coordination between landowners and permit approval process.

6.2.2 Impact Analysis

a. Hydrology and Water Quality

Alternative 2 would not result in the removal of existing roadbeds, installation of new sewer pipe, backfill of trenches, and patching pavement. However, land clearing, grading, excavation, and construction activities associated with the WWTPs would occur on individual properties. Construction of Alternative 2 would result in an overall increase in impervious surfaces due to the construction of multiple small-scale WWTPs and associated on-site facilities, unlike the proposed project. As such, the existing drainage pattern in the vicinity of the WWTPs would be altered under Alternative 2, and new localized drainage facilities may be needed to accommodate the increased amount of surface runoff. Construction of the WWTPs would require implementation of BMPs for site design and stormwater treatment along with full compliance with the Livermore Municipal Code, the goals, policies, and actions of the City's General Plan, the San Francisco Bay RWQCB's post-construction requirements for stormwater management, and mandatory CWA requirements (NPDES Construction General Permit and MS4 General Permit) if construction of a WWTP would disturb more than one acre of land, similar to the proposed project.

Alternative 2 would allow wastewater generated at adjacent residential and agricultural parcels to be treated with shared, small-scale WWTPs. The existing septic systems currently in use at these properties would be abandoned or removed, and the groundwater quality degradation associated with wastewater discharge to septic systems would be eliminated. Therefore, groundwater quality would be improved, as a result of septic system abandonment or removal, in the South Livermore Valley, similar to the proposed project. Overall, Alternative 2 would result in slightly increased impacts to hydrology and water quality as compared to the proposed project due to the increase in impervious surfaces and stormwater runoff. However, compliance with the Livermore Municipal Code, the goals, policies, and actions of the City's General Plan, the San Francisco Bay RWQCB's post-construction requirements for stormwater management, and potential mandatory CWA requirements would reduce impacts to less than significant, similar to the proposed project.

b. Utilities and Service Systems

Alternative 2 would result in an increased demand for electric power during operation and maintenance of the small-scale WWTPs. Alternative 2 would also result in an increase in impervious surfaces due to construction of the WWTPs, and new drainage facilities may be needed to accommodate the increased amount of surface runoff. However, similar to the proposed project, Alternative 2 would not increase the demand for natural gas facilities, or telecommunications infrastructure. Both Alternative 2 and the proposed project would result in a temporary increase in water supply needs for construction activities, such as dust suppression and concrete manufacturing. Alternative 2 would not increase the demand for wastewater treatment because this alternative would treat wastewater generated at adjacent residential and agricultural parcels with shared, small-scale WWTPs. Overall, impacts to utilities and service systems would be less than significant; however, impacts under Alternative 2 would be greater than the proposed project due to the incremental increase in utility service demands for operation and maintenance of the WWTPs. In addition, this alternative would not require increased treatment at the treatment plant.

c. Other CEQA Topics

Construction of small-scale WWTPs on private properties would not alter the existing pattern of land use in the project vicinity, introduce new land uses, divide connected neighborhoods, require the use of valuable mineral resources, result in mining activities, result in population growth, result in the construction of new residences or businesses, increase the demand for public services, or exacerbate the risk of wildfire. Therefore, impacts to land use and planning, mineral resources, population and housing, public services, recreation, and wildfire would be less than significant and similar to the proposed project.

The small-scale WWTPs would have increased impacts on aesthetics due to the addition of new aboveground structures associated with the WWTPs. The structures associated with the WWTPs could result in partially obstructed views of the Altamont Hills and the Diablo Mountain Range from small segments of designated Scenic Routes in Livermore, such as South Livermore Road and Tesla Road. Additionally, small-scale WWTPs in the South Livermore Valley would be contrary to the vision of the General Plan and SLVSP by introducing aboveground utilities infrastructure to primarily agricultural areas. However, the WWTP infrastructure would be approximately up to one story in height and would not block such views entirely. This impact would remain less than significant; however, this impact would be greater than that of the proposed project.

This alternative could potentially convert small portions of existing agricultural land to non-agricultural uses for the small WWTPs. No forestland or timberland exists on parcels adjacent to the project alignment; therefore, this alternative would not convert forestland or timberland to non-forest use. Overall, this alternative would result in greater impacts to agriculture and forestry resources.

Construction of the small-scale WWTPs would result in temporary air quality and GHG emissions associated with construction equipment, construction worker vehicles, and heavy trucks transporting materials and soil. However, air quality and GHG emissions associated with construction of the WWTPs would be similar to the air quality and GHG emissions that would result from project construction. These impacts would remain less than significant. Operation of the WWTPs would result in long-term air quality and GHG emissions, as well as unpleasant odors generated as a result of wastewater treatment processes. Additional review of potential air quality and GHG emissions would be required, as the operation of several small-scale WWTPs may be greater than the proposed project due to the increased efficiency of treating all wastewater from the development potential of parcels in the City General Plan and SLVSP areas at one facility, as proposed under the project. Depending on the precise location of the shared WWTPs and distance to sensitive receivers, which would require further environmental review under the County prior to approval, mitigation measures related to odor control in the vicinity of the small-scale WWTP facilities may be required.

Construction activity associated with the WWTPs would generate temporary noise in the project vicinity, exposing surrounding sensitive receivers to increased noise levels. However, noise associated with construction of the WWTPs would be similar to the noise that would result from project construction, and Alternative 2 would require implementation of Mitigation Measure NOI-1 to reduce construction noise at the sensitive receivers in the vicinity of the WWTPs to less than significant. Nonetheless, ongoing operation of the WWTPs would result in operational noise associated with wastewater treatment, unlike the proposed project. Operation of the WWTPs would also result in an increase in energy usage, which would be needed to power the WWTPs and associated facilities during wastewater treatment. Depending on the precise location of the shared

WWTPs and distance to sensitive receivers, which would require further environmental review under the County prior to approval, mitigation measures related to operational noise control in the vicinity of the small-scale WWTP facilities may be required. Therefore, impacts to energy and noise would be greater than the proposed project.

Construction of the small-scale WWTPs could result in ground disturbance in previously undisturbed areas. Therefore, impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources would continue to require the implementation of the following Mitigation Measures to reduce impacts to less than significant:

- Mitigation Measure BIO-1: Nesting Bird Avoidance and Minimization Efforts;
- Mitigation Measure CR-1: Unanticipated Archaeological Resources;
- Mitigation Measure GEO-1: Paleontological Resources Monitoring and Mitigation; and
- Mitigation Measure TCR-1: Unanticipated Discovery of Tribal Cultural Resources.

Overall, impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources would be greater under Alternative 2 than the proposed project.

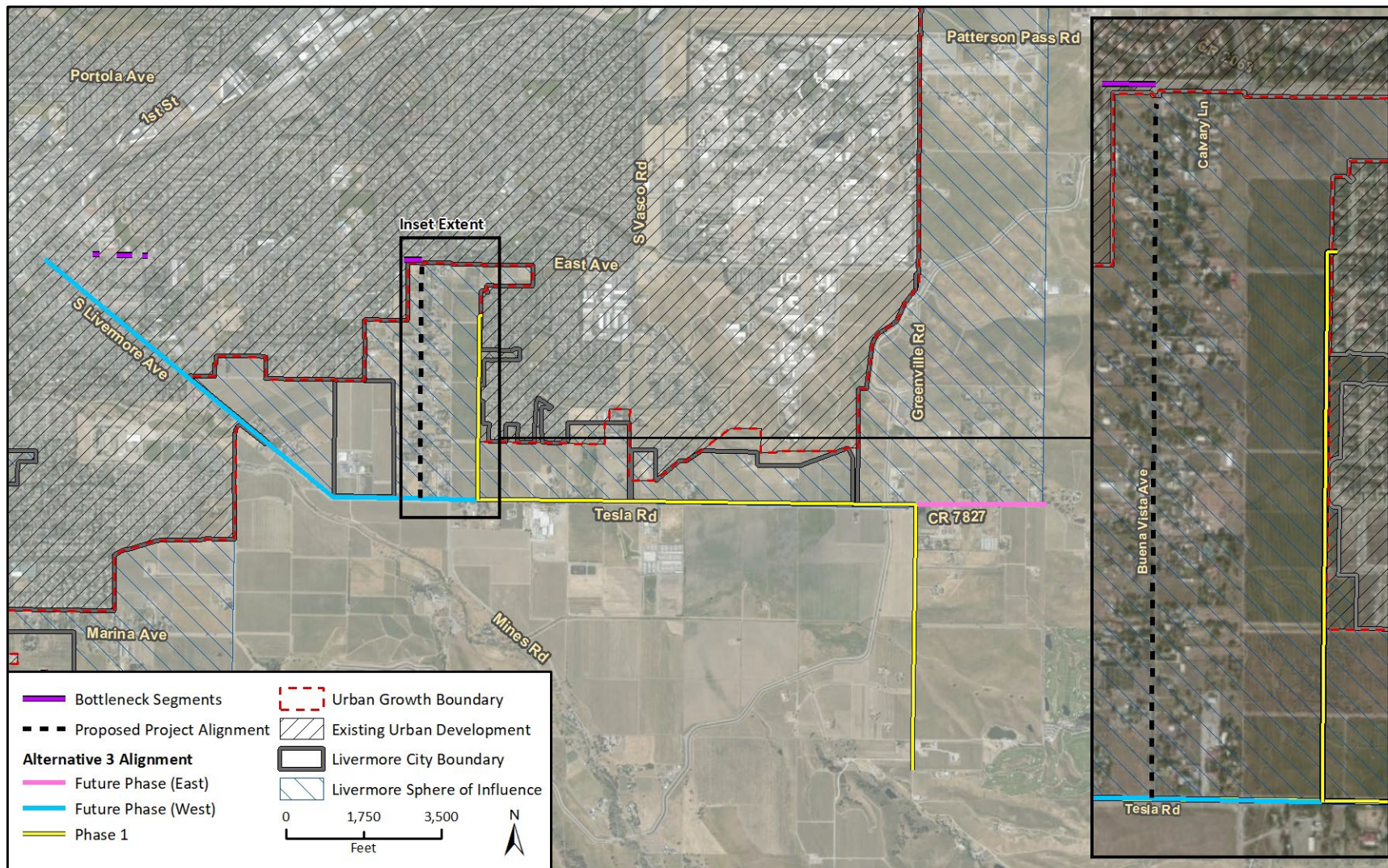
Construction of Alternative 2 would result in the increased potential for hazardous materials exposure and releases from historic pesticide uses on the adjacent parcels. Depending on the precise location of the shared WWTPs, which would require further environmental review under the County prior to approval, mitigation measures related to the release of hazardous materials during ground disturbance may be required. Alternative 2 would result in greater impacts related to both hazards and hazardous materials, and transportation than the proposed project, due to the need for biosolids to be regularly trucked off-site for disposal. The City has established designated truck routes, including I-580 and SR 84, which would be used by the operational truck trips of biosolids under Alternative 2. Operation of Alternative 2 would comply with federal, state, and local requirements regulating the transport of hazardous materials, and the number of trips added to local roadways by Alternative 2 would be minimal, as biosolid removal would not require daily trips to each of the small-scale WWTPs. While impacts to hazards and hazardous materials and transportation would be less than significant, they would be greater than the proposed project.

6.3 Alternative 3: Alternative Alignment

6.3.1 Description

Similar to the proposed project, Alternative 3 would involve pipeline upsizing associated with the Bottleneck Project and installation of new sewer pipelines along South Livermore Avenue, Tesla Road, and Greenville Road. Instead of the proposed 5,400-LF alignment along Buena Vista Avenue from East Avenue to Tesla Road, Alternative 3 would include 3,800 LF of pipeline within agricultural land located approximately 1,200 feet east of Buena Vista Avenue, to connect to an existing pipeline in Carnegie Loop. Carnegie Loop is located northwest of Bruno Canziani Neighborhood Park. The advantage of connecting to the existing pipeline in Carnegie Loop would be that the total length of new sewer pipeline would be 1,600 LF shorter than under the proposed project and would be returned to active agricultural use after construction. Figure 6-1 shows the location of the pipeline alignment under this alternative. This alternative would require the same change to the UGB language as the proposed project. However, Alternative 3 would not achieve all of the project objectives because it would not extend municipal sewer service to existing residences along Buena Vista Avenue or reduce groundwater quality issues.

Figure 6-1 Alternative 3 Alignment



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Fig 6-1 Alternative 3

6.3.2 Impact Analysis

a. Hydrology and Water Quality

Similar to the proposed project, Alternative 3 would require removal of the existing roadbed, grading and excavation, installation of the new sewer pipe, backfill of the trench, and repaving on South Livermore Avenue, Tesla Road, Greenville Road, and East Avenue. No construction along Buena Vista Avenue would occur. Additionally, both the proposed project and Alternative 3 would require implementation of BMPs for site design and stormwater treatment along with full compliance with the Livermore Municipal Code, the goals, policies, and actions of the City's General Plan, the San Francisco Bay RWQCB's post-construction requirements for stormwater management, and mandatory CWA requirements (NPDES Construction General Permit and MS4 General Permit). The alignment associated with Alternative 3 would be 1,600 LF shorter than under the proposed project; however, 3,800 LF of sewer pipeline would be constructed within active agricultural land located east of Buena Vista Avenue. With adherence to the requirements detailed in Section 4.1, *Hydrology and Water Quality*, Alternative 3 would result in a similar potential for temporary impacts to water quality due to runoff leaving the project alignment from grading and excavation activities or accidental leaking of fuel, oil, and lubricants from heavy construction equipment as compared to the proposed project.

Unlike the proposed project, Alternative 3 would not allow residential parcels on Buena Vista Avenue to connect to the City's wastewater system, and wastewater would continue to be discharged to on-site septic systems. Therefore, Alternative 3 would result in reduced improvements to groundwater due to the removal of septic systems as compared to the proposed project. Overall, Alternative 3 would result in less than significant impacts to hydrology and water quality; however, Alternative 3 would result in increased impacts to hydrology and water quality as compared to the proposed project.

b. Utilities and Service Systems

Alternative 3 would not result in an unanticipated demand for water at the existing uses in the project vicinity, similar to the proposed project. Additionally, Alternative 3 would continue to allow runoff from the existing paved impervious surfaces along South Livermore Avenue, Tesla Road, and Greenville Road after construction, and the overall amount of surface runoff would not increase, similar to the proposed project. Since construction of Alternative 3 would not result in the addition of impervious surfaces within the agricultural land, no new drainage facilities would be required to accommodate an increased amount of surface runoff, similar to the proposed project. Also similar to the proposed project, Alternative 3 would not require expanded electric power, natural gas facilities, or telecommunications infrastructure.

Both Alternative 3 would result in a temporary increase in water supply needs for construction activities, such as dust suppression and concrete manufacturing, similar to the proposed project. However, implementation of Alternative 3 may require more dust suppression as compared to the proposed project due to proposed construction within active agricultural land. Alternative 3 would increase the demand for wastewater treatment from expanded residential and commercial use of the City's wastewater system along South Livermore Avenue, Tesla Road, and Greenville Road, similar to the proposed project. Untreated organic flows from adjacent wineries could overload the treatment processes at the LWRP, as the same wineries would be able to connect to the proposed sewer extension as under the proposed project. As with the proposed project, Livermore Municipal

Code 13.32.060 prohibits discharge into the City's system that would interfere with the performance or operation of the LWRP. Therefore, pre-treatment of the organic flows from wineries that apply for a sewer connection to the proposed system may be required upon City approval of future connections to the proposed alignment to reduce the potential for the increased sewer flows to overload the treatment processes at the LWRP. However, Alternative 3 would result in a lesser increase in the demand for wastewater treatment, as residences along Buena Vista Avenue would not be able to connect to the City's wastewater system under this alternative. Overall, impacts to utilities and service systems would be less than significant and reduced in comparison to the proposed project due to the reduced increase in demand for wastewater treatment.

c. Other CEQA Topics

Similar to the proposed project, Alternative 3 would require construction along existing roadways, which would result in the closure of one lane of roadway and the Class II bicycle lane at any given time. However, Alternative 3 would not require the closure of travel lanes along Buena Vista Avenue. Therefore, transportation impacts would be less than significant and slightly reduced as compared to the proposed project.

Construction under Alternative 3 would temporarily increase the use and transport of hazardous materials in the project area through the operation of vehicles and equipment and would require the excavation and transport of paving materials and soils that could possibly be contaminated by vehicle-generated pollution, as well as agricultural pesticides, to a slightly greater extent than the proposed project. Construction of Alternative 2 would also result in the increased potential for hazardous materials exposure and releases from historic pesticide uses along the portion of the proposed alignment that would be located within active agricultural land. Mitigation measures related to the release of hazardous materials during ground disturbance may be required. Alternative 3 would result in greater impacts to hazards and hazardous materials than the proposed project.

Similar to the proposed project, Alternative 3 would not result in aboveground improvements, alter the existing pattern of land use in the project vicinity, introduce new land uses, divide connected neighborhoods, require the use of valuable mineral resources, result in mining activities, directly result in population growth, directly result in the construction of new residences or businesses, increase the demand for public services, increase the use or need for expanded recreational facilities, or exacerbate the risk of wildfire. Therefore, impacts to aesthetics, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire would be less than significant and similar to the proposed project.

Soils along the proposed alignment within agricultural land associated with Alternative 3 consist of Livermore very gravelly course sandy loam, which is considered farmland of statewide importance, as well as Pleasanton gravelly loam and Rincon loam, both of which are considered prime farmland if irrigated (Natural Resources Conservation Service 2022). Construction of Alternative 3 would not result in the permanent conversion of farmland to non-agricultural use because existing agricultural uses would continue after construction is complete; therefore, impacts would be less than significant. However, construction of the pipeline within agricultural land would result in the temporary disruption of existing agricultural uses during project construction, which would result in slightly greater impacts to agricultural resources as compared to the proposed project.

Alternative 3 would result in disturbance of land at greater depths than what has historically occurred through active agriculture. Therefore, construction of Alternative 3 would result in a greater potential for impacts to biological resources, cultural resources, geology and soils, and tribal

cultural resources that would require the same mitigation measures as the proposed project (refer to Appendix IS) to reduce impacts to less than significant levels:

- Mitigation Measure BIO-1: Nesting Bird Avoidance and Minimization Efforts;
- Mitigation Measure CR-1: Unanticipated Archaeological Resources;
- Mitigation Measure GEO-1: Paleontological Resources Monitoring and Mitigation; and
- Mitigation Measure TCR-1: Unanticipated Discovery of Tribal Cultural Resources.

Overall, Alternative 3 would have greater potential impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources than the proposed project.

The 1,600-LF reduction in total pipeline length under Alternative 3 would reduce both the construction footprint and the total days of construction. Therefore, impacts to air quality, energy, GHG emissions, and noise, would be slightly reduced as compared to the proposed project. Mitigation Measure NOI-1 would still be required to reduce construction noise at the sensitive residential receivers along East Avenue and South Livermore Avenue, as well as additional sensitive residential receivers on Carnegie Loop, Lawson Circle, and Hall Circle, which are located adjacent to the proposed Alternative 3 alignment within the agricultural land (Figure 6-1). Impacts related to air quality, energy, GHG emissions, and noise under Alternative 3 would remain less than significant and reduced as compared to the proposed project.

6.4 Alternatives Considered but Rejected

One alternative considered included changing the location of the existing UGB boundary to allow for urban development, such as extended sewer service, to occur within a larger area in the southeast portion of the City. This change would allow for construction of the extended sewer pipeline to occur within the UGB boundary without requiring a change to the UGB language, which would require voter approval. However, a change in the location of the existing UGB boundary would also require voter approval, and this alternative would ultimately result in the same construction as the proposed project. Therefore, this alternative would not avoid the potential impacts anticipated under the proposed project. Because this alternative involve similar voter requirements, construction, and impacts as the proposed project, it was rejected as an alternative to the project.

6.5 Environmentally Superior Alternative

Table 6-1 indicates whether each alternative's environmental impact is greater than, less than, or similar to that of the proposed project for each of the issue areas studied. Based on the alternatives analysis provided above, Alternative 1 would be the environmentally superior alternative. However, pursuant to *CEQA Guidelines* Section 15126.6(e)(2), if the No Project Alternative is determined to be environmentally superior, the EIR shall also identify an environmentally superior alternative among the other alternatives. Therefore, Alternative 3 would be the environmental superior alternative, as it reduces impacts to air quality, energy, GHG emissions, noise, and utilities and service systems by shortening the linear footage of new sewer pipeline, compared to the proposed project. Overall, in comparison to the proposed project, Alternative 3 would reduce impacts to five environmental issue areas and increase impacts to six environmental issue areas, and would result in a similar level of impact to nine environmental issue areas.

Alternative 1 (No Project/No Construction Alternative) assumes that the UGB language revision is not approved by a majority of voters, and that the proposed pipeline and upsizing of existing pipeline along East Avenue are not constructed. Under this alternative, potential water quality impacts associated with construction and upsizing of the pipelines would not occur. Similarly, potential impacts to utilities associated with the additional demand for water from temporary construction activities and development of adjacent parcels would not occur. However, Alternative 1 would result in an overall increase in impacts to hydrology and water quality due to water quality issues associated with the degradation of groundwater from continued discharge to residential and commercial on-site septic systems. However, as no construction would occur under this alternative, the mitigation measures associated reducing construction noise, avoiding and minimizing impacts to nesting birds, and monitoring for unanticipated archeological, paleontological, and tribal cultural resources would not be required. Alternative 1 would not fulfill the Project Objectives because the existing conditions would not improve groundwater quality in the South Livermore Valley, existing wineries and residences would be unable to realize their development potential under the General Plan and SLVSP, and economic viability of agriculture and viticulture in the region would not be enhanced.

Alternative 2 (No Project/On-Site Wastewater Treatment) would not install new municipal sewer pipelines and would not require a revision to the UGB language. Instead, individual wineries and property owners would coordinate to construct shared small-scale WWTPs on individual properties to treat and dispose of additional wastewater generated by the maximum development potential of each property under the General Plan and SLVSP. Construction of the WWTPs would result in an increase in impervious surfaces, which could alter the existing drainage pattern in the vicinity of the facilities. As a result, new drainage facilities may be needed to accommodate the increased amount of surface runoff. Alternative 2 would also have an increased demand for electric power during operation and maintenance of the small-scale WWTPs. Therefore, this alternative is expected to have increased impacts to hydrology and water quality and utilities and service systems as compared to the proposed project. In addition, Alternative 2 would have increased impacts to aesthetics due to the addition of new aboveground structures that could result in obstructed views of scenic vistas from South Livermore Road and Tesla Road, which are designated Scenic Routes. Alternative 2 would also result in increased impacts to noise, air quality, GHG, and energy associated with the ongoing operation of the WWTPs. Similarly, ongoing operation of the WWTPs would require frequent truck trips for off-site disposal of biosolids, resulting in an increase in impacts to both hazards and hazardous materials and transportation as compared to the proposed project. Alternative 2 would also have increased hazards and hazardous materials impacts during construction, due to the potential release of historic agricultural pesticides. As with the proposed project, the same mitigation measures during the construction period for noise, biological resources, cultural resources, geology and soils, and tribal cultural resources would be required. Additional mitigation measures related to odor control and operational noise control may be required during operation of the WWTPs under this alternative. Alternative 2 would not fulfill all Project Objectives because it would not enhance the short-term economic viability of agriculture and viticulture in the area, as the construction and installation of individual WWTPs would likely have high individual costs and have uncertain timing due to the necessary coordination between landowners and permit approval process.

Alternative 3 (Alternative Alignment) would involve the construction of the same segments of new and upsized pipeline with the exception of the alignment on Buena Vista Avenue. Under this alternative, 3,800 LF of pipeline would be constructed within agricultural land located approximately 1,200 feet east of Buena Vista Avenue instead of the proposed 5,400-LF alignment along Buena

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Vista Avenue. As a result, construction of the pipeline within agricultural land would result in the temporary disruption of existing agricultural uses in soils considered farmland of statewide importance and prime farmland if irrigated during project construction, which would have greater impacts to agriculture resources as compared to the proposed project. In addition, Alternative 3 would not allow residential parcels on Buena Vista Avenue to connect to the City’s wastewater system which would result in increased impacts to hydrology and water quality due to ongoing groundwater quality degradation associated with residential discharge to on-site septic systems. However, Alternative 3 would result in reduced impacts to utilities and service systems due to a lesser increase in the demand for wastewater treatment (pretreatment of winery organic flows may still be required by the City to maintain the performance), as residences along Buena Vista Avenue would not be able to connect to the City’s wastewater system. As with the proposed project, the same mitigation measures during the construction period for noise, biological resources, cultural resources, geology and soils, and tribal cultural resources would be required. Alternative 3 would not fulfill all Project Objectives because it would not extend municipal sewer service to existing residences along Buena Vista Avenue and reduce groundwater quality issues.

Table 6-1 Impact Comparison of Alternatives

Issue	Proposed Project Impact Classification	Alternative 1: No Project/No Construction	Alternative 2: No Project/On-Site Wastewater Treatment	Alternative 3: Alternative Alignment
Aesthetics	No impact	=	-	=
Agriculture and Forestry Services	No impact	=	-	-
Air Quality	Less than significant	+	-	+
Biological Resources	Less than significant with mitigation	+	-	-
Cultural Resources	Less than significant with mitigation	+	-	-
Energy	Less than significant	+	-	+
Geology and Soils	Less than significant with mitigation	+	-	-
Greenhouse Gas Emissions	Less than significant	+	-	+
Hazards and Hazardous Materials	Less than significant	+	-	-
Hydrology and Water Quality	Less than significant	-	-	-
Land Use and Planning	No impact	=	=	=
Mineral Resources	No impact	=	=	=
Noise	Less than significant with mitigation	+	-	+
Population and Housing	Less than significant	=	=	=
Public Services	No impact	=	=	=
Recreation	No impact	=	=	=
Transportation	Less than significant	+	-	+
Tribal Cultural Resources	Less than significant with mitigation	+	-	-
Utilities and Service Systems	Less than significant	+	-	+
Wildfire	No impact	=	=	=
Overall Impact Comparison		11 + 8 = 1 -	0 + 7 = 13 -	6 + 7 = 7 -

+ Superior to the proposed project (reduced level of impact)

- Inferior to the proposed project (increased level of impact)

= Similar level of impact to the proposed project

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Appendix IS

Initial Study for South Livermore Sewer Expansion Project



South Livermore Sewer Expansion Project

Initial Study

prepared by

City of Livermore

1052 South Livermore Avenue

Livermore, California 94550

Contact: Andy Ross, Senior Planner

prepared with the assistance of

Rincon Consultants, Inc.

449 15th Street, Suite 303

Oakland, California 94612

May 2022



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

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Appendices

Appendix AQ	Road Construction Emissions Model Inputs and Outputs
Appendix EN	Energy Fuel Consumption Calculations

Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
AGVT	Agriculture/Viticulture
amsl	above mean sea level
BAAQMD	Bay Area Air Quality Management District
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CNEL	Community Noise Equivalent Level
CO ₂	carbon dioxide
CWA	Clean Water Act
dB	decibels
dba	A-weighted sound pressure level
DNL	Day-Night Average Level
DOC	California Department of Conservation
DOF	California Department of Finance
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
FTA	Federal Transit Administration
GHG	greenhouse gas
GSP	Groundwater Sustainability Plan
GWP	global warming potential
I-580	Interstate 580

South Livermore Sewer Expansion Project

L _{ea}	equivalent noise level
LARPD	Livermore Area Recreation and Park District
LF	linear feet
LPD	Livermore Police Department
LPFD	Livermore-Pleasanton Fire Department
LMC	Livermore Municipal Code
LRA	Local Responsibility Area
NAAQS	National Ambient Air Quality Standards
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
PBDB	Paleobiology Database
PD-SLVSP	Planned Development – South Livermore Valley Specific Plan
PG&E	Pacific Gas and Electric Company
PM _{2.5}	particulate matter with a diameter equal to or less than 2.5 microns
PM ₁₀	particulate matter with a diameter equal to or less than 10 microns
PPV	peak particle velocity
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SLVAP	South Livermore Valley Area Plan
SLVSP	South Livermore Valley Specific Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SRA	State Responsibility Area
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SVP	Society of Vertebrate Paleontology
TAC	toxic air contaminant
UCMP	University of California Museum of Paleontology
UGB	Urban Growth Boundary
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VOC	volatile organic compound

Initial Study

The City of Livermore, as the Lead Agency, prepared this Initial Study for the South Livermore Sewer Expansion Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations [CCR] Section 15000 et. seq.), and the regulations and policies of the City of Livermore, California.

1. Project Title

South Livermore Sewer Expansion Project (project)

2. Lead Agency Name and Address

City of Livermore
Community Development Department
1052 South Livermore Avenue
Livermore, California 94550

3. Contact Person and Phone Number

Andy Ross, Senior Planner
aaross@LivermoreCA.gov
(925) 960-4475

4. Project Location

The project alignment is generally located southeast of the City of Livermore within unincorporated Alameda County, California. A portion of the project alignment is located within the City of Livermore and another portion aligns with the City's Sphere of Influence boundary. Phase 1 of the alignment would be located on Tesla Road from Buena Vista to Greenville Road, Buena Vista Avenue between East Avenue and Tesla Road, and Greenville Road from Tesla Road to approximately 5,900 feet south of Tesla Road. The alignment along Tesla Road is adjacent to the City's Sphere of Influence, with the western portion of the alignment along South Livermore Avenue within the city boundary and UGB. The portion along Buena Vista Avenue is within the City's Sphere of Influence and adjacent to the city boundary and UGB at East Avenue. The alignment along Greenville Road is outside the City's Sphere of Influence. The alignment along Buena Vista Avenue and Tesla Road from Buena Vista Avenue to Greenville Road is adjacent to SLVSP Subareas 1 and 2.

The project also includes two potential future phases of the sewer alignment. The western future phase would be located on South Livermore Avenue from approximately 520 feet northwest of Concannon Boulevard to Tesla Road, and on Tesla Road from South Livermore Avenue to Buena Vista Avenue. The eastern future phase would be located on Tesla Road from Greenville Road to approximately 3,000 feet east of Greenville Road.

An additional component of the project that would involve sewer improvements in the City limits (the Bottleneck Project) is located within the City of Livermore, in segments along East Avenue (three segments between 7th Street and Dolores Street and one segment just west of Buena Vista Avenue). The Bottleneck Project would be completed as part of Phase 1.

The project alignment (all phases) is located within existing paved rights-of-way. Figure 1 shows the regional context of the project alignment and Bottleneck Project, and Figure 2 shows the project alignment and Bottleneck Project in its vicinity context. Regional access to the project alignment and Bottleneck Project is available via Interstate 580 (I-580), which is located approximately 2.6 miles north of the project alignment and approximately 1.5 miles north of the Bottleneck Project.

5. Project Sponsor's Name and Address

City of Livermore
1052 South Livermore Avenue
Livermore, California 94550

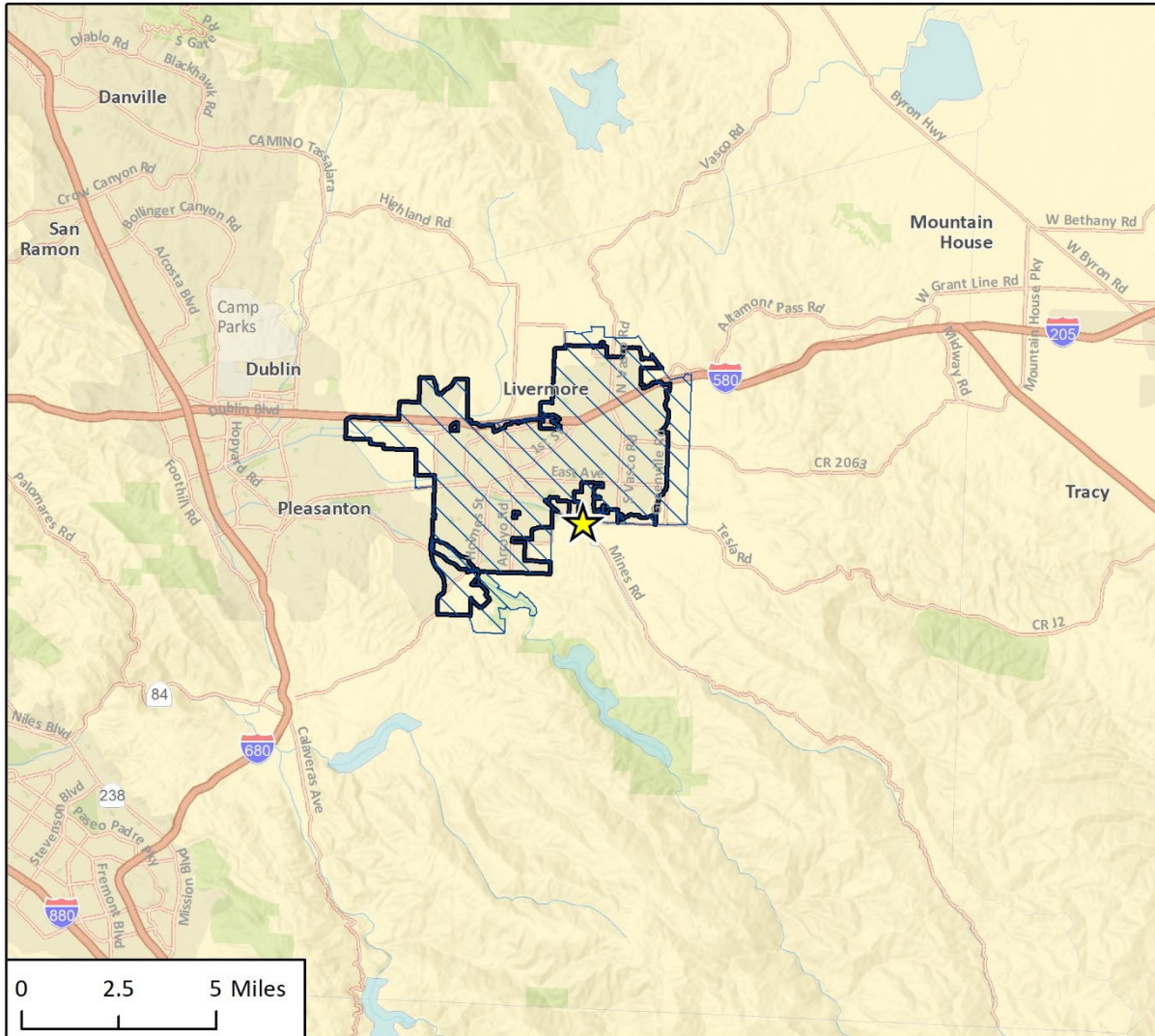
6. General Plan Designation

The project alignment is located within existing public roadway rights-of-way and does not have a land use designation. Land use adjacent to much of the project alignment is designated in the City's General Plan Map as Agriculture/Viticulture (AGVT). Additional parcels alongside the alignment are designated as Rural Residential (RR), Urban Medium High Residential (UMH), and Urban High Residential (UH), Community Facility (CF) Parks, Trailways, Recreation Areas (OSP), Agricultural Preserve (SV-AP), and Vineyard Commercial (SV-VC) land uses (City of Livermore 2015).





7. Zoning

The project alignment is located within existing public roadway rights-of-way and is not zoned. A portion of the parcels adjacent to the project alignment are zoned by the City of Livermore, while others are zoned by Alameda County. Parcels zoned by the City primarily include Planned Development – South Livermore Valley Specific Plan (PD-SLVSP), along with one adjacent parcel zoned as Education and Institutions (E), one adjacent parcel zoned as Open Space Agricultural (OS-A), and one adjacent parcel zoned as South Livermore Valley Agricultural (SLV-AG) (City of Livermore 2015). Parcels zoned by Alameda County include Agriculture, Single Family Residential, and Planned Development (County of Alameda 2021). Generally, surrounding and adjacent parcels in the area consist of residential development, commercial development, vineyards and wineries, and open space uses compliant with City's General Plan Land Use element and the County's Zoning Ordinance. Furthermore, the project alignment is also located within the Vineyard Area of the SLVAP.

Figure 1 Regional Location



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-  Project Location
-  N
-  Livermore City Boundary
-  Livermore Sphere of Influence

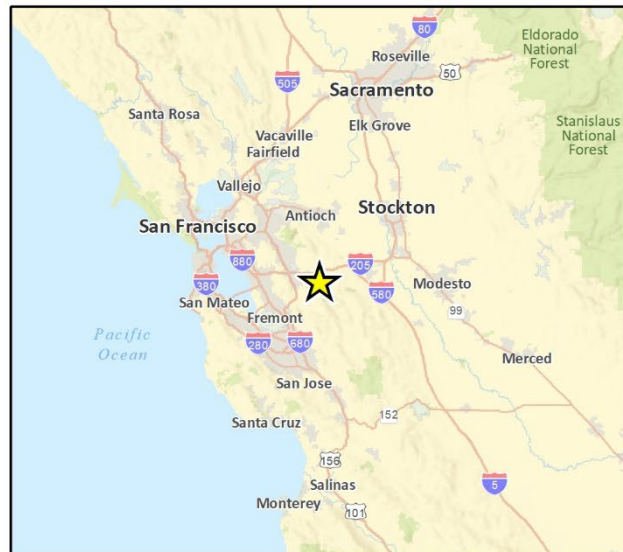


Fig 1 Regional Location

8. Project Description

Project Background

South Livermore Valley Area Plan

The County of Alameda adopted the South Livermore Valley Area Plan (SLVAP) in November 1992 as part of a collaborative effort between the cities of Pleasanton and Livermore, and Alameda County to create a planned area that preserves, promotes, and enhances viticulture and other cultivated agriculture. The SLVAP is a policy document that establishes criteria for future development for approximately 15,500 acres of undeveloped land in unincorporated areas south and east of the City of Livermore. The SLVAP limits development to areas that do not conflict with current or proposed agricultural uses in order to preserve and enhance viticulture and other cultivated agriculture. The County prepared a Draft EIR for the SLVAP (State Clearinghouse No. 1996052025). The Alameda County Planning Department certified the Final EIR (1992 EIR) and approved the project in November 1992 (County of Alameda 2003).

South Livermore Valley Specific Plan

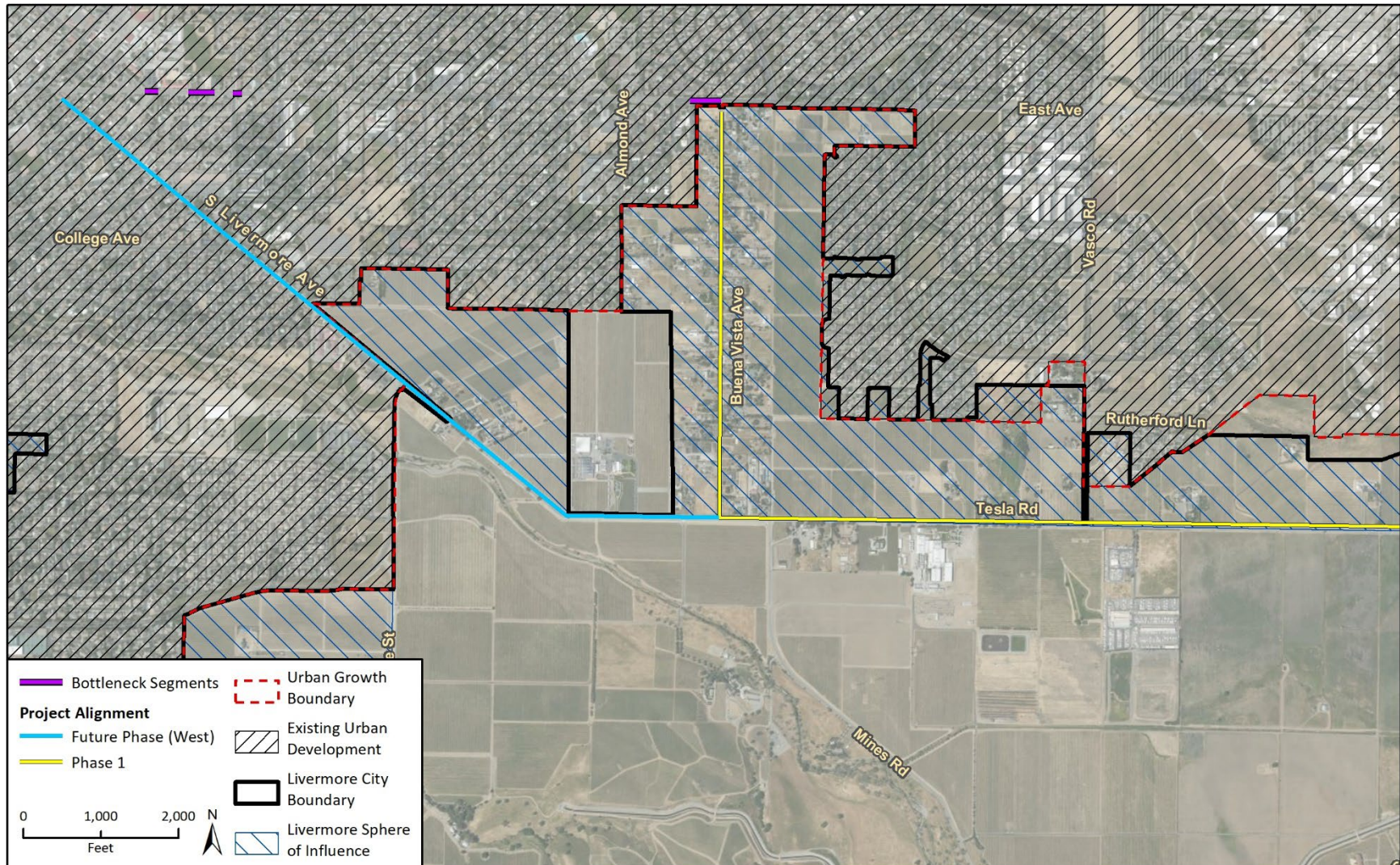
The City adopted the SLVSP on November 17, 1997, and amended it in February 2004. In 1993, the City initiated the specific planning process to implement the urban component of the County's Area Plan to guide development and promote and enhance viticulture and agriculture in South Livermore Valley. The SLVSP is a policy document that establishes criteria and a regulatory framework for future development in South Livermore Valley, which is located south of the City of Livermore boundary. The SLVSP incorporates several goals, development standards and policies that aim to conserve agricultural and natural resources in the plan area. The City prepared a Draft Environmental Impact Report (EIR) for the SLVSP and General Plan Amendment (State Clearinghouse No. 96052025). The City certified the Final EIR and General Plan Amendment (1997 EIR) and approved the SLVSP in September 1997.

The proposed sewer expansion would remove a constraint to and serve development potential of adjacent parcels as envisioned under the SLVSP; therefore, this analysis relies on the 1997 EIR for the SLVSP.

South Livermore Urban Growth Boundary Initiative

In March 2000, the City of Livermore voters approved the South Livermore Urban Growth Boundary (UGB). This voter initiative adopted policies into the City's General Plan for the establishment of the UGB in South Livermore. The UGB forms a southern border, beyond which urban development (including extended sewer and water service) is permitted only under limited exceptions. In addition, the UGB further protects and enhances agriculture and open space in the South Livermore Valley Specific Plan (SLVSP) area by regulating where development is permitted within South Livermore. Finally, the initiative reduces urban sprawl by preventing uncontrolled urban development that could otherwise encroach into existing agricultural land or open space areas. Figure 3 and Figure 4 show the UGB in relation to the proposed east and west segments of the project.

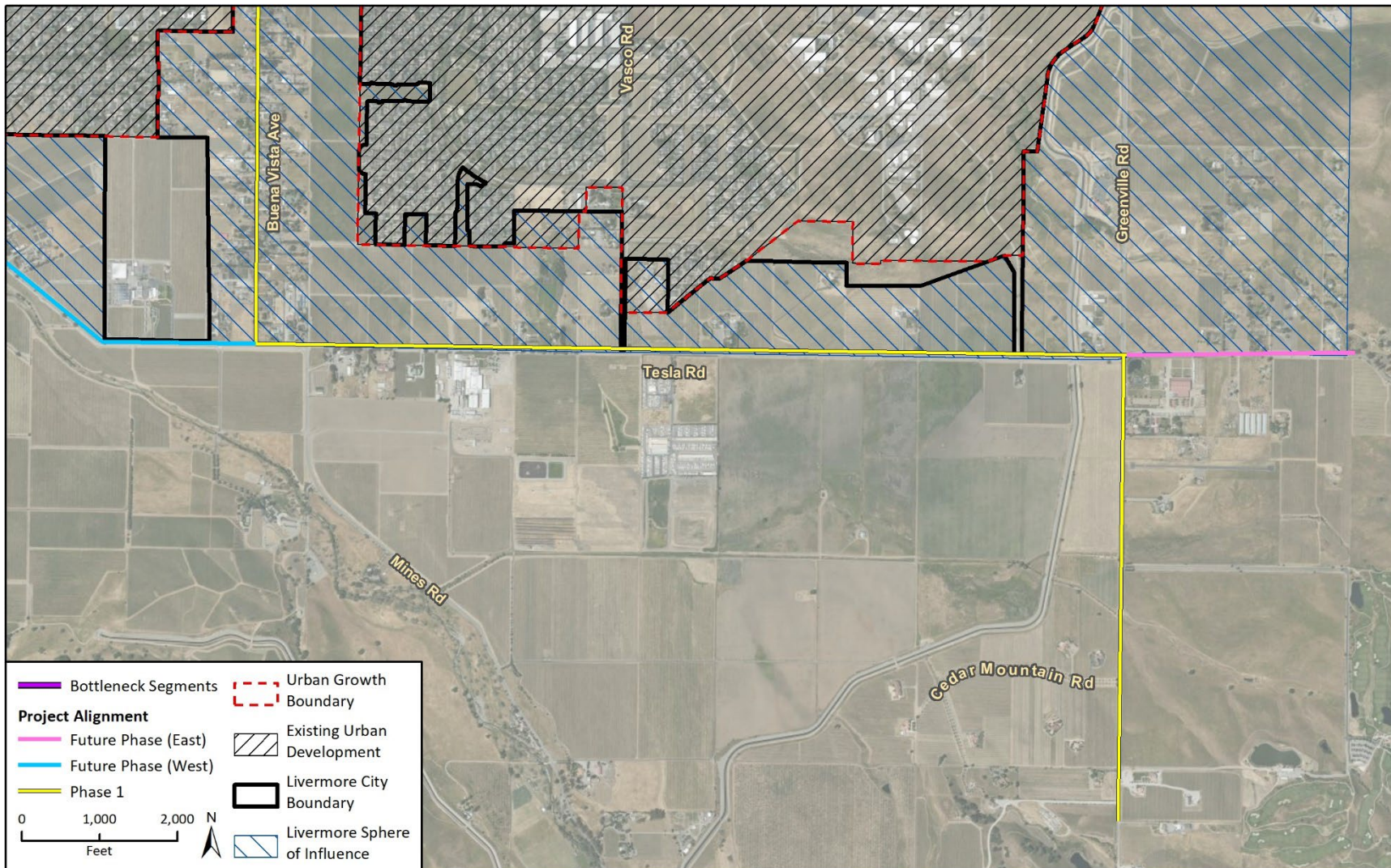
Figure 3 Sewer Extension and UGB - West



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Fig 3 Conceptual Plans_West

Figure 4 Sewer Extension and UGB - East



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Fig 3 Conceptual Plans_West

South Livermore Sewer Expansion Project

Because connection to urban services such as sanitary sewer is limited by the UGB, many residential and commercial uses in South Livermore Valley rely on on-site wastewater treatment systems (septic systems). In South Livermore Valley, the Regional Water Quality Control Board, County Department of Environmental Health, and Zone 7 Water Agency (Agencies) have restricted issuing permits for new septic systems or replacing failing septic systems.

The Agencies' positions reflect their missions to protect the Tri-Valley's groundwater basin. The Agencies have identified high nitrate concentrations in groundwater throughout the Tri-Valley resulting from past livestock operations and failing, undersized, or inefficient septic systems. These issues have the potential to adversely affect water quality and public health, safety, and quality of life. The inability to construct, expand, or replace septic systems or connect to the sanitary sewer is negatively affecting the South Livermore Valley wine industry and related uses thus preventing the vision of the Livermore General Plan, SLVAP and SLVSP.

Alameda Urban Growth Boundary Initiative

In November 2000, Alameda County voters passed Measure D. The purpose of Measure D is to preserve agricultural lands and to protect open space, watersheds, and wildlife habitat. Measure D set a county urban growth boundary that restricts subdivisions of the farms and ranches in eastern Alameda County, including North Livermore and the South Livermore Valley. Measure D amended portions of the County General Plan, including the East County Area Plan (ECAP). The initiative did not supersede or change the provisions of the SLVAP in the area to which the plan applied on February 1, 2000. However, the amended ECAP programs and policies place limits on density, development standards, and the geographical extent of the SLVAP.

Project Overview

The project would amend the South Livermore Valley UGB language to allow the extension of sanitary sewer lines to serve adjacent parcels containing residences and wineries located within and near the City of Livermore. This amendment would allow for the installation of approximately 5 miles of new sewer lines to support existing uses and future development consistent with the General Plan, SLVSP, and SLVAP in South Livermore Valley, subject to Alameda County Measure D. The purpose of the project is to improve groundwater quality in the South Livermore Valley area, serve existing development potential consistent with the City's General Plan and SLVSP, and enhance the short- and long-term economic viability of agriculture and viticulture in the South Livermore Valley area. Subject to necessary approvals and annexation into the City, the project would also allow existing residences on Buena Vista Avenue to connect to the City's wastewater system and cease the use of their on-site septic systems. The project is intended to support uses that are consistent with the City's General Plan, SLVSP, or current zoning; should development on adjacent parcels that is not consistent with existing land use designations and zoning be proposed, additional CEQA review would be required.

Phase 1 of the proposed sewer extension would be installed within Tesla Road from Buena Vista Avenue to Greenville Road, within Buena Vista Avenue from East Avenue to Tesla Road, and within Greenville Road from Tesla Road to approximately 5,900 feet south of Tesla Road. The expanded sewer facilities would allow existing and future wineries, visitor serving uses, and residences to connect to the City's wastewater system in conformance with the Livermore General Plan, South Livermore Valley Specific Plan, and/or South Livermore Valley Area Plan, subject to the provisions of Alameda County Measure D.

The City's 2017 Sewer Master Plan also identifies a Bottleneck Project (BO-CIP-P06) located on East Avenue. Preliminary analysis of the proposed project identified four segments of 12-inch sewer pipes that may need to be upsized on East Avenue between Maple Street and Buena Vista Avenue (City of Livermore 2017). The locations of each segment are shown in Figure 5. In total, approximately 950 linear feet (LF) would need to be upsized to accommodate the proposed project. Therefore, the proposed project may require the Bottleneck Project to be undertaken sooner than originally anticipated.

Two potential future phases of the sewer alignment would install sewer pipelines within South Livermore Avenue from approximately 520 feet northwest of Concannon Boulevard to Tesla Road, and on Tesla Road from South Livermore Avenue to Buena Vista Avenue (western future phase); and within Tesla Road from Greenville Road to approximately 3,000 feet east of Greenville Road (eastern future phase). The western future phase would provide redundancy within the sewer collection system, and the eastern future phase would expand the availability of services to several parcels east of Greenville Road.

The project would not require ground disturbance in agricultural or other natural areas, nor would it require vegetation removal.

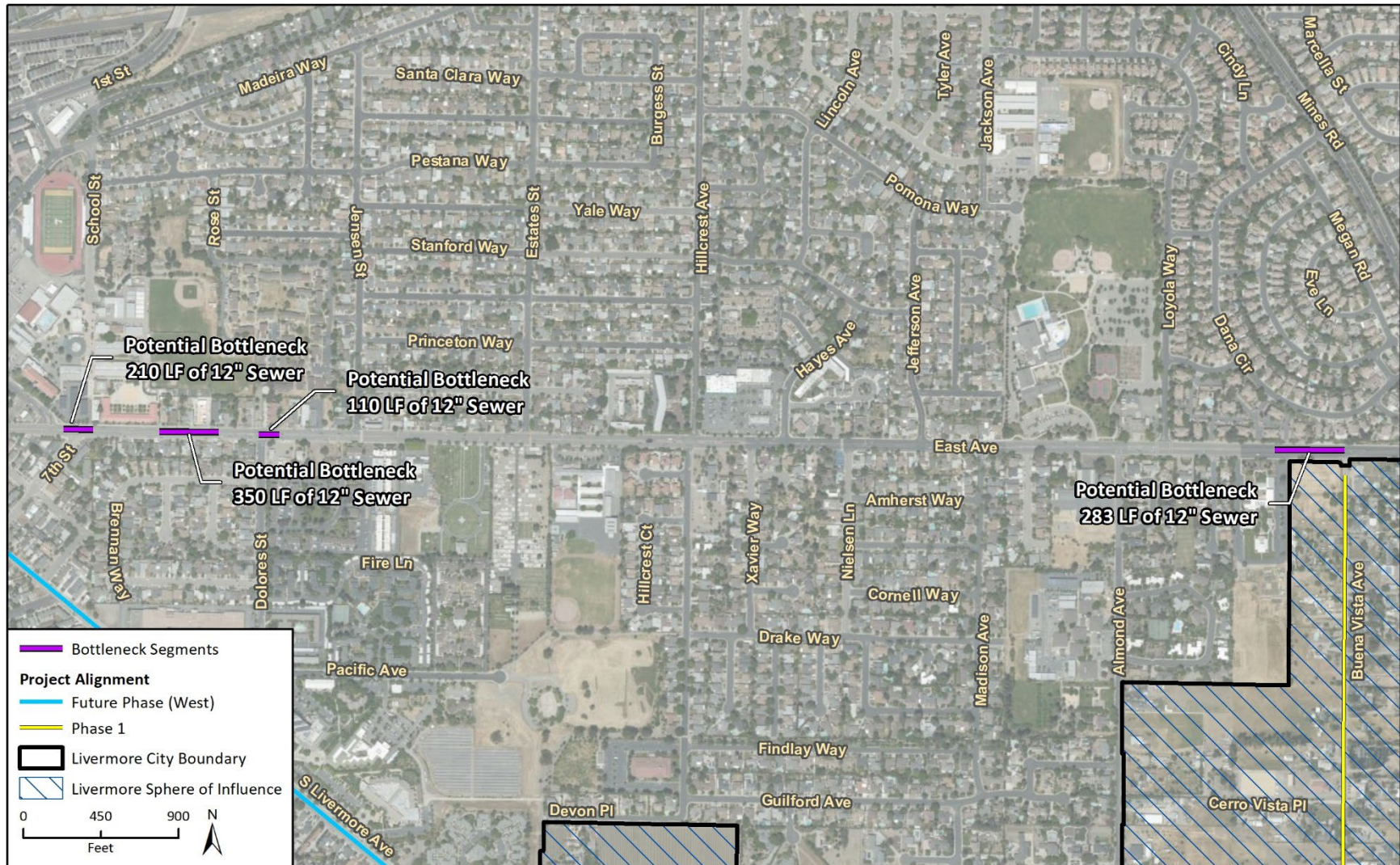
Construction

Construction is anticipated to commence in 2024 and last for approximately 12 months, ending in 2025. The project may be constructed in phases based on available funding. Construction would require one lane of the affected public roadways to be closed at any given time. To that end, a traffic control plan is proposed that would regulate worker parking, construction staging, roadway improvements and potential traffic detours during project construction. Construction staging, laydown areas, and worker parking would be provided along the project alignment in one travel lane, one bike lane, and one shoulder. The contractor may work with private property owners as feasible, or utilize the City's Maintenance Service Center for additional staging. The City would post signage along the alignment and on roadways leading up to it before and during construction to give advance warning of road closures and detours. Detour signs for bicycle lane users would also be provided to facilitate safe crossing while portions of the bicycle lanes are closed.

Construction would occur 5 days per week to expedite the work and minimize traffic impacts. Limited weekend work may occur to accommodate the project schedule at the discretion of the City; however, total working days per month are not expected to exceed 22 days. Construction of the project would involve the installation of approximately 27,000 LF of sewer. If the contractor installs 150 LF per day as anticipated, then this would take approximately 180 working days. Equipment would include excavators, backhoes, front loaders, dump trucks, and shoring and paving equipment.

Excavation depths would vary by location, with most depths between 5 and 15 feet below ground surface. Approximately 1,000 LF along Greenville Road south of Tesla Road would require excavation between 15 and 18 feet, and approximately 1,200 LF along Tesla Road east of Vasco Road would require excavation between 15 and 26 feet.

Figure 5 Bottleneck Segment Locations



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Fig 5 Bottleneck Segment Locations 20220426

Daily construction tasks would include excavation/grading, installing pipe, backfilling, patching pavement, and coordinating traffic control. Once an area is complete, final paving would be installed over the trench. Approximately 20 feet of width in the daily work area would be required. There is approximately 40 feet of pavement width on South Livermore Avenue, Tesla Road, Buena Vista Avenue, and Greenville Road. Therefore, construction would either require one-way traffic around the active work zone with one bike lane open, or two-way traffic without a bike lane. Once an area is completed, final paving over the trench and one foot beyond the trench would be installed. The County may require the entire road to be slurry sealed. The project would not increase the total impervious area.

In accordance with the Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ), the proposed project would implement a Stormwater Pollution Prevention Plan (SWPPP) that would include the use of best management practices (BMPs) during project construction. The project would require approximately 27,000 cubic yards of excavation, of which approximately 26,400 cubic yards would be used as backfill. Approximately 2,140 cubic yards of asphalt is anticipated to be exported. The Bottleneck Project may require roadway closures similar to the expansion project, and construction staging would occur on an adjacent property.

9. Project Setting and Surrounding Land Uses

The project alignment is currently fully developed and would take place within existing paved rights-of-way. The alignment is predominately flat, with a gentle slope from approximately 510 feet above mean sea level (amsl) at the northwestern portion of the project alignment at the intersection of South Livermore Avenue and East Avenue to approximately 720 feet amsl at the southeastern portion of the project alignment at the intersection of Tesla Road and Greenville Road. The alignment generally drains from the southeast to the northwest. The Bottleneck Project alignment is also predominately flat and currently a fully developed roadway and the project would take place within existing paved rights-of-way.

The SLVSP includes two Subareas (1 and 2) that are located adjacent to the project alignment. Subarea 1 is described as including horse ranches, the Stivers Academy elementary school, and Rios-Lovell Winery in the SLVSP, and is located north of the project alignment along Tesla Road east of South Vasco Road. Subarea 1 has since been developed with single-family residences, with the existing vineyard and winery still present within the subarea. Subarea 2 is described as including vineyards in the SLVSP, and is located north of the project alignment along Tesla Road between Buena Vista Avenue and South Vasco Road. Subarea 2 has since been developed with residences along Buena Vista Avenue and single-family residences surrounding the Bruno Canziani Neighborhood Park, with vineyards and wineries still present adjacent to Tesla Road and between the Buena Vista residences and Bruno Canziani neighborhood.

Figure 2 shows the project alignment and surrounding land uses, which are primarily residential and agriculture, located directly along the alignment. The parcels directly bordering South Livermore Avenue and Tesla Road are in active agricultural uses (viticulture). Several parcels that directly border Buena Vista Avenue and Greenville Road are residential uses. Parcels located adjacent to the project alignment are zoned as PD - SLVSP with a General Plan designation of SLVSP. The nearest school, Livermore High School, is located adjacent to the Bottleneck Project on East Avenue.

10. Other Public Agencies Whose Approval is Required

The City of Livermore is the lead agency for the CEQA documentation and process. The modified UGB language must be approved by the voters of the City of Livermore.

Required Approvals

The project would require the following approvals from the City of Livermore:

- City Council certification of a Supplemental EIR prepared in accordance with CEQA prior to approving the modified UGB language.
- City Council approval of language to modify the UGB and place on the ballot.

The project would also require the following:

- Approval of the modified UGB language by a majority of voters.

The project would require the following approvals from the County of Alameda:

- Encroachment Permit
- Traffic Control Plan

Following project completion, individual properties would require subsequent approvals including permitting and service agreements with the City subject to Alameda County Local Agency Formation Commission approval, County, and/or Livermore-Amador Valley Water Management Agency, prior to connection to the wastewater system.

11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

In accordance with Public Resources Code (PRC) Section 21080.3.1, the City sent consultation request letters to two tribes (Amah Mutsun Tribal Band of Mission San Juan Bautista and Ione Band of Miwok Indians).

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that requires further study beyond the impacts identified in the certified 1997 EIR, as indicated by the checklist on the following pages. The checklist is a modified version of the CEQA Guidelines Appendix G Initial Study checklist, based on evaluating the need for supplemental CEQA documentation under CEQA Guidelines Section 15162, and oriented to identifying topics requiring further analysis in a Supplemental EIR. The following impact areas were determined to have at least one impact identified as “Potentially Significant” or “Less than Significant with Mitigation Incorporated” where new mitigation not included in the 1997 EIR is required:

- | | | |
|---|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology and Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

- I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

City of Livermore
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- I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Andy Ross, Senior Planner

4/20/22

Date

Environmental Checklist

1 Aesthetics

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Except as provided in Public Resources Code Section 21099, would the project:

a. Have a substantial adverse effect on a scenic vista?	EIR Pages 4.8-10 through 4.8-27	No	No	No	N/A
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	EIR Pages 4.8-10 through 4.8-27	No	No	No	N/A
c. Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	EIR Pages 4.8-10 through 4.8-27	No	No	No	N/A
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	EIR Pages 4.8-10 through 4.8-27	No	No	No	N/A

1997 EIR Summary

Chapter 4.8 (Visual and Aesthetic Quality) of the 1997 EIR analyzes the existing SLVSP's impacts on visual quality. Visual impacts identified in the 1997 EIR are summarized as follows:

- **Subarea 1:** The EIR finds that no new development is considered for areas with high sensitivity. Therefore, it determines that this impact on scenic views would be less than significant.
- **Subarea 2:** The EIR states that development in the area would be consistent with the existing visual quality in the area. Therefore, it determines that this impact on scenic views would be less than significant.

The 1997 EIR determined that aesthetic impacts in Subareas 1 and 2 would be less than significant.

Setting

The alignment is primarily surrounded by residential development and maintained grassy lots with scattered trees along Buena Vista Avenue; residential development, commercial development, vineyards and wineries, and open space along South Livermore Avenue; vineyards and wineries, and residential development along Tesla Road; and vineyards and wineries along Greenville Road. There are distant views of Altamont Hills, located east of Livermore, and the Diablo Mountain Range, located north, south, and east of Livermore, from South Livermore Avenue and Tesla Road. The City's General Plan identifies such views as one of the primary visual characteristics and amenities of the City, and the General Plan includes both South Livermore Avenue and Tesla Road as Major Streets on the City's Planned Scenic Routes Map (City of Livermore 2015). The project alignment is approximately 1.6 miles south of the nearest eligible state scenic highway, I-580 (Caltrans 2021).

Regulatory Setting

City of Livermore General Plan 2003-2025

The City's General Plan Land Use and Community Character Elements both contain goals and policies regarding to the City's scenic qualities. Specifically, Goal LU-15 aims to preserve South Livermore's unique rural and scenic qualities (City of Livermore 2015). Goal CC-4 encourages protection and enhancement of public views within and from established scenic routes. Policy CC 4.6 P1 suggests that landscaping be maintained in scenic route corridors to provide added visual interest, to frame scenic views, and to screen unsightly views. Policy CC 4.7 P2 encourages new, relocated, or existing utility distribution lines be placed underground wherever feasible. Objective CC-4.14 outlines the control of removal of vegetation along scenic routes (City of Livermore 2015).

Impact Analysis

a. Would the project have a substantial adverse effect on a scenic vista?

A scenic vista is usually defined as a panoramic view from an elevated position or a long-range view from a public vantage point. This can include views of natural features or of the built environment, when architecture and landscaped boulevards offer high-value views of an area considered important to the sense of place. Although South Livermore Road and Tesla Road are identified as Scenic Routes by the City, the project would not impact the distant views of Altamont Hills and the Diablo Mountain Range from these roads as the project would not involve aboveground improvements. The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP. Therefore, the project would not have a substantial adverse effect on a scenic vista and there would be no impact. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The project alignment is located approximately 1.6 miles south of the nearest eligible state scenic highway, I-580. The project alignment is not visible from I-580. The project would not damage, nor require removal of, scenic resources such as trees, rock outcroppings, or historic buildings, none of which exist in the proposed area of disturbance (existing paved roadway alignments). Therefore, the proposed project would not damage scenic resources within a state scenic highway and there would be no impact. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project would be below grade and would not result in new or substantially altered visual or aesthetic conditions. Additionally, the project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP. The project would not conflict with current applicable zoning or other regulations governing scenic qualities, such as Goal LU-6 in the City's General Plan Land Use Element that ensures development minimizes potential visual impacts, Objective LU-6.1 that encourages development that does not detract from the scenic character of Livermore, and Goal LU-15 that specifically aims to preserve South Livermore's unique rural and scenic qualities (City of Livermore 2015). The project would be consistent with applicable zoning and other regulations governing scenic quality, and no aesthetic impacts would occur. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The project would not create additional permanent sources of light or glare; therefore, no permanent adverse effects to daytime or nighttime views in the area would occur. Additionally, the project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP. Construction would take place during daytime hours as required by the Livermore Municipal Code (LMC) Chapter 9.36, with the potential for limited nighttime construction during the winter months; therefore, the construction of the proposed project would not result in extended periods of time where construction lighting would affect road users and sensitive receptors adjacent to the project alignment. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

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2 Agriculture and Forestry Resources

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?	
Would the project:						
a.	Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	EIR Page 4.1-24 through 4.1-26	No	No	No	N/A
b.	Conflict with existing zoning for agricultural use or a Williamson Act contract?	EIR Page 4.1-27 through 4.1-28	No	No	No	N/A
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	N/A	No	No	No	N/A
d.	Result in the loss of forest land or conversion of forest land to non-forest use?	N/A	No	No	No	N/A
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?	EIR Page 4.1-24 through 4.1-26 and 4.1-35 through 4.1-42	No	No	No	Yes

1997 EIR Summary

Chapter 4.1 (Land Use) of the 1997 EIR analyzes the existing SLVSP's agriculture and forestry impacts. The 1997 EIR does not address the issues related to forest land or timberland. The 1997 EIR determined that agriculture impacts would be less than significant in Subareas 1 and 2, with mitigation required for potential urban-residential conflicts in these subareas. Agricultural resources mitigation measures that were incorporated in the 1997 EIR to reduce potentially significant impacts are summarized below:

Mitigation Measures 4.5-1(a)

The package of actions the City plans to consider at the same time as the Draft Plan includes a right-to-farm ordinance. The ordinance currently encourages dispute resolution methods to address any significant conflicts. The ordinance should be modified to require that an Information Officer be designated by each developer to formalize communications between homeowners and agriculturists. The role of the Information Officer should include at a minimum:

- Responsibility for organizing periodic briefings on agricultural activities.
- Responsibility for receiving grievances related to use conflicts in the South Valley.
- Responsibility for coordinating and facilitate meetings between homeowner associations and agriculturalists so that there is ongoing communication between these groups.
- Responsibility for preparing a quarterly newsletter describing what activities are upcoming in the vineyard and agricultural areas.
- Responsibility for developing a brochure which describes the role of the Information Officer and provides telephone and facsimile numbers for grievances or information requests. The brochure should be provided to new homeowners prior to close of escrow.

In the event of a conflict between a homeowner and an adjacent use, the Information Officer's responsibilities would include:

- Obtaining a clear understanding of the conflict
- If the agricultural operation is within typical agricultural practices, the Information Officer would explain the operation including equipment, the reason for the operation and likely duration of the operation to the resident.
- If the agricultural operation is performing activities which are not consistent with typical agricultural practices the Information Officer will contact the operator. If after discussion the Information Officer is not satisfied that typical agricultural practices are being followed, the Officer shall contact the City of Livermore. The City would be responsible for enforcing applicable policies and ordinances.
- In the event that either the agricultural operation or the resident is located in the County, the County's right-to-farm ordinance and grievance procedures would apply.

Periodic briefings should correspond to cyclical agricultural activities (e.g., spraying, harvesting, etc.) that have the potential to create a nuisance to nearby homeowners. Such briefings and meetings should be held at least twice a year (more if significant grievances are being communicated to the Information Officer).

The ordinance should modify the distance of the right-to-farm deed restrictions. This modification would change the distance of 1,000 feet presently provided by the draft ordinance to a distance of 2,000 feet. This latter distance exceeds the width of the urban shadow which agriculturists generally estimate extends beyond urbanized areas into farmland.

Mitigation Measures 4.5-1(b)

Amend the Draft Plan to encourage assembly or consolidation of potential agricultural land and/or for coordinated long-term agricultural operations on those parcels. The latter could be accomplished through leases by single farmers within individual subareas to plant, manage, and

harvest agricultural mitigation land located within the SLVSPA, and could be accomplished as part of the review of the required eight-year maintenance contract.

Setting

Roadways within the City of Livermore do not have a zoning or land use designation. However, most parcels adjacent to the project alignment are currently zoned by the City as PD-SLVSP along with one adjacent parcel zoned as Education and Institutions (E), one adjacent parcel zoned as Open Space Agricultural (OS-A), and one adjacent parcel zoned as South Livermore Valley Agricultural (SLV-AG) (City of Livermore 2015). Parcels in the project vicinity are zoned by Alameda County as Agriculture, Single Family Residential, and Planned Development (County of Alameda 2021). However, the proposed alignment is developed as a roadway.

The California Department of Conservation (DOC) manages the Farmland Mapping and Monitoring Program to assess and record suitability of land for agricultural purposes. In each county, the land is analyzed for soil and irrigation quality. The highest quality land is designated as Prime Farmland. The DOC lists the project alignment as entirely Urban and Built-Up Land. However, adjacent parcels in the vicinity of the project alignment are designated as Farmland of Statewide Importance, Prime Farmland, Unique Farmland, Grazing Land, Urban and Built-Up Land, and Other Land (DOC 2016).

Regulatory Setting

PRC Section 12220(g) defines forest land as:

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.

PRC Section 4526 defines timberland 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. Commercial species shall be determined by the board on a district basis.

Government Code Section 51104(g) defines a timberland production zone as:

“an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h).”

Impact Analysis

- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

The project alignment is located adjacent to lands classified as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance (DOC 2016). However, the project would be constructed entirely within existing paved rights-of way and would not require additional ground disturbance in adjacent agricultural or other natural areas. The project would not induce unanticipated growth in

the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP. As such, no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be affected by project implementation and no impact would occur. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

Multiple parcels adjacent to the project alignment are enrolled under the California Land Conservation Act and are subject to a Williamson Act contract as Prime Agricultural Land and Non-Prime Agricultural Land (DOC 2015a). Similarly, parcels alongside the project alignment are zoned by the City as both Open Space Agricultural and South Livermore Valley Agricultural, while other parcels adjacent to the project alignment are zoned by the County as Agriculture (City of Livermore 2015; County of Alameda 2021). However, the project would only extend sanitary sewer lines along existing paved roadways, which are not subject to Williamson Act contracts and do not have zoning designations or land use designations. The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract and no impact would occur. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The project alignment and surrounding areas are not designated as, nor adjacent to lands zoned for forest land, timberland, or timberland zoned for Timberland Production (CDFW 2021). Therefore, the project would not conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned for Timberland Production; result in the loss of forest land; or convert forest land to non-forest use and no impact would occur. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- e. *Would the project 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?*

The project would not directly or indirectly result in the conversion of farmland or forestland adjacent to the project alignment to non-agricultural use or non-forest use. The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP. Therefore, the project

would not result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR. There would be no impact. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

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3 Air Quality

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Conflict with or obstruct implementation of the applicable air quality plan?	N/A	No	No	No	N/A
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	EIR Pages 4.6-5 through 4.6-6	No	No	No	Yes
c. Expose sensitive receptors to substantial pollutant concentrations?	EIR Pages 4.6-5 to 4.6-8	No	No	No	Yes
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	EIR Page 4.6-9	No	No	No	Yes

1997 EIR Summary

Chapter 4.6 (Air Quality) of the 1997 EIR analyzes the existing SLVSP’s air quality impacts. This chapter does not address the issues of conflicts with air quality plans. The 1997 EIR determined that air quality impacts related to carbon monoxide from buildout under the SLVSP would be less than significant. All other air quality impacts were determined to be potentially significant or significant and unavoidable in Subareas 1 and 2. Air quality mitigation measures that were incorporated in the 1997 EIR to reduce potentially significant impacts are summarized below.

Mitigation Measures 4.6-1(a)

In order to mitigate potentially significant construction dust impacts, the City should require implementation of the BAAQMD’s following basic construction dust control measures as conditions of approval for all individual development projects or infrastructure improvement contracts in the SLVSPA:

- Water all active areas at least twice daily
- Pave, apply water three times daily, or apply non-toxic soil stabilizer on all unpaved roads, parking areas, and staging areas at construction sites
- Sweep paved access roads, parking areas, and staging areas at construction sites daily with water sweepers

South Livermore Sewer Expansion Project

- Sweep streets daily with water sweepers, if visible soil material is carried onto adjacent public streets

Mitigation Measures 4.6-1(b)

In order to mitigate potentially significant construction dust impacts at construction sites larger than four acres in size, the City should also require implementation of the BAAQMD's enhanced construction dust control measures as conditions of approval for those projects:

- Hydroseed or apply non-toxic soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or longer)
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.)
- Limit traffic speeds on unpaved roads to 15 miles per hour
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways
- Replant vegetation in disturbed areas as quickly as possible
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour

Mitigation Measure 4.6-3

The Draft Plan would provide off-street trail corridors to accommodate separate bicycle/pedestrian and equestrian use. The trail system would be an amenity for SLVSPA residents and visitors. Use would be primarily recreational and, therefore, would have only a minimal effect in reducing vehicle trips from SLVSPA land uses.

The generally low-density, predominantly residential, and semi-rural nature of SLVSPA development under the Draft Plan would severely limit available mitigation strategies to reduce trip generation. Therefore, the City should provide information to encourage individual residential development projects in all subareas to:

- Wire each housing unit to allow use of emerging electronic communication technology to encourage home employment
- Provide electrical recharge outlets in residential garages for electric cars

Residences include a number of intermittent air pollutant sources. Therefore, the City also should encourage the following measures for individual residential development projects in all subareas:

- Limit the number of fireplaces in residences to one per household and / or use EPA-certified wood stoves, pellet stoves, or fireplace inserts in housing units. EPA-certified fireplaces and fireplace inserts are 70 to 90 percent effective in reducing emissions from this source. Also encourage the use of natural gas fired fireplaces.
- Provide outdoor electrical outlets at residences to allow use of electrical lawn and landscape maintenance equipment
- Make natural gas available in residential backyards to allow use of natural gas-fired barbecues

Mitigation Measure 4.6-4

- Draft Plan's site planning standards provide 20-foot rear setbacks for residences. This distance is not expected to be sufficient to avoid dust-related impacts where residential development is located east of agricultural operations. In order to mitigate this air quality-land use conflict, the City should require the following measures as conditions of approval for residential development in Subareas 1, 2, 4, and 7:
- Where residential development would occur east of adjacent active agricultural lands, require developer to provide disclosure statements to prospective buyer warning of possible agricultural nuisances (see Mitigation Measure 4.1-5(a) related to the City's pending right-to-farm ordinance)
- Implement Mitigation Measure 4.1-5 (to reduce urban-rural conflicts)

Setting

Overview of Air Pollution

The federal and State Clean Air Acts mandate the control and reduction of certain air pollutants. Under these laws, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),¹ nitrogen oxides (NO_x), particulate matter with diameters of ten microns or less (PM₁₀) and 2.5 microns or less (PM_{2.5}), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO_x. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

¹ CARB defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this Initial Study.

Air Quality Standards and Attainment

The project alignment is located in the Livermore – Amador Valley subregion of the San Francisco Bay Area Air Basin (the Basin), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). As the local air quality management agency, BAAQMD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the USEPA classifies specific geographic areas as “attainment area” or “nonattainment area” for each pollutant. Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. BAAQMD is a designated nonattainment area for the ozone NAAQS and CAAQS, the PM_{2.5} NAAQS and CAAQS, and the PM₁₀ CAAQS and is required to prepare a plan for improvement (BAAQMD 2017a). The health effects associated with criteria pollutants for which the Basin is in non-attainment are described in Table 1.

Table 1 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).
Suspended particulate matter (PM _{2.5})	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma. ¹

¹ More detailed discussion on the health effects associated with exposure to suspended particulate matter can be found in the following documents: USEPA, Air Quality Criteria for Particulate Matter, October 2004.
 PM10 = particulate matter 10 microns in diameter or less; PM2.5 = particulate matter 2.5 microns or less in diameter
 Source: USEPA 2021a

Regulatory Setting

Air Quality Management

The Bay Area 2017 Clean Air Plan (the 2017 Plan) provides a plan to improve Bay Area air quality and protect public health as well as the climate. The legal impetus for the 2017 Plan is to update the most recent ozone plan - the 2010 Clean Air Plan - to comply with state air quality planning requirements as codified in the California Health & Safety Code. Although steady progress in reducing ozone levels in the Basin has been made, the region continues to be designated as non-attainment for both the one-hour and eight-hour ozone CAAQS. In addition, emissions of ozone precursors in the Bay Area contribute to air quality problems in neighboring air basins. Under these circumstances, state law requires the 2017 Plan to include all feasible measures to reduce emissions of ozone precursors (BAAQMD 2017b).

In 2006, the USEPA reduced the 24-hour PM_{2.5} NAAQS regarding short-term exposure to fine particulate matter from 65 micrograms per cubic meter (µg/m³) to 35 µg/m³. Based on air quality monitoring data for the 2006-2008 cycle showing that the region was slightly above the standard, in December 2008 the USEPA designated the Basin as non-attainment for the 24-hour PM_{2.5} NAAQS. This triggered the requirement for the BAAQMD to prepare a State Implementation Plan (SIP) to demonstrate how the region would meet the standard. However, data for both the 2008-2010 and the 2009-2011 cycles showed that PM_{2.5} levels in the Basin currently meet the standard. On October 29, 2012, the USEPA issued a proposed rulemaking to determine that the Basin now meets the 24-hour PM_{2.5} NAAQS. The Basin will continue to be designated as nonattainment for the 24-hour PM_{2.5} NAAQS until such time as the BAAQMD elects to submit a “redesignation request” and a “maintenance plan” to the USEPA, and the USEPA approves the proposed redesignation.

BAAQMD Significance Thresholds

The BAAQMD recommends that lead agencies determine appropriate air quality emissions thresholds of significance based on substantial evidence in the record. The BAAQMD’s significance thresholds in the updated May 2017 CEQA Air Quality Guidelines for land use development projects within the Basin are the most appropriate thresholds for use in determining air quality impacts of the proposed project (BAAQMD 2017b). The BAAQMD significance thresholds for criteria air pollutants, shown in Table 2, were used to evaluate the project’s potential air quality impacts. Projects that would result in criteria air pollutant emissions below these significance thresholds would not result in a cumulatively considerable net increase in criteria air pollutants for which the Basin is in non-attainment under applicable federal or state ambient air quality standards.

Table 2 Criteria Air Pollutant Significance Thresholds

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	

ROG = reactive organic gases; NO_x = nitrogen oxides; PM₁₀ = particulate matter 10 microns in diameter or less; PM_{2.5} = particulate matter 2.5 microns or less in diameter; lbs/day = pounds per day

Source: BAAQMD 2017b

The BAAQMD also provides a preliminary screening methodology to conservatively determine whether a proposed project would exceed CO thresholds. If the following criteria are met, a project would result in a less than significant impact related to local CO concentrations:

- Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
- Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.

South Livermore Sewer Expansion Project

- Project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The BAAQMD has also established screening criteria applicable to projects that would introduce new stationary sources of toxic air contaminants (TAC) emissions. A project would result in significant impacts if TAC emissions would result in an increased cancer risk level of more than 10 in one million or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0.

City of Livermore General Plan 2003 – 2025

The City's Climate Change Element contains policies focused on designing, constructing, and operating new development in a way that reduces potential for future air quality problems, such as Policies 1 through 4 under Objective CLI-1.1, which ensure that best available control technology is used for operations that could generate air pollutants; encourages energy conservation and low-polluting energy sources; promotes landscaping and tree planting to absorb CO and other pollutants; and implements complementary strategies to reduce greenhouse gases (GHG) identified in the Climate Action Plan (CAP). Additionally, Policy 1 under Objective OSC-6.1 of the Open Space and Conservation Element requires that construction and grading practices minimize airborne dust and particulate matter (City of Livermore 2015).

Methodology

Air pollutant emissions generated by project construction were estimated using the Sacramento Metropolitan Air Quality Management District (SMAQMD) Road Construction Emissions Model, Version 9.0.0. This model utilizes project-specific information including the project type, construction time, project area, and project location to model a project's construction emissions. The analysis reflects project construction and operation as described under Initial Study Section 9, *Project Description*. Model inputs and calculations are included in Appendix AQ.

Construction

Construction emissions modeled include emissions generated by construction equipment used along the alignment and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. Construction would begin in January 2024 and would last for approximately 12 months with an assumption that there would be 22 working days per month. The construction equipment list used in the model was based on project-specific information, and it was assumed to be diesel-powered.

Operational Emissions

While the conveyance of wastewater and additional wastewater treatment demand would require an incremental increase in energy demand at the Livermore Water Reclamation Plant, the air quality emissions associated with the additional energy demand would be within the BAAQMD permitted thresholds for the Livermore Water Reclamation Plant, and the project would not generate more emissions than existing conditions. No buildings would be constructed, as the project would only serve existing development potential consistent with the vision of the General Plan and SLVSP. Similarly, the project would not result in unanticipated growth beyond the current vision of the General Plan and SLVSP in the vicinity. As a result, no change to existing operations would result from the project, and a quantitative analysis of operational emissions is not included.

Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The California Clean Air Act requires that air districts create a Clean Air Plan that describes how the jurisdiction will meet air quality standards. The most recently adopted applicable air quality plan is the BAAQMD's 2017 Plan. As described in the *Air Quality Management* Section, the 2017 Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan. Pursuant to air quality planning requirements, the 2017 control strategy includes feasible measures to reduce emissions of ozone precursors – ROG and NO_x. The 2017 Plan does not include control measures that apply directly to individual development projects. Instead, the control strategy includes measures related to specific emissions sectors.

Under BAAQMD's methodology, a determination of consistency with the 2017 Plan should demonstrate that a project:

- Supports the primary goals of the air quality plan
- Includes applicable control measures from the air quality plan
- Does not disrupt or hinder implementation of any air quality plan control measures

A project that would not support the 2017 Plan's goals would not be considered consistent with the 2017 Plan. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support for the 2017 Plan's goals. In addition, applicable control measures such as green building construction, waste diversion, and water conservation would indicate support for the clean air plan goals on an individual project basis.

The project would not generate new operational emissions and construction activities would create temporary emissions that would cease upon completion of the project. Furthermore, as described under *criterion b*, construction activities would adhere to 2017 Plan control measures and construction-related emissions would not exceed the applicable BAAQMD significance thresholds. Therefore, the proposed project, consistent with the BAAQMD's CEQA thresholds, would not conflict with or obstruct the implementation of the 2017 Plan. This impact would be less than significant and this topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Construction activities such as the use of construction vehicles and equipment, trenching, and disturbance of stockpiled soils have the potential to generate fugitive dust (PM₁₀) through the exposure of soil to wind erosion. Exhaust emissions associated with heavy construction equipment could contribute to the degradation of regional air quality. Air pollutant emissions associated with project construction and operation are discussed in the following subsections.

Construction Emissions

CRITERIA AIR POLLUTANT EMISSIONS

Table 3 summarizes the estimated maximum daily emissions of pollutants during project construction. As shown therein, construction-related emissions would not exceed BAAQMD thresholds. Therefore, project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. This impact would be less than significant and this topic will not be discussed in the Supplemental EIR. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.

Table 3 Estimated Average Daily Construction Emissions (lbs/day)

	ROG	NO _x	Exhaust PM ₁₀	Exhaust PM _{2.5}
2024	2	24	1	1
BAAQMD Thresholds	54	54	82	54
Threshold Exceeded?	No	No	No	No

ROG = reactive organic gases; NO_x = nitrogen oxides; PM₁₀ = particulate matter 10 microns in diameter or less; PM_{2.5} = particulate matter 2.5 microns or less in diameter; lbs/day = pounds per day; BAAQMD = Bay Area Air Quality Management District

Notes: All emissions modeling was completed using the SMAQMD Road Construction Emissions Model. See Appendix AQ for model output results. Some numbers may not add up due to rounding.

FUGITIVE DUST

Site preparation and grading/excavation may cause wind-blown dust that could contribute particulate matter into the local atmosphere. BAAQMD has not established a quantitative threshold for fugitive dust emissions but rather states that projects that incorporate BMPs for fugitive dust control during construction, such as watering exposed surfaces and limiting vehicle speeds to 15 miles per hour, would have a less than significant impact related to fugitive dust emissions. The project would be required to include implementation of these BMPs consistent with Objective OSC-6.1 Policy 1 in City’s General Plan (2015); therefore, construction-related fugitive dust emissions would be less than significant and this topic will not be discussed in the Supplemental EIR. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.

Operational Emissions

Project operation would not increase energy use in the form of electricity, natural gas, or gasoline and diesel fuel consumption. No buildings would be constructed, no vehicle traffic would be generated, and the project would not result in unanticipated growth in the vicinity. As such, no change to existing operations is expected to result from the project. Project operation would not result in a cumulatively considerable net increase of ROG, NO_x, PM₁₀, or PM_{2.5} emissions, and impacts would be less than significant. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as schools, hospitals, and residences. Sensitive receptors in the project vicinity include single family residences located approximately 50 feet from the project alignment on Tesla Road, South Livermore Avenue, and Buena Vista Avenue. The following subsections evaluate the potential for these sensitive receptors to be exposed to substantial concentrations of CO and TACs.

Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the national one-hour standard of 35.0 parts per million (ppm) or the federal and state eight-hour standard of 9.0 ppm (CARB 2021a).

As mentioned in the *BAAQMD Significance Thresholds* subsection above, BAAQMD has a set of screening criteria to use as the first step to evaluate whether a project would result in the generation of CO concentrations that would substantially contribute to an exceedance of BAAQMD thresholds.

The proposed project would not result unanticipated growth beyond the current vision of the General Plan and SLVSP in the vicinity. Average daily traffic on roadways in the project vicinity would not change. The project would not result in a CO hotspot and impacts would be less than significant.

TACs

Project construction and operation would generate emissions of TACs, which are defined by California law as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Diesel particulate matter (DPM) was identified as a TAC by CARB in 1998 (CARB 2021b). The potential cancer risk from the inhalation of DPM outweighs the potential non-cancer health impacts (CARB 2021b) and is therefore the focus of this analysis. The following subsections discuss the potential for the project to generate TAC emissions during construction and operation.

CONSTRUCTION IMPACTS

Construction-related activities would result in temporary emissions of DPM exhaust emissions from off-road, heavy duty diesel equipment, including excavators, backhoes, front loaders, dump trucks, and shoring and paving equipment. Generation of DPM from construction typically occurs in a single area for a short period. Project construction would occur over approximately 12 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period (Office of Environmental Health Hazard Assessment 2015); however, such assessments should be limited to the period/duration of activities

associated with the project. Thus, the duration of proposed construction activities (i.e., 12 months) is approximately 1.4 percent of the total exposure period used for health risk calculation. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (BAAQMD 2018).

PM₁₀ exhaust emissions are often used as a surrogate for DPM. The maximum PM₁₀ exhaust emissions would occur during grading/excavation activities. Site preparation would occur for a short amount of time each day, as the linear project requires each phase of construction activity to occur for each segment of the project undertaken at a time. PM₁₀ emissions would decrease for the remaining construction phases because other construction activities would require less construction equipment. While the maximum DPM emissions associated with site preparation activities would only occur for a portion of each day, these activities represent the maximum exposure condition for the total construction period. The duration of site preparation activities would represent less than 1 percent of the total exposure period for a 30-year health risk calculation. Therefore, DPM generated by project construction would not create conditions where the probability is greater than 10 in 1 million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. This impact would be less than significant and this topic will not be discussed in the Supplemental EIR. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.

OPERATIONAL IMPACTS

The Bay Area contains urban or industrialized communities where the exposure to TACs is relatively high. According to the BAAQMD CEQA Air Quality Guidelines and the Community Air Risk Evaluation Program, the project alignment is located in an impacted community, which is defined as an area with elevated pollution levels based on detailed emissions inventories and air dispersion modeling that the BAAQMD has identified as impacted (BAAQMD 2017b; BAAQMD 2018). Sources of TACs include, but are not limited to, land uses such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities.

The project would not result in unanticipated growth beyond the current vision of the General Plan and SLVSP in the vicinity. As such, no change to existing operations is expected to result from the project. Therefore, project operation would not expose sensitive receptors to substantial TAC emissions. Impacts would be less than significant and this topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be intermittent and temporary and would cease upon completion, and odors disperse with distance. Overall, project construction-related impacts of other emissions would be less than significant. Additionally,

development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.

Table 3-3 in the BAAQMD's 2017 CEQA Guidelines provides odor screening distances for land uses that have the potential to generate substantial odor complaints. Typical odor-generating land uses include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants (BAAQMD 2017b). The proposed project does not include any of the uses identified by the BAAQMD as odor-generating uses. Therefore, the proposed project would not generate objectionable odors that would affect a substantial number of people. This impact would be less than significant and this topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?	
Would the project:						
a.	Have 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 U.S. Fish and Wildlife Service?	EIR Pages 4.4-36 through 4.4-39	No	No	No	N/A
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	EIR Pages 4.4-34 through 4.4-39	No	No	No	N/A
c.	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?	EIR Pages 4.4-34 through 4.4-36	No	No	No	N/A
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 native wildlife nursery sites?	EIR Pages 4.4-31 through 4.4-34	No	No	No	N/A
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	EIR Pages 4.4-27 through 4.4-31	No	No	No	N/A
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?	N/A	No	No	No	N/A

1997 EIR Summary

Chapter 4.4 (Biological Resources) of the 1997 EIR analyzes the existing SLVSP's biological resources impacts. The 1997 EIR does not address the issues of conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. The 1997 EIR determined that biological resources impacts related to loss of non-native grassland and agricultural cover, disturbance to wetlands and other waters, and modification and elimination of habitat for special-status species would be less than significant. Furthermore, all other impacts were determined to be less than significant. As a result, biological resources mitigation measures were not required.

Setting

The project alignment is developed and there are no trees or other notable vegetation within it. The City may lease space from adjacent property owners for construction staging and worker parking.

Regulatory Setting

Regulatory authority over biological resources is shared by federal, state, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies with the land use control and planning authority of local jurisdictions. The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the state under CEQA and has direct jurisdiction under the Fish and Game Code of California. Under the federal and state Endangered Species Acts, the CDFW and the United States Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as Threatened or Endangered. The United States Army Corps of Engineers has regulatory authority over specific biological resources, namely wetlands and waters of the U.S., under Section 404 of the Federal Clean Water Act (CWA).

Plants or animals may be considered "special-status" due to declining populations, vulnerability to habitat change, or restricted distributions. Special-status species are classified in a variety of ways, both formally (e.g., federal and state Threatened and Endangered Species) and informally ("Special Animals"). Species may be formally listed and protected as Threatened or Endangered by the CDFW or USFWS or as California Fully Protected. Informal listings by agencies include California Species of Special Concern (SSC) a broad database category applied to species, roost sites, or nests, or as USFWS Candidate taxa. CDFW and local governmental agencies may also recognize special listings developed by focal groups (i.e., Audubon Society Blue List, California Native Plant Society Rare and Endangered Plants, U.S. Forest Service regional lists). California Fish and Game Code Section 3503.5 specifically protects birds of prey, and their nests and eggs, against take, possession, or destruction, and Section 3503 incorporates restrictions imposed by the federal Migratory Bird Treaty Act with respect to migratory birds.

City of Livermore General Plan 2003 – 2025

The City of Livermore's General Plan includes goals and policies within its Open Space and Conservation Element which are relevant to biological resources. General Plan Goal OSC-1 aims to maintain biodiversity within the city with special emphasis on species that are sensitive, rare, declining, unique or represent valuable biological resources. In addition, Goal OSC-2 aims to conserve Livermore's waterways, tributaries and associated riparian habitats. General Plan Objective OSC-1.3 contains language that discourages tree removal and encourages tree preservation.

City of Livermore Municipal Code

LMC Chapter 12.20 outlines the City's tree ordinance with regards to street trees. LMC Section 12.20.030 states that it is unlawful for a person to plant, remove, prune, injure, or destroy any street tree. In order to remove or replace a tree, a person must put in an application to the Superintendent as stated in LMC Sections 12.20.050 and 12.20.080.

Impact Analysis

- a. *Would the project have 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 U.S. Fish and Wildlife Service?*

Special-Status Plants

Using the BIOS viewer (CDFW 2022), it was determined that one special status plant species is present in the Livermore quad. This includes palmate-bracted bird's-beak (*Chloropyron palmatum*) (CDFW 2022). However, the highly disturbed conditions and the lack of soil due to paved surfaces and native vegetation communities preclude the potential for rare plants to occur within the alignment. The project alignment is entirely within previously disturbed and paved rights-of-way. The project would not require ground disturbance in previously undisturbed areas. Given these factors, no special status species have the potential to occur within the project alignment. Therefore, the project would not result in impacts to special-status plant species.

Special-Status Wildlife

Using the BIOS viewer (CDFW 2022), it was determined that five special status animal species are present in the Livermore quad. This includes the California tiger salamander (*Ambystoma californiense*), foothill yellow-legged frog (*Rana boylei*), bald eagle (*Haliaeetus leucocephalus*), tricolored blackbird (*Agelaius tricolor*), and the San Joaquin kit fox (*Vulpes macrotis mutica*) (CDFW 2022). However, the alignment is highly disturbed, fully paved roadway. Vegetation along the project alignment is limited to ornamental plantings and isolated patches of ruderal vegetation that occur on the sides of the roadway that are regularly disturbed by human activity, including through pedestrian and vehicle use. The alignment has no natural or native vegetation communities that would support special-status wildlife. For those select few special-status species that occur in disturbed or ruderal areas (such as burrowing owl), the alignment is sufficiently isolated from existing natural areas, and surrounded with agricultural, residential, and commercial development, that wildlife access to the alignment is substantially restricted. The nearest natural area is Robertson Park, located approximately 0.3 mile southwest from the project alignment. Due to its disturbed nature, the alignment is not considered viable to support federal or state listed species or other special-status wildlife.

A desktop review of the project alignment determined that vegetation observed along the project alignment and vicinity are primarily non-native, ornamental, and/or disturbed; however, the alignment could be used by numerous species of migratory birds that utilize sparse ground cover or ornamental shrubs and landscaping as nesting habitat. Migratory or other nesting birds, while not designated as special-status species, are protected by the California Fish and Game Code Section 3503 and the Migratory Bird Treaty Act. Ornamental trees and shrubs and human-made structures alongside the project alignment could provide habitat for nesting birds. If nests are present and

project construction activities occur during the nesting season (typically February 1 through August 31), impacts to nesting birds, including raptors, would be potentially significant. Potential impacts to nesting birds, including raptors, would be reduced to less than significant level through implementation of Mitigation Measure BIO-1, described below.

Mitigation Measure

BIO-1 Nesting Bird Avoidance and Minimization Efforts

If project construction activities occur during the nesting season (between February 1 and August 31), a qualified biologist shall conduct a pre-construction survey for nesting birds no more than 14 days prior to construction. The survey shall include the entire project alignment and a 300-foot buffer to account for nesting raptors. If nests are found, the qualified biologist shall establish an appropriate species-specific avoidance buffer of sufficient size to prevent disturbance by project activity to the nest (up to 300 feet for raptors, up to 150 feet for other birds). The qualified biologist shall perform at least two hours of pre-construction monitoring of the nest to characterize “typical” bird behavior.

During construction, active nests identified during the pre-construction survey shall be monitored by the qualified biologist to determine if construction activities are causing disturbance to the bird and shall increase the buffer if it is determined the birds are showing signs of unusual or distressed behavior associated with project activities. Atypical nesting behaviors that may cause nest abandonment include, but are not limited to, defensive flights, vocalizations directed towards project personnel/activities, standing up from a brooding position, and flying away from the nest. The qualified biologist shall have authority to order the cessation of construction activities if the nesting birds exhibit atypical behavior that may cause nest failure (nest abandonment and loss of eggs and/or young) until a refined appropriate buffer is established. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established buffer(s) shall remain in effect until the young have fledged or the nest has been abandoned as confirmed by the qualified biologist. The monitoring biologist shall determine the appropriate protection for active nests on a case-by-case basis using the criteria described above. The qualified biologist shall prepare a nest monitoring report at the time monitoring has been completed. The report will document the methods and results of the monitoring, and the final status of the nest (i.e., successful fledging of the nest, nest depredation, nest failure due to construction activity). The report shall be submitted to the City for approval.

Implementation of Mitigation Measure BIO-1 would reduce potential impacts to nesting birds, including raptors, to less than significant levels. This mitigation measure will be listed in the Supplemental EIR’s executive summary and included in the project’s mitigation monitoring and reporting program. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- c. *Would the project 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?*

The project alignment is not located within riparian habitat, sensitive natural communities, or wetland areas. The nearest wetland is located approximately 0.2 miles south of the project alignment. Furthermore, Arroyo Mocho is classified as riverine habitat and is located approximately 260 feet from the project alignment (USFWS 2021). Project construction would not occur within riparian habitat, sensitive natural communities, or protected wetlands. The General Plan includes several goals, objectives and policies that protect such habitats. For example, Policies 1 through 13 under Objective OSC-1.2 require setbacks from sensitive habitats, require protection of riparian woodlands and freshwater marshes, and require project proponents to map sensitive biological and wetland resources (City of Livermore 2015). Because the project would disturb more than 1 acre of land, it would be subject to the NPDES Construction General Permit, which requires implementation of a site-specific SWPPP and BMPs. These BMPs would include erosion and sediment controls, runoff water quality monitoring, and means of waste disposal, all of which would ensure no pollutants or sediments are carried via stormwater runoff from the active project construction area to nearby riparian or wetland features. Thus, the project would not have a substantial adverse effect on riparian habitat, sensitive natural community, or state or federally protected wetlands. No impact would occur and this topic will not be discussed in the Supplemental EIR.

NO IMPACT

- d. *Would the project 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 native wildlife nursery sites?*

The project alignment is not located directly adjacent to intact wildlife habitat or corridors. The project would not redirect or cause the cessation of stream flows that could interfere with migratory fish species. Land use in the project vicinity is agricultural, residential, and commercial with little connectivity to natural habitats. It is therefore not expected to support wildlife movement. The alignment itself does not contain suitable connected natural areas that would contribute to a migratory wildlife corridor. Furthermore, Policies 9 and 10 under Objective OSC-1.2 in the Open Space and Conservation Element of the General Plan protect corridors from being impacted from development, such as development on adjacent existing wineries and residences that would be served by the project (City of Livermore 2015). No native wildlife nursery sites were identified in the area due to the lack of natural areas. Since the project alignment is not a significant site for wildlife to move or migrate through, no impacts would occur and this topic will not be discussed in the Supplemental EIR.

NO IMPACT

South Livermore Sewer Expansion Project

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The proposed project would not result in the removal of existing trees along the project alignment. As long as the construction contractor submits a request for the removal and replacement of the street trees in accordance with the LMC, the project would not conflict with local policies or ordinances protecting biological resources. No impacts would occur and this topic will not be discussed in the Supplemental EIR.

NO IMPACT

- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Currently, there are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other habitat conservation plans in the city and county; however, the East Alameda Conservation Strategy does include lands within and adjacent to the City, including the project site. The Conservation Strategy identifies the project alignment as adjacent to Open Space Land Type 3 and 4, which are agricultural and public lands that may have some ecological value. The project would not directly convert adjacent parcels to a different land use and would serve development on adjacent parcels consistent with the City's General Plan and SLVSP. Therefore, the proposed project would have no impact and this topic will not be discussed in the Supplemental EIR.

NO IMPACT

5 Cultural Resources

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	EIR Pages 4.10-9 through 4.10-11	No	No	No	N/A
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	EIR Pages 4.10-7 through 4.10-8	No	No	No	N/A
c. Disturb any human remains, including those interred outside of formal cemeteries?	EIR Pages 4.10-7 through 4.10-8	No	No	No	N/A

1997 EIR Summary

Chapter 4.10 (Cultural Resources) of the 1997 EIR analyzes the existing SLVSP’s impacts on cultural resources. The 1997 EIR determined that cultural resources impacts related to historical resources, archaeological resources, and human remains would be less that significant. No mitigation measures were required.

Setting

GPA Consulting (GPA) conducted a Historic Resources Survey Update for the City of Livermore in March 2021. The study consisted of an intensive-level survey and a citywide reconnaissance level survey. The study identified 30 previously unidentified properties that appear eligible for listing on the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR), and that also meet the definition of a City of Livermore historic resource. The study also identified five properties previously listed in the NRHP and CRHR within the GPA survey area. None of the identified properties identified by GPA are within the project alignment.

The study also identified two designated wineries, Wenté Brothers Winery and Concannon Winery, within the GPA study area. Both wineries are listed on the CRHR and are located adjacent to the project alignment along Tesla Road. The Wenté Brothers Winery, founded in 1883 by C.H. Wenté (Wenté Vineyards 2022), is located at 5565 Tesla Road and was listed as California Historical Landmark No. 957 in May 1983. Concannon Winery, established in 1883 by James Concannon (Concannon Vineyards 2022), is located at 4590 Tesla Road and was listed as California Historic Landmark No. 641 in April 1958. Both wineries are located approximately 40 feet from Tesla Road.

Rincon Consultants conducted a records search of the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC) for the project alignment on January 6, 2022. The records search identified 29 previously conducted cultural resources studies within a 0.5-

South Livermore Sewer Expansion Project

mile radius of the project site, of which seven include portions of the project alignment. The records search also identified one historic-period built environment resource within the 0.5-mile radius of the project site, and no resources within the current project site. The NWIC records search indicated that the project alignment had not been surveyed for cultural resources prior to 2000. Rincon conducted a Phase I archaeological windshield survey of the project alignment and its components due to safety concerns from traffic conditions. The archaeologist drove the alignment three times to ensure that the project was documented for analysis. The archaeologist noted high vehicle and bicycle traffic throughout the project alignment. No archaeological resources were identified during this effort.

Rincon also submitted a Sacred Lands File (SLF) search request to the Native American Heritage Commission (NAHC) on January 17, 2022. The NAHC responded to Rincon's SLF request on February 3, 2022, stating that the results of the SLF search were negative.

Rincon completed a review of historical topographic maps and aerial imagery to ascertain the development history of the project alignment. Historical topographic maps from 1907 to 1941 depict Tesla Road (trending east-west) and South Livermore Avenue (trending northwest-southeast) as paved roadways surrounded by minimal development, likely ranch houses (NETR Online 2022; United States Geological Survey 2022). From 1943 to 1964, historical topographic maps identify residential and road development within the project alignment and the identification of agricultural plots (NETR Online 2022; United States Geological Survey 2022). From 1969 to 1985, further residential and commercial development is depicted surrounding the project alignment, with the project alignment depicted in its current condition from 1985 through 2018 (NETR Online 2022; United States Geological Survey 2022). In addition, aerial imagery, from 1949 through 2018, details the level of disturbance surrounding the project alignment from agricultural use, specifically vineyard growth and expansion, as well as additional residential development (NETR Online 2022).

Regulatory Setting

CEQA requires that a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the CRHR, a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines Section 15064.5[a] [1-3]).

A resource is considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

If it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

City of Livermore General Plan 2003-2025

The City General Plan's Community Character Element contains goals specific to cultural resources. Goal CC-3, along with the Objectives, Policies and Actions therein, specifically aims to "preserve and enhance the City's cultural and historic resources not merely as positive reminders of the past, but also as relevant and unique alternatives for the present and the future—a source of community identity, architecture, and social, ecological and economic vitality" (City of Livermore 2004b).

Impact Analysis

- a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

The two CRHR listed resources, Wente Brothers Winery and Concannon Winery, are recorded adjacent to the project alignment along Tesla Road. The proposed project would not extend into either of the recorded resource boundaries as the project would be constructed entirely within existing paved rights-of-way. Changes to the project alignment would be underground and would not affect the resources. The project would not involve above-ground modification of the existing setting beyond underground utility placement and minor repaving. The project would return the road to a similar condition as before construction. The project would not involve the demolition of existing buildings or structures near the project alignment, nor would contributing features to Wente Brothers Winery and Concannon Winery be changed or impacted. Therefore, no historical resources would be affected. No changes in significance of a historical resource would occur, and no impacts would occur. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

No archaeological resources have been recorded within the project alignment or a 0.5-mile radius of the project alignment. Previous studies within the project vicinity do not identify archaeological resources and indicate that the archaeological sensitivity is low for containing intact archaeological deposits.

The project alignment is paved and has been disturbed by the development of Tesla Road, South Livermore Avenue, Buena Vista Avenue, and Greenville Road; residential development; and the historical agricultural use of the surrounding parcels. Therefore, the project alignment has low sensitivity for containing intact archaeological resources. However, there is always a possibility that previously undiscovered archaeological resources could be encountered during ground disturbance;

therefore, Mitigation Measure CR-1 would be required to address unanticipated discoveries during construction.

Mitigation Measure

CR-1 Unanticipated Archaeological Resources

If archaeological resources are encountered during ground-disturbing activities, work within 50 feet of the find shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to archaeological resources.

Implementation of Mitigation Measure CR-1 would reduce potential impacts on archeological resources to less than significant. This mitigation measure will be listed in the Supplemental EIR's executive summary and included in the project's mitigation monitoring and reporting program. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No known burials or cemeteries are recorded within the project alignment. However, the discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site and provide recommendations for treatment to the landowner within 48 hours of being granted access. With adherence to existing regulations, impacts to unanticipated human remains would be less than significant. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

6 Energy

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	N/A	No	No	No	N/A
b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	N/A	No	No	No	N/A

1997 EIR Summary

The 1997 EIR does not address the issue area of energy.

Setting

As a state, California is one of the lowest per capita energy users in the nation due to its energy efficiency programs and mild climate, followed only by Rhode Island (United States Energy Information Administration 2021). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes in addition to being consumed by alternative fuel vehicles. The project would not use natural gas; therefore, only electricity is described herein. Most of California’s electricity is generated in state with approximately 30 percent of energy imported from out of state in 2020 (California Energy Commission [CEC] 2021a). In addition, approximately 33 percent of California’s electricity supply in 2020 came from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2021a). In 2018, Senate Bill (SB) 100 accelerated the state’s Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy and zero-carbon resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. Electricity service would be provided to the project by Pacific Gas and Electric Company (PG&E). Table 4 summarizes the electricity consumption for Alameda County and PG&E, as compared to statewide consumption.

Table 4 2020 Electricity Consumption

Energy Type	Alameda County	PG&E	California	County Proportion of PG&E Consumption	County Proportion of Statewide Consumption ¹
Electricity (GWh)	10,247	78,519	559,020	13%	2%

GWh = gigawatt-hours

¹ For reference, the population of Alameda County (1,663,114 persons) is approximately 4.2 percent of the population of California (39,648,938 persons) (Department of Finance 2021).

Source: CEC 2021b

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (CEC 2021c). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 12.6 billion gallons sold in 2020 (CEC 2021d). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.7 billion gallons sold in 2021 (CEC 2021d). Table 5 summarizes the petroleum fuel consumption for Alameda County as compared to statewide consumption.

Table 5 2020 Annual Gasoline and Diesel Consumption

Fuel Type	Alameda County (Millions of Gallons)	California (Millions of Gallons)	Proportion of Statewide Consumption ¹
Gasoline	442	12,572	4%
Diesel	52	1,744	3%

¹ For reference, the population of Alameda County (1,663,114 persons) is approximately 4.2 percent of the population of California (39,648,938 persons) (Department of Finance 2021).

Source: CEC 2021d

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and GHG emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project’s energy consumption are discussed in detail in Environmental Checklist Section 3, *Air Quality*, and Environmental Checklist Section 8, *Greenhouse Gas Emissions*, respectively.

Regulatory Setting

2017 Bay Area Clean Air Plan

The Bay Area 2017 Clean Air Plan (the 2017 Plan) provides a plan to improve Bay Area air quality and protect public health as well as the climate. The legal impetus for the 2017 Plan is to update the most recent ozone plan - the 2010 Clean Air Plan - to comply with state air quality planning requirements as codified in the California Health & Safety Code. The goals and visions outlined in the 2017 Plan provide a focus on creating energy efficiency and adopting a low-carbon lifestyle through increased use of renewable energy.

City of Livermore General Plan 2003-2025

The City’s General Plan Climate Change Element contains goals, policies, and objectives that prioritize energy efficiency. For example, Objective CLI-1.5 aims to expand and adopt new policies and programs that will help to provide energy efficiency alternatives to fossil fuel use and reduce consumption. This Objective is directly supported by policies and actions within the City’s General Plan Open Space and Conservation Element, such as Action OSC-7.1 A1 that supports alternative energy sources (City of Livermore 2015).

Impact Analysis

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Project-related energy consumption would include energy consumed during project construction, such as fuel consumed by vehicles and equipment, and operational energy use related to increased wastewater disposal at the Livermore Water Reclamation Plant. No change to existing operations is expected to result from the project, no buildings would be constructed, and the project would not create result in the potential for unanticipated growth in the vicinity. The proposed project would require the use of gasoline and diesel fuel for project construction. The anticipated use of these resources is detailed in the following subsections. Construction details and the SMAQMD Road Construction Emissions Model outputs for the air pollutant and GHG emissions modeling were used to estimate energy consumption associated with the proposed project (Appendix AQ).

Construction Impacts

During project construction, energy would be consumed in the form of petroleum-based fuels used to power and operate heavy-duty equipment and machinery, off-road construction vehicles on the project alignment, construction worker travel to and from the project alignment, and vehicles used to deliver materials. The proposed project would require site preparation, excavation, installation of piping, backfill, patch paving, final paving, and slurry sealing. As shown in Table 6 below, project construction would require approximately 3,076 gallons of gasoline and 74,352 gallons of diesel fuel. These construction energy estimates are conservative because they assume that the construction equipment used in each phase of construction is operating every day of construction.

Table 6 Proposed Project Construction Energy Usage

Source	Fuel Consumption (Gallons)	
	Gasoline	Diesel
Construction Equipment & Hauling Trips	–	74,352
Construction Worker Vehicle Trips	3,076	–

See Appendix AQ for SMAQMD Road Construction Emissions Model values and Appendix EN for energy calculation sheets.

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of CCR Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than 5 minutes and would minimize unnecessary fuel consumption. Construction

equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption.

Pursuant to applicable regulatory requirements, the project would comply with construction waste BMPs to divert a minimum of 50 percent of construction and demolition debris and 100 percent of concrete, asphalt, and land-clearing debris. These practices would result in efficient use of energy necessary to construct the project. Furthermore, in the interest of cost-efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary. Project construction would not result in significant impacts due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant. This topic will not be discussed in the Supplemental EIR.

Operational Impacts

The proposed pipeline would convey wastewater to the existing Livermore Water Reclamation Plant, where it would be treated and discharged in accordance with the Livermore Water Reclamation Plant's permit to operate, which includes a maximum treatment capacity and requirements for the quality of treated discharge. An incremental increase in energy usage associated with wastewater treatment would be consistent with the permitted treatment capacity of the Livermore Water Reclamation Plant, and would not be wasteful or inefficient. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Several plans and policies have been adopted to ensure energy efficiency in the Bay Area, including the 2017 Bay Area Clean Air Plan, the City of Livermore CAP, and the City of Livermore General Plan. As discussed under *criterion a*, the project would be limited to energy consumption during construction, such as fuel consumed by vehicles and equipment. Overall, project implementation would not alter energy efficiency or affect existing renewable energy resources. Therefore, the project would not conflict with or obstruct the visions defined within the 2017 Bay Area Clean Air Plan, the strategies outlined in the 2012 CAP or its 2021 Update, or the goals, objectives, and policies discussed within the City's General Plan. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

7 Geology and Soils

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

1.	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?	EIR Page 4.2-32 through 4.2-35	No	No	No	N/A
2.	Strong seismic ground shaking?	EIR Page 4.2-32 through 4.2-35	No	No	No	N/A
3.	Seismic-related ground failure, including liquefaction?	EIR Page 4.2-35	No	No	No	N/A
4.	Landslides?	EIR Page 4.2-28 through 4.2-31	No	No	No	N/A
		EIR Page 4.2-30 through 4.2-31	No	No	No	N/A
b.	Result in substantial soil erosion or the loss of topsoil?	EIR Page 4.2-28 through 4.2-31	No	No	No	N/A
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?	EIR Page 4.2-28 through 4.2-31	No	No	No	N/A
d.	Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	EIR page 4.2-31 through 4.2-32	No	No	No	N/A
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?	N/A	No	No	No	N/A

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	N/A	No	No	No	N/A

1997 EIR Summary

Chapter 4.2 (Geology and Soils) of the 1997 EIR analyzes the existing SLVSP’s impacts on geology and soils. The 1997 EIR does not address the issues of septic tanks or alternative wastewater disposal systems and paleontological resources. The 1997 EIR determined that geology and soil impacts related to landslides, slope stability, expansive soils, faulting and surface rupture, liquefaction, and mineral resources would be less than significant in Subareas 1 and 2. However, impacts related to seismicity were determined to be potentially significant. As a result, geology and soils mitigation measures that were incorporated in the 1997 EIR to reduce potentially significant impacts are summarized below:

Mitigation Measure 4.2-5

In addition to implementing Policies 6-34 and 6-35 and satisfying the routine requirements expected of any development in the City, individual landowners/developers owners should:

- Take the recommendations of the Structural Engineers Association of Northern California into account when designing and implementing site development
- Secure breakable objects or focus work stations away from such potential hazards

Setting

The project alignment is located in one of the most seismically active areas in the country. There are three active faults within the project vicinity: the Greenville Fault, located approximately 2.4 miles to the east of the project alignment; the Las Positas Fault, which intersects a portion of the project alignment along Tesla Road; and the Calaveras Fault, located approximately 9.3 miles to the west of the project alignment. A portion of the project alignment is located within a State-designated Alquist-Priolo Earthquake Fault Zone.

Landslide risk is low throughout most of Livermore, including the project alignment (City of Livermore 2015). Areas prone to landslide hazards include areas along the hills in southern Livermore, in addition to the northwestern and northeastern portions of the city (City of Livermore 2015). The nearest landslide area is located approximately 1 mile south of the project alignment.

The project alignment is located within Zone X (Federal Emergency Management Agency [FEMA] 2021). Zone X is described as areas with a 0.2 percent annual chance flood hazard, areas of one percent annual chance flood with average depth less than 1 foot or with drainage areas of less than 1 square mile. Most of the project alignment along South Livermore Avenue is also located adjacent to a regulatory floodway (FEMA 2009).

The project alignment is located in an area of the city with low liquefaction susceptibility (City of Livermore 2015). Portions of the project alignment along Tesla Road and South Livermore Avenue are located within a liquefaction zone (DOC 2018). Lateral spreading is typically associated with liquefaction. Lateral spreading itself refers to horizontal ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water. Since the project alignment has been identified as being within a zone identified for very low liquefaction risk, the potential for lateral spreading to affect the alignment was determined to be low as no open spaces within a distance considered susceptible to lateral spreading exist.

The project alignment overlays soils that are not expansive (USDA Natural Resources Conservation Service 2019).

Paleontological Setting

The project alignment is located in Livermore Valley which lies in the central part of the Coast Ranges Province, one of the eleven major geomorphic provinces of California (California Geological Survey 2002) (Figure 1). The project alignment is located in the *Altamont* and *Livermore* United States Geological Survey 7.5-minute topographic quadrangles and was mapped at a scale of 1:24,000 by Dibblee and Minch (2006a, b). According to those authors, the area is underlain by two geologic units: Quaternary alluvium (Qa) and the Livermore Gravel (QTlg) (Figure 6). Qa is Holocene in age and consists of gravel, sand, and clay (Dibblee and Minch 2006a, b). QTlg is Plio-Pleistocene in age and consists of poorly sorted cobbles, pebbles, gravel, and sand (Dibblee and Minch 2006b).

Regulatory Setting

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. Generally, siting of structures for human occupancy must be set back from the fault by approximately 50 feet. This Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 was enacted, in part, to address seismic hazards not included in the Alquist-Priolo Act, including strong ground shaking, landslides, and liquefaction. Under the Alquist-Priolo Act, the State Geologist is responsible for identifying and mapping seismic hazards. California Geological Survey (CGS) Special Publication 117, adopted in 1997 by the State Mining and Geology Board, constitutes guidelines for evaluating seismic hazards other than surface faulting and for recommending mitigation measures as required by PRC Section 2695(a). In accordance with the mapping criteria, the CGS seismic hazard zone maps identify areas with the potential for a ground shaking event that corresponds to 10 percent probability of exceedance in 50 years.

Figure 6 Geologic Units and Paleontological Sensitivity of the Project Alignment

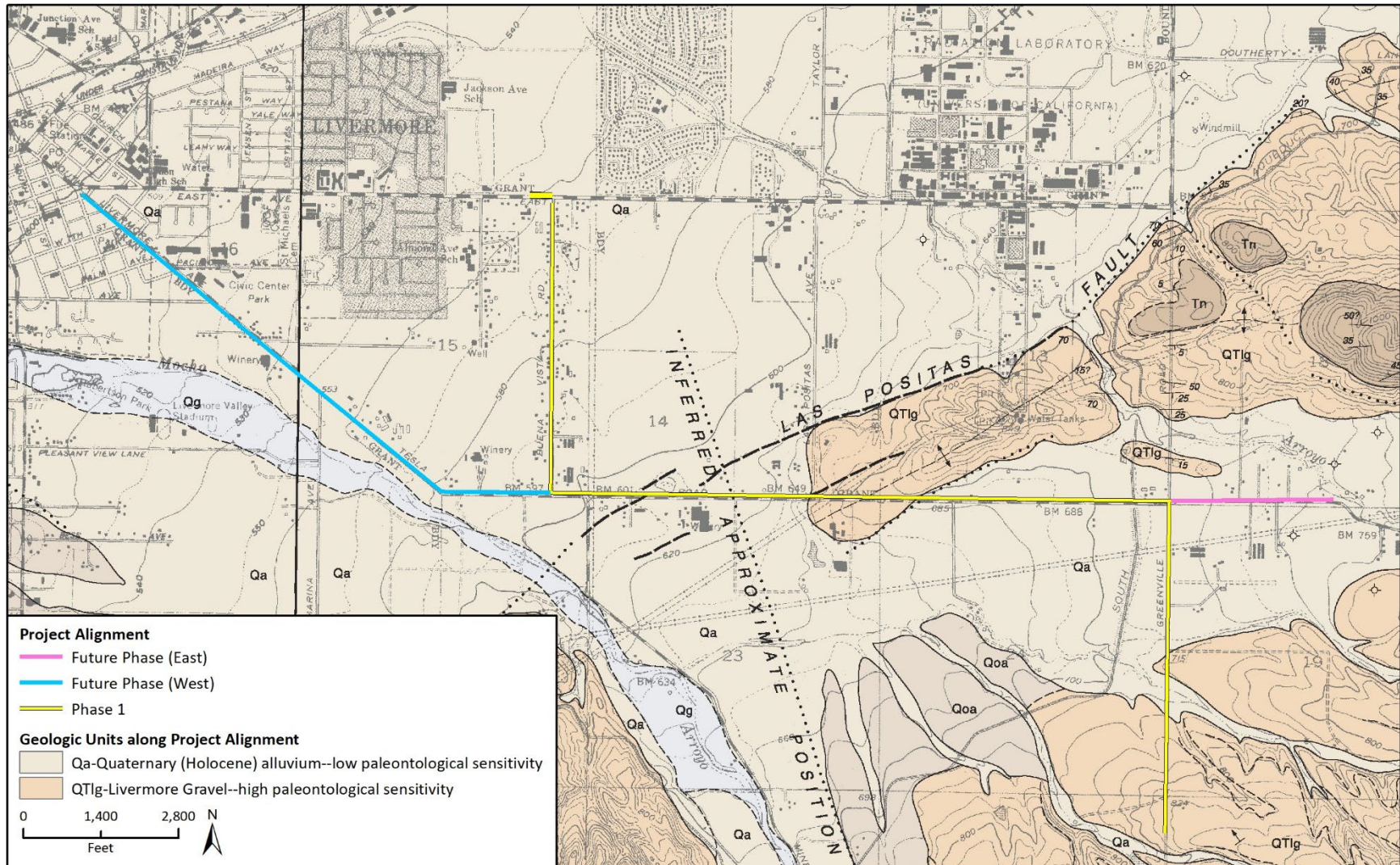


Fig. X Geologic Units and Paleontological Sensitivity

The purpose of the Seismic Hazards Mapping Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and state agencies are directed to use seismic hazard zone maps developed by CGS in their land use planning and permitting processes. The Seismic Hazards Mapping Act requires site-specific geotechnical investigations prior to permitting most urban development projects in seismic hazard zones.

National Pollutant Discharge Elimination System (NPDES)

Construction projects which disturb one or more acres of soil or are part of a larger common plan of development that disturbs one or more acres of soil must obtain coverage under the statewide NPDES General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). To obtain coverage under the Construction General Permit, a project-specific SWPPP must be prepared. The SWPPP outlines BMPs to reduce stormwater and non-stormwater pollutant discharges, including erosion control, minimizing contact between construction materials and precipitation, and strategies to prevent equipment leakage or spills.

LMC

LMC Chapter 15.02, Grading, Excavations, and Fills, includes a grading ordinance that seeks to mitigate hazards associated with erosion and land stability. The ordinance establishes requirements for grading permits, including submittal and construction requirements. An erosion and sedimentation control plan must be submitted with a grading permit application, along with a drainage plan and pollution control plan. Implementation of these plans will also help to ensure that the stormwater runoff from a construction site will meet applicable water quality standards. The LMC discusses soils and foundations in accordance with the 2016 California Building Code (CBC) to ensure that professionals have been retained to review the plans and specifications recommended in the soil investigation and provide soil site observation and provide field and final reports to ensure that all of the work associated with the project substantially conforms with the approved plans, specifications, and investigation. Furthermore, LMC Section 15.20 includes specifications regarding seismic resistance and structural observations of the lateral system to reflect changes in the CBC.

Impact Analysis

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?*
- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

The project alignment, like much of California, may experience moderate to potentially severe ground shaking from earthquakes generated on known faults within 60 miles of the project alignment, such as the Greenville Fault. There is potential for fault rupture along the project alignment and construction workers would be present at the site and working on a mapped fault; however, no structures or new land uses are proposed as a part of the project. Additionally, the project would be designed consistent with Objective INF-2.1 Policy 7 of the City General Plan, which

requires sewer collection and transmission systems to cross seismic faults at right angles and include safety features to prevent wastewater leakage and facilitate rapid repair. Therefore, the project would not cause direct or indirect adverse effects resulting from fault ruptures or seismic activities (DOC 2018). The project would result in less than significant impacts related to seismically-induced ground shaking from nearby faults. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The project alignment is located within a low liquefaction hazard zone (DOC 2018). Furthermore, as stated above in the discussion provided under *criterion a.1* and *criterion a.2*, no structures or new land uses are proposed under the project. Therefore, the project would result in a less than significant impact. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The risk of landslides throughout the city is low (City of Livermore 2015). The nearest area with a landslide risk is located approximately 1 mile south of the project alignment (City of Livermore 2015). The project alignment is included in the very low landslide risk area. Furthermore, because the alignment is located in a flat area, project construction and operation would not result in landslides. Impacts related to landslides would be less than significant. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Construction activities would disturb soil along the project alignment, resulting in potential for soil erosion and loss of topsoil. As noted in Environmental Checklist Section 3, *Air Quality*, the project would be required to comply with BAAQMD Regulation 6 regarding incorporation of measures to reduce fugitive dust, which would reduce the potential for construction-related wind erosion. BAAQMD Regulation 6 includes requirements for the application of water or stabilizing agents to prevent generation of dust plumes, pre-watering materials prior to the use of tarps to enclose haul trucks, stabilizing sloping surfaces using soil binders until vegetation or ground cover efficiently stabilize slopes, hydroseeding prior to rain, and washing mud and soils from equipment at the conclusion of trenching activities. Implementation of these measures pursuant to BAAQMD Regulation 6 would reduce the potential for project construction to result in substantial wind erosion or loss of topsoil.

Because the project would disturb more than 1 acre of land, it would be subject to the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) (“Construction General Permit”) adopted by the State Water

Resources Control Board (SWRCB). Compliance with the permit requires filing a Notice of Intent with the SWRCB. Permit conditions require preparation of a project-specific SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with existing regulatory requirements, including implementation of applicable BMPs related to wind and water erosion control, would reduce potential soil loss and erosion from the alignment. In addition, the project would be constructed within existing paved rights-of-way, with limited soil exposure during construction.

Impacts related to erosion and loss of topsoil would be less than significant. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project 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?*

The project alignment is located within a liquefaction hazard zone (DOC 2018). However, the project does not propose habitable structures or new land uses and would be constructed within existing paved rights-of-way. Given the nature of the proposed project and existing conditions along the alignment, the potential for lateral spreading would be low.

Pursuant to LMC Chapter 15.02, the project would comply with CBC requirements and project construction would not cause the ground to become unstable or result in landslide, lateral spreading, or liquefaction because the roadway would be maintained and applicable regulations would be followed. The project would result in a less than significant impact, and this topic will not be discussed in the Supplemental EIR. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project 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?*

Soils within the project alignment have a low linear extensibility, which corresponds to a low shrink-swell potential and low expansiveness (Natural Resources Conservation Service 2022). No expansive soils, which would require modifications to project design, are known to be present within the proposed alignment. Therefore, the project would have a less than significant impact, and this topic will not be discussed in the Supplemental EIR. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.

LESS THAN SIGNIFICANT IMPACT

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- e. *Would the project 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 septic systems or alternative wastewater disposal systems are proposed and no related impacts would occur. In addition, the project would provide an opportunity to take existing development off septic systems. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Rincon evaluated the paleontological sensitivity of the geologic units that underlie the project area using the results of the paleontological locality search and review of existing information in the scientific literature concerning known fossils within those geologic units. Rincon reviewed fossil collections records from the University of California Museum of Paleontology (UCMP) online database and Paleobiology Database (PBDB), which contain known fossil localities in Alameda County.

Following the literature review and museum record search a paleontological sensitivity classification was assigned to the geologic units within the project area. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. The Society of Vertebrate Paleontology (SVP) (2010) has developed a system for assessing paleontological sensitivity and describes sedimentary rock units as having high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present.

The project alignment is underlain by two geologic units: Quaternary alluvium (Qa) and Livermore Gravel (QTlg). Quaternary alluvium (Qa) is Holocene in age and generally considered too young to preserve scientifically significant paleontological resources at the surface where sediments are less than 5,000 years old. However, young Holocene units may be shallowly underlain by older units at unknown depths in the subsurface near the project alignment. These older units have the potential to contain scientifically significant paleontological resources, and records of fossil occurrences from quaternary alluvium are documented from within Alameda County (PBDB 2022; UCMP 2022). Older units, such as Livermore Gravel (QTlg) and Pleistocene-aged alluvium (Qoa) are exposed at the surface in proximity (i.e., less than 2000 feet) to the project alignment (Figure 6), indicating a potential to be encountered at relatively shallow depths (i.e., less than five feet) within the project area. Qa is assigned a low paleontological sensitivity.

The Livermore Gravel is a Pliocene to Pleistocene age unit with a history of producing scientifically significant vertebrate fossils in Alameda County. These fossils include mammoth (*Mammuthus*), horse (*Equus*), ground sloth (*Ptilosia*), and turtle (*Clemmys*) (PBDB 2022; UCMP 2022). Livermore Gravel (QTlg) is assigned a high paleontological sensitivity. Therefore, impacts could be significant and mitigation measures would be required.

Mitigation Measure

GEO-1 Paleontological Resources Monitoring and Mitigation

Prior to the commencement of project construction, a qualified paleontological monitor (i.e., a paleontologist who meets the SVP [2010] standards as a Paleontological Resource Monitor) shall be retained to conduct paleontological monitoring during ground-disturbing activities (including, but not limited to site preparation, grading, excavation, and trenching) of intact (i.e., previously undisturbed) areas mapped as high sensitivity geologic units (QTlp) located along the alignment. This includes areas along Tesla Road near Vasco Road and along Greenville Road approximately 3,000 feet south of Tesla Road (refer to geologic unit map prepared by Dibblee and Minch [2006a]), which are anticipated to require ground disturbance to depths greater than 15 feet. Monitoring shall be performed by a Qualified Paleontologist (i.e., a paleontologist who meets the SVP [2010] standards as a Qualified Professional Paleontologist).

Full-time monitoring shall be conducted for all ground-disturbing activities that impact previously undisturbed geologic units mapped at the surface as Pliocene to Pleistocene age Livermore Gravel (Qtlp), which has a high paleontological sensitivity. Additionally, initial part-time monitoring (i.e., spot-checking) shall be conducted for all ground-disturbing activities that impact previously undisturbed geologic units mapped at the surface as middle to late Holocene alluvial deposits (Qa) to check for the presence of geologic units of high sensitivity (i.e., early Holocene older alluvium [Qoa, QTlp]). If older sediments are observed at depth, then full-time monitoring shall be conducted. Ground-disturbing activities that impact previously disturbed sediments only do not require paleontological monitoring.

The duration and timing of the monitoring shall be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time or part-time monitoring is no longer warranted, they may recommend reducing monitoring to periodic spot-checking or may recommend that monitoring cease entirely. Monitoring shall be reinstated if any new ground disturbances of previously undisturbed areas are required, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time.

If a paleontological resource is discovered, the monitor shall have the authority to temporarily divert construction equipment around the find until it is assessed for scientific significance and collected. Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the UCMP). Curation fees are the responsibility of the project owner.

A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

Mitigation Measure GEO-1 would help ensure that paleontological resources would not be damaged or destroyed during ground-disturbing activities. This measure would apply to all phases of project construction and would ensure that any significant fossils present on-site are preserved. Implementation of Mitigation Measure GEO-1 would reduce potential impacts to paleontological resources to less than significant level through the recovery, identification, and curation of previously unrecovered fossils. This mitigation measure will be listed in the Supplemental EIR's

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executive summary and included in the project's mitigation monitoring and reporting program. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

8 Greenhouse Gas Emissions

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	N/A	No	No	No	N/A
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	N/A	No	No	No	N/A

1997 EIR Summary

The 1997 EIR does not address the issue area of greenhouse gas (GHG) emissions.

Overview of Climate Change and GHGs

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as “carbon dioxide equivalent” (CO₂e), which is the amount of GHG emitted multiplied by its GWP. CO₂ has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO₂ on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).²

The United Nations IPCC expressed that the rise and continued growth of atmospheric CO₂ concentrations is unequivocally due to human activities in the IPCC’s Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatonnes of anthropogenic CO₂ was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO₂, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human

² The Intergovernmental Panel on Climate Change’s (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change’s (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

activity (USEPA 2021b). Emissions resulting from human activities are thereby contributing to an average increase in Earth’s temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

Regulatory Framework

In response to climate change, California implemented Assembly Bill (AB) 32, the “California Global Warming Solutions Act of 2006.” AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed SB 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (discussed further below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally appropriate quantitative thresholds consistent with a statewide per capita goal of 6 metric tons of CO₂e by 2030 and two MT of CO₂e by 2050 (CARB 2017).

The City of Livermore adopted its current CAP in November 2012. The 2012 CAP outlined Livermore’s comprehensive strategy to reduce GHG emissions and quantify the reductions in order to meet its GHG emission targets by the year 2020. The City drafted a CAP Update in May 2021 as a direct update to its previous CAP, outlining new mitigation and adaptation measures aimed to further reduce the City’s GHG emissions, including energy-related emissions, and to increase resilience throughout the community.

BAAQMD Significance Thresholds

Individual projects do not generate sufficient GHG emissions to influence climate change directly. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project’s contribution towards an impact would be cumulatively considerable. “Cumulatively considerable” means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

According to CEQA Guidelines Section 15183.5(b), projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project’s consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (2016) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project’s GHG emissions. The 2012 CAP is a qualified CAP and complies with the requirements of CEQA Guidelines Section 15183.5(b)(1). However, the 2012

CAP only address GHG emissions pursuant with the AB 32 2020 goal and does not include strategies to comply with SB 32. Furthermore, the CAP is designed to address new building developments not temporary construction activities. Therefore, the CAP is not used for tiering purposes.

Instead, the construction emissions were quantified and presented in the analysis. BAAQMD does not have a significance threshold for construction GHG emissions due to the interim nature of the activities. Construction-related GHG emissions would be considered less than significant.

Methodology

GHG emissions associated with project construction were estimated using SMAQMD Road Construction Emissions Model Version 9.0.0 for informational purposes and are included in Appendix AQ. The SMAQMD model calculates emissions of CO₂, methane, and nitrous oxide associated with construction activities and vehicle trips. Emissions were modeled in accordance with the assumptions outlined in the Methodology section in Environmental Checklist Section 3, *Air Quality*.

Impact Analysis

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Project construction would generate temporary GHG emissions, primarily as a result of construction equipment as well as from construction worker vehicles and heavy trucks transporting materials and soil export. Project construction would generate an estimated total of 734 MT of CO₂e (Appendix AQ). Furthermore, the project would follow BAAQMD construction BMPs and implement the most current BAAQMD recommendations for construction activities. Therefore, construction-related GHG emissions would not be a permanent source of GHG emissions and impacts would be less than significant.

While the conveyance of wastewater and additional wastewater treatment demand would result in an incremental increase in energy demand at the Livermore Water Reclamation Plant, the GHG emissions associated with the additional energy demand would be within the permitted thresholds for the Livermore Water Reclamation Plant, and the project would be consistent with applicable GHG policies such as the 2017 Scoping plan or the City's General Plan. Therefore, impacts would be less than significant and this topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The 2017 Scoping Plan's strategies that are applicable to the proposed project include increasing water conservation. The project would support the 2017 Scoping Plan's water quality goals because it would allow existing wineries and residential development in the project vicinity to connect to the City's wastewater system and remove or abandon their on-site septic systems. The wastewater generated by parcels that would connect to the extended sewer line would be treated at the Livermore Water Reclamation Plant, which recycles wastewater for irrigation and fire protection; in contrast, the currently generated wastewater is disposed of via septic systems and is not reused. As a result, the transition from septic to sewer would conserve water. Additionally, the project would upsize four segments of 12-inch sewer line on East Avenue. The existing sewer pipes in these areas

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are currently undersized to efficiently convey wastewater and would not be able to handle the additional wastewater load without creating clogs in the system. Upgrading the pipes would promote wastewater conveyance efficiency and would minimize the existing system wastewater losses associated with leaks and reduced efficiencies due to age. Table 7 provides energy efficiency goals and policies provided in the City’s General Plan (City of Livermore 2015) and describes the project’s consistency with these policies. As discussed in the table, the project would not conflict with or obstruct a state or local plan related to GHGs and would be consistent with the 2017 Scoping Plan, and no impact would occur. This topic will not be discussed in the Supplemental EIR.

Table 7 Project Compliance with Energy Efficiency Goals and Policies

Energy Efficiency Goal or Policy	Is the Project Consistent?
City of Livermore General Plan	
<p>Goal CLI-1 Policy 2. Climate Action Plan. Include mechanisms to ensure regular review of progress toward the GHG emission reduction targets established by the CAP, report progress to the public and responsible officials, and revise the plan as appropriate, using principles of adaptive management.</p>	<p>Consistent. The project would be required to comply with current CALGreen requirements, which encourage implementation of water use efficiency during construction, such as water use for dust control.</p>
<p>Goal CLI-1 Policy 3 Climate Action Plan. Work with other local and regional governments to assess federal and state programs and their impact on GHG emissions and mitigation efforts.</p>	<p>Consistent. The project would be required to comply with current Energy Code and CALGreen requirements, which encourage energy use efficiency during construction.</p>
<p>Goal CLI-1 Policy 4. Development Project Framework. Evaluate the GHG emissions impacts of proposed developments through the CEQA process. Require preparation of project level GHG emissions inventories. Establish requirements for tiered significance thresholds for the evaluation of projects and identification and application of mitigation.</p>	<p>Consistent. GHG impacts are quantified in <i>criterion a</i>, above. Impacts of the project would be less than significant.</p>
<p>Source: City of Livermore 2015</p>	

NO IMPACT

9 Hazards and Hazardous Materials

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	N/A	No	No	No	N/A
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?	N/A	No	No	No	N/A
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	N/A	No	No	No	N/A
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	N/A	No	No	No	N/A
e. For a project located in 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	N/A	No	No	No	N/A
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	N/A	No	No	No	N/A
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	N/A	No	No	No	N/A

1997 EIR Summary

The 1997 EIR does not address the issue area of hazards and hazardous materials.

Setting

Government Code Section 65962.5 requires the California Environmental Protection Agency to develop an updated list of hazardous material sites (Cortese List). The California DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List (DTSC 2021a). The analysis for this section included a review of the following resources on January 14, 2022, to provide hazardous material release information:

- **USEPA**
 - Comprehensive Environmental Response, Compensation, and Liability Information System/Superfund Enterprise Management System (USEPA 2021)
- **SWRCB**
 - GeoTracker search for leaking underground storage tanks and other cleanup sites (SWRCB 2020)
- **DTSC**
 - Cortese List of Hazardous Waste and Substances Sites (DTSC 2021a)
 - EnviroStor search for hazardous facilities or known contamination sites (DTSC 2021b)

Based on review of these databases, it was determined that the project alignment is not included on existing lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, the SWRCB has listed the following nearby facilities as a Leaking Underground Storage Tank (LUST) cleanup sites:

- Wente Winery, located at 5565 Tesla Road immediately south of the project alignment, was listed for gasoline contamination to an aquifer and a well used for drinking water supply. The case was closed in November 2009.
- Robert and Edna Carpenter, located at 524 Livermore South Avenue immediately east of the project alignment, was listed for heating and fuel oil contamination to soil. The case was closed in January 1994.
- A private residence, located on the corner of South Livermore Avenue and 5th Street immediately west of the project alignment, was listed for heating and fuel oil contamination to an aquifer used for drinking water supply. The case was closed in January 2016.
- Arco, located at 286 South Livermore Avenue approximately 600 feet north of the project alignment, was listed for gasoline contamination to an aquifer used for drinking water supply. The case was closed in November 2015.
- Del Valle Continuation High School, located at 2253 5th Street approximately 500 feet southwest of the project alignment, was listed for heating and fuel oil contamination to soil. The case was closed in June 2008.
- Pacific Bell, located at 2388 2nd Street approximately 1,000 feet north of the project alignment, was listed for diesel contamination to soil. The case was closed in February 1996.
- Chevron, located at 2259 1st Street approximately 1,100 feet north of the project alignment, was listed for benzene, diesel, gasoline, and total petroleum hydrocarbon contamination to soil vapor and to an aquifer used for drinking water supply. The case remains open with verification monitoring continued as of January 2022.

- North K Associates, located at 2322-38 1st Street approximately 0.25 mile north of the project alignment, was listed for gasoline contamination to soil. The case was closed in October 1994.
- City of Livermore Fire Station #1, located at 4550 East Avenue approximately 0.25 mile north of the project alignment, was listed for waste oil, motor oil, hydraulic oil, and lubricating oil contamination to an aquifer used for drinking water supply. The case was closed in June 1996.

No additional listed sites were identified within 0.25 mile of the project site.

Regulatory Setting

NPDES

As the proposed project would disturb over 1 acre of land, the City would be required to obtain coverage under the NPDES General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). To obtain coverage under the Construction General Permit, a project-specific SWPPP is required, which would specify BMPs to quickly contain and clean up accidental spills or leaks.

Department of Toxic Substances Control (DTSC)

Part of the DTSC involves implementing the CCR Title 22 regarding hazardous waste management, transfer, treatment, storage, identification, disposal, and site remediation. CCR Section 1532.1 requires testing, monitoring, containment, and disposal of lead-based materials, such that exposure levels do not exceed Division of Occupational Safety and Health standards.

Bay Area Air Quality Management District

The BAAQMD is the public agency that regulates the stationary sources of air pollution in the nine counties of the San Francisco Bay Area. BAAQMD's Regulation 11, Rule 2 governs the proper handling and disposal of asbestos-containing materials for demolition, renovation, and manufacturing activities in the Bay Area.

Tri-Valley Hazard Mitigation Plan

The Disaster Mitigation Act was passed in 2000, shifting the emphasis on hazard mitigation from the federal level toward planning for disasters before they occur. The Disaster Mitigation Act requires state and local governments to develop hazard mitigation plans and to provide updates to such plans every five years, as a condition for federal disaster grant assistance. The Tri-Valley Local Hazard Mitigation Plan fulfills the five-year plan update requirement and identifies resources, information, and strategies for reducing risk from natural hazards in the Tri-Valley planning area.

City of Livermore General Plan 2003-2025

The Public Safety Element of the City's General Plan contains goals and policies related to hazardous material and waste management. Goal PS-4 specifically discusses the City's objectives and policies for protecting the community from the harmful effects of hazardous materials. The City maintains a formally designated hazardous material carrier route to direct hazardous materials away from populated and other sensitive areas, prohibits the parking of vehicles transporting hazardous materials on City streets, and generally encourage the reduction of solid and hazardous wastes generated within the City, in accordance with Countywide plans (City of Livermore 2015).

Impact Analysis

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project 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?*

Project construction would temporarily increase the use and transport of hazardous materials in the project area through the operation of vehicles and equipment. Such substances include diesel fuel, oil, solvents, and other similar construction-related hazardous materials and could introduce the potential for an accidental spill or release to occur. These materials would be contained within receptacles specifically engineered for safe storage and would not be transported, stored, or used in quantities which would pose a significant hazard to the public or construction workers themselves. Hazardous materials used during project construction must be disposed of offsite in accordance with all applicable state and local laws and regulations, such as CCR Title 22 and the City's General Plan.

Project construction would require the excavation and transport of paving materials (e.g., asphalt, concrete, roadbed fill materials) and soils which could possibly be contaminated by vehicle-related pollution (e.g., oil, gasoline, diesel, and other automotive chemicals). Additionally, roadways constructed before the 1970s were known to use asbestos containing materials in asphalt and lead-based paint for roadway markings. The existing asphalt pavement may contain asbestos and/or lead-based paint due to its age. All such paving, roadbed materials, and soils removed during construction would be transported and disposed of in accordance with applicable codes and regulations, including CCR Title 22, to ensure no significant hazard to construction workers or the surrounding community would occur. With required adherence to regulations, impacts would be less than significant.

Project operation would involve the conveyance of wastewater and would not require transport, use, storage, or disposal of hazardous materials. Therefore, the project would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. Similarly, the project would not 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. Impacts would be less than significant and will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

Schools located within 0.25 mile of the project alignment include Livermore High School, located adjacent to the Bottleneck Project on East Avenue near 7th Street; Our Savior Lutheran School, located adjacent to the project alignment along South Livermore Avenue; De Valle Continuation High School, located 500 feet southwest of the alignment on Livermore Avenue; and Vineyard High School, located approximately 0.25 mile southwest of the Bottleneck Project on East Avenue. As described under *criterion a* and *criterion b*, above, an accidental spill or release of hazardous or potentially hazardous materials such as vehicle and equipment fuels could occur during project construction. Hazardous materials used during project construction would be disposed of offsite in

accordance with all applicable laws and regulations, including but not limited to the California Building and Fire Codes, as well regulations of the federal and State Occupational Safety and Health Administrations. Therefore, potential impacts associated with an accidental emission or release of hazardous materials in proximity to a school would be less than significant. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

As described above in the *Setting*, the proposed project would not occur on a site, or directly adjacent to a site, listed as currently containing hazardous materials pursuant to Government Code Section 65962.5. This impact would be less than significant and this topic will not be discussed in the Supplemental EIR.

NO IMPACT

- e. *For a project 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The closest airport is the Livermore Municipal Airport, which is approximately 3.75 miles west of the project alignment. The project alignment is not located within a Safety Compatibility Zone as designated by the Livermore Executive Airport Land Use Compatibility Plan (County of Alameda 2012). Therefore, the proposed project would not subject people working along the alignment to safety hazards or excessive noise, and there would be no impact. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The project would require temporary lane closures along the alignment throughout construction, but traffic would be managed by a county-approved traffic control plan. Lane closures would occur along limited segments of the alignment, as approximately 150 linear feet of pipeline would be constructed each day. Emergency routes would remain open with minimal delay resulting from project construction, and the project would not interfere with an adopted emergency response plan or emergency evacuation plan.

Project operation would not change or disrupt the existing roadway and traffic patterns, and no streets would be closed or reconfigured once construction is complete. As such, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, including the Tri-Valley Hazard Mitigation Plan. The project would have a less than significant impact and this topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

South Livermore Sewer Expansion Project

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The project alignment is adjacent to existing agricultural, residential, and commercial uses. There are no wildland conditions on or adjacent to the project alignment, and the project is not located in a designated Very High Fire Hazard Severity Zone (CAL FIRE 2007, 2008). However, the eastern portion of the project alignment, including Greenville Road and a portion of Tesla Road, is located in an area designated as a Moderate FHSZ (CAL FIRE 2007, 2008). The project would be constructed within paved rights-of-way and would not expose people or structures to a significant loss, injury, or death involving wildland fires. There would be no impact. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

10 Hydrology and Water Quality

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?	
Would the project:						
a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	EIR Pages 4.3-27 through 4.3-28	No	No	No	N/A
b.	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	EIR Page 4.9-14	No	No	No	N/A
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;	EIR Pages 4.3-24 through 4.3-27	No	No	No	N/A
(ii)	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	EIR Pages 4.3-23 through 4.3-24	No	No	No	N/A
(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	EIR Pages 4.3-21 through 4.3-23	No	No	No	N/A
(iv)	Impede or redirect flood flows?	EIR Pages 4.3-21 through 4.3-24	No	No	No	N/A
d.	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	EIR Pages 4.3-28 through 4.3-29	No	No	No	N/A
e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	N/A	No	No	No	N/A

1997 EIR Summary

Chapter 4.3 (Hydrology, Drainage and Water Quality) of the 1997 EIR analyzes the existing SLVSP's impacts related to hydrology and water quality. The 1997 EIR does not address the issues of conflicts with or obstructs implementation of a water quality control plan or sustainable groundwater management plan. The 1997 EIR determined that hydrology and water quality impacts related to site peak flow rates/localized flooding, erosion, and water quality would be less than significant.

Impact Analysis

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*
- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*
- c.(i) *Would the project 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 result in substantial erosion or siltation on- or off-site?*
- c.(ii) *Would the project 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) *Would the project 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 that would 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?*
- c.(iv) *Would the project 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 impede or redirect flood flows?*
- d. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*
- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project would result in construction activities that could affect the water quality of nearby waterways during the implementation of dust control measures, which could result in sediments carried by runoff into nearby waterways. The project alignment is located within Flood Zone X (FEMA 2021). The project would also result in a construction-related increase in water demand for dust control. Impacts are potentially significant. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR. This issue will be studied in the Supplemental EIR.

POTENTIALLY SIGNIFICANT IMPACT

11 Land Use and Planning

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Physically divide an established community?	EIR Pages 4.1-29 through 4.1-35	No	No	No	Yes
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?	EIR Pages 4.1-16 through 4.1-23 and 4.1-45 through 4.1-77	No	No	No	N/A

1997 EIR Summary

Chapter 4.1 (Land Use and Public Plans) of the 1997 EIR analyzes the existing SLVSP’s impacts related to land use. The 1997 EIR determined that land use impacts related to conflicts with land use plans would be less than significant. Furthermore, impacts related to physical divisions of established communities were determined to be potentially significant or significant and unavoidable in Subareas 1 and 2. As a result, land use mitigation measures that were incorporated in the 1997 EIR to reduce potentially significant impacts are summarized below:

Mitigation Measures 4.1-4

Off-site uses where increased incidents of trespass, vandalism, or theft are expected as a result of the new residential population introduced by SLVSPA buildout already are fenced for security. Existing fences afford as much protection as would be reasonable in consideration of the expected significance of impact. The following measures (already included in Draft Plan site plans and described in Land Use Element development concepts) would further reduce impacts if incorporated as a condition of project approval:

- Fifty foot or wider landscaped and cultivated setbacks would separate residential lots from subarea boundaries and from difference adjacent uses or densities. Fifty-foot setbacks would be located in Subareas 1 and, adjacent to SNL and the Shaheen Industrial Park, respectively. Cultivated setbacks of varying widths would provide both visual and functional buffering from existing on- and off-site land uses in all subareas (see Impact 4.1-5, below)
- Within the 50-foot-wide landscaped buffer in Subarea 1 adjacent to the SNL property line, planting trees 30 feet away from the boundary and allowing only low-growing shrubbery or ground cover in the intervening buffer to permit visibility for security purposes and avoid

creating places for intruders to hide or obtain access to SNL while shielding and privacy for residential uses in Subarea 1.

Mitigation Measures 4.1-7(a)

The City can choose among the following approaches to achieving conformance between the Draft Plan and already adopted City of Livermore policies:

- Modify the Plan before finally adopting and implementing it
- Amend South Livermore Policies of the City of Livermore Community General Plan or the General Plan itself to better reflect more current thinking and more detailed site-specific planning the Draft Plan represents

Mitigation Measures 4.1-7(b)

The County will review and comment on both the Draft Plan and this EIR in response to which the City may review or modify aspects of the Plan before adopting it formally. In recognition of the mutual interests of the City and County in the South Livermore Valley, preceded by the joint planning process which led to formulation of both the Area Plan and Draft Plan, the following measure is recommended:

- The City should work with the County to resolve County concerns and policy conflicts (if any) before adopting and implementing the South Livermore Valley Specific Plan. This could include reaffirming continued cooperative programs and/or establishing a framework to coordinate further on specific concerns as the City implements specific aspects of the Plan.

Setting

As stated in Environmental Checklist Section 1, *Aesthetics*, land use along much of the project alignment is designated in the City's General Plan Map as AGVT, with some parcels alongside the project alignment designated as Rural Residential (RR), Urban High Residential (UH), Parks, Trailways, Recreation Areas (OSP), Agricultural Preserve (SV-AP), and Vineyard Commercial (SV-VC) (City of Livermore 2015). A portion of the parcels in the project vicinity are zoned by the City of Livermore, while others are zoned by Alameda County. Parcels zoned by the City primarily include PD-SLVSP, along with one adjacent parcel zoned each as Education and Institutions (E), Open Space Agricultural (OS-A), and South Livermore Valley Agricultural (SLV-AG). Parcels zoned by Alameda County include Agriculture, Single Family Residential, and Planned Development (County of Alameda 2021). Generally, surrounding and adjacent parcels in the project vicinity consist of residential development, commercial development, vineyards and wineries, and open space uses compliant with City's General Plan, SLVSP, and the County's Zoning Ordinance.

Regulatory Setting

City of Livermore General Plan 2003-2025

According to the City's General Plan Land Use Element, the AGVT land use category is intended to preserve and promote agriculture and viticulture as primary uses in locations that are deemed suitable for cultivated agriculture. The areas are also intended to protect sensitive or unique environmental and land characteristics, including an area's rural character (City of Livermore 2015).

SLVSP

The intent of the PD-SLVSP zone is to implement the SLVSP, adopted in 1997 and amended in 2004. The SLVSP provides the framework for growth and development within the unincorporated area along the City of Livermore's southern boundary, where portions of the project are proposed. The project alignment would extend along SLVSP Subareas 1 and 2. Permitted land uses in Subarea 1 are limited to residential development while permitted land uses in Subarea 2 include residential development and commercial development limited to a small winery or bed and breakfast with a small tasting room or small restaurant and a medium winery or bed and breakfast with a tasting room or small restaurant on 8 acres (City of Livermore 1997).

Impact Analysis

a. Would the project physically divide an established community?

Project implementation would not alter the existing pattern of land use in the project vicinity or introduce new land uses and would not divide connected neighborhoods or land uses from one another. Project construction would not physically or socially divide an established community or limit movement, travel, or other interaction between established land uses. Therefore, no impacts would occur and this topic will not be discussed in the Supplemental EIR. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR.

NO IMPACT

b. Would the project 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?

The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP. No development beyond the current vision of the General Plan and SLVSP would occur as a result of the project. The City General Plan requires new development in the City to connect to the municipal system, following confirmation of the availability of adequate treatment and disposal capacity (Objective INF-2.1). Therefore, the project would not conflict with existing land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating and environmental effect. Therefore, no impacts would occur and this topic will not be discussed in the Supplemental EIR.

NO IMPACT

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12 Mineral Resources

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?	
Would the project:						
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	EIR page 4.2-35 through 4.2-36	No	No	No	N/A
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	EIR page 4.2-35 through 4.2-36	No	No	No	N/A

1997 EIR Summary

EIR Chapter 4.2 (Geology, Soils, and Seismicity) of the 1997 EIR analyzes the existing SLVSP’s mineral resources impacts. The 1997 EIR determined that impacts related to mineral resources would be less than significant. As a result, mineral resources mitigation measures were not required.

Setting

The project alignment is not located in an identified mineral resource area or mineral resource zone (DOC 2015b).

Regulatory Setting

Pursuant to the Surface Mining and Reclamation Act of 1975, the State Mining and Geology Board requires all cities to incorporate into their general plans mapped mineral resources designations approved by the State Mining and Geology Board. Some mineral resources can be found within Alameda County. The City of Livermore General Plan indicates that there are areas in the vicinity that are underlain by alluvial deposits containing significant reserves of high-value sand and gravel deposits. Much of the valley floor located south of I-580 was also classified by the CGS as an area of significant mineral resources, including portions of the South Livermore Avenue and Tesla Road (City of Livermore 2015).

Impact Analysis

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No existing mineral resource mining operations occur along the alignment. The project would not require the use of mineral resources valuable to the region and residents of the state, and no mining activity is planned to occur on the project alignment. The project would not result in the loss of availability of mineral resources. Therefore, no impacts would occur and this topic will not be discussed in the Supplemental EIR.

NO IMPACT

13 Noise

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project result in:

a. Generation of 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?	EIR Pages 4.7-10 through 4.7-14 and 4.7-16 through 18	No	No	No	N/A
b. Generation of excessive groundborne vibration or groundborne noise levels?	EIR Pages 4.7-16 through 4.7-18	No	No	No	N/A
c. 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, would the project expose people residing or working in the project area to excessive noise levels?	N/A	No	No	No	N/A

1997 EIR Summary

Chapter 4.7 (Noise) of the 1997 EIR analyzes the existing SLVSP's impacts related to on-site operational noise, traffic noise, and construction noise. The 1997 EIR does not address the issues of being 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. The 1997 EIR determined that impacts related to noise would be less than significant. As a result, noise mitigation measures were not required.

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2020).

Human Perception of Sound

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

Sound Propagation and Shielding

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a “sound power level” or a “sound pressure level,” which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as L_{pw}) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (FHWA 2011). Structures can substantially reduce exposure to noise as well. The FHWA’s guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this analysis are the equivalent noise level

(L_{eq}), Day-Night Average Level (DNL; may also be symbolized as L_{dn}), and the community noise equivalent level (CNEL, may also be symbolized as L_{den}).

L_{eq} is one of the most frequently used noise metrics; it considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The L_{max} is the highest noise level within the sampling period, and the L_{min} is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using DNL, which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using CNEL, which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013).³ The relationship between the peak-hour L_{eq} value and the DNL/CNEL depends on the distribution of noise during the day, evening, and night; however noise levels described by DNL and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 8.

³ Because DNL and CNEL are typically used to assess human exposure to noise, the use of dBA is implicit. Therefore, when expressing noise levels in terms of DNL or CNEL, the dBA unit is not included.

Table 8 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Source: Caltrans 2020

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 9.

Table 9 Vibration Annoyance Potential Criteria

Human Response	Vibration Level (in/sec PPV)	
	Transient Sources	Continuous/Frequent Intermittent Sources ¹
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity

Source: Caltrans 2020

¹ Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Regulatory Setting

CCR

CCR, Title 24, Section 1207.4 requires interior noise levels attributable to exterior sources to be at or below 45 dBA in any habitable room of a development based on the noise metric used in the noise element of the local general plan. All residential windows, exterior doors, and exterior wall assemblies would be required to have sound transmission class ratings that would ensure adequate attenuation of noise at a range of frequencies.

City of Livermore General Plan 2003-2025

The City’s General Plan Noise Element generally defines a sensitive receiver as residential areas, hospitals, nursing homes, health care facilities, libraries, schools, and wildlife preserves. Sensitive receivers nearest the project alignment include residential development located adjacent to the project alignment along Buena Vista Avenue, South Livermore Avenue, and East Avenue; the Civic Center Library, located adjacent to the project alignment on South Livermore Avenue; and schools, including Livermore High School, located adjacent to one location of the Bottleneck Project on East Avenue near 7th Street, and Our Savior Lutheran School, located adjacent to the project alignment along South Livermore Avenue. Existing noise sources within the City primarily come from vehicular traffic, aircraft, industrial plant equipment, and activities associated with neighborhoods and schools (i.e., lawn mowing, leaf blowing, and children playing) (City of Livermore 2015).

Policy N-1.2 P5 requires the City to minimize exposure of neighboring properties to excessive construction noise. Policy N-1.5 P1 and P2 set the following limits for exterior noise during temporary construction activities: 55 dBA L50 (7:00 a.m. to 10:00 p.m.) and 45 dBA L50 (10:00 p.m. to 7:00 a.m.), with allowable exceedances of these levels of 5 dBA for a cumulative period of no more than fifteen (15) minutes in any hour, 10 dBA for a cumulative period of no more than five (5) minutes in any hour, and 15 dBA for a cumulative period of no more than one (1) minute in any hour. Furthermore, Policy N-1.5 P3 restricts temporary construction from exceeding these noise standards by more than 15 dBA for any period of time. Policy N-1.5 P4 exempts the following noise sources from the above restrictions: motor vehicles on public streets; and temporary construction, maintenance, or demolition activities conducted between the hours of 7:00 a.m. and 8:00 p.m.

LMC

LMC Chapter 9.36 provides restrictions and regulations for noise within the City. LMC Section 9.36.080 prohibits the use of any pile driver, pneumatic tool, derrick, electric hoist, sandblaster or other equipment used in construction, demolition, or other repair work, the use of which is attended by loud or unusual noise, between the hours of 6:00 p.m. Saturday to 7:00 a.m. Monday; 8:00 p.m. to 7:00 a.m. on Monday, Tuesday, Wednesday, and Thursday; 8:00 p.m. Friday to 9:00 a.m. on Saturday; and at all on City-observed holidays. LMC does include exceptions that provide a city engineer and/or builder with the authority to authorize construction activities during prohibited hours for the following reasons:

1. A public agency, other than the City, requires as a condition of a permit that the construction be done during the restricted hours.
2. Public health, safety or welfare requires the work to be done during the restricted hours.
3. Specific construction activities (such as large concrete foundation pours) can be identified and approved to occur as an exemption to this ordinance in the conditions of approval for a project at the time of the public hearing.

Noise Level Increases over Ambient Noise Levels

The operational and construction noise limits used in this analysis are set at reasonable levels at which a substantial noise level increase as compared to ambient noise levels would occur. Operational noise limits are lower than construction noise limits to account for the fact that permanent noise level increases associated with continuous operational noise sources typically result in adverse community reaction at lower magnitudes of increase than temporary noise level increases associated with construction activities that occur during daytime hours and do not affect sleep. Furthermore, these noise limits are tailored to specific land uses; for example, the noise limits for residential land uses are lower than those for commercial land uses. The difference in noise limits for each land use indicates that the noise limits inherently account for typical ambient noise levels associated with each land use. Therefore, an increase in ambient noise levels that exceeds these absolute limits would also be considered a substantial increase above ambient noise levels. As such, a separate evaluation of the magnitude of noise level increases over ambient noise levels would not provide additional analytical information regarding noise impacts and therefore is not included in this analysis.

Impact Analysis

- a. *Would the project result in generation of 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 activity would generate temporary noise in the project vicinity, exposing surrounding sensitive receivers to increased noise levels. Project construction noise would be generated by heavy-duty diesel construction equipment used for site preparation, excavation/grading, construction, and paving activities. Each phase of construction has a specific equipment mix and associated noise characteristics, depending on the equipment used during that phase. Construction noise would typically be higher in the morning during the more equipment-intensive phases (i.e., site preparation work) and would be lower later in each day during the construction and paving phases. No buildings would be constructed, and the project would not result in unanticipated growth in the vicinity. As such, no change to existing ambient noise would result from the project.

The LMC does not establish noise level limits for construction occurring between the hours of 7:00 a.m. and 8:00 p.m. In the absence of applicable local noise level limits, this analysis references guidance from the FTA *Transit Noise and Vibration Impact Assessment Manual* to establish a quantified threshold against which to assess the impact of construction noise; FTA recommends that reasonable noise criteria may include those shown in Table 10. Construction would be limited to between the hours of 7:00 a.m. and 8:00 p.m.; therefore, daytime noise criteria would be appropriate.

Table 10 Construction Noise Criteria

Land Use	Daytime L_{eq} (8-hour)	Nighttime L_{eq} (8-hour)
Residential	80	70
Commercial	85	85
Industrial	90	90

Source: FTA 2018

To determine impacts, noise is estimated at the nearest sensitive receiver. Table 11 demonstrates the typical noise levels associated with heavy construction equipment during phases of construction at distances of 25, 50, and 100 feet from the noise source. While the property boundaries of the nearest sensitive receivers are located within 25 feet from the construction boundary, most structures are located approximately 50 feet from the project alignment, and Table 11 provides construction noise levels up to 100 feet from the noise source to demonstrate how noise from construction equipment attenuates over distance. Noise levels at a distance of 50 feet are provided by the FTA, while the other distances under evaluation are calculated using an attenuation rate of 6 dBA per doubling of distance.

Table 11 Construction Noise Levels

Equipment	Approximate Noise Level at 25 feet (dBA, L_{eq})	Approximate Noise Level at 50 Feet (dBA, L_{eq})	Approximate Noise Level at 100 feet (dBA, L_{eq})
Backhoe	86	80	74
Loader	86	80	74
Paver	91	85	79
Roller	91	85	79
Truck	90	84	78

An attenuation rate of 6 dBA per doubling of distance was used to calculate noise levels at 25 feet and 100 feet.
Source: FTA 2018

As shown in Table 11, noise from construction equipment has the potential to exceed the standard noise criteria of 80 dBA at the receivers located within 50 feet of the project alignment. These impacts would be temporary and would only last during the construction phase. Noise from construction equipment is not anticipated to exceed the standard noise criteria of 80 dBA at receivers located 100 feet or more from the noise source. Although the project would be constructed at approximately 150 LF each day, individual receivers would be exposed to construction equipment noise for a few days over the entire 12-month construction timeline. However, because the project would exceed the FTA construction noise standards at sensitive receivers located within 50 feet of the project alignment, this would be a significant impact and mitigation measures would be required.

Mitigation Measure

NOI-1 Construction Noise Reduction

The following requirements are required to reduce construction noise:

- Prior to the start of and for the duration of construction, the contractor shall properly maintain and tune all construction equipment in accordance with the manufacturer's recommendations to minimize noise emissions.
- Prior to use of any construction equipment, the contract shall fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer.
- During construction, the construction contractor shall place stationary construction equipment and material delivery (loading/unloading) areas to maintain the greatest distance from the nearest residences, or within noise reducing enclosures.
- The construction contractor shall post a sign along the work alignment that is clearly visible to the public, providing a contact name and telephone number for filing a noise complaint.
- These measures shall be listed on all grading plans and monitored by the City of Livermore during construction.

For noise sensitive uses, implementation of Mitigation Measure NOI-1 would reduce construction noise impacts to a less than significant level. This mitigation measure will be listed in the Supplemental EIR’s executive summary and included in the project’s mitigation monitoring and reporting program. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Project construction would intermittently generate vibration on and adjacent to the alignment, which has the potential to create human annoyance and damage buildings at high levels. Unlike construction noise, vibration levels are not averaged over time to determine their impact. The most important factors are the maximum vibration level and the frequency of vibratory activity. Therefore, it is appropriate to estimate vibration levels at the nearest distance to sensitive structures that equipment could be used, even though this equipment would typically be located farther from receivers. Vibration-generating equipment may include bulldozers and loaded trucks to move materials and debris, and vibratory rollers for paving. It is assumed that pile drivers, which generate strong ground borne vibration, would not be used during construction because no structures would be built. Table 12 outlines expected vibration levels for vibration-generating equipment that may be used during project construction. Such equipment would be operated on a transient basis.

While the property boundaries of the nearest sensitive receivers are located within 25 feet from the construction boundary, it is anticipated that most structures are located at least 50 feet from the project alignment.

Table 12 Vibration Levels for Construction Equipment at Noise-Sensitive Receivers

Equipment	PPV (in/sec) at 25 feet	L _v (VdB) at 25 feet
Vibratory Roller	0.210	94
Loaded Trucks	0.076	86

Source: FTA 2018

As shown in Table 12, construction equipment would generate peak vibration levels ranging from 0.076 in/sec PPV to 0.210 in/sec PPV at the property boundaries of the nearest sensitive receivers, which would be barely perceptible to humans based on the information provided in Table 9, *Vibration Annoyance Potential Criteria*. These vibration levels would exceed the maximum vibration levels for preventing damage to historic sites and to residential buildings with plastered walls, but would not exceed the maximum vibration levels for preventing damage to residential buildings in good repair with gypsum board walls (refer to Table 8, *AASHTO Maximum Vibration Levels for Preventing Damage*). As discussed in Environmental Checklist Section 5, *Cultural Resources*, there are no historic structures within 25 feet of the project alignment. Similarly, it is anticipated that most residential and commercial structures are located at least 50 feet from the project alignment, which would reduce vibration to less than significant levels.

As required by LMC Chapter 9.36, construction activity would be limited to daytime hours and would not disrupt residential receivers during recognized hours of sleep. Overall, vibration caused by project construction would result in a less than significant impact.

There would be no groundborne vibration generated by project operation.

This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

- c. *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, would the project expose people residing or working in the project area to excessive noise levels?*

According to Figure 3-2 of the Livermore Municipal Airport Land Use Compatibility Plan, the project would not be located within the 55 CNEL, 60 CNEL, or 65 CNEL Noise Contour (County of Alameda 2012). There are no private airstrips in the project vicinity and the project would not introduce a new noise sensitive land use. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with airports or a private airstrip. No impact would occur and this topic will not be discussed in the Supplemental EIR.

NO IMPACT

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14 Population and Housing

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	N/A	No	No	No	N/A
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	N/A	No	No	No	N/A

1997 EIR Summary

The 1997 EIR does not address the issue area of population and housing.

Setting

Livermore has an estimated population of 91,216 with 33,004 housing units (Department of Finance [DOF] 2021). The average number of persons per household is estimated at 2.85 (DOF 2021). The Association of Bay Area Governments (ABAG) provides projections for households in Livermore through the year 2040 and in Alameda County through the year 2050. ABAG projects there to be 112,905 households in Livermore by 2040 and 847,000 households in Alameda County by 2050 (ABAG 2021).

Impact Analysis

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The proposed project would not involve the construction of new residences or businesses, nor would it extend existing roadways. The project would involve the construction of sanitary sewer infrastructure intended to support existing uses and serve existing development potential consistent with the vision of the General Plan and SLVSP. The project would not support uses that are not consistent with the City's General Plan, SLVSP, or current zoning. The project would not cause unanticipated growth in the City. Therefore, the project would not induce substantial unplanned growth, directly or indirectly. Impacts to population or housing would be less than significant. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

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- b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

There are residences alongside the project alignment; however, the project alignment is entirely within paved rights-of-way. The project would not involve the demolition of existing residences and would not displace existing housing units or people. No impact would occur. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

15 Public Services

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?	
a.	Would the project result in substantial adverse physical 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, response times or other performance objectives for any of the public services:					
1	Fire protection?	EIR Pages 4.9-23 through 25 and 4.9-28	No	No	No	N/A
2	Police protection?	EIR Pages 4.9-29 through 4.9-30	No	No	No	N/A
3	Schools?	EIR Pages 4.9-40 through 4.9-41	No	No	No	N/A
4	Parks?	EIR Page 4.9-36 through 4.9-38	No	No	No	N/A
5	Other public facilities?	EIR Page 4.9-42 through 4.9-43	No	No	No	N/A

1997 EIR Summary

Chapter 4.9 (Public Services) of the 1997 EIR analyzes the existing SLVSP's impacts related to public services. The 1997 EIR determined that impacts related to all public services would be less than significant. As a result, public services mitigation measures were not required.

Setting

The California Department of Forestry and Fire Protection (CAL FIRE) is responsible for fire prevention and suppression in the project vicinity (CAL FIRE 2007). The Livermore-Pleasanton Fire Department (LPPFD) acts as first responders to hazardous materials incidents, rescue emergencies, and medical emergencies (including injury accidents) within the City and project vicinity (LPPFD 2021). The LPPFD operates five fire stations in the City and operates five additional fire stations along with one fire headquarters and one training facility in the City of Pleasanton, located west of Livermore. In addition to fire and emergency response, LPPFD also participates in development activities in the City by reviewing Planning Division projects and inspecting new construction and tenant improvements through the Fire Prevention Division (LPPFD 2021). The LPPFD's goal is an overall response time of 5 minutes, 90 percent of the time.

The Livermore Police Department (LPD) provides police protection services in the City. The City has four area commands for LPD. The project alignment along most of the western portion of South Livermore Avenue is located between the District 1 and District 3 boundaries, East Avenue is within the District 3 boundaries, and the eastern portion of South Livermore Avenue in addition to all of Buena Vista Road, Greenville Road, and Tesla Road fall just outside of the District 3 boundaries (City of Livermore 2021b). As such, the Alameda County Sheriff's Office shares jurisdiction over the project alignment, specifically providing police protection services to a portion of South Livermore Avenue and all of Buena Vista Avenue, Tesla Road, and Greenville Avenue. The LPD Headquarters is located approximately 0.47-mile northwest of the portion of the proposed project on South Livermore Avenue (Alameda County Sheriff's Office 2022).

Livermore Valley Joint Unified School District serves more than 13,900 students in transitional kindergarten through 12th grade at nine elementary campuses, two K-8 schools, three middle schools, two comprehensive high schools, and two alternative schools throughout Livermore Valley (Livermore School District 2022).

The Livermore Public Library currently operates one main facility, the Civic Center Library, and three branch facilities in the City of Livermore: Rincon Library, Springtown Library, and Springtown Easy Access. The nearest library facility to the project alignment is the Civic Center Library, located at 1188 South Livermore Avenue, adjacent to the westernmost portion of the project alignment.

Impact Analysis

- a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*
- a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

- a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*
- a.5. *Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives?*

The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the vision of the General Plan and SLVSP. Project implementation would not increase the demand for fire or police services beyond what is anticipated in the City's General Plan and SLVSP. Therefore, the project would not cause substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities. Similarly, the project would not increase the number of students attending schools operated by the Livermore Valley Joint Unified School District and would not require the construction of new school facilities. The project would not involve construction of residences and would not generate new jobs in the City; therefore, the project would not result in impacts to Livermore library services or facilities, or other public facilities in City. No impacts to would occur. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

Please refer to Environmental Checklist Section 16, *Recreation*, for an analysis of impacts related to parks and recreation resources. No impacts to parks or recreational facilities would occur. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

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16 Recreation

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	EIR Page 4.9-36 through 4.9-38	No	No	No	N/A
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	EIR Page 4.9-36 through 4.9-38	No	No	No	N/A

1997 EIR Summary

Chapter 4.9 (Public Services) of the 1997 EIR analyzes the existing SLVSP’s impacts on existing recreational facilities. The 1997 EIR determined that impacts related to recreational facilities would be less than significant. As a result, recreation mitigation measures were not required.

Setting

The City of Livermore owns and operates several small parks within the city limits. However, parks and recreational facilities in the City are primarily managed by the Livermore Area Recreation and Park District (LARPD), formed as an independent special district in 1947 by vote of the public. LARPD is responsible for providing public park operation and maintenance for local and regional parks and recreation services to the City of Livermore and surrounding unincorporated areas of South Livermore Valley and north Livermore (County of Alameda 2013). LARPD is responsible for the management of approximately 1,949 acres of parks, trails, and open space; 153.3 acres are dedicated to Neighborhood Parks, 152.4 acres are dedicated to Community Parks, and 199 acres are dedicated to Special Use Facilities/Parks (LARPD 2016).

Parks and recreation facilities operated and maintained by LARPD nearest the proposed project include Ernie Rodrigues Softball Fields, located adjacent to the project alignment on South Livermore Avenue, and Robertson Park, located on Robertson Park Road approximately 600 feet west of the project alignment along South Livermore Avenue. Additional parks and recreation facilities located in the project vicinity include Civic Center Park, located adjacent to the project alignment on South Livermore Avenue next to the Public Library, Bothwell Park and Playground, located on 7th Street approximately 150 feet west of the project alignment along South Livermore Avenue, Robert Livermore Park, located on East Avenue approximately 0.2 mile west of the easternmost location of the Bottleneck Project on East Avenue near Buena Vista Avenue, Almond Avenue Neighborhood Park, located approximately 0.3 mile west of the project alignment along Buena Vista Avenue, Livermore Skatepark, located on Pacific Avenue approximately 0.4 mile east of the project alignment along South Livermore Avenue, and, Bruno Canziani Neighborhood Park,

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located on Charlotte Way approximately 0.5 mile east of the project alignment along Buena Vista Avenue. An existing shared-use path, the Arroyo Mocho Bike Trail, also runs along the project alignment on the southern side of the eastern portion of South Livermore Avenue. The Arroyo Mocho Bike Trail continues along the southern side of Tesla Avenue before turning north on Buena Vista Avenue and connecting to Bruno Canziani Neighborhood Park.

Impact Analysis

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The shared use Arroyo Mocho Bike Trail on South Livermore Avenue and Tesla Road would remain open and usable during project construction because they are not located within the project alignment, and project implementation would not permanently alter the Arroyo Mocho Bike Trail.

The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City’s General Plan and SLVSP.

Additionally, the project would not involve construction of residences and would not generate new jobs in the City. Therefore, the project would not increase the demand for existing recreational services. Furthermore, the project would not include the construction or expansion of additional public recreation facilities. As such, the project would not result in impacts related to recreation. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

17 Transportation

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?	
Would the project:						
a.	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	EIR page 4.5-59 through 4.5-67	No	No	No	Yes
b.	Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	N/A	No	No	No	N/A
c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	EIR page 4.5-62 through 4.5-63	No	No	No	N/A
d.	Result in inadequate emergency access?	N/A	No	No	No	N/A

1997 EIR Summary

Chapter 4.5 (Transportation and Circulation) of the 1997 EIR analyzes the existing SLVSP’s impacts on traffic, pedestrian conditions, and parking availability. The 1997 EIR does not address the issue areas of consistency with CEQA Guidelines Section 15064.3, subdivision (b) or the adequacy of emergency access. The 1997 EIR determined that transportation impacts related to intersections and transit would be less than significant. Furthermore, all other impacts were determined to be potentially significant or significant and unavoidable in Subareas 1 and 2. Mitigation measures that were incorporated in the 1997 EIR to reduce potentially significant transportation impacts are summarized below:

Mitigation Measure 4.5-4

Implementation of Draft Plan Policy 5-28, regarding the City’s encouragement of the County’s traffic calming program for Buena Vista Avenue, supports the neighborhood’s efforts to reduce volumes and slow speeds on Buena Vista Avenue. The following mitigation measure would be required to supplement Policy 5-38:

- The City shall work with the County to continue monitoring traffic patterns on Buena Vista Avenue. Traffic shall be monitored at least once a year until cumulative traffic conditions have stabilized for a period of three years. Stabilized shall be defined as vehicle speed and vehicle volume counts not increasing by more than ten percent for a given three-year period. If trips on Buena Vista Avenue increase to more than 2,000 trips per day (the conservative environmental capacity of the roadway) or if the 85th percentile speed of traffic on the roadway exceeds 30 miles per hour, the City will work cooperatively with the County to implement traffic calming

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measures to reduce the volume and speed of vehicles to those levels. Traffic calming measures which will be considered include those outlined in the County's adopted traffic calming program, such as the particular following examples:

- Planting street trees close to the roadway / Residential Neighborhood Gateways
 - Speed enforcement (Neighborhood Speed Watch Program)
 - Road and speed humps
 - Turn lane restrictions
- The City will advocate increasingly stringent traffic calming measures until the above-stated standards are met.

Mitigation Measures 4.5-6(a)

Where trails cross roadways, trail crossings shall be designated to the standard set forth in the Livermore Bicycle/Pedestrian Plan Update and Equestrian Trails Study. Subarea developers should work with LARPD and the City and County Publics Works Departments on crossing design. Trail/roadway crossings are planned at the following locations:

- Subarea 2 midway along the central collector
- Subarea 2 all farm compound access drives
- Tesla Road at southwest edge of Subarea 2

Mitigation Measures 4.5-6(b)

Subarea developers should work with the City Public Works Department and LARPD to plan, design, and construct the segments of the Bicycle/Pedestrian Plan facilities, which run adjacent to subarea frontage but are not included in the Draft Plan. Subarea developers should pay for the improvements along the subarea frontage. The facilities include:

- Bicycle lanes on South Vasco Road along Subarea 1 and 2 frontages
- Multi-use trail on South Vasco Road between southern entrance to Subarea 2 and Tesla Road
- Bicycle lanes and multi-use trail on Tesla Road between Subarea 1 southeast corner and north-south trail connection at southwest corner of Subarea 2

Setting

Existing Roadway Network

Regional access to the project alignment is provided by I-580 via North Livermore Avenue and South Vasco Road to the north and by State Route 84/Isabel Avenue via East Stanley Boulevard and Concannon Boulevard to the west. The following descriptions are provided for roadways along the project alignment (City of Livermore 2015).

- **South Livermore Avenue** is a two-lane rural roadway with no curbs, gutters, or sidewalks, identified as a Special Rural Route.⁴

⁴ Special rural routes are designated through City-identified vineyard lands and incorporate special road design standards that serve to protect and complement the “wine county” character of the City (City of Livermore 2015). Special Rural Routes follow specific standards regarding width restrictions, landscaping features, and special signs, and typically include combined bike, pedestrian, and equestrian trails that are separated from the roadway.

- **Tesla Road** is a two-lane road that starts at a connection with South Livermore Avenue within the City and stretches approximately 12 miles east, ending at a connection with Corral Hollow Road outside of the City. The roadway is identified as both a Major Street and a Special Rural Route west of Greenville Road and is identified as both a Major Street and an Intercounty Route east of Greenville Road. Tesla Road currently experiences cut-through traffic as a result of freeway congestion.
- **Buena Vista Avenue** is a low-speed, low-capacity residential roadway classified as a Local Street.⁵
- **Greenville Road** begins at a connection with Northfront Road, adjacent to I-580. Portions of the roadway north of Tesla Road are identified as a Major Street and a Special Rural Route, and often experience cut-through traffic as a result of freeway congestion. Portions of the roadway south of Tesla Road are identified as a low-speed, low-capacity Local Street that provides access to existing vineyards and wineries.
- **East Avenue** is located adjacent to the beginning of the proposed project on Buena Vista Avenue and is identified as a Major Street.

Existing Bicycle Facilities

Caltrans classifies bicycle facilities in four ways. The Alameda County Transportation Commission has adopted a sub-set of classifications for each of the four classifications designated by Caltrans to harmonize the previously existing local classification system within Alameda County. The following descriptions are provided for bicycle facilities located within the City with classifications identified by both Caltrans and Alameda County (City of Livermore 2018).

- **Class I Shared Use Paths** are separated with exclusive rights-of-way for two-way bicycling, walking, and other non-motorized uses.
 - **Class IA** are paved paths.
 - **Class IB** are unpaved paths.
- **Class II Bicycle Lanes** are striped, preferential lanes on roadways for one-way bicycle travel.
 - **Class IIA** are conventional bicycle lanes consisting of a single stripe to delineate the lane, stenciled pavement markings, and signs to identify it as a bicycle lane.

Although there are additional subclassifications of Class II Bicycle Lanes within Alameda County, all existing bicycle lanes within the City are classified as Class IIA. The City of Livermore currently maintains 40 miles of Class I Shared Use Paths and 66 miles of Class II Bicycle Lanes (City of Livermore 2018). Existing bicycle facilities located along the project alignment include a Class IA shared use path, the Arroyo Mocho Bike Trail, which runs along the southern side of the eastern portion of South Livermore Avenue. The Arroyo Mocho Bike Trail continues along the southern side of Tesla Avenue before turning north on Buena Vista Avenue and connecting to Bruno Canziani Neighborhood Park. Additional existing bicycle facilities located along the project alignment include a Class II bicycle lane in both directions beginning at the intersection of South Livermore Avenue and 7th Street. This Class II bicycle lane runs southeast down South Livermore Avenue, continuing east onto Tesla Road. The Class II bicycle lane on Tesla Road stops at the intersection with Greenville Avenue but continues north onto Greenville Avenue outside of the project alignment. An additional

⁵ Local Streets provide multimodal circulation with direct access to abutting land uses. Street design standards and layouts are typically used to discourage cut-through traffic, avoid high travel speeds and amounts of traffic, and minimize neighborhood noise and safety impacts

Class II bicycle lane exists in both directions on East Avenue between Madison Avenue and Vasco Road, adjacent to the Bottleneck Project.

Existing Pedestrian Facilities

Existing pedestrian facilities in the City consist of sidewalks, pathways, crosswalks, curb ramps, crossing enhancements, and amenities like benches and lighting. The following descriptions are provided for pedestrian facilities located within the City (City of Livermore 2018).

- **Sidewalks** are smooth, even surfaces separated from vehicle travel lanes. Some sidewalks are buffered from the roadway by landscaped areas or other features. Sidewalks vary in width from five to ten feet wide, depending on the adjacent land use.
- **Marked Crosswalks** are guide pedestrians to a preferred path of travel across a street and alert motorists that pedestrians are likely to be crossing at that location.
- **Curb Ramps** assist pedestrians with mobility impairments, pedestrians using assistive devices, and children transitioning from the sidewalk to a crosswalk. They are also intended to support pedestrians with strollers and children riding scooters or skateboards on the sidewalk.
- **Median refuges**, also known as pedestrian refuge islands, provide a safe waiting area for pedestrians in the median of wide, busy streets.
- **Rectangular Rapid Flashing Beacons** are user-actuated amber LEDs that supplement warning signs at uncontrolled intersections and mid-block crosswalks.

The City maintains approximately 566 miles of sidewalks, covering 93 percent of the street network. Approximately 44 miles of roadways have sidewalk on only one side, and approximately 32 miles of roadway lack sidewalks entirely. The City maintains approximately 8,000 curb ramps, with approximately 28 percent of ramps complying with current Americans with Disabilities Act standards.

Existing Public Transit

There are several transit services available in the City, with the Livermore Transit Center serving as the major transfer point for local buses, Altamont Corridor Express trains, Amtrak motor coaches, and Greyhound buses. The Transit Center is located approximately 0.35-mile east of South Livermore Avenue on Railroad Avenue. The following transit services currently available within the City with routes and stops in the project vicinity are described below (City of Livermore 2015).

- **Livermore Amador Valley Transit Authority** operates the WHEELS Service, providing local public transit to the cities of Dublin, Livermore, Pleasanton, and to the adjacent unincorporated areas of Alameda County.
- **Altamont Commuter Express** provides passenger rail service from Stockton to San Jose through the Altamont Pass.

The Livermore Amador Valley Transit Authority offers fixed route services that operate seven days per week between the hours of 4:30 a.m. and 12:30 a.m. Route 14 (Pleasanton-Livermore) maintains one stop on the corner of East Avenue and 7th Street, adjacent to the Bottleneck Project. Additionally, Route 30R (Dublin-Livermore via College) maintains one stop on the corner of East Avenue and Buena Vista Avenue, adjacent to the project alignment. Finally, Route 30X (Vasco) runs along East Avenue, adjacent to the Bottleneck Project, with one stop at the intersection of East

Avenue and Vasco Road, outside of the project alignment. The Altamont Commuter Express provides three morning and three evening trips to the connector stations in Livermore and Pleasanton. The City has two ACE stations: one located on Vasco Road and the other on Railroad Avenue, adjacent to the Transit Center and 0.35-mile east of the project alignment.

Regulatory Setting

SB 743 and Vehicle Miles Traveled

SB 743 was signed into law by Governor Brown in 2013 and tasked the State Office of Planning and Research with establishing new criteria and metrics for identifying and mitigating transportation impacts under CEQA. In January 2018, the Office of Planning and Research transmitted its proposed CEQA Guidelines implementing SB 743 to the California Natural Resources Agency for adoption, and in January 2019 the Natural Resources Agency finalized updates to the CEQA Guidelines, which incorporated SB 743 modifications, and are now in effect (Caltrans 2020). SB 743 changed the way that public agencies evaluate the transportation impacts of project, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact. In addition to new exemptions for projects consistent with specific plans, the CEQA Guidelines replaced congestion-based metrics, such as auto delay and level of service, with vehicle miles traveled as the basis for determining significant impacts, unless the Guidelines provide specific exceptions.

Alameda County Countywide Transportation Plan

A Countywide Transportation Plan was adopted by the Alameda County Transportation Commission in November 2020, which details a 30-year transportation vision and guides the decision-making of the Alameda County Transportation Commission. The Countywide Transportation Plan serves to improve the transportation system within Alameda County to promote connectivity, sustainability, transit operations, public health, and economic opportunities (County of Alameda 2020).

City of Livermore General Plan 2003 – 2025

The City's Circulation Element contains goals, objectives, and policies focused on regulating and developing transportation systems in the City, such as Goal CIR-1 that ensures all users are provided safe, efficient, comfortable, and convenient mobility and Objective CIR-2.1 that promotes viable alternatives to single-occupant vehicle travel.

City of Livermore Bicycle, Pedestrian, & Trails Active Transportation Plan

The 2018 City of Livermore Bicycle, Pedestrian, and Trails Active Transportation Plan acts as a comprehensive framework to implement network improvements in order to provide quality bicycle and pedestrian facilities that improve mobility, connectivity, public health, physical activity, and recreational opportunities. Overall, the City uses the Plan to increase transportation options, reduce environmental impacts of the transportation system, and enhance the overall quality of life for the Livermore community. The Plan is consistent with, or provides further guidance for, regional plans and policies including the LARPD Master Plan, the East Bay Regional Park District Master Plan, Alameda Countywide Bike Plan and Pedestrian Plan, and Unincorporated Alameda County's Bike Plan and Pedestrian Plan. The Plan also further implements the City's Complete Street Policies set forth in the Livermore General Plan. The Plan provides a vision, goals, and policies that guide decision-making to prioritize and implement the recommended active transportation network improvement projects and programs (City of Livermore 2018).

Impact Analysis

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Project construction would require one lane of public roadways to be closed at any given time. The City would post signage along the alignment and on roadways leading up to the alignment before and during construction to give advance warning of road closures and detours. Access to the transit stops located along East Avenue would be maintained during project construction. Project implementation would not alter the roadways or transit stops, increase commercial or residential development, generate growth, or cause an increase in traffic in the vicinity. Therefore, the project would not impact the overall use of the roadways along the project alignment and would not conflict with the goals, objectives, or policies addressing the circulation system in the City's General Plan Circulation Element.

The Arroyo Mocho Bike Trail would not be impacted during project construction, and project operation would not permanently alter the Arroyo Mocho Bike Trail. An existing Class II bicycle lane runs in both directions along the project alignment on South Livermore Avenue and Tesla Road. Project construction would require closure of one side of the Class II bicycle lane on South Livermore Avenue and Tesla Road at a time. Detour signs would be placed at intersections to facilitate the safe crossing of bicycle lane users when portions of the lane are closed. Additionally, bicycle lane users could be redirected to use the unaffected Arroyo Mocho Bike Trail as needed during project construction. Project operation would not result in permanent closures or long-term impacts to the Class II bicycle lane. Therefore, the project would not conflict with the goals, objectives, or policies addressing bicycle and pedestrian facilities in the City's General Plan Circulation Elements or the City's Bicycle, Pedestrian, & Trails Active Transportation Plan.

Overall, the proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant. Additionally, development on adjacent parcels within the SLVSP area would continue to be required to implement applicable mitigation measures from the 1997 EIR. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

CEQA Guidelines Section 15064.3(b) describes criteria for analyzing transportation impacts. The proposed project would not change the existing roadways, increase commercial or residential development in the area, generate growth, or create an increase in traffic in the project vicinity. Project operation would not generate vehicle trips, and there would be no change to existing roadways or increase in vehicle miles travelled. As such, the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) and no impacts would occur. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

The project would be constructed within existing roadways and would not alter or affect the existing street and intersection networks in the vicinity, nor increase hazards due to a new geometric design feature. The proposed project would not introduce incompatible uses, including vehicles or equipment, to the alignment or the surrounding area, and would have no impacts. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

- d. *Would the project result in inadequate emergency access?*

Project construction would require one lane of public roadways to be temporarily closed at any given time. A county-approved traffic control plan would be implemented to regulate worker parking, construction staging, roadway improvements and potential traffic detours during construction. Signage would be posted along the alignment and on roadways leading up to the alignment it before and during construction to give advance warning of road closures and detours. Additionally, lane closures during project construction would only occur along limited segments of the alignment, as approximately 150 linear feet of pipeline would be constructed each day. As a result, the project would not result in inadequate emergency access and impacts would be less than significant. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT IMPACT

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18 Tribal Cultural Resources

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a PRC Section 21074 as either a site, feature, place, or 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:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or	N/A	No	No	No	N/A
b. 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	N/A	No	No	No	N/A

1997 EIR Summary

The 1997 EIR does not address the issue area of tribal cultural resources.

Regulatory Setting

AB 52 was enacted in 2015 and expanded CEQA by defining a new resource category: “tribal cultural resources.” AB 52 states that “[a] 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.” It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible.

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

- Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC section 5020.1(k), or
- 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 PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those having requested notice of projects proposed in the jurisdiction of the lead agency.

Impact Analysis

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 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)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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?*

The City of Livermore notified culturally affiliated Tribes regarding the project on January 31, 2022. As of the date of this report, no Tribes have requested governmental consultation regarding this project consistent with AB 52. The project would not involve the demolition of existing buildings or structures in the project vicinity. Based on the above, it is assumed no tribal cultural resources are present on the project alignment. However, because the project involves ground disturbance, there is the possibility of encountering undisturbed subsurface tribal cultural resources during construction. Therefore, the project could result in potentially significant impacts to tribal cultural resources and mitigation measures would be required.

Mitigation Measure

TCR-1 Unanticipated Discovery of Tribal Cultural Resources

If cultural resources of Native American origin are identified during project construction, all earth-disturbing work within 50 feet of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. If the City determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared in accordance with state guidelines and in consultation with Native American groups and reviewed and approved by the City prior to implementation. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American groups as necessary.

Mitigation Measure TCR-1 would reduce impacts to a less than significant level. This mitigation measure will be listed in the Supplemental EIR’s executive summary and included in the project’s mitigation monitoring and reporting program. This topic will not be discussed in the Supplemental EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

19 Utilities and Service Systems

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. 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?	EIR Pages 4.9-6 through 4.9-14 and 4.9-19 through 4.9-21	No	No	No	N/A
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	EIR Pages 4.9-6 through 4.9-14	No	No	No	N/A
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	EIR Pages 4.9-19 through 4.9-21	No	No	No	N/A
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?	N/A	No	No	No	N/A
e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	N/A	No	No	No	N/A

1997 EIR Summary

Chapter 4.9 (Public Services) of the 1997 EIR analyzes the existing SLVSP's impacts related to water and wastewater. The 1997 EIR does not address the issues of construction or relocation of stormwater drainage, electric power, natural gas, or telecommunications facilities; sufficient water supplies during normal, dry, and multiple dry years; or of solid waste generation. The 1997 EIR determined that impacts related to water supply would be significant and unavoidable. Furthermore, all other impacts were determined to be less than significant in Subareas 1 and 2. As a result, utility services mitigation measures were not required for development in Subareas 1 and 2.

Impact Analysis

- a. *Would the project 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?*
- b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*
- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*
- d. *Would the project 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. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The project would expand wastewater service to parcels adjacent to the proposed alignment. The project could result in a construction-related increase in water demand for dust control, electricity and natural gas demand from equipment use, and solid waste generation from pavement and soil removal. Impacts may be potentially significant. Additionally, the impacts of organics in sewage from wineries on the treatment processes at the Water Reclamation Plant would need to be studied further to determine what level of pre-treatment, if any, is required. This issue will be studied in the Supplemental EIR.

POTENTIALLY SIGNIFICANT IMPACT

20 Wildfire

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	N/A	No	No	No	N/A
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?	EIR Pages 4.9-25 through 4.9-27	No	No	No	N/S
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?	N/A	No	No	No	N/A
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	EIR Pages 4.9-25 through 4.9-27	No	No	No	N/A

1997 EIR Summary

Chapter 4.9 (Public Services) of the 1997 EIR analyzes impacts related to wildfire. The 1997 EIR determined that impacts related to wildfire would be less than significant in Subareas 1 and 2. As a result, wildfire mitigation measures were not required for development in Subareas 1 and 2.

Setting

The City of Livermore is not located within a CAL FIRE designated Very High FHSZ (CAL FIRE 2008). The northern and western portions of the project alignment and the Bottleneck Project are within a Local Responsibility Area (LRA). The central and southern portions of the project alignment are within a State Responsibility Area (SRA). The eastern portion of the project alignment, including Greenville Road and a portion of Tesla Road, is located within an area designated as a Moderate FHSZ in an SRA, while a small portion of Tesla Road beginning at Greenville Road is located within an area designated as High FHSZ in an SRA (CAL FIRE 2007). The nearest Very High FHSZ area is located approximately 8.5 miles west of the project alignment within an LRA (CAL FIRE 2008).

Impact Analysis

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, 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. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Although the project alignment is located in an SRA, the project would be constructed within paved rights-of-way. The project would not result in population growth or expose new residents to wildfire risks. As such, the project would not substantially impair an adopted emergency evacuation plan, exacerbate wildfire risks, require the installation or maintenance of associated infrastructure that may exacerbate fire risk, or expose people or structures to significant risks. Overall, the project would not generate impacts from wildfire hazards. This topic will not be discussed in the Supplemental EIR.

NO IMPACT

21 Mandatory Findings of Significance

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Does the project:

a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	N/A	No	No	No	N/A
b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	N/A	No	No	No	N/A
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	N/A	No	No	No	N/A

Impact Analysis

- a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The project alignment does not contain suitable habitat for fish and wildlife species. Therefore, the project would not substantially reduce the habitat of fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. In addition, as discussed in Environmental Checklist Section 4, *Biological Resources*, Mitigation Measure BIO-1 would reduce impacts to bird and tree species to a less than significant level. This mitigation measure will be listed

in the Supplemental EIR's executive summary and included in the project's mitigation monitoring and reporting program.

The project alignment does not contain important examples of the major periods of California history or prehistory. Therefore, the project would not eliminate these resources. In addition, as discussed in Environmental Checklist Section 5, *Cultural Resources*, and Environmental Checklist Section 7, *Geology and Soils*, no historical, archaeological, or paleontological resources were identified along the alignment. Nevertheless, the potential for the recovery of buried cultural materials during construction remains. Implementation of Mitigation Measure CR-1 would reduce impacts to previously undiscovered cultural resources to a less than significant level by providing a process for evaluating and, as necessary, avoiding impacts to any resources found during construction. Furthermore, Mitigation Measure GEO-1 would reduce potential impacts to paleontological resources. These mitigation measures will be listed in the Supplemental EIR's executive summary and included in the project's mitigation monitoring and reporting program. These topics will not be discussed in the Supplemental EIR.

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- b. *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As described in the discussion of Environmental Checklist Sections 1 through 20, with respect to all environmental issues, with the exception of water quality for dust control, water supply from facilitated development, and wastewater generation from facilitated development (refer to Environmental Checklist Sections 10 and 19), the proposed project would not result in potentially significant impacts to the environment; anticipated impacts associated with project construction and operation would be either less than significant or less than significant with mitigation incorporated. This is because project construction would be temporary, and project operation would not significantly alter the environmental baseline condition.

Cumulatively considerable impacts could occur if the construction of other projects occurs at the same time as the proposed project and in the same vicinity, such that the effects of similar impacts of multiple projects combine to expose adjacent sensitive receptors to greater levels of impact than would occur under the proposed project. For example, if the construction of other projects in the area occurs at the same time as construction of the proposed project, potential impacts associated with noise and traffic to residents in the project area may be more substantial. There are no major construction projects currently planned in the project vicinity and most of the parcels in the project vicinity are developed. Therefore, construction-related impacts to sensitive receptors are not anticipated.

In addition, cumulative impacts could occur due to indirect growth-inducing impacts, which includes consideration of whether the project would remove an obstacle to additional growth and development. The project would not induce unanticipated growth in the City or surrounding area because it would serve existing development potential consistent with the City's General Plan and SLVSP.

Most project impacts are temporary, localized effects that would occur during construction. Once operational, the project would not have significant adverse environmental impacts or induce development in the area that could combine with other projects' effects to create cumulatively

significant impacts. Therefore, with the exception of water quality and wastewater service, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact. Potential cumulative water quality and wastewater service impacts will be addressed in greater detail in the Supplemental EIR.

POTENTIALLY SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in the Environmental Checklist Section 3, *Air Quality*, the project would not result, either directly or indirectly, in substantial adverse effects related to air quality through construction or operation. As discussed in Environmental Checklist Section 9, *Hazards and Hazardous Materials*, project operation would not involve the routine use of extremely hazardous materials. Compliance with applicable regulations during project construction would reduce potential impacts on human beings related to hazards and hazardous materials to a less than significant level. During project construction, noise impacts would be limited to the daytime hours of 7:00 a.m. to 8:00 p.m., and Mitigation Measure NOI-1 would reduce construction noise below applicable thresholds; therefore, construction noise impacts would be temporary and less than significant. Project operation would not increase noise levels. Consequently, operational noise would not significantly impact nearby sensitive receivers. Therefore, the project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be less than significant with mitigation. This topic will not be discussed in the Supplemental EIR.

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Rincon Consultants, Inc. prepared this Initial Study under contract to the City of Livermore. Persons involved in data gathering analysis, project management, and quality control are listed below.

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Appendix AQ

Road Construction Emissions Model Inputs and Outputs

Road Construction Emissions Model
Data Entry Worksheet

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

Input Type

Project Name
Construction Start Year
Project Type
Project Construction Time
Working Days per Month
Predominant Soil/Site Type: Enter 1, 2, or 3
(for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)
Project Length
Total Project Area
Maximum Area Disturbed/Day
Water Trucks Used?

Version 9.0.0

South Livermore Sewer Expansion Project

2024

4

12.00
22.00

1

5.00
12.13
0.05
1


Enter a Year between 2014 and 2040 (inclusive)

1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway
2) Road Widening : Project to add a new lane to an existing roadway
3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane
4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction

months
days (assume 22 if unknown)

1) Sand Gravel : Use for quaternary deposits (Delta/West County)
2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta)
3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)

miles
acres
acres
1. Yes
2. No



Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/Information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Material Hauling Quantity Input

Material Type	Phase	Haul Truck Capacity (yd ³) (assume 20 if unknown)	Import Volume (yd ³ /day)	Export Volume (yd ³ /day)
Soil	Grubbing/Land Clearing	20.00		
	Grading/Excavation	20.00	0.00	2.28
	Drainage/Utilities/Sub-Grade	20.00		
	Paving	20.00		
		20.00		
Asphalt	Grubbing/Land Clearing	20.00		
	Grading/Excavation	20.00		
	Drainage/Utilities/Sub-Grade	20.00		
	Paving	20.00	8.00	8.00
		20.00		

Mitigation Options

On-road Fleet Emissions Mitigation
Off-road Equipment Emissions Mitigation

No Mitigation
No Mitigation

Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer
Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (<http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation>).
Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard

The remaining sections of this sheet contain areas that require modification when 'Other Project Type' is selected.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

Construction Periods	User Override of Construction Months	Program Calculated Months	User Override of Phase Starting Date	Program Default Phase Starting Date
Grubbing/Land Clearing	12.00	1.20	1/1/2024	1/1/2024
Grading/Excavation	12.00	4.80	1/1/2024	12/31/2024
Drainage/Utilities/Sub-Grade	12.00	4.20	1/1/2024	12/31/2026
Paving	12.00	1.80	1/1/2024	12/31/2026
Totals (Months)		48		

Please note: You have entered a different number of months than the project length shown in cell D16.
 Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions		User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT					
User Input											
Miles/round trip: Grubbing/Land Clearing					0	0.00					
Miles/round trip: Grading/Excavation		40.00			1	40.00					
Miles/round trip: Drainage/Utilities/Sub-Grade					0	0.00					
Miles/round trip: Paving					0	0.00					
Emission Rates		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00	
Grading/Excavation (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00	
Drainage/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00	
Paving (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00	
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grading/Excavation (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Drainage/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paving (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling Emissions		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Grading/Excavation	0.00	0.04	0.32	0.01	0.00	0.00	150.28	0.00	0.02	157.32	
Tons per const. Period - Grading/Excavation	0.00	0.00	0.04	0.00	0.00	0.00	19.84	0.00	0.00	20.77	
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total tons per construction project	0.00	0.00	0.04	0.00	0.00	0.00	19.84	0.00	0.00	20.77	

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

Asphalt Hauling Emissions		User Override of Miles/Round Trip	Program Estimate of Miles/Round Trip	User Override of Truck Round Trips/Day	Default Values Round Trips/Day	Calculated Daily VMT					
User Input											
Miles/round trip: Grubbing/Land Clearing					0	0.00					
Miles/round trip: Grading/Excavation					0	0.00					
Miles/round trip: Drainage/Utilities/Sub-Grade					0	0.00					
Miles/round trip: Paving		40.00			1	40.00					
Emission Rates		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00	
Grading/Excavation (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00	
Drainage/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00	
Paving (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00	
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grading/Excavation (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Drainage/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paving (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Emissions		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Pounds per day - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pounds per day - Paving	0.00	0.04	0.32	0.01	0.00	0.00	150.28	0.00	0.02	157.32	
Tons per const. Period - Paving	0.00	0.00	0.04	0.00	0.00	0.00	19.84	0.00	0.00	20.77	
Total tons per construction project	0.00	0.00	0.04	0.00	0.00	0.00	19.84	0.00	0.00	20.77	

Note: Worker commute default values can be overridden in cells D121 through D126.

Worker Commute Emissions											
User Input	User Override of Worker Commute Default Values		Default Values		Calculated Daily Trips	Calculated Daily VMT					
	11										
Miles/ one-way trip	2										
One-way trips/day	4				8	88.00					
No. of employees: Grubbing/Land Clearing	4				8	88.00					
No. of employees: Grading/Excavation	1				2	22.00					
No. of employees: Drainage/Utilities/Sub-Grade	4				8	88.00					
No. of employees: Paving	4				8	88.00					
Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e	
Grubbing/Land Clearing (grams/mile)	0.01	0.84	0.06	0.05	0.02	0.00	306.70	0.00	0.01	308.54	
Grading/Excavation (grams/mile)	0.01	0.84	0.06	0.05	0.02	0.00	306.70	0.00	0.01	308.54	
Draining/Utilities/Sub-Grade (grams/mile)	0.01	0.84	0.06	0.05	0.02	0.00	306.70	0.00	0.01	308.54	
Paving (grams/mile)	0.01	0.84	0.06	0.05	0.02	0.00	306.70	0.00	0.01	308.54	
Grubbing/Land Clearing (grams/trip)	0.98	2.66	0.27	0.00	0.00	0.00	65.99	0.07	0.03	76.61	
Grading/Excavation (grams/trip)	0.98	2.66	0.27	0.00	0.00	0.00	65.99	0.07	0.03	76.61	
Draining/Utilities/Sub-Grade (grams/trip)	0.98	2.66	0.27	0.00	0.00	0.00	65.99	0.07	0.03	76.61	
Paving (grams/trip)	0.98	2.66	0.27	0.00	0.00	0.00	65.99	0.07	0.03	76.61	
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e	
Pounds per day - Grubbing/Land Clearing	0.02	0.21	0.02	0.01	0.00	0.00	60.67	0.00	0.00	61.21	
Tons per const. Period - Grubbing/Land Clearing	0.00	0.03	0.00	0.00	0.00	0.00	8.01	0.00	0.00	8.98	
Pounds per day - Grading/Excavation	0.02	0.21	0.02	0.01	0.00	0.00	60.67	0.00	0.00	61.21	
Tons per const. Period - Grading/Excavation	0.00	0.03	0.00	0.00	0.00	0.00	8.01	0.00	0.00	8.98	
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.05	0.00	0.00	0.00	0.00	15.17	0.00	0.00	15.30	
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.01	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.02	
Pounds per day - Paving	0.02	0.21	0.02	0.01	0.00	0.00	60.67	0.00	0.00	61.21	
Tons per const. Period - Paving	0.00	0.03	0.00	0.00	0.00	0.00	8.01	0.00	0.00	8.98	
Total tons per construction project	0.01	0.09	0.01	0.00	0.00	0.00	26.03	0.00	0.00	26.26	

Note: Water Truck default values can be overridden in cells D153 through D156, H153 through H156, and F153 through F156.

Water Truck Emissions												
User Input	User Override of Default # Water Trucks		Program Estimate of Number of Water Trucks		User Override of Truck Round Trips/Vehicle/Day		Default Values Round Trips/Vehicle/Day		Calculated Trips/day		User Override of Default Values Miles/Round Trip	
	1											
Grubbing/Land Clearing - Exhaust	1				1.00				15.00			15.00
Grading/Excavation - Exhaust	1				1.00				15.00			15.00
Drainage/Utilities/Subgrade	1				1.00				15.00			15.00
Paving	1				1.00				15.00			15.00
Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e		
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00		
Grading/Excavation (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00		
Draining/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00		
Paving (grams/mile)	0.04	0.43	3.49	0.12	0.05	0.02	1,704.13	0.00	0.27	1,784.00		
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grading/Excavation (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Draining/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Paving (grams/trip)	0.00	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Emissions	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e		
Pounds per day - Grubbing/Land Clearing	0.00	0.01	0.13	0.00	0.00	0.00	56.35	0.00	0.01	59.00		
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.02	0.00	0.00	0.00	7.44	0.00	0.00	7.79		
Pounds per day - Grading/Excavation	0.00	0.01	0.13	0.00	0.00	0.00	56.35	0.00	0.01	59.00		
Tons per const. Period - Grading/Excavation	0.00	0.00	0.02	0.00	0.00	0.00	7.44	0.00	0.00	7.79		
Pounds per day - Drainage/Utilities/Sub-Grade	0.00	0.01	0.13	0.00	0.00	0.00	56.35	0.00	0.01	59.00		
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.02	0.00	0.00	0.00	7.44	0.00	0.00	7.79		
Pounds per day - Paving	0.00	0.01	0.13	0.00	0.00	0.00	56.35	0.00	0.01	59.00		
Tons per const. Period - Paving	0.00	0.00	0.02	0.00	0.00	0.00	7.44	0.00	0.00	7.79		
Total tons per construction project	0.00	0.01	0.07	0.00	0.00	0.00	29.76	0.00	0.00	31.15		

Note: Fugitive dust default values can be overridden in cells D183 through D185.

Fugitive Dust		User Override of Max Acreage Disturbed/Day		Default Maximum Acreage/Day		PM10	PM10	PM2.5	PM2.5
						pounds/day	tons/period	pounds/day	tons/period
Fugitive Dust - Grubbing/Land Clearing						0.46	0.06	0.10	0.01
Fugitive Dust - Grading/Excavation						0.46	0.06	0.10	0.01
Fugitive Dust - Drainage/Utilities/Subgrade						0.46	0.06	0.10	0.01

Values in cells D196 through D226, D246 through D279, D297 through D330, and D348 through D381 are required when 'Other Project Type' is selected.

Off-Road Equipment Emissions														
Grubbing/Land Clearing	Default		Mitigation Option		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Number of Vehicles	Override of	Default	Default										
Override of Default Number of Vehicles	Program-estimate	Default Equipment Tier (applicable only when 'Tier 4 Mitigation' Option Selected)		Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Excavators	0.16	3.27	1.40	0.07	0.06	0.01	500.27	0.16	0.00	505.66
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Graders	0.35	1.66	4.16	0.13	0.12	0.01	640.51	0.21	0.01	647.41
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Tractors/Loaders/Backhoes	0.14	2.24	1.45	0.07	0.06	0.00	301.77	0.10	0.00	305.01
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User-Defined Off-road Equipment					ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab					pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
Number of Vehicles	Equipment Tier	Type	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e		
0.00	NA		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	NA		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	NA		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	NA		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	NA		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	NA		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0.00	NA		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	Grubbing/Land Clearing	pounds per day	0.68	7.16	7.01	0.27	0.25	0.01	1,442.54	0.47	0.01	1,458.08		
	Grubbing/Land Clearing	tons per phase	0.09	0.94	0.92	0.04	0.03	0.00	190.42	0.06	0.00	192.47		

Grading/Excavation	Default		Mitigation Option		ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
	Number of Vehicles	Override of	Default											
	Override of Default Number of Vehicles	Program-estimate	Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	Equipment Tier										
				Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Excavators	0.18	3.27	1.40	0.07	0.06	0.01	500.27	0.16	0.00	505.66
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Graders	0.35	1.66	4.16	0.13	0.12	0.01	640.51	0.21	0.01	647.41
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pavers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rollers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00			Model Default Tier	Tractors/Loaders/Backhoes	0.14	2.24	1.45	0.07	0.06	0.00	301.77	0.10	0.00	305.01
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User-Defined Off-road Equipment														
<i>If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab</i>														
Number of Vehicles			Equipment Tier	Type	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
0.00			N/A		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00			N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Grading/Excavation			pounds per day	0.68	7.16	7.01	0.27	0.25	0.01	1,442.54	0.47	0.01	1,458.08
	Grading/Excavation			tons per phase	0.09	0.94	0.92	0.04	0.03	0.00	190.42	0.06	0.00	192.47

Paving	Default Mitigation Option		Default	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e		
	Number of Vehicles	Override of												Equipment Tier	Type
	Override of Default Number of Vehicles	Program-estimate												Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected)	
			Model Default Tier	Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1.00			Model Default Tier	Cement and Mortar Mixers	0.06	0.31	0.37	0.01	0.01	0.00	50.52	0.01	50.77		
			Model Default Tier	Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Cranes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Excavators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Graders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Other General Industrial Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Other Material Handling Equipm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1.00			Model Default Tier	Pavers	0.18	2.89	1.74	0.08	0.07	0.00	455.16	0.15	460.07		
1.00			Model Default Tier	Paving Equipment	0.16	2.57	1.50	0.07	0.07	0.00	394.47	0.13	398.72		
			Model Default Tier	Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1.00			Model Default Tier	Rollers	0.15	1.85	1.52	0.08	0.07	0.00	254.15	0.08	256.88		
			Model Default Tier	Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Rubber Tired Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Scrapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Signal Boards	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Trenchers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
			Model Default Tier	Welders	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
User-Defined Off-road Equipment				If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab											
	Number of Vehicles		Equipment Tier	Type	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e	
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00		N/A		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Paving		pounds per day	0.55	7.62	5.13	0.25	0.23	0.01	1,154.29	0.36	0.01	1,166.45	
		Paving		tons per phase	0.07	1.01	0.68	0.03	0.03	0.00	152.37	0.05	0.00	153.97	
Total Emissions all Phases (tons per construction period) =>					0.32	3.32	2.97	0.12	0.11	0.01	702.20	0.23	0.01	709.73	

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

Equipment	User Override of Horsepower	Default Values Horsepower	User Override of Hours/Day	Default Values Hours/Day
Aerial Lifts		63		8
Air Compressors		78		8
Bore/Drill Rigs		221		8
Cement and Mortar Mixers		9		8
Concrete/Industrial Saws		81		8
Cranes		231		8
Crawler Tractors		212		8
Crushing/Proc. Equipment		85		8
Excavators		158		8
Forklifts		89		8
Generator Sets		84		8
Graders		187		8
Off-Highway Tractors		124		8
Off-Highway Trucks		402		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		168		8
Pavers		130		8
Paving Equipment		132		8
Plate Compactors		8		8
Pressure Washers		13		8
Pumps		84		8
Rollers		80		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		247		8
Rubber Tired Loaders		203		8
Scrapers		367		8
Signal Boards		6		8
Skid Steer Loaders		65		8
Surfacing Equipment		263		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		97		8
Trenchers		78		8
Welders		46		8

END OF DATA ENTRY SHEET

The maximum pounds per day in row 11 is summed over overlapping phases, but the maximum tons per phase in row 34 is not summed over overlapping phases.

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> South Livemore Sewer Expansion Project														
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.70	7.38	7.15	0.74	0.28	0.46	0.35	0.25	0.10	0.02	1,559.56	0.47	0.02	1,578.29
Grading/Excavation	0.70	7.42	7.47	0.75	0.29	0.46	0.35	0.26	0.10	0.02	1,709.84	0.47	0.05	1,735.61
Drainage/Utilities/Sub-Grade	0.50	3.32	3.46	0.58	0.13	0.46	0.21	0.11	0.10	0.01	1,351.87	0.41	0.02	1,368.43
Paving	0.58	7.88	5.59	0.27	0.27	0.00	0.24	0.24	0.00	0.01	1,421.59	0.36	0.04	1,443.98
Maximum (pounds/day)	2.49	26.00	23.66	2.35	0.97	1.38	1.15	0.87	0.29	0.06	6,042.86	1.72	0.14	6,126.31
Total (tons/construction project)	0.33	3.43	3.12	0.31	0.13	0.18	0.15	0.11	0.04	0.01	797.66	0.23	0.02	808.67

Notes: Project Start Year -> 2024
 Project Length (months) -> 12
 Total Project Area (acres) -> 12
 Maximum Area Disturbed/Day (acres) -> 0
 Water Truck Used? -> Yes

Phase	Total Material Imported/Exported Volume (yd ³ /day)		Daily VMT (miles/day)			
	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	88	15
Grading/Excavation	2	0	40	0	88	15
Drainage/Utilities/Sub-Grade	0	0	0	0	22	15
Paving	0	16	0	40	88	15

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> South Livemore Sewer Expansion Project														
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.09	0.97	0.94	0.10	0.04	0.06	0.05	0.03	0.01	0.00	205.86	0.06	0.00	189.00
Grading/Excavation	0.09	0.98	0.99	0.10	0.04	0.06	0.05	0.03	0.01	0.00	225.70	0.06	0.01	207.84
Drainage/Utilities/Sub-Grade	0.07	0.44	0.46	0.08	0.02	0.06	0.03	0.01	0.01	0.00	178.45	0.05	0.00	163.87
Paving	0.08	1.04	0.74	0.04	0.04	0.00	0.03	0.03	0.00	0.00	187.65	0.05	0.01	172.92
Maximum (tons/phase)	0.09	1.04	0.99	0.10	0.04	0.06	0.05	0.03	0.01	0.00	225.70	0.06	0.01	207.84
Total (tons/construction project)	0.33	3.43	3.12	0.31	0.13	0.18	0.15	0.11	0.04	0.01	797.66	0.23	0.02	733.62

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.
 The CO2e emissions are reported as metric tons per phase.

Appendix EN

Energy Fuel Consumption Calculations

South Livermore Sewer Expansion Project

Last Updated: 12/17/2021

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
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Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT						
Construction Equipment	#	Hours per		Load Factor	Construction Phase	Fuel Used (gallons)
		Day	Horsepower			
Excavators	1	8	158	0.38	Grubbing/Land Clearing	6,703
Graders	1	8	187	0.41	Grubbing/Land Clearing	8,559
Tractors/Loaders/Backhoes	1	8	97	0.37	Grubbing/Land Clearing	4,454
Graders	1	8	187	0.41	Grading/Excavation	8,559
Excavators	1	8	158	0.38	Grading/Excavation	6,703
Tractors/Loaders/Backhoes	1	8	97	0.37	Grading/Excavation	4,454
Off-Highway Trucks	1	8	402	0.38	Drainage/Utilities/Sub-Grade	17,054
Pavers	1	8	130	0.42	Paving	6,095
Paving Equipment	1	8	132	0.36	Paving	5,305
Rollers	1	8	80	0.38	Paving	3,773
Cement and Mortar Mixers	1	8	9	0.56	Paving	626
Total Fuel Used						72,286

(Gallons)

Construction Phase	Days of Operation
Grubbing/Land Clearing	264
Grading/Excavation	264
Drainage/Utilities/Sub-Grade	264
Paving	264

WORKER TRIPS				
Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Grubbing/Land Clearing	24.1	8	10.8	946.46
Grading/Excavation	24.1	8	10.8	946.46
Drainage/Utilities/Sub-Grade	24.1	2	10.8	236.61
Paving	24.1	8	10.8	946.46
Total				3,075.98

HAULING AND VENDOR TRIPS				
Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Grubbing/Land Clearing	7.5	0	20.0	0.00
Grading/Excavation	7.5	2	20.0	5.33
Drainage/Utilities/Sub-Grade	7.5	0	20.0	0.00
Paving	7.5	2	20.0	5.33
Total				10.67
VENDOR TRIPS				
Grubbing/Land Clearing	7.5	2	7.3	513.92
Grading/Excavation	7.5	2	7.3	513.92
Drainage/Utilities/Sub-Grade	7.5	2	7.3	513.92

Paving	7.5	2	7.3	513.92
Total				2,055.68

Total Gasoline Consumption (gallons)	3,076
Total Diesel Consumption (gallons)	74,352

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2* . September. Available at: <https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics* . Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Appendix NOP

Notice of Preparation and Comments Received

Notice of Preparation of a Draft Supplemental EIR

Date: December 16, 2021
To: Public Agencies and Interested Parties
Subject: Notice of Preparation of a Draft Supplemental Environmental Impact Report
Project Title: South Livermore Sewer Expansion Project

The City of Livermore, as lead agency under the California Environmental Quality Act (CEQA), will prepare a Supplemental Environmental Impact Report (EIR) for the South Livermore Sewer Expansion project (the “project”). In accordance with CEQA Guidelines Section 15082, the City has issued this Notice of Preparation (NOP) to provide responsible agencies, trustee agencies, and other interested parties with information describing the proposed project and its potential environmental effects.

The purpose of this notice is to:

- 1) serve as the Notice of Preparation of a Supplemental Environmental Impact Report for the Office of Planning and Research (OPR), Responsible Agencies, public agencies involved in funding or approving the project, and Trustee Agencies responsible for natural resources affected by the project, pursuant to CEQA Guidelines Section 15082; and
- 2) advise and solicit comments and suggestions regarding the preparation of the EIR, environmental issues to be addressed in the EIR, and any other related issues, from interested parties, including interested or affected members of the public.

Project Location

The project alignment is located in the southeast area of the City of Livermore within Alameda County, California. Figure 1 shows the regional context of the project alignment, and Figure 2 shows the project site in its vicinity context. Regional access to the project alignment is available via Interstate 580 (I-580), which is located 2.58 miles north. Direct access to the project alignment is provided by East Avenue, which bisects the project area to the west and South Vasco Road, which bisects the project area to the east.

Project Description

The project proposes to extend existing sanitary sewer lines approximately 5 miles (27,000 linear feet) in unincorporated Alameda County, California. The expanded sewer facilities would allow existing and future wine country uses permitted under the South Livermore Valley Area Plan and South Livermore Valley Specific Plan, south and east of the project to connect to the City’s wastewater system. The expansion would also allow existing residences on Buena Vista Avenue to connect to the City’s wastewater system and remove their on-site septic systems. The sewer expansion would not induce unanticipated growth in the City or within its Sphere of Influence. By allowing existing residences to connect to the wastewater system, the City would reduce groundwater quality issues in the project vicinity. Construction is anticipated to begin in January 2024 and would continue for a duration of approximately 18 months, ending in June 2025. Construction would occur Monday through Friday, with limited weekend construction.

City of Livermore
NOTICE OF PREPARATION

The project would require City Council approval to place a Council-sponsored initiative on the City’s ballot that would amend language in the City’s voter-approved South Livermore Urban Growth Boundary (UGB) Initiative. The UGB forms a southern border within City, beyond which urban development (including extended sewer and water service) is permitted under limited exceptions. In March 2000, Livermore voters passed Measure K, establishing the South Livermore UGB. The UGB is intended to protect and enhance agriculture and open space by regulating where development is permitted within South Livermore. The initiative is also intended to reduce urban sprawl by preventing uncontrolled urban development that could potentially impact agricultural land and open space areas. The proposed project would amend language in the UGB Initiative to allow the City to extend sanitary sewer services beyond the UGB; however, the boundary itself would not change. Figure 3 and Figure 4 display the UGB in addition to the east and west segments of the project alignment.

The 2017 Sewer Master Plan identifies a Bottleneck Project (BO-CIP-P06) located west of the project site (refer to Figure 3.1). The proposed project may require the Bottleneck Project to be undertaken sooner to better accommodate the sewer system and its expansion. The Bottleneck Project, if required, and its potential impacts would be included in the environmental analysis to describe the “whole of the project” under CEQA.

EIR Scope

The City’s South Livermore Valley Specific Plan (SLVSP), adopted in November 1997, incorporates several goals, development standards, and policies to guide future development and conserve agricultural and natural resources. An EIR was prepared for the SLVSP (SCH #1996052025) that was certified in 1997. The City of Livermore, in its capacity as Lead Agency for the project, has determined that the project has the potential to result in significant environmental effects and that a Supplemental EIR should be prepared. The City is preparing an Initial Study to evaluate the potentially significant impacts of the project, and it will be included as an appendix to the Supplemental EIR. Based on the preliminary results of the Initial Study, the following topics warrant additional consideration in an EIR:

- Hydrology and Water Quality
- Utilities and Service Systems

The Supplemental EIR will assess the effects of the project on the environment, identify potentially significant impacts, identify feasible mitigation measures to reduce or eliminate potentially significant environmental impacts, and discuss potentially feasible alternatives to the project that may accomplish basic objectives while lessening or eliminating any potentially significant project-related impacts.

Opportunity for Public Review and Comment

This Notice is available for review on the City’s website at:
<https://www.cityoflivermore.net/government/community-development/planning/environmental-documents>

The City of Livermore would like to receive your input on the scope of the information and analysis to be included in the EIR. Due to time limits, as established by CEQA, your response should be sent at the earliest possible date, but no later than 31 days after publication of this notice. Please submit your comments by 5:00 p.m. **on January 17, 2022** by mail or e-mail to:

Steve Stewart, AICP, Planning Manager
City of Livermore
1052 S. Livermore Avenue
Livermore, California 94550

Phone: (925) 960-4468
Email: scstewart@cityoflivermore.net

City of Livermore
NOTICE OF PREPARATION

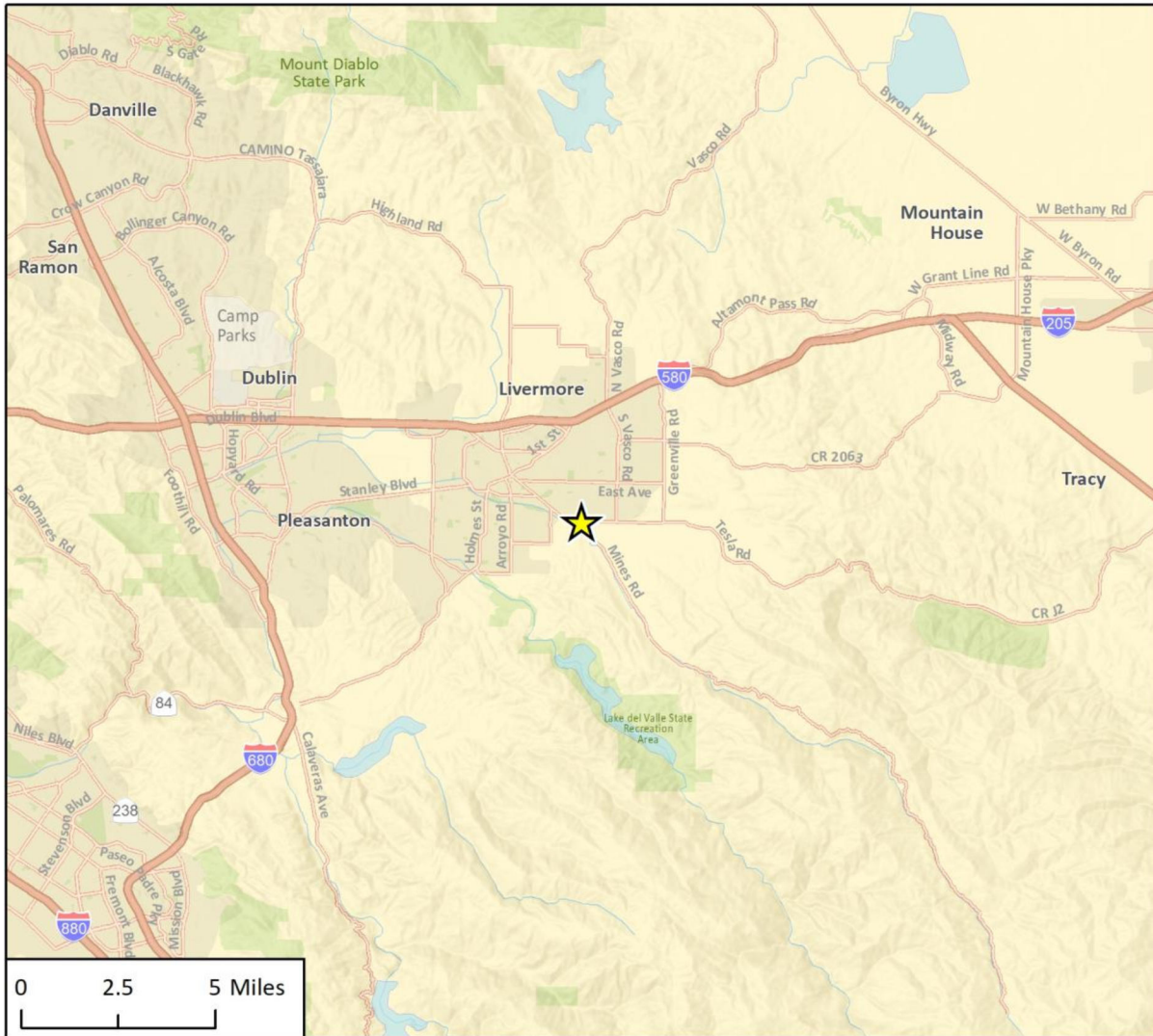
Please include the name, phone number, and address of a contact person in your response.

Attachments

- Figure 1 Regional Location
- Figure 2 Project Location
- Figure 3 Sewer Extension and Urban Growth Boundary - West
- Figure 4 Sewer Extension and Urban Growth Boundary - East

City of Livermore
NOTICE OF PREPARATION

Figure 1 Regional Location



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★ Project Location

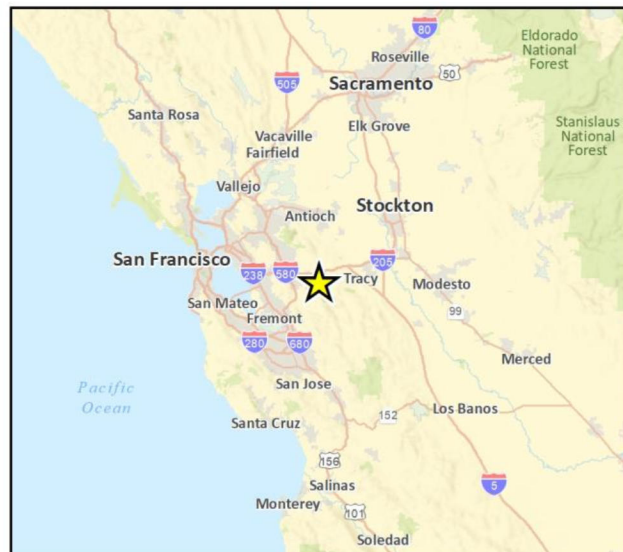
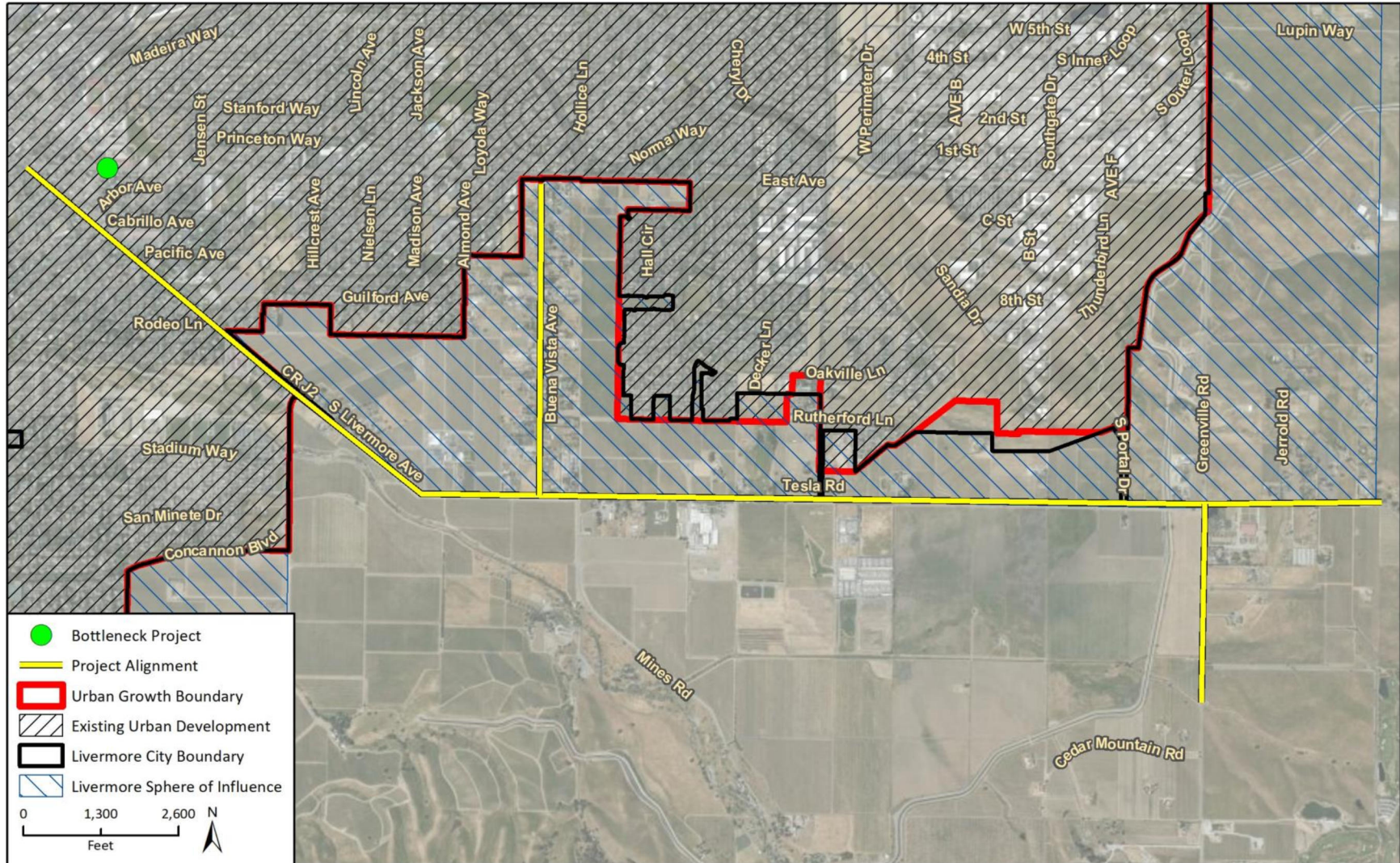


Fig 1 Regional Location

City of Livermore
NOTICE OF PREPARATION

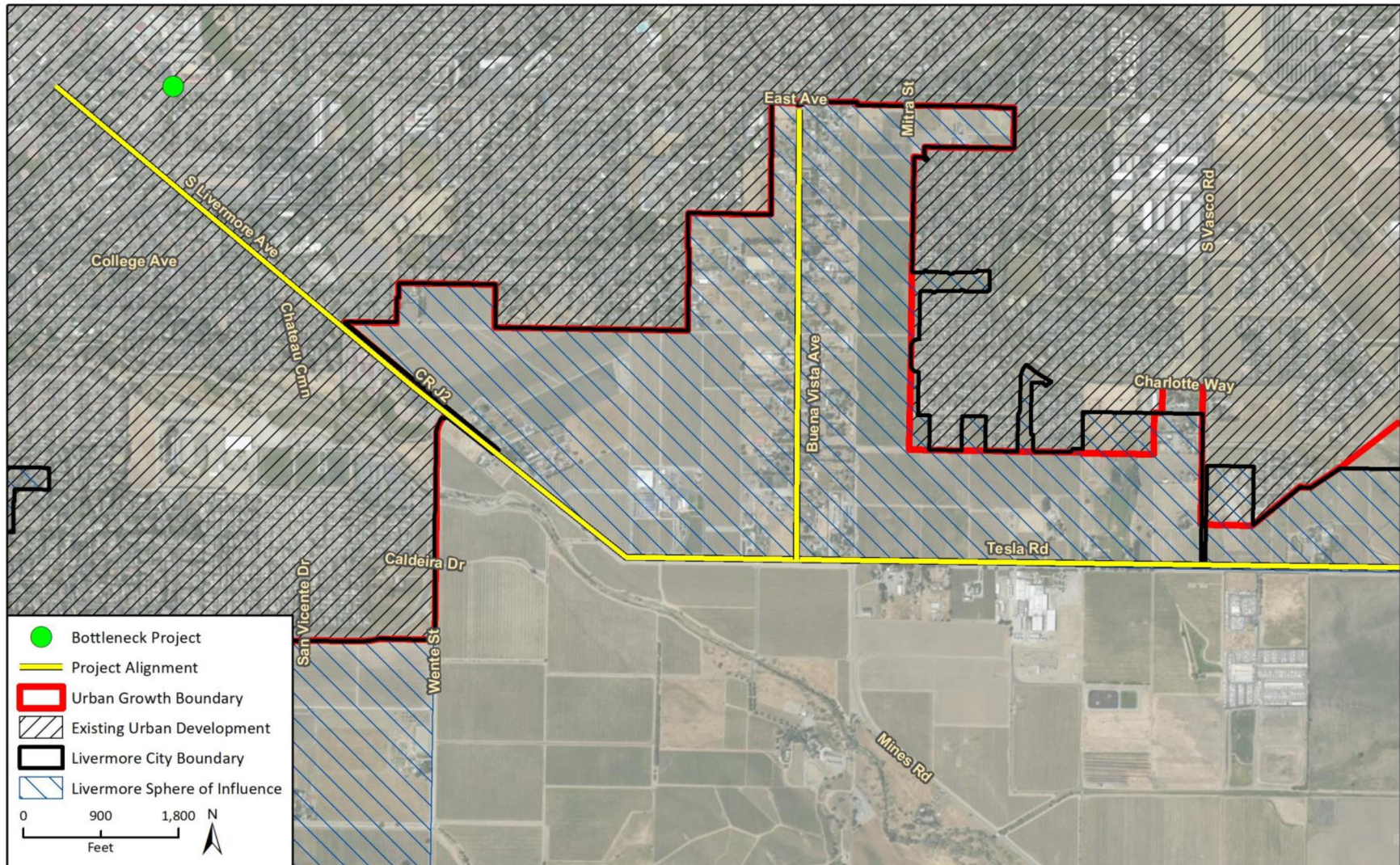
Figure 2 Project Location



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Fig 2 Project Location - Landscape

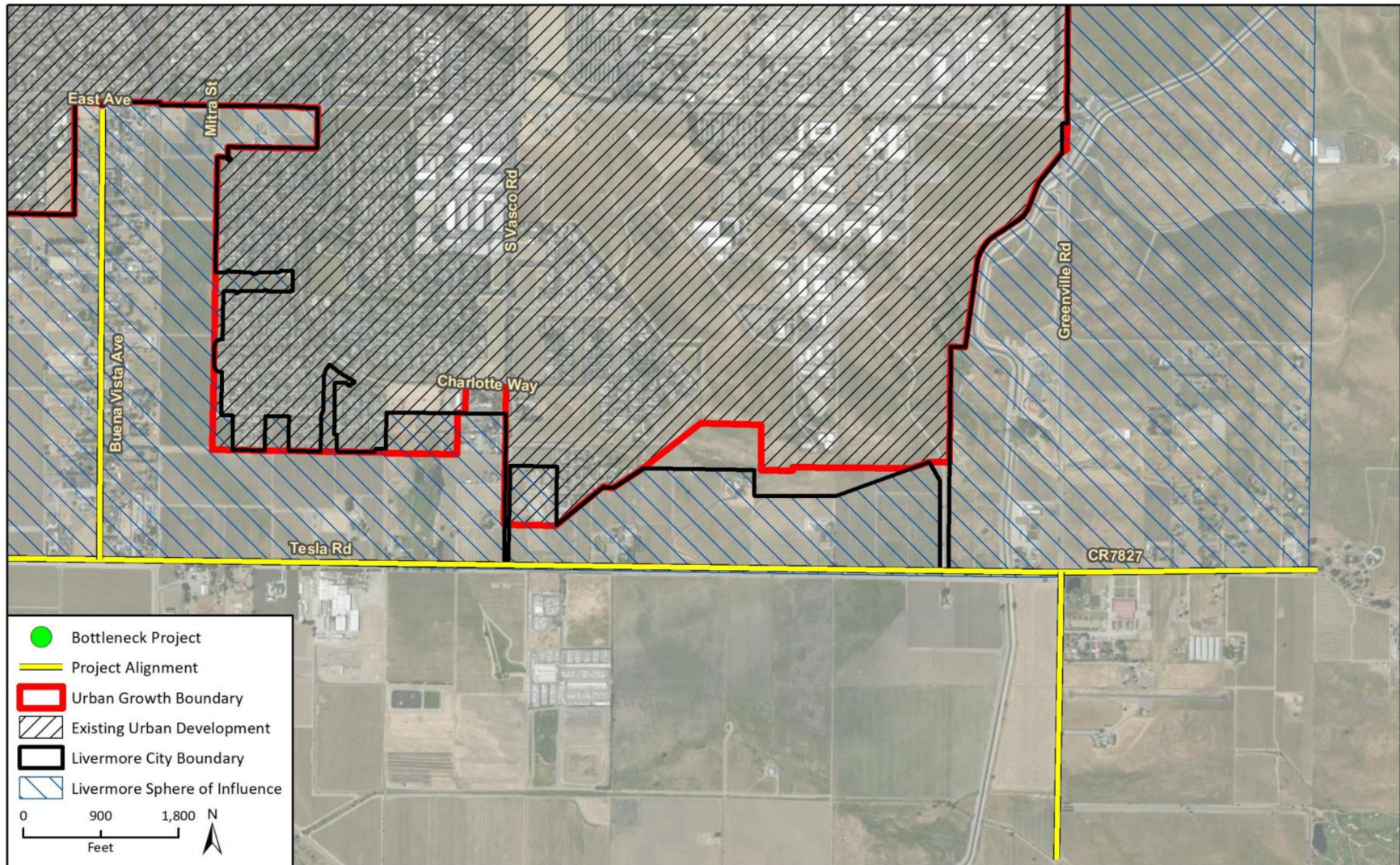
Figure 3 Sewer Extension and Urban Growth Boundary - West



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Fig 3. Conceptual Plans

Figure 4 Sewer Extension and Urban Growth Boundary - East



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Fig 3. Conceptual Plans

NATIVE AMERICAN HERITAGE COMMISSION

December 20, 2021

Governor's Office of Planning & Research

Dec 24 2021

Steve Stewart, AICP, Planning Manager
City of Livermore
1052 South Livermore Avenue
Livermore, CA 94550

STATE CLEARING HOUSE

Re: 2021120386, South Livermore Sewer Expansion Project, Alameda County

Dear Mr. Stewart:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b))). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1))). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a 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. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.



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AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

 - a.** A brief description of the project.
 - b.** The lead agency contact information.
 - c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
 - d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subs. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1 (b)).

 - a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
- 3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

 - a.** Alternatives to the project.
 - b.** Recommended mitigation measures.
 - c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).
- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:

 - a.** Type of environmental review necessary.
 - b.** Significance of the tribal cultural resources.
 - c.** Significance of the project's impacts on tribal cultural resources.
 - d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

 - a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
 - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i.** Protecting the cultural character and integrity of the resource.
 - ii.** Protecting the traditional use of the resource.
 - iii.** Protecting the confidentiality of the resource.
 - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:
Katy.Sanchez@nahc.ca.gov.

Sincerely,



Katy Sanchez
Associate Environmental Planner

cc: State Clearinghouse