INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

FOR THE

CORRAL HOLLOW ROAD WIDENING PHASE 2 LINNE ROAD TO I-580 – CIP 73161

JUNE 2020

Prepared for:

City of Tracy
Utilities Department
3900 Holly Drive
Tracy, CA 95304

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 580-9818

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A Land Use Planning, Design, and Environmental Firm

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Proposed Mitigated Negative Declaration for the Corral Hollow Road Widening Phase 2 Linne Road to I-580 – CIP 73161

Lead Agency:
City of Tracy
Public Works Department
3900 Holly Drive
Tracy, CA 95304

Project Title: Corral Hollow Road Widening Phase 2 Linne Road to I-580 – CIP 73161

Project Location: The Corral Hollow Road Widening Phase 2 Linne Road to I-580 project site (project site) is located in the southern portion of the City of Tracy and unincorporated San Joaquin County. The portion of Corral Hollow Road within the project site begins just north of the Union Pacific Railroad at Linne Road, to the north, and terminates at Interstate 580 (I-580) to the south.

Project Description: The proposed project consists of widening Corral Hollow Road from the existing two-lane roadway to a four-lane major arterial with median island, sidewalks, bike facilities, landscaping, and street lights from Linne Road to I-580. The project will include design of at least two traffic signals and the replacement of the bridges over the Delta Mendota Canal and the California Aqueduct. The widening would include railroad crossing improvements at the UPRR, including an at-grade crossing and full sidewalk improvements. The project would also include two stormwater drainage-related facilities: a wet well with storm drain pump station, and a retention basin.

The project will require additional right of way from the fronting property owners. The project also fronts new construction of the first phase of the Tracy Hills development project that is under construction and has obtained entitlements for phased construction.

The purpose of the project is to improve this segment of Corral Hollow Road to accommodate the existing and future transportation functions anticipated through General Plan buildout. The upgraded roadway is needed to increase vehicle capacity, improve level of service, increase safety for vehicles/bikes/pedestrians, and ensure adequate emergency vehicle access to approved development.

Findings:

In accordance with the California Environmental Quality Act, the City of Tracy has prepared an Initial Study to determine whether the proposed project may have a significant adverse effect on the environment. The Initial Study and Proposed Mitigated Negative Declaration reflect the independent judgment of City of Tracy staff. On the basis of the Initial Study, the City of Tracy hereby finds:

> *Although the proposed project could have a significant adverse effect on the environment, there will not be a significant adverse effect in this case because the project has incorporated specific provisions to reduce impacts to a less than significant level and/or the mitigation measures described herein have been added to the project. A Mitigated Negative Declaration has thus been prepared.*

The Initial Study, which provides the basis and reasons for this determination, is attached and/or referenced herein and is hereby made a part of this document.

_____ _____

Signature Date

Proposed Mitigation Measures:

The following Mitigation Measures are extracted from the Initial Study. These measures are designed to avoid or minimize potentially significant impacts, and thereby reduce them to an insignificant level. A Mitigation Monitoring and Reporting Program (MMRP) is an integral part of project implementation to ensure that mitigation is properly implemented by the City and the implementing agencies. The MMRP will describe actions required to implement the appropriate mitigation for each CEQA category including identifying the responsible agency, program timing, and program monitoring requirements. Based on the analysis and conclusions of the Initial Study, the impacts of proposed project would be mitigated to less-than-significant levels with the implementation of the mitigation measures presented below.

AGRICULTURAL RESOURCES

Mitigation Measure AG-1: *The City of Tracy shall pay the adopted agricultural mitigation fee for each acre of Prime Farmland converted. The fee shall be collected prior to construction. The acreage of Prime Farmland developed shall be determined once the final improvements plans are submitted to the City, and the acreage shall be noted on the improvement plans.*

AIR QUALITY

Mitigation Measure AQ-1: *Prior to the commencement of grading activities, the City shall require the contractor hired to complete the grading activities to prepare a construction emissions reduction plan that meets the requirements of SJVAPCD Rule VIII. The construction emissions reductions plan shall be submitted to the SJVAPCD for review and approval. The City of Tracy shall ensure that all required permits from the SJVAPCD have been issued prior to commencement of grading activities.*

Mitigation Measure AQ-2: *The following mitigation measures, in addition to those required under Regulation VIII of the SJVAPCD, shall be implemented by the project's contractor during all phases of project grading and construction to reduce fugitive dust emissions:*

- *Water previously disturbed exposed surfaces (soil) a minimum of two-times/day or whenever visible dust is capable of drifting from the site or approaches 20 percent opacity.*
- *Dust from all on-site and off-site unpaved access roads shall be effectively stabilized by applying water or other approved suppressants.*
- *Reduce speed on unpaved roads to less than 15 miles per hour.*
- *Restrict vehicular access to the area*
- *Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the end of each workday. (Use of dry rotary brushes is prohibited except when preceded or accompanied by sufficient wetting to limit visible dust emissions and the use of blowers is expressly forbidden.)*
- *Cease grading activities during periods of high winds (greater than 20 mph over a one-hour period).*
- *Asphalt-concrete paving shall comply with SJVAPCD Rule 4641 and restrict use of cutback, slow-sure, and emulsified asphalt paving materials.*

BIOLOGICAL RESOURCES

Mitigation Measure BIO-1: *Prior to commencement of any grading activities, the project proponent shall seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through payment of development fees for conversion of open space lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. In addition, coverage includes incidental take avoidance and minimization measures for species that could be affected as a result of the proposed project. There are a wide variety of incidental take avoidance and minimization measures contained in the SJMSCP that were developed in consultation with the USFWS, CDFW, and local agencies. The applicability of incidental takes avoidance and minimization measures are determined by SJCOG on a project basis. The process of obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a) and California Fish and Game Code Section 2081. The Section 10(a) permit also serves as a special-purpose permit for the incidental take of those species that are also protected under the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species. The SJMSCP includes the implementation of an ongoing Monitoring Plan to ensure success in mitigating the habitat impacts that are covered. The SJMSCP Monitoring Plan includes an Annual Report process, Biological Monitoring Plan, SJMSCP Compliance Monitoring Program, and the SJMSCP Adaptive Management Plan SJCOG.*

CULTURAL RESOURCES

Mitigation Measure CUL-1: *If any cultural resources, including prehistoric or historic artifact, or other indications of archaeological resources are found during grading and construction activities, all work shall be halted immediately within a 200-foot radius of the discovery until the an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).*

Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.

If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the Applicant's expense.

Mitigation Measure CUL-2*: If human remains are discovered during the course of construction, work shall be halted at the site and any nearby area reasonably suspected to overlie adjacent human remains until he San Joaquin County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, either of the following steps will be taken:*

- *The coroner will contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner will make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.*
- *The landowner shall retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs:*
    - *The Native American Heritage Commission is unable to identify a descendent.*
    - *The descendant identified fails to make a recommendation.*

The City of Tracy, County of San Joaquin, or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

GEOLOGY AND SOILS

Mitigation Measure GEO-1: *Prior to earthmoving activities, a certified geotechnical engineer, or equivalent, shall be retained to perform a final geotechnical evaluation of the soils at a design-level. The final geotechnical evaluation shall include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people or structures. The grading and improvement plans, shall be designed in accordance with the recommendations provided in the final geotechnical evaluation.*

Mitigation Measure GEO-2: *If paleontological resources are discovered during the course of construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Tracy or San Joaquin County shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. If the paleontological resource is considered significant, it should be excavated by a qualified paleontologist and given to a local agency, State University, or other applicable institution, where they could be curated and displayed for public education purposes.*

HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measure HAZ-1: *In the event that hazardous materials are encountered during construction, a Soils Management Plan (SMP) shall be submitted and approved by the San Joaquin County Department of Environmental Health. The SMP shall establish management practices for handling and disposal of hazardous materials, including fuels, cleaners, solvents, etc., during construction. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.*

HYDROLOGY AND WATER QUALITY

Mitigation Measure HYDRO-1: *The project's storm drainage infrastructure plans shall, to the satisfaction of the City, demonstrate adequate infrastructure capacity to collect and direct all stormwater generated on the project site to the City's existing and future stormwater conveyance system, and demonstrate that the project would not result in on- or off-site flooding impacts.*

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TABLE OF CONTENTS

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INITIAL STUDY CHECKLIST

PROJECT TITLE

Corral Hollow Road Widening Phase 2 Linne Road to I-580

LEAD AGENCY NAME AND ADDRESS

Kuldeep Sharma, Director of Utilities
City of Tracy
Utilities Department
3900 Holly Drive
Tracy, CA 95304
(209) 831-6320

PROJECT LOCATION AND SETTING

The Corral Hollow Road Widening Phase 2 Linne Road to I-580 project site (project site) is located in the southern portion of the City of Tracy and unincorporated San Joaquin County. See Figures 1 and 2 for the regional location and the project vicinity. As shown, the portion of Corral Hollow Road within the project site begins just north of the Union Pacific Railroad (UPRR) at Linne Road, to the north, and terminates at Interstate 580 (I-580) to the south.

The City and County agreed that the City of Tracy would serve as lead agency for the widening of Corral Hollow Road in the county areas. Corral Hollow Road has two existing bridges, one over California Aqueduct and the other over the Delta Mendota Canal. See Figure 3 for the aerial view of the project site. The Aqueduct is within the jurisdiction of State and is managed and operated by Department of Water Resources (DWR). DWR has discretionary approval over actions that directly affect their facilities. DWR will serve as a Responsible Agency. The Delta Mendota Canal is under federal jurisdiction and is managed and operated by U.S. Bureau of Reclamation (USBR). USBR will serve as the federal lead agency for NEPA and other federal approvals.

PROJECT DESCRIPTION

The proposed project consists of widening Corral Hollow Road from the existing two-lane roadway to a four-lane major arterial with median island, sidewalks, bike facilities, landscaping, and street lights from just north of the UPRR at Linne Road to I-580. The project will include design of at least two traffic signals and replacement of the bridges over the Delta Mendota Canal and the California Aqueduct. The widening would include railroad crossing improvements at the UPRR, including an at-grade crossing and full sidewalk improvements.

The project would also include two stormwater drainage-related facilities: a wet well with storm drain pump station, and a retention basin. The retention basin would be located at the southwest corner of the Linne Road and Corral Hollow Road intersection. The wet well and pump station would be located east of Corral Hollow Road and south of the Delta Mendota Canal. The storm drain pump station would include a wet well with a pump which would pump water to the Delta Mendota Canal.

The project will require additional right of way from the fronting property owners. The project also fronts new construction of the first phase of the Tracy Hills development project that is under construction and has obtained entitlements for phased construction.

The purpose of the project is to improve this segment of Corral Hollow Road to accommodate the existing and future transportation functions anticipated through General Plan buildout. The upgraded roadway is needed to increase vehicle capacity, improve level of service, increase safety for vehicles/bikes/pedestrians, and ensure adequate emergency vehicle access to approved development.

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

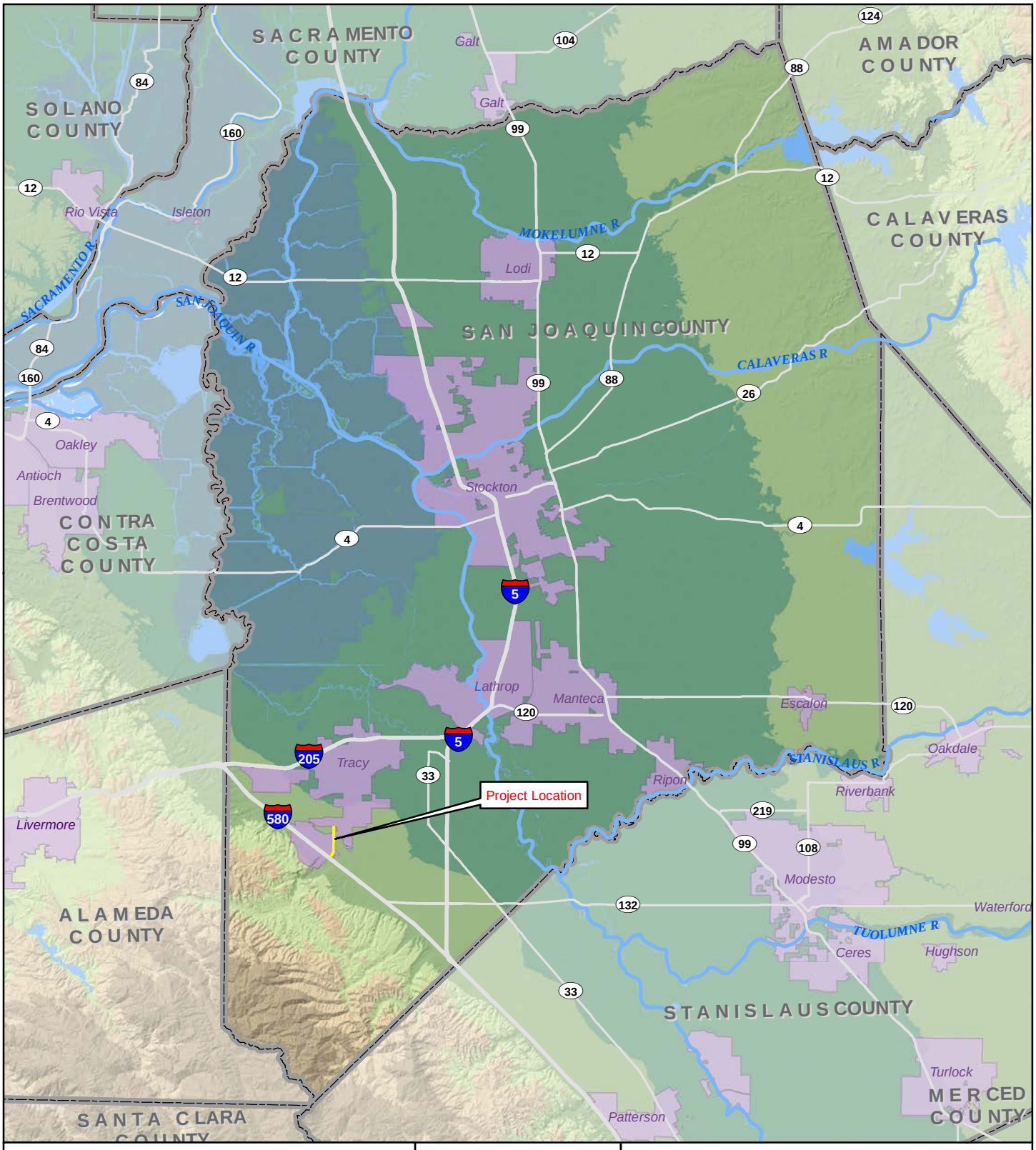
The City of Tracy is the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of CEQA, Section 15050.

This document will be used by the City of Tracy to take the following actions:

- Adoption of the Mitigated Negative Declaration (MND);
- Adoption of the Mitigation Monitoring and Reporting Program;
- City review and approval of the Grading and Improvement Plans.

The following agencies may be required to issue permits or approve certain aspects of the proposed project:

- Department of Water Resources (DWR) – Responsible agency for approvals associated with the California Aqueduct.
- RWQCB – Construction activities would be required to be covered under the National Pollution Discharge Elimination System (NPDES);
- RWQCB – The Storm Water Pollution Prevention Plan (SWPPP) would be required to be approved prior to construction activities pursuant to the Clean Water Act;
- San Joaquin Valley Air Pollution Control District (SJVAPCD) – Approval of construction-related air quality permits;
- San Joaquin Council of Governments (SJCOG) – Review of project application to determine consistency with the San Joaquin County Multi-Species Habitat, Conservation, and Open Space Plan (SJMSCP).
- SJCOG – Review of project application to determine consistency with San Joaquin County's Aviation System Airport Land Use Compatibility Plan;
- U.S. Bureau of Reclamation (USBR) – NEPA lead agency for federal approvals associated with the Delta Mendota Canal bridge.



Legend

- Project Location
- City Area
- County Boundary

Sources: CalAtlas; Sacramento County, San Joaquin County, Stanislaus County, Santa Clara County, Alameda County, Contra Costa County, Solano County.
Map date: October 30, 2018.

0 2½ 5
Miles

CORRAL HOLLOW ROAD PHASE 2

Figure 1. Regional Location Map

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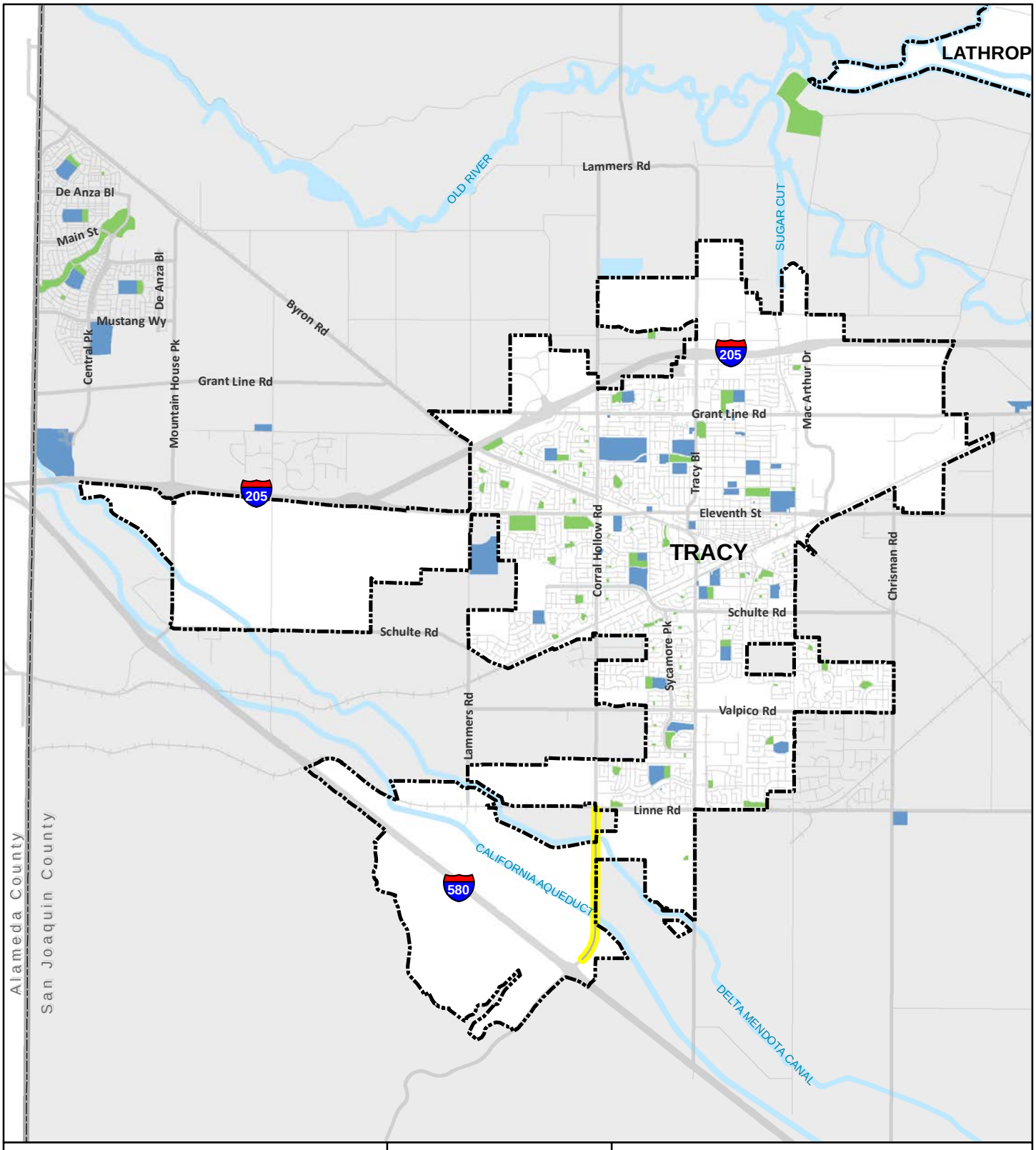

Legend

- Project Location
- City Boundary
- County Boundary
- School
- Park

0 ½ 1
Miles

Sources: San Joaquin County. Map date: October 30, 2018.

CORRAL HOLLOW ROAD PHASE 2

Figure 2. Vicinity Map

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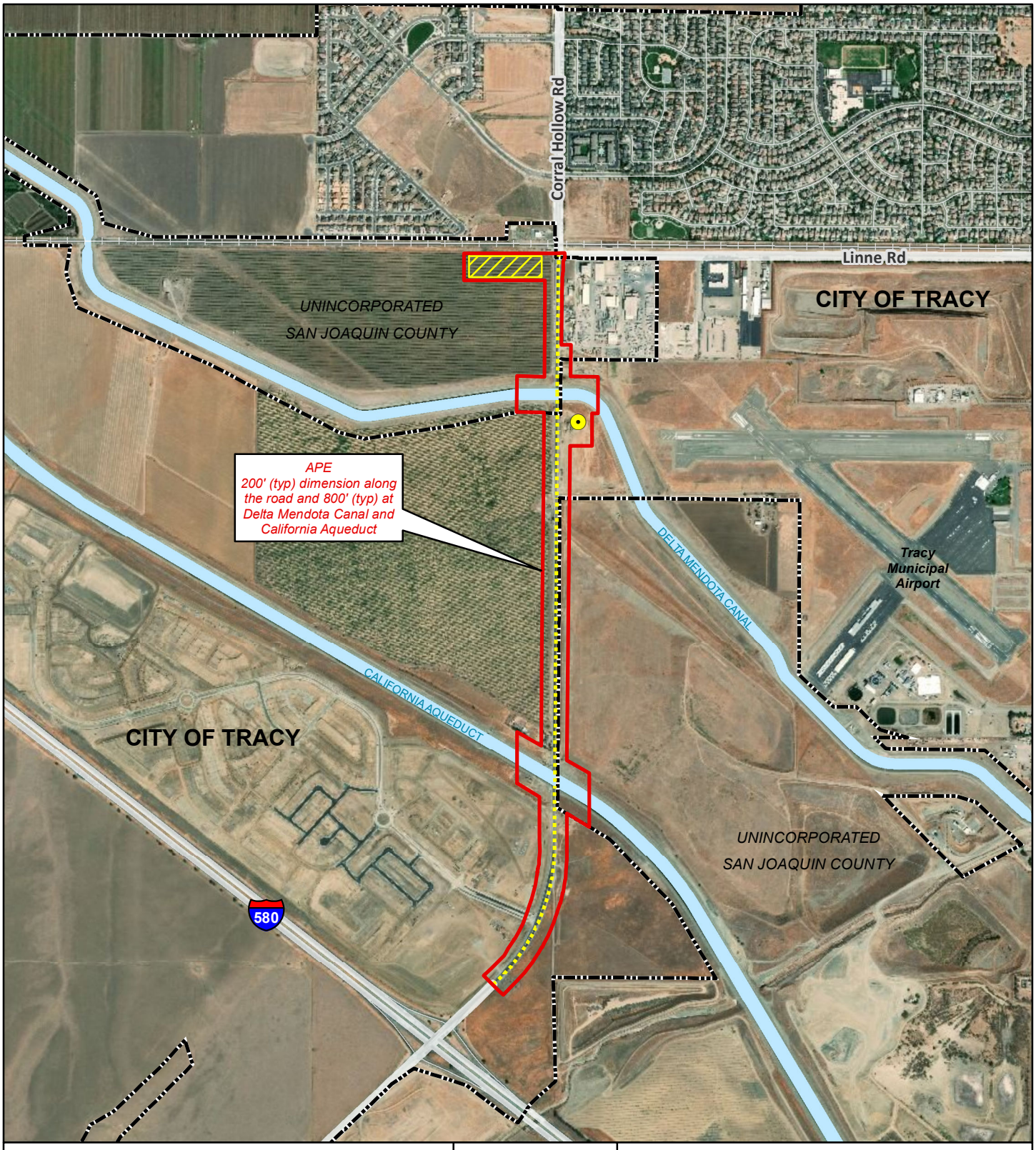

Legend

- Area of Potential Effect (APE)
- Tracy City Limits

Project Features

- Corral Hollow Rd Phase II
- Storm Drain Pump Station
- Basin

0 600 1,200
Feet

Sources: San Joaquin County; ArcGIS Online World Imagery Map Service; Rugerri-Jensen-Azar Engineers-Planners-Surveyors. Map date: April 27, 2020.

CORRAL HOLLOW ROAD PHASE 2

Figure 3. Aerial View of Project Site

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

None of the environmental factors listed below would have potentially significant impacts as a result of development of this project, as described on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Energy
	Geology and Soils		Greenhouse Gasses		Hazards and Hazardous Materials
	Hydrology and Water Quality		Land Use and Planning		Mineral Resources
	Noise		Population and Housing		Public Services
	Recreation		Transportation		Tribal Cultural Resources
	Utilities and Service Systems		Wildfire		Mandatory Findings of Significance

DETERMINATION

On the basis of 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.
X	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 in 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.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" 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. An 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 potentially 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.

Signature Date

EVALUATION INSTRUCTIONS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9) The explanation of each issue should identify:
    a) The significance criteria or threshold, if any, used to evaluate each question; and
    b) The mitigation measure identified, if any, to reduce the impact to less than significant.

EVALUATION OF ENVIRONMENTAL IMPACTS

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the project.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 21 environmental topic areas.

I. AESTHETICS

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) 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 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?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Responses to Checklist Questions

Responses a), c): The City of Tracy General Plan does not specifically designate any scenic viewsheds within the city. The existing Tracy General Plan Draft EIR does, however, note Tracy's scenic environmental resources including the views to the surrounding natural hillsides on the western edge of the city, as well as views of agricultural land from highways and other roadways.

For analysis purposes, a scenic vista can be discussed in terms of a foreground, middleground, and background viewshed. The middleground and background viewshed is often referred to as the broad viewshed. Examples of scenic vistas can include mountain ranges, valleys, ridgelines, or water bodies from a focal point of the forefront of the broad viewshed, such as visually important trees, rocks, or historic buildings. An impact would generally occur if a project would change the view to the middle ground or background elements of the broad viewshed, or remove the visually important trees, rocks, or historic buildings in the foreground.

Development of the majority of the proposed improvements will not significantly disrupt views from public viewpoints. The proposed project consists of widening Corral Hollow Road from the existing two-lane roadway to a four-lane major arterial with median island, sidewalks, bike facilities, landscaping, and street lights from Linne Road to I-580. The project will include design of at least two traffic signals and replacement of bridges over the Delta Mendota Canal and California Aqueduct. This would contribute to changes in the visual character of the site. However, the majority of the proposed alterations to the project site would be at the terrestrial ground level and would not be visible from surrounding areas.

However, some of the proposed improvements, including the bridge replacements and traffic signals, would be visible from surrounding areas. For example, the project will include design of at least two traffic signals. The poles required for the traffic signals would blend with the built environment of the roadway and would not significantly alter the visual character of the existing area. As such, the proposed traffic signals would not significantly alter the visual character of the area. The proposed replacement of bridges over the Delta Mendota Canal and California Aqueduct would be visible from public viewpoints in the project area. However, the replacement of bridges would not be considered a substantial alteration of the existing visual character of the existing bridges.

Implementation of the project would not greatly alter the areas overall characteristics. Therefore, implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Response b): The project site is not located within view of a state scenic highway. There are two official designated scenic highway segments in the City: I-580 between I-205 and I-5, and I-5 between I-205 and the Stanislaus County border. The project site is visible from the segment of I-580 between I-205 and I-5. The project site is not visible from the segment of I-5 between I-205 and the Stanislaus County border. Although the site may be visible from the I-580 segment, there are no trees, rock outcroppings, or historic buildings on the project site. Therefore, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Response d): There is a potential for the implementation of the proposed project to introduce new sources of light and glare into the project area during construction and operation. Contributors to light and glare impacts would include temporary construction lighting that would create ongoing light impacts to the area, as well as operational lighting of Corral Hollow Road. The City of Tracy Standard Plan #140 establishes street light standards, and requirements for light illumination. The project would be subject to these standards and requirements. Therefore, implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

II. AGRICULTURE AND FORESTRY RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?		X		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?			X	

Responses to Checklist Questions

Responses a), e): The project site is located on Urban and Built-Up Land, Vacant or Disturbed Land, Farmland of Local Importance, and Prime Farmland. The project will require additional right of way from the fronting property owners. Some of the proposed future improvements would be located on Prime Farmland or Farmland of Local Importance. The proposed project would not result in the conversion of Unique Farmland or Farmland of Statewide Importance to non-agricultural use. However, depending on the ultimate alignment of the proposed roadway alignment, the project may convert some Prime Farmland that is currently located adjacent to Linne Road. Additionally, some of the area adjacent west of Corral Hollow Road and north of the California Aqueduct contains Prime Farmland.

The potential environmental impacts from development of the roadway and project area for urban uses and the associated removal of Prime Farmland for agricultural use were considered and addressed in the City of Tracy General Plan and Final EIR. There, it was determined that buildout of the General Plan would result in the conversion of Prime Farmland, Unique Farmland and Farmland of Statewide Importance to urban uses. The General Plan Draft EIR found this to be a significant and unavoidable impact. On February 1, 2011, the Tracy City Council adopted a Statement of Overriding Considerations (Resolution 2011-028) for the loss of prime agricultural land resulting from adoption of the Plan and EIR, and provided mitigation measures for the agricultural land lost to development in the City of Tracy's urbanized areas. Mitigation measures included the implementation of a "Right to Farm" ordinance by the City (Ord. 10.24 et seq.), intended to preserve and protect existing agricultural operations within the incorporated City, and participation in the City's agricultural mitigation fee program (Tracy Municipal Code, Chapter 13.26).

The proposed project area is identified as Industrial, Public Facilities, Urban Reserve, Commercial, and Residential Low by the Tracy General Plan land use map. Therefore,

development of the project area for future urban land uses was planned in the Tracy General Plan. As such, implementation of the proposed project would not create new impacts over and above those identified in the General Plan Final EIR, nor significantly change previously identified impacts.

As part of the development process for individual site-specific projects, the agricultural mitigation fee adopted by the City shall be paid for each acre of Prime Farmland to be converted. The fee is outlined in Chapter 13.28, Agricultural Mitigation Fee, of the Tracy Municipal Code. The fees shall be collected by the City at the time building permits are issued for such site-specific projects, or as otherwise required by the City. The proposed project would be subject to the agricultural mitigation fee, as required by Mitigation Measure AG-1. With implementation of this mitigation measure, the proposed project would have a ***less than significant*** impact relative to this issue.

> ***Mitigation Measure AG-1:*** *The City of Tracy shall pay the adopted agricultural mitigation fee for each acre of Prime Farmland converted. The fee shall be collected prior to construction. The acreage of Prime Farmland developed shall be determined once the final improvements plans are submitted to the City, and the acreage shall be noted on the improvement plans.*

Response b): The project site is not zoned for agricultural use nor is it under a Williamson Act contract. The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response c): The project site is not forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526). The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response d): The project site is not forest land. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Implementation of the proposed project would have ***no impact*** relative to this issue.

III. AIR QUALITY

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of the applicable air quality plan?		X		
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?		X		
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Existing Setting

The project site is located within the San Joaquin Valley Air Pollution Control District (SJVAPCD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Joaquin Valley Air Basin (SJVAB) and has jurisdiction over most air quality matters within its borders.

The SJVAPCD has primary responsibility for compliance with both the federal and state standards and for ensuring that air quality conditions are maintained. They do this through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues.

Activities of the SJVAPCD include the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the FCAA and CCAA.

The SJVAPCD has prepared the *2007 Ozone Plan* to achieve Federal and State standards for improved air quality in the SJVAB regarding ozone. The *2007 Ozone Plan* provides a comprehensive list of regulatory and incentive-based measures to reduce emissions of ozone and particulate matter precursors throughout the SJVAB. The 2007 Ozone Plan calls for major advancements in pollution control technologies for mobile and stationary sources of air pollution. The *2007 Ozone Plan* calls for a 75-percent reduction in ozone-forming oxides of nitrogen emissions.

The SJVAPCD has also prepared the *2007 PM_{10} Maintenance Plan and Request for Redesignation* (2007 PM_{10} Plan). On April 24, 2006, the SJVAPCD submitted a Request for Determination of PM_{10} Attainment for the Basin to the California Air Resources Board (CARB). CARB concurred with the request and submitted the request to the U.S. Environmental Protection Agency (EPA) on May 8, 2006. On October 30, 2006, the EPA issued a Final Rule determining that the Basin had attained the National Ambient Air Quality Standards (NAAQS) for PM_{10}. However, the EPA noted that the

Final Rule did not constitute a redesignation to attainment until all of the Federal Clean Air Act requirements under Section 107(d)(3) were met.

The SJVAPCD has prepared the *2008 PM.2.5 Plan* to achieve Federal and State standards for improved air quality in the San Joaquin Valley Air Basin. The *2008 PM.2.5 Plan* provides a comprehensive list of regulatory and incentive-based measures to reduce PM2.5.

In addition to the *2007 Ozone Plan, the 2008 $PM_{2.5}$ Plan,* and the *2007 PM_{10} Plan*, the SJVAPCD prepared the *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI). The GAMAQI is an advisory document that provides Lead Agencies, consultants, and project applicants with analysis guidance and uniform procedures for addressing air quality impacts in environmental documents. Local jurisdictions are not required to utilize the methodology outlined therein. This document describes the criteria that SJVAPCD uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds for determining whether or not projects would have significant adverse environmental impacts, identifies methodologies for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts. An update of the GAMAQI was approved on March 19, 2015, and is used as a guidance document for this analysis.

Responses to Checklist Questions

Responses a-b): Air quality emissions would be generated during construction of the proposed project. Operational emissions would be negligible as the project does not propose any new structures or uses that would increase trip generation or vehicle miles travelled (VMT). Construction-related air quality impacts are addressed below.

Construction Emissions

Construction-generated emissions are temporary and short term but have the potential to represent a significant air quality impact. The construction and development of the proposed project would result in the temporary generation of emissions. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities.

The SJVAPCD has adopted guidelines for determining potential adverse impacts to air quality in the region. The SJVAPCD guidelines state that construction activities are considered a potentially significant adverse impact if: the feasible control measures for construction in compliance with Regulation VIII as listed in the SJVAPCD guidelines are not incorporated or implemented; if the project generates emissions of reactive organic gases (ROG) or oxides of nitrogen (NO_X) that exceeds 10 tons per year; or if the project generates emissions of respirable particulate matter (PM_{10}) or fine particulate matter ($PM_{2.5}$) that exceeds 15 tons per year.

The Sacramento Metropolitan Air Quality Management District (SMAQMD) Roadway Construction Emissions Model (version 9.0, May 2018) was used to quantify the construction emissions for the project. Note: Information in the Roadway Construction Emissions Model is based on conversations with knowledgeable individuals at SMAQMD, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of the Roadway Construction Emissions Model.

Construction Activities/Schedule: SMAQMD default values were used for the construction schedule and off-road equipment. Construction activities will consist of multiple phases over

approximately 14 months years. These construction activities include the following phases: grubbing/land clearing, grading/excavation, drainage/utilities/sub-grade, and paving. For purposes of this analysis, it is assumed that the entire project is built-out from 2020 through 2021.

The site improvement phase of construction will begin with site preparation. The site preparation step will include the use of dozers, backhoes, and loaders to strip (clear and grub) all organic materials and the upper half-inch to inch of soil from the area adjacent to the existing roadway. After the area to be widened is striped of organic materials, grading will begin. This activity will involve the use of excavators, graders, dozers, scrappers, loaders, and backhoes to move soil around the project site to create specific engineered grade elevations and soil compaction levels. The last task is to install the topside improvements, which includes pouring concrete curbs, gutters, sidewalks, and access aprons and then paving of the street. This task will involve the use of pavers, paving equipment, and rollers.

Construction Emissions: A quantification of the emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ that will be emitted by project construction has been performed. The SMAQMD Roadway Construction Emissions Model and outputs are included in Appendix A.

Table 1 shows the maximum unmitigated construction emissions for each project component.

Table 1: Construction Emissions (Unmitigated)

Project Component	*ROG*	*NO_X*	*PM_{10}*	*$PM_{2.5}$*
	≤ 10 tons/year	*≤ 10 tons/year*	*≤ 15 tons/year*	*≤ 15 tons/year*
Widening	0.37	3.95	5.57	1.29
California Aqueduct Bridge	0.22	2.48	0.51	0.18
Delta Mendota Canal Bridge	0.22	2.48	0.31	0.14
Total	**0.81**	**8.91**	**6.39**	**1.61**
Threshold Exceeded in Any Year?	**No**	**Yes**	**No**	**No**

NOTES: THE AIR DISTRICT IS ATTAINMENT FOR CO AND SO_2.
SOURCE: SMAQMD ROADWAY CONSTRUCTION EMISSIONS MODEL V.9.0.

The SJVAPCD has established construction related emissions thresholds of significance as follows: 10 tons per year of ROG, 10 tons per year of NO_x, or 15 tons per year of PM_{10} or $P_{2.5}$. If the proposed project's emissions will exceed the SJVAPCD's threshold of significance for construction-generated emissions, the proposed project will have a significant impact on air quality and all feasible mitigation are required to be implemented to reduce emissions. As shown in Table 1 above, annual emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ will not exceed the SJVAPCD thresholds of significance in any given year. Nevertheless, regardless of emission quantities, the SJVAPCD requires construction related mitigation in accordance with their rules and regulations. Implementation of the Mitigation Measures AQ-1 and AQ-2 will ensure that the proposed project would reduce construction related emissions to the extent possible. With implementation of the mitigation measures, the proposed project would have ***a less than significant i***mpact related to construction emissions.

Air Quality Plan Consistency

As discussed above, annual construction emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ will not exceed the SJVAPCD thresholds of significance in any given year.

The SJVAPCD's various air quality plans (i.e., 2007 Ozone Plan, 2007 PM_{10} Plan, and 2008 $PM_{2.5}$ Plan) includes growth assumptions generated by SJCOG. These growth assumptions are generated based, in part, on the development projections from individual land use authorities (i.e. incorporated cities and unincorporated counties) that are located within their region. It is noted that the consistency with the SJCOG population projection is growth that would generate population that is at, or below, the projections established by SJCOG. Any growth above the SJCOG population projection, would be growth that is inconsistent with the SJCOG projections. Any growth that is at, or below, the SJCOG projections would be consistent with the SJCOG projections.

The purpose of the project is to upgrade a second phase of Corral Hollow Road to accommodate the existing and future transportation functions anticipated through General Plan buildout. The proposed project is consistent with the General Plan vision for the project area, and the proposed project supports the future development that is included within the SJCOG projections.

Overall, the proposed project would be consistent with the regional air quality plan (i.e., SJVAPCD's 2007 Ozone Plan, 2007 PM_{10} Plan, and 2008 $PM_{2.5}$ Plan).

Cumulative Air Quality Impacts

As discussed above, the SJVAPCD is an agency responsible for ensuring that air quality conditions are attained, and where non-attainment is determined, this agency develops strategies to achieve attainment in the future. This effort to achieve attainment is documented in the SJVAPCD's various air quality plans (i.e., 2007 Ozone Plan, 2007 PM_{10} Plan, and 2008 $PM_{2.5}$ Plan), which are updated periodically to accommodate changes. While the scope of the SJVAPCD's strategies to achieve attainment is wide ranging, the agency has established thresholds of significance for individual new projects and if a project exceeds the threshold of significance, then it would also be a significant contribution to a cumulative impact.

The SJVAPCD's air quality significance thresholds represent the maximum emissions from a project that are not expected to conflict with the SJVAPCD's air quality plans, and is not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. These are developed based on the ambient concentrations of the pollutant for each source. Because the project would not exceed the air quality significance thresholds on the project-level (as discussed above), and would not otherwise conflict with the SJVAPCD's air quality plans, the cumulative emissions would not be a significant contribution to a cumulative impact.

Conclusion

Construction would result in numerous activities that would generate dust. Fine, silty soils and often strong afternoon winds exacerbate the potential for dust, particularly during the summer months. Grading, leveling, earthmoving and excavation are the activities that generate the most particulate emissions. Impacts would be localized and variable. The initial phase of project construction would involve grading and leveling the various project site areas.

Construction activities that could generate dust and vehicle emissions are primarily related to grading and other ground-preparation activities in order to prepare the various project site areas for paving. All construction activities shall comply with all applicable measures from SJVAPCD Rule VIII which limits construction related emissions and particulates.

Because construction activities could generate dust and vehicle emissions, the following mitigation shall be incorporated into the construction plans of this project. With implementation of the following measures, this impact would be ***less than significant.***

> ***Mitigation Measure AQ-1:*** *Prior to the commencement of grading activities, the City shall require the contractor hired to complete the grading activities to prepare a construction emissions reduction plan that meets the requirements of SJVAPCD Rule VIII. The construction emissions reductions plan shall be submitted to the SJVAPCD for review and approval. The City of Tracy shall ensure that all required permits from the SJVAPCD have been issued prior to commencement of grading activities.*
>
> ***Mitigation Measure AQ-2:*** *The following mitigation measures, in addition to those required under Regulation VIII of the SJVAPCD, shall be implemented by the project's contractor during all phases of project grading and construction to reduce fugitive dust emissions:*
>
> - *Water previously disturbed exposed surfaces (soil) a minimum of two-times/day or whenever visible dust is capable of drifting from the site or approaches 20 percent opacity.*
> - *Dust from all on-site and off-site unpaved access roads shall be effectively stabilized by applying water or other approved suppressants.*
> - *Reduce speed on unpaved roads to less than 15 miles per hour.*
> - *Restrict vehicular access to the area*
> - *Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the end of each workday. (Use of dry rotary brushes is prohibited except when preceded or accompanied by sufficient wetting to limit visible dust emissions and the use of blowers is expressly forbidden.)*
> - *Cease grading activities during periods of high winds (greater than 20 mph over a one-hour period).*
> - *Asphalt-concrete paving shall comply with SJVAPCD Rule 4641 and restrict use of cutback, slow-sure, and emulsified asphalt paving materials.*

Response c):

Carbon Monoxide Hotspots

The SJVAPCD recommends utilizing a screening approach for analyzing CO concentrations to determine if dispersion modeling is warranted. The methodology provides lead agencies with a conservative indication of whether project-generated vehicle trips will result in the generation of CO emissions that contribute to an exceedance of the thresholds of significance. The recommended screening criteria are divided into two tiers, as described below.

First Tier*:* The proposed project will result in a less-than-significant impact to air quality for local CO if:

- Traffic generated by the proposed project will not result in deterioration of intersection level of service (LOS) to LOS E or F; and
- The project will not contribute additional traffic to an intersection that already operates at LOS of E or F.

For the proposed project, the first tier is met because the addition of project trips would not degrade operations at any of the study intersections, and the project would not contribute traffic to an intersection that already operates at LOS E or F. See Section XVII, Transportation, for more information. As such, the proposed project screens out satisfactorily under Tier 1. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Toxic Air Contaminants

A Toxic Air Contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources. In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment. These are acrolein, benzene, 1,3-butidiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter.

The 2007 EPA rule requires controls that will dramatically decrease Mobile Source Air Toxics (MSAT) emissions through cleaner fuels and cleaner engines. According to a Federal Highway Administration (FHWA) analysis using EPA's MOBILE6.2 model, even if vehicle activity (VMT) increases by 145 percent, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050. California maintains stricter standards for clean fuels and emissions compared to the national standards, therefore it is expected that MSAT trends in California will decrease consistent with or more than the U.S. EPA's national projections.

CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* (2007) to provide information to local planners and decision-makers about land use compatibility issues associated with emissions from industrial, commercial and mobile sources of air pollution. The CARB Handbook indicates that mobile sources continue to be the largest overall contributors to the State's air pollution problems, representing the greatest air pollution health risk to most Californians. The most serious pollutants on a statewide basis include diesel exhaust particulate matter (diesel PM), benzene, and 1,3-butadiene, all of which are emitted by motor vehicles. These mobile source air toxics are largely associated with freeways and high traffic roads. Non-mobile source air toxics are largely associated with industrial and commercial uses. Table 2 provides the CARB minimum separation recommendations on siting sensitive land uses. The proposed project does not include any of the source categories identified in the CARB minimum separation standards.

The nearest school to the project site is Anthony Traina Elementary School, located approximately 0.64 miles northeast of the site. Similarly, there are several existing residences located in the project vicinity to the northwest, north, and northeast. However, implementation of the proposed project would not expose these sensitive receptors to substantial pollutant concentrations. Air emissions would be generated during the construction phase of the project, but would be short term in duration. The construction phase of the project would be temporary and short-term, and the implementation of Mitigation Measures AQ-1 and AQ-2 would greatly reduce pollution concentrations generated during construction activities, and prevent spillover into residential areas.

Table 2: CARB Minimum Separation Recommendations on Siting Sensitive Land Uses

Source Category	*Advisory Recommendations*
Freeways and High-Traffic Roads	• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	• Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	• Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	• Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	• Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	• Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

SOURCE: AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE (CARB 2005).

Operation of the proposed project would not result in increased emissions from vehicle trips. As described above, the proposed project would not generate significant concentrations of air emissions. Implementation of the proposed project would not result in a significant increased exposure of sensitive receptors to localized concentrations of TACs, or create a CO hotspot. This project would have a ***less than significant*** impact relative to this topic.

> ***Mitigation Measures:*** *Implement Mitigation Measure AQ-1 and Mitigation Measure AQ-2. These mitigation measures are previously presented in Responses a-b, and are re-produced below:*
>
> ***Mitigation Measure AQ-1:*** *Prior to the commencement of grading activities, the City shall require the contractor hired to complete the grading activities to prepare a construction emissions reduction plan that meets the requirements of SJVAPCD Rule VIII. The construction emissions reductions plan shall be submitted to the SJVAPCD for review and approval. The City of Tracy shall ensure that all required permits from the SJVAPCD have been issued prior to commencement of grading activities.*
>
> ***Mitigation Measure AQ-2:*** *The following mitigation measures, in addition to those required under Regulation VIII of the SJVAPCD, shall be implemented by the project's contractor during all phases of project grading and construction to reduce fugitive dust emissions:*
>
> - *Water previously disturbed exposed surfaces (soil) a minimum of two-times/day or whenever visible dust is capable of drifting from the site or approaches 20 percent opacity.*

- *Dust from all on-site and off-site unpaved access roads shall be effectively stabilized by applying water or other approved suppressants.*
- *Reduce speed on unpaved roads to less than 15 miles per hour.*
- *Restrict vehicular access to the area*
- *Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the end of each workday. (Use of dry rotary brushes is prohibited except when preceded or accompanied by sufficient wetting to limit visible dust emissions and the use of blowers is expressly forbidden.)*
- *Cease grading activities during periods of high winds (greater than 20 mph over a one-hour period).*
- *Asphalt-concrete paving shall comply with SJVAPCD Rule 4641 and restrict use of cutback, slow-sure, and emulsified asphalt paving materials.*

Response d): The proposed project would not generate objectionable odors. People in the immediate vicinity of construction activities may be subject to temporary odors typically associated with construction activities (diesel exhaust, hot asphalt, etc.). However, any odors generated by construction activities would be minor and would be short and temporary in duration.

Examples of facilities that are known producers of operational odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station, Painting/Coating Operations (e.g. auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plant. If a project would locate receptors and known odor sources in proximity to each other further analysis may be warranted; however, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted. The project does not propose sensitive receptors that could be exposed to odors in the vicinity. Although the project would include wastewater system facilities, a wastewater treatment facility would not be constructed as a result of the project. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

IV. BIOLOGICAL RESOURCES

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
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 Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
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?			X	
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?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?		X		

Background

A Biological Assessment was completed for the project in May 2019 by De Novo Planning Group. According to the Biological Assessment, the land surrounding the project limits includes agricultural land, aquatic habitat (Delta Mendota Canal and California Aqueduct), ruderal habitat, and rural/developed areas/roadways. The surrounding agricultural land in the region includes irrigated pastures, alfalfa, vineyards, orchards, and row crops. Most of this land is irrigated by irrigation canals that traverse the region. The irrigation canals are the primary source of aquatic habitat in the immediate vicinity.

The area within the project limits is composed of a gravel shoulder associated with the roadway, disturbed soil associated with the agricultural operations, the Delta Mendota Canal, and the California Aqueduct. Vegetation was largely absent from the gravel shoulder, with the roadway, and agricultural areas in and immediately adjacent to the project limits. This area is best characterized as ruderal in some locations and barren in others. Plants observed included: wild oats (*Avena* spp.), mustard (*Brassica* spp), bromes (*Bromus* spp.), barley (*Hordeum* spp.), and rye (*Lolium* spp.). Other plants that were not observed, but are commonly found in ruderal areas of the region and are likely to occur in the project limits between disturbances include: fiddleneck

(*Amsinkia menziesii*), scarlet pimpernel (*Anagalis arvensis*), field owls clover (*Castilleja campestris*), star thistle (*Centaurea solstitialis*), filaree (*Erodium botrys*), cut-leaf filaree (*Erodium cicutarium*), cut-leaf geranium (*Geranium dissectum*), birdfoot deer vetch (*Lotus corniculatus*), miniature lupine (*Lupinus bicolor*), jointed wild radish (*Raphanus raphanistrum*), wild radish (*Raphanus sativus*), milk thistle (*Silybum marianum*), medusa-head (*Taeniatherum caput-medusae*), rose clover (*Trifolium hirtum*), and cocklebur (*Xanthium strumarium*).

The following discussion is based on the Assessment, which is included as Appendix B.

Responses to Checklist Questions

Response a): There are numerous special-status wildlife and plant species known to occur within the region. A search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) and the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPAC) was completed.

Special-Status Wildlife

The CNDDB documents 76 special status species, 21 of which are listed as federal or state endangered or threatened within a nine-quad radius of the project site. The nine quad search area includes: Clifton Court Forebay, Union Island, Lathrop, Midway, Tracy, Vernalis, Cedar Mountain, Lone Tree Creek, and Solyo USGS 7.5 minute quadrangles. The 21 state or federal species includes three amphibians, four birds, two crustaceans, four fish, three mammals, one insect, two reptiles, and two plants. The full list of species, inclusive of those not listed as endangered or threatened is provided in Appendix B.

In addition to the federally listed species presented above, there are a variety of birds that are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. De Novo Planning Group's biologist initiated a review of potentially occurring birds protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act by reviewing the USFWS IPaC. Below is the list of the nine birds that were provided on the IPaC report:

- Burrowing Owl (*Athene cunicularia*)
- Common Yellowthroat (*Geothlypis trichas sinuosa*)
- Golden Eagle (*Aquila chrysaetos*)
- Long-billed Curlew (*Numenius americanus*)
- Nuttall's Woodpecker (*Picoides nuttallii*)
- Rufous Hummingbird (*Selasphorus rufus*)
- Spotted Towhee (*Pipilo maculatus clementae*)
- Tricolored Blackbird (*Agelaius tricolor*
- Yellow-billed Magpie (*Pica nuttalli*)

Table 4 provided in the Biological Assessment (Appendix B) identifies each of the special status species and their habitat requirements. As shown, habitat is present in the project area for the following special-status animal species: California tiger salamander (CTS) (*Ambystoma californiense*), western pond turtle (*Emys marmorata*), burrowing owl (*Athene cunicularia*), California horned lark (*Eremophila alpestris actia*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), grasshopper sparrow (*Ammodramus savannarum*), loggerhead shrike (*Lanius ludovicianus*), merlin (*Falco columbarius*), northern harrier (*Circus cyaneus*), short-eared owl (*Asio flammeus*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), American badger (*Taxidea taxus*), pallid bat (*Antrozous pallidus*), San Joaquin kit fox (SJKF) (*Vulpes macrotis mutica*), Townsend's big-eared bat (*Corynorhinus townsendii*), and western

mastiff bat (*Eumops perotis californicus*). Additionally, marginal habitat along the fringes of the project area agricultural fields is present for the following special-status animal species: California glossy snake (*Arizona elegans occidentalis*), coast horned lizard (*Phrynosoma blainvillii*), Giant Garter snake (*Thamnophis gigas*), northern California legless lizard (*Anniella pulchra*), and San Joaquin coachwhip (*Masticophis flagellum ruddocki*).

Raptors and Migratory Birds

Raptors are fully protected under the California Fish and Game Code Section 3503.5. A variety of raptors are very common throughout the Central Valley, while several species are considered rare. Raptor species are often found either foraging or nesting, at various times. Some raptors are migratory and thus are only in the region during certain periods of the year, while many are residents. There was no evidence of a remnant or active nest located in the project site during the surveys. Ground nesters, such as burrowing owl and northern harrier have some potential nesting habitat in the adjacent lands, but not within the project site. Horned lark is documented immediately adjacent to the project site, and would be expected to traverse through the project site at times.

The Pacific Flyway, which is a migratory travel route for millions of birds, and more than 350 species, is located through the Central Valley of California. The project site is located on the western fringe of the Pacific Flyway. Migratory birds travel this avian flyway each year from the Bering Strait to South America. Many of the birds travel from the north to overwinter in California, including the Central Valley region. The birds overwintering arrive as early as August. Other birds travel south to overwinter, and arrive back in California as early as February to nest/breed.

There is a wide variety of migratory birds, including water birds, which use the Central Valley for foraging. A review of the USFWS IPaC revealed the above-listed nine bird species.

The proposed project is located in an area with documented occurrences of a variety of raptors and migratory birds. There was no evidence of active or remnant nests located in the project site or immediate vicinity. The project site does not contain appropriate nesting habitat for most birds given that it lacks trees. Ground nesters, such as burrowing owls can occupy sites where ground squirrels have established burrows. At the time of the survey, there was no evidence of burrows, or burrowing owls within the project site.

Appropriate foraging habitat for raptors and migratory birds, is located in the agricultural fields located immediately adjacent to the project site. Construction activities is not expected to remove foraging habitat for these protected birds, although construction activities could temporarily make the agricultural fields immediately adjacent to the project limits to be less desirable for foraging while construction occurs.

Additionally, cliff swallows are a migratory bird that are very common nesters throughout the Central Valley, and are typically found nesting under bridges. Nesting cliff swallows were not observed within the during the survey, however, these birds can inhabit a bridge for nesting in any given year. The nesting season is February 15 to September 1.

Critical habitat has not been designated for Migratory Birds or Raptors.

The project site lacks trees and burrow habitat for nesting raptors. There is a wide variety of migratory birds, including water birds, which use the Aqueduct and Delta Mendota canal and adjacent agricultural fields for foraging. Migratory birds in this area are use to a relatively high

frequency of disturbance associated with the agricultural production; however, construction would elevate the activities temporarily. Construction activities could temporarily affect these migratory birds if they were using the Aqueduct and Delta Mendota canal and adjacent agricultural fields for foraging at the commencement of construction. The effect would be expected to be temporary and associated with the noise and activities required to rebuild the bridge. At the completion of construction, the migratory birds would have uninterrupted use of the Aqueduct and Delta Mendota canal and adjacent agricultural fields. With the implementation of avoidance, preconstruction surveys, and establishment of buffers if necessary, the project would not adversely affect migratory birds.

The bridge itself provides potential nesting habitat for cliff sparrows. This species was not observed during field surveys, but they can easily occupy a bridge in future years. The proposed project would require work on the bridges, which would impact nesting colonies if they were to occupy the bridge in future years. Abandoned young would become deceased without support. In order to avoid impacts to nesting cliff swallows, a preconstruction survey would be necessary, and if they were found to occupy the bridges, the project activities would need to occur outside the nesting season or cliff swallows would need to be excluded prior to the nesting season. The nesting season is February 15 to September 1. These measures would be required for the project in order to seek coverage under the SJMSCP.

Mitigation Measure Bio-1 requires the project proponent to seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.

Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is a state listed threatened species that nests in the Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley. The highest nesting densities occur near Davis and Woodland, Yolo County. Nests commonly occur in oaks or cottonwoods in or near riparian habitats and they forage in grasslands, irrigated pastures, and grain fields.

This species is well documented within the region, and there are many nesting sites located to the east along the San Joaquin River within the riparian habitat. This species forages within a ten-mile radius of their nesting sites. This species was not observed within the project site, nor where there any of active or remnant nest sites. The adjacent agricultural fields are appropriate foraging habitat. There are no critical habitats within the project limits.

The project site lacks trees for nesting Swainson's hawks. This species is well documented throughout the region and is commonly seen foraging over agricultural fields. The proposed project would not directly remove agricultural foraging habitat; however, construction would elevate the amount of activities in the area temporarily. Construction activities could temporarily affect the desirability of the adjacent agricultural fields during the construction period. The effect would be expected to be temporary and associated with the noise and activities required to construction the bridges. At the completion of construction, the birds would have uninterrupted

use of the agricultural fields. With the implementation of avoidance, preconstruction surveys, and establishment of buffers if necessary, the project would not adversely affect these birds. With implementation of ITMMs required for the project in order to seek coverage under the SJMSCP (see Mitigation Measure BIO-1), this impact would be less than significant.

California Tiger Salamander (CTS)

CTS is a federal and state listed threatened species that requires both aquatic and upland habitat to complete its life cycle. The aquatic habitat serves as breeding habitat and is usually found in vernal pools and seasonal water sources, including slow moving streams, ponds, and swales that are free of predatory fish and bullfrogs. In early winter, just after sufficient rains have fallen for the ground to be moist and for temporary pools to begin to form, CTS begin their nocturnal breeding migration. On rainy nights, the adults emerge from their underground burrows and disperse up to a mile to lay their eggs in newly replenished vernal pools. Males typically outnumber females and often precede females to the pools/ponds. Shortly after breeding, adults will return to their terrestrial habitat. Larvae hatch from the eggs within two weeks and they continue to live in the pool for four to five months. CTS metamorphosis is considerably slower than other native amphibians, making the time frame of the presence of water critical to their survival. Usually by late spring or early summer, juveniles are ready to disperse to their terrestrial habitat. As the season shifts toward the driest summer months the CTS aestivates, not coming out until the wetter months arrive. The upland habitat is usually found in undisturbed grasslands near the aquatic breeding sites.

The project site is outside the critical habitat for this species. The aquatic habitat in the Delta Mendota and California Aqueduct is populated with aggressive fish predators (striped bass, largemouth bass) that inhibit the use of this habitat for CTS breeding. The upland portion of the project site is disturbed and does not provide quality refugia habitat for estivating CTS.

CTS are not documented in the project site, but there are documented occurrences in the foothills to the east of the project site in the Corral Hollow Creek drainage. The project site is within the 1.3-mile migratory range; however, the project site does not present quality refuge habitat and this species is not believed to migrate to the project site.

The project site does not contain appropriate aquatic breeding habitat given that the aquatic features are fast flowing waterways that lack pools or other stillwaters. CTS do not breed in fast flowing waters because larva or eggs would be washed away. This species is not adapted to breeding in fast flowing waters. Additionally, the project site lacks burrows, and lacks an active ground squirrel population that could establish burrows needed to maintain a population of CTS. The upland areas within the project site also lacks debris, such as wood piles, vehicles, etc., that can serve as refuge habitat for this species. The project site is largely barren and lacks any significant aquatic or upland habitat for CTS.

There are no indications that CTS disperses down the Corral Hollow Creek drainage to the valley floor. While CTS can potentially travel up to a mile to reach suitable habitat, given lack of occurrences, and lack of upland and aquatic habitat within the project site it is unlikely that the species would disperse north to the project site. There are no critical habitats within the project limits.

Potential impacts to CTS are based on the assumption that this species could migrate from their known population located to the east of the project site in the foothill region along Corral Hollow Creek during the active season and find aestivation habitat. First, consideration should be given

to the fact that CTS are not documented in the project site, and the project site does not contain appropriate aquatic breeding habitat given that the aquatic features are fast flowing waterways that lack pools or other stillwaters. Secondly, the project site lacks burrows, and lacks an active ground squirrel population that could establish burrows needed to maintain a population of CTS. The upland areas within the project site also lacks debris, such as wood piles, vehicles, etc., that can serve as refuge habitat for this species. The project site is largely barren and lacks any significant aquatic or upland habitat for CTS.

There are no indications that CTS disperses down the Corral Hollow Creek drainage to the valley floor. While CTS can potentially travel up to a mile to reach suitable habitat, given lack of occurrences, and lack of upland and aquatic habitat within the project site it is unlikely that the species would disperse north to the project site. Nevertheless, with implementation of ITMMs required for the project in order to seek coverage under the SJMSCP (see Mitigation Measure BIO-1), impacts to CTS would be less than significant. The ITMMS may include, but would not be limited to, preconstruction surveys, installation of drift fences to prevent CTS from moving into the area, biological monitoring during construction, and construction worker education for CTS.

Western Pond Turtle

Western pond turtle is a thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation. They need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 kilometers from water for egg-laying. Western pond turtle is documented in many canals and waterbody's through the region. It is anticipated that this species is in the Aqueduct and Delta Mendota Canal in the vicinity of the bridge sites.

This species was not observed during site surveys. Direct effects to western pond turtle could occur as a result of instream construction in Aqueduct and/or Delta Mendota Canal. Construction activities near the Aqueduct and Delta Mendota Canal could also temporarily reduce the availability of upland retreat sites for the turtle. If pond turtles are present in the waterway in the immediate vicinity of construction, they can usually disperse away from such disturbance without difficulty. Potential water quality effects associated with instream construction and roadway runoff could threaten western pond turtles. Implementation of Mitigation Measure BIO-1, which would require implementation of ITMMs while working in and around waterways, will ensure that the proposed project will not directly injure or kill any western pond turtles or impact its habitat.

Giant Garter Snake

The Giant Garter snake (*Thamnophis gigas*) federally listed as threatened. The giant garter snake inhabits marshes, sloughs, ponds, small lakes, low gradient streams, other waterways and agricultural wetlands such as irrigation and drainage canals and rice fields, and the adjacent uplands. Essential habitat components consist of (1) adequate water during the snake's active period (i.e., early spring through mid-fall) to provide a prey base and cover; (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat; and (3) upland habitat for basking, cover, refuge from flood waters, and hibernation in burrows. According to USFWS published programmatic biological opinions for giant garter snake (USFWS 1997), a basic giant garter snake habitat unit will typically consist of 2.00 acres (0.81 hectares) of surrounding upland for every 1.00 acre (0.40 hectare) of aquatic habitat. The 2.00 acres (0.81 hectares) of upland also may be defined as 218 linear feet (66 meters) of bankside

habitat which incorporates adjacent uplands to a width of 200 feet (61 meters) from the edge of the bank.

This species is not documented within, or in the regional vicinity of the project site and none were observed during field surveys. The aquatic habitat in the project site is marginal for giant garter snake given the lack of emergent vegetation. The banks of the aquatic facilities were largely void of vegetation, which is anticipated to be a result of regular weed abatement. There was some vegetation along the water edge. Common aquatic plants along the water edge included water-milfoil (*Myriophyllum* spp.), waterweeds (*Elodea* spp.), pondweeds (*Potamogeton* spp.), and duckweeds (*Lemna* spp.) among others.

The project site has poor upland habitat given that it lacks burrows, is largely barren. The adjacent uplands just outside of the project site lands are actively cultivated, which requires active ground disturbance and the use of chemicals such as fertilizers, pesticides, and herbicides, all of which make it poor upland habitat for giant garter snake. These areas also lack burrows. The combination of marginal aquatic habitat and poor upland habitat present a very low likelihood of giant garter snake presence. Based on the absence of quality aquatic and upland habitat, and the absence of recent occurrences, this species is not anticipated to be present in the project site.

There are no critical habitats within the project limits.

Potential impacts to GGS are based on the assumption that this species could transect through the aquatic habitat in the project site during the active season and find hibernation habitat in the uplands. First, consideration should be given to the fact that the aquatic habitat in the California Aqueduct and Delta Mendota Canal is considered marginal. The deeper water habitat does not support rooted-emergent or woody plant species, which is a key component for GGS aquatic habitat. The shallower edges of these facilities do not support a prevalence of emergent vegetation due to the maintenance and weed abatement activities along the Canal bank. The absence of quality emergent vegetation along the water edge makes this marginal habitat for GGS.

The project site has poor upland habitat given that it lacks burrows, is largely barren. Additionally, the adjacent lands outside of the project site lands are poor upland habitat given that they are actively cultivated, and use chemicals such as fertilizers, pesticides, and herbicides. The combination of marginal aquatic habitat and poor upland habitat present a very low likelihood of GGS presence. Based on the absence of quality aquatic and upland habitat, and the absence of recent occurrences, this species is not anticipated to be present in the project site during the active season and it not anticipated to enter the project site to hibernate for the inactive season. With implementation of ITMMS required for the project in order to seek coverage under the SJMSCP (see Mitigation Measure BIO-1), this impact would be less than significant.

Special-Status Plants

There are two plant species documented within the regional vicinity on the CNDDB. The large-flowered fiddleneck (*Amsinckia grandiflora*) requires cismontane woodland, or valley and foothill grassland. The Delta button-celery (*Eryngium racemosum*) requires riparian scrub, seasonally inundated depressions along floodplains on clay soils. The project site is outside the critical habitat for these species and they were not observed during field surveys. There is no evidence of documented occurrences within project site or immediately adjacent. The project site is high disturbed land, and is mostly void of vegetation. Based on this preliminary evaluation of listed plant species in the region and the known site conditions within the project site, it was

determined that no suitable habitat occurs within the project site. Therefore, the project would result in no effect to federally listed plant species or federally proposed plant species.

Conclusion

Mitigation Measure BIO-1 would reduce impacts to migratory birds and raptors, Swainson's hawk, CTS, and western pond turtle. As required by Mitigation Measure BIO-1, participation in the SJMSCP will provide the coverage for the incidental take of a species if it were to occur. Therefore, this potentially significant impact would be reduced to a ***less than significant*** level relative to this topic.

> ***Mitigation Measure BIO-1:*** *Prior to commencement of any grading activities, the project proponent shall seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through payment of development fees for conversion of open space lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. In addition, coverage includes incidental take avoidance and minimization measures for species that could be affected as a result of the proposed project. There are a wide variety of incidental take avoidance and minimization measures contained in the SJMSCP that were developed in consultation with the USFWS, CDFW, and local agencies. The applicability of incidental takes avoidance and minimization measures are determined by SJCOG on a project basis. The process of obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a) and California Fish and Game Code Section 2081. The Section 10(a) permit also serves as a special-purpose permit for the incidental take of those species that are also protected under the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species. The SJMSCP includes the implementation of an ongoing Monitoring Plan to ensure success in mitigating the habitat impacts that are covered. The SJMSCP Monitoring Plan includes an Annual Report process, Biological Monitoring Plan, SJMSCP Compliance Monitoring Program, and the SJMSCP Adaptive Management Plan SJCOG.*

Response b): The records search identified the following five documented sensitive natural communities within the nine-quad search for the project site: Alkali Meadow, Great Valley Cottonwood Riparian Forest, Great Valley Valley Oak Riparian Forest, Northern Claypan Vernal Pool, Valley Sink Scrub. None of these community types are found on the project site. Riparian habitat is also not found on-site, or upland from the project site. Implementation of the proposed project will have a ***less than significant impact*** on riparian habitat and sensitive natural communities.

Response c): A wetland is an area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Wetlands are defined by regulatory agencies as having special vegetation, soil, and hydrology characteristics. Hydrology, or water inundation, is a catalyst for the formation of wetlands. Frequent inundation and low oxygen cause chemical changes to the soil properties resulting in what is known as hydric soils. The prevalent vegetation in wetland communities consists of hydrophytic plants, which are adapted to areas that are frequently inundated with water. Hydrophytic plant species have the ability to grow, effectively compete, reproduce, and persist in low oxygen soil conditions.

Below is a list of wetlands that are found in the Tracy planning area:

- Farmed Wetlands: This category of wetlands includes areas that are currently in agricultural uses. This type of area occurs in the northern portion of the Tracy Planning Area.

- Lakes, Ponds and Open Water: This category of wetlands includes both natural and human-made water bodies such as that associated with working landscapes, municipal water facilities and canals, creeks and rivers.

- Seasonal Wetlands: This category of wetlands includes areas that typically fill with water during the wet winter months and then drain enough to become ideal plant habitats throughout the spring and summer. There are numerous seasonal wetlands throughout the Tracy Planning Area.

- Tidal Salt Ponds and Brackish Marsh: This category of wetlands includes areas affected by irregular tidal flooding with generally poor drainage and standing water. There are minimal occurrences along some of the larger river channels in the northern portion of the Tracy Planning Area.

None of these categories apply to the project site. The Delta Mendota Canal and the California Aqueduct are not subject to regulatory permit, such as Section 401 Water Quality certification, Section 404 Nationwide Permit, or 1600 Streambed Alteration Agreement. Therefore, this impact would be ***less than significant***.

Response d): The CNDDB record search did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to the project site. The project would not result in any impacts to Federal fisheries or essential fish habitat because there is no suitable habitat for any listed or protected fish species within the project site. The project includes widening and existing roadway, installing traffic signals, and replacing two bridges. Implementation of the proposed project would have a ***less than significant impact*** in this regard.

Response e): The General Plan includes policies related to the protection of biological resources within the project area as listed below:

- OSC-P1. New development shall meet all federal, State and regional regulations for habitat and species protection.
- OSC-P2. The City shall continue to participate with the San Joaquin Council of Governments and other agencies to implement and enforce the San Joaquin Multi Species Habitat Conservation and Open Space Plan.
- OSC-P3. New development should incorporate native, drought-tolerant vegetation into landscape plans and reduce the use of invasive, non-native plant species.

The project is not inconsistent with any of these policies. As demonstrated above and throughout this Initial Study, the project would be subject to all federal, State and regional regulations for habitat and species protection. Mitigation Measure BIO-6 requires participation in the SJMSCP. Additionally, Chapter 11.28, Water Management, of the Tracy Municipal Code requires landscape design plans which include local native plants, climate adapted non-natives, and avoidance of invasive plants. Therefore, this impact would be ***less than significant***.

Response f): The proposed project is subject to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). The proposed project does not conflict with the SJMSCP. Mitigation Measure BIO-6 requires participation in the SJMSCP. Therefore, this

potentially significant impact would be reduced to a ***less than significant*** level relative to this topic.

> ***Mitigation Measure****: Implement Mitigation Measure BIO-1. This mitigation measure is previously presented in Response a, and is re-produced below:*
>
> ***Mitigation Measure BIO-1:*** *Prior to commencement of any grading activities, the project proponent shall seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through payment of development fees for conversion of open space lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. In addition, coverage includes incidental take avoidance and minimization measures for species that could be affected as a result of the proposed project. There are a wide variety of incidental take avoidance and minimization measures contained in the SJMSCP that were developed in consultation with the USFWS, CDFW, and local agencies. The applicability of incidental takes avoidance and minimization measures are determined by SJCOG on a project basis. The process of obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a) and California Fish and Game Code Section 2081. The Section 10(a) permit also serves as a special-purpose permit for the incidental take of those species that are also protected under the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species. The SJMSCP includes the implementation of an ongoing Monitoring Plan to ensure success in mitigating the habitat impacts that are covered. The SJMSCP Monitoring Plan includes an Annual Report process, Biological Monitoring Plan, SJMSCP Compliance Monitoring Program, and the SJMSCP Adaptive Management Plan SJCOG.*

V. CULTURAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Background

A Determination of Eligibility and Effect for the Corral Hollow Road Widening Project was completed by Peak & Associates, Inc. in December 2018. Records of previously recorded cultural resources and cultural resource investigations were examined by the Central California Information Center (CCIC) of the California Historical Resources Information System. Two resources known to the CCIC are within the project area: an unrecorded segment of P-39-000089, the Delta-Mendota Canal, and an unrecorded segment of P-39-000090, the California Aqueduct. Two other resources are recorded within the search radius: P-39-000048 (a seed drill recorded in 1992) and P-39-000362 (land modification related to a gravel pit of unknown age).

Additionally, the Native American Heritage Commission (NAHC) replied to a Sacred Lands file search request from Peak & Associates on November 19, 2018 stating that there were no known Sacred Lands recorded for the project area. The NAHC also provided a list with seven organizations who may have information or concerns regarding cultural resources within or near the project area. On November 21, 2018, letters requesting information and/or comment with a map of the project area were sent to: Rhonda Morningstar Pope, Chairperson, Buena Vista Rancheria of Me-Wuk Indians; the California Valley Miwok Tribe; California Valley Miwok Tribe AKA Sheep Ranch Rancheria of Me-Wuk Indians of CA; Sara Dutschke Setchwaelo, Chairperson, Ione Band of Miwok Indians; Katherine Erolinda Perez, Chairperson, North Valley Yokuts Tribe; Gene Whitehouse, Chairperson, United Auburn Indian Community of the Auburn Rancheria; and, Raymond Hitchcock, Chairperson, Wilton Rancheria . No replies have been received to date.

A complete, intensive inspection of the project area was undertaken on August 16, 2018 by two members of Peak & Associates. The only resources that exist in the project area are the four major structures: Delta Mendota Canal (DMC), Corral Hollow Road bridge that crosses the Canal (Bridge No. 29C0186), California Aqueduct, and the Corral Hollow Road bridge that crosses the Aqueduct (Bridge No. 29C0185). All four of these properties have been field visited and recorded by Peak & Associates, who prepared detailed descriptions, site evaluations, and the Department of Parks and Recreation (DPR) 523 forms. Two of the four major structures are historic properties: DMC and California Aqueduct. See Appendix C for the full Determination of Eligibility and Effect.

Responses to Checklist Questions

Response a): The project site is located in an area known to have historical resources. According to the Determination of Eligibility and Effect, there are two historic properties present within the project area: DMC and California Aqueduct, with only the DMC on federal land. The project does not include changes to the California Aqueduct. The project does include modifications to an existing bridge which crosses the DMC. The existing bridge which crosses the DMC is not considered a contributing feature to the historic quality of the DMC. Therefore, the proposed

changes to and/or replacement of the bridge will not affect the DMC in any way. With regard to Section 106 of the National Historic Preservation Act (NHPA), it is recommended that agency seek concurrence from the California State Historic Preservation Officer (SHPO) with a finding of "no adverse effect" per § 800.4(d) (1) for the project.

Additionally, as with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown historical resource. Implementation of Mitigation Measure CUL-1 would ensure steps would be taken to reduce impacts to historical resources in the event that they are discovered during construction. Therefore, this potentially significant impact would be reduced to a ***less than significant*** level regarding this topic.

> ***Mitigation Measure CUL-1:*** *If any cultural resources, including prehistoric or historic artifact, or other indications of archaeological resources are found during grading and construction activities, all work shall be halted immediately within a 200-foot radius of the discovery until the an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).*
>
> *Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.*
>
> *If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the Applicant's expense.*

Response b) The project site is located in an area known to have cultural resources. The field and record surveys did not reveal a significant archeological resource or site on the project site. However, as with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown archaeological resource. The implementation of the following mitigation measure would ensure that this potential impact is reduced to a ***less than significant*** level regarding this topic.

> ***Mitigation Measure:*** *Implement Mitigation Measure CUL-1. This mitigation measure is previously presented in Response a, and is re-produced below:*
>
> ***Mitigation Measure CUL-1:*** *If any cultural resources, including prehistoric or historic artifact, or other indications of archaeological resources are found during grading and construction activities, all work shall be halted immediately within a 200-foot radius of the discovery until the an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).*
>
> *Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.*
>
> *If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the Applicant's expense.*

Response c): Indications are that humans have occupied San Joaquin County for over 10,000 years and it is not always possible to predict where human remains may occur outside of formal

burial sites. Therefore, excavation and construction activities, regardless of depth, may yield human remains that may not be interred in marked, formal burials.

Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." Additionally, Public Resources Code Section 5097 has specific stop-work and notification procedures to follow in the event that human remains are inadvertently discovered during project implementation.

While no human remains were indicated through the records search, or found during field surveys, implementation of the following mitigation measure would ensure that all construction activities that inadvertently discover human remains implement state required consultation methods to determine the disposition and historical significance of any discovered human remains. Implementation of the following mitigation measure would reduce this potential impact to a ***less than significant*** level***.***

> ***Mitigation Measure CUL-2****: If human remains are discovered during the course of construction, work shall be halted at the site and any nearby area reasonably suspected to overlie adjacent human remains until he San Joaquin County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, either of the following steps will be taken:*
>
> - *The coroner will contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner will make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.*
> - *The landowner shall retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs:*
>   - *The Native American Heritage Commission is unable to identify a descendent.*
>   - *The descendant identified fails to make a recommendation.*
>
> *The City of Tracy, County of San Joaquin, or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.*

VI. ENERGY

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Responses to Checklist Questions

Response a-b): Appendix F of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered "wasteful, inefficient, and unnecessary" if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The proposed project consists of widening Corral Hollow Road from the existing two-lane roadway to a four-lane major arterial with median island, sidewalks, bike facilities, landscaping, and street lights from Linne Road to I-580. The project will include design of at least two traffic signals and replacement of bridges over the Delta Mendota Canal and California Aqueduct. The amount of operational energy used at the project site would directly correlate to the amount of outdoor lighting and landscape equipment. Operational energy would be negligible as the project does not propose any new structures or uses that would energy use, increase trip generation, or VMT's. Because the project does not include any structures, the amount of electric required for operation of the project would be extremely low. The only electricity required for the project operation would be for the proposed street lights from Linne Road to I-580.

Other major sources of proposed project energy consumption include fuel used by vehicle trips generated during project construction, and fuel used by off-road construction vehicles during construction.

Off-road construction vehicles would use diesel fuel during the construction phase of the proposed project. A non-exhaustive list of off-road constructive vehicles expected to be used during the construction phase of the proposed project includes: cranes, forklifts, generator sets, tractors, excavators, and dozers.

The proposed project would also generate on-road vehicle trips during project construction (from construction workers and vendors). Estimates of vehicle fuel consumed were derived based on the assumed construction schedule, vehicle miles traveled for haulers and workers provided in the SMAQMD Roadway Construction Emissions Model, and Year 2020 gasoline MPG factors provided by EMFAC2014. Table 3 describes gasoline and diesel fuel used by on-road

mobile sources for each project component. As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the proposed project would occur during the widening component of the project. See Appendix A for a detailed calculation.

Table 3: On-Road Mobile Fuel Generated by Project Construction Activities – By Component

Project Component	*Total Worker VMT[(a)]*	*Total Hauling VMT[(a)]*	*Gallons of Gasoline Fuel[(b)]*	*Gallons of Diesel Fuel[(b)]*
Widening	2,600	30	26,732	1,162
California Aqueduct Bridge	2,360	30	12,132	581
Delta Mendota Canal Bridge	2,360	30	12,132	581
Total	**7,320**	**90**	**50,996**	**2,324**

NOTE: [(A)] PROVIDED BY SMAQMD ROADWAY CONSTRUCTION EMISSIONS MODEL. [(B)]SEE APPENDIX A FOR FURTHER DETAIL
SOURCE: SMAQMD ROADWAY CONSTRUCTION EMISSIONS MODEL; DE NOVO PLANNING GROUP, 2019.

Other

Proposed project landscape maintenance activities would generally require the use fossil fuel (i.e. gasoline) energy. For example, lawn mowers require the use of fuel for power. As an approximation, it is estimated that landscape care maintenance would require approximately one individual one full day per week (eight hours per week), or 416 hours per year. Assuming an average of approximately 0.5 gallons of gasoline used per person-hour, the proposed project would require the use of approximately 208 gallons of gasoline per year to power landscape maintenance equipment. The energy used to power landscape maintenance equipment would not differ substantially from the energy required for landscape maintenance for similar project.

Conclusion

The proposed project would use energy resources for the on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the proposed project, from off-road construction activities associated with the proposed project (e.g. diesel fuel), and from landscape maintenance activities (e.g., gasoline and diesel fuel). Each of these activities would require the use of energy resources.

The proposed project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. For example, PG&E is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E is expected to achieve at least a 33% mix of renewable energy resources by 2020, and 50% by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards ("part 6"), would be applicable to the proposed project (note: as provided under Mitigation Measure 3.7-1, the proposed project would achieve a 15% increase in energy efficiency beyond the 2016 version of the Title 24 Energy code). Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. Furthermore, as described previously, the incorporation of the mitigation measures described previously in this section would further reduce project energy consumption.

As a result, the proposed project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations,

maintenance, and/or removal. PG&E, the electricity and natural gas provider to the proposed street lights, maintains sufficient capacity to serve the proposed project. The proposed project would comply with all existing energy standards, including those established by the City of Tracy, and would not result in significant adverse impacts on energy resources. For these reasons, the proposed project would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the threshold as described by Appendix F of the CEQA Guidelines. This is a ***less than significant*** impact.

VII. GEOLOGY AND SOILS

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*No Impact*
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?		X		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

Responses to Checklist Questions

Responses a.i), a.ii): The project site is located in an area of low to moderate seismicity. No known active faults cross the project site, and the site is not located within an Alquist-Priolo Earthquake Fault Zone; however, relatively large earthquakes have historically occurred in the Bay Area and along the margins of the Central Valley. Many earthquakes of low magnitude occur every year in California. The nearest earthquake fault zoned as active by the State of California Geological Survey is the Black Butte fault, located approximately 2.7 miles southwest of the site.

The Tracy area has a low-to-moderate seismic history. The largest recorded measurable magnitude earthquake in Tracy measured 3.9 on the Richter scale. The greatest potential for

significant ground shaking in Tracy is believed to be from maximum credible earthquakes occurring on the Calaveras, Hayward, San Andreas, or Greenville faults. Further seismic activity can be expected to continue along the western margin of the Central Valley, and as with all projects in the area, the Project will be designed to accommodate strong earthquake ground shaking, in compliance with the applicable California building code standards.

Other faults capable of producing ground shaking at the site include the San Joaquin fault, 6.7 miles southwest; the Midway fault, 6.9 miles southwest; and the Corral Hollow-Carnegie fault, 10.7 miles southwest of the site. Any one of these faults could generate an earthquake capable of causing strong ground shaking at the subject site. Earthquakes of Moment Magnitude (Mw) 7 and larger have historically occurred in the region and numerous small magnitude earthquakes occur every year.

Since there are no known active faults crossing the project site and the site is not located within an Earthquake Fault Special Study Zone, the potential for ground rupture at the site is considered low.

An earthquake of moderate to high magnitude generated within the San Francisco Bay Region and along the margins of the central valley could cause considerable ground shaking at the site, similar to that which has occurred in the past. In order to minimize potential damage to the proposed project caused by groundshaking, all construction would comply with the latest California Building Code standards, as required by the City of Tracy Municipal Code 9.04.030.

Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures should be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

Implementation of the California Building Code standards, which include provisions for seismic building designs, would ensure that impacts associated with groundshaking would be less than significant. Building new structures for human use would increase the number of people exposed to local and regional seismic hazards. Seismic hazards are a significant risk for most property in California.

The Safety Element of the Tracy General Plan includes several goals, objectives and policies to reduce the risks to the community from earthquakes and other geologic hazards. In particular, the following policies would apply to the project site:

> **SA-1.1, Policy P2:** Geotechnical reports shall be required for development in areas where potentially serious geologic risks exist. These reports should address the degree of hazard, design parameters for the project based on the hazard, and appropriate mitigation measures.
>
> **SA-1.2, Policy P1:** All construction in Tracy shall conform to the California Building Code and the Tracy Municipal Code including provisions addressing unreinforced masonry buildings.

The City reviews all proposed projects for consistency with the General Plan policies and California Building Code provisions identified above, as applicable. This review occurs

throughout the project application review and processing stage, and throughout plan check and building inspection phases prior to the issuance of a certificate of occupancy. Since the majority of work under the scope of this project involves roadway and bridges, the relevant Caltrans, state, and FHWA codes and requirements will be enforced.

Consistency with the requirements of the California Building Code and the Tracy General Plan policies identified above would ensure that impacts on humans associated with seismic hazards would be ***less than significant***. No additional mitigation is required.

Responses a.iii), c), d): Liquefaction normally occurs when sites underlain by saturated, loose to medium dense, granular soils are subjected to relatively high ground shaking. During an earthquake, ground shaking may cause certain types of soil deposits to lose shear strength, resulting in ground settlement, oscillation, loss of bearing capacity, landsliding, and the buoyant rise of buried structures. The majority of liquefaction hazards are associated with sandy soils, silty soils of low plasticity, and some gravelly soils. Cohesive soils are generally not considered to be susceptible to liquefaction. In general, liquefaction hazards are most severe within the upper 50 feet of the surface, except where slope faces or deep foundations are present.

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of clay-type soils. Expansive soils shrink and swell in volume during changes in moisture content, such as a result of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections.

Soil expansion is dependent on many factors. The more clayey, critically expansive surface soil and fill materials will be subjected to volume changes during seasonal fluctuations in moisture content. According to the City of Tracy General Plan Draft EIR, portions of the Tracy Planning Area have a moderate to high risk for expansive soils. The General Plan EIR indicates that with the implementation of objectives, policies, and actions from the General Plan Safety Element, this potentially significant impact would be reduced to a ***less than significant*** level.

Responses a.iv): The project site is relatively flat with slopes increasing as vehicles travel south on Corral Hollow towards I-580. According to the City's General Plan EIR, the landslide risk in Tracy is low in most areas. In the wider Tracy Planning Area, some limited potential for risk exists for grading and construction activities in the foothills and mountain terrain of the upland areas in the southwest. The potential for small scale slope failures along river banks also exists. The project site is not located in the foothills, mountain terrain, or along a river bank. As such, the project site is exposed to little or no risk associated with landslides. This is a ***less than significant*** impact and no mitigation is required.

Responses b): During the construction preparation process, existing vegetation would be removed to grade and compact the project site, as necessary. As construction occurs, these exposed surfaces could be susceptible to erosion from wind and water. Effects from erosion include impacts on water quality and air quality. Exposed soils that are not properly contained or capped increase the potential for increased airborne dust and increased discharge of sediment and other pollutants into nearby stormwater drainage facilities. Risks associated with erosive surface soils can be reduced by using appropriate controls during construction and properly re-vegetating exposed areas. Mitigation Measures AQ-1 and AQ-2 require the implementation of various dust control measures during site preparation and construction activities that would reduce the potential for soil erosion and the loss of topsoil. Additionally, implementation of

various best management practices (BMPs) associated with the project-specific SWPPP would reduce the potential for disturbed soils and ground surfaces to result in erosion and sediment discharge into adjacent surface waters during construction activities. The implementation of these required mitigation measures and SWPP would ensure these impacts are ***less than significant***.

Response c): Liquefaction: Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. According to the City of Tracy General Plan Draft EIR, the south central portion of the Tracy Planning Area is moderately susceptible liquefaction due to loose, coarse-grained deposits. The General Plan EIR indicates that with the implementation of objectives, policies, and actions from the General Plan Safety Element, this potentially significant impact would be reduced to a ***less than significant*** level.

Lateral Spreading: Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is also directly associated with areas of liquefaction. Since the potential for liquefaction is moderate to high, the potential for lateral spreading is present. The General Plan Draft EIR indicates that with the implementation of goals, policies, and implementation measures from the 2023 General Plan Safety Element this potentially significant impact would be reduced to a ***less than* significant** levels.

Landslides: Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e. cut and fill). The project site is flat; therefore, as previously discussed in part a), the potential for a landslide in the project site is low. Implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

Collapsible Soils: Collapsible soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. Collapsible soils occur predominantly at the base of mountain ranges, where Holocene-age alluvial fan and wash sediments have been deposited during rapid run-off events. Differential settlement of structures typically occurs when heavily irrigated landscape areas are near a building foundation. Examples of common problems associated with collapsible soils include tilting floors, cracking or separation in structures, sagging floors, and nonfunctional windows and doors. Soil data from the NRCS Web Soil Survey suggests a low potential for collapsible soils on the project site. Therefore, implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

Subsidence: Land subsidence is the gradual settling or sinking of an area with little or no horizontal motion due to changes taking place underground. It is a natural process, although it can also occur (and is greatly accelerated) as a result of human activities. Common causes of land subsidence from human activity include: pumping water, oil, and gas from underground reservoirs; dissolution of limestone aquifers (sinkholes); collapse of underground mines; drainage of organic soils; and initial wetting of dry soils. However, subsidence is not a characteristic of the soil series found within the study area. According to the City's General Plan EIR, the project site is not located in an area known to have shallow groundwater levels. Therefore**,** implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

Conclusion: The project site does not have a significant risk of becoming unstable as a result landslide, subsidence, or collapse. Because the proposed project must be consistent with the current General Plan which provides specific policies and measures to address unstable soils, the proposed project would have a ***less than significant*** impact relative to these topics**.**

Responses d): Expansive soils are those that shrink or swell with the change in moisture content. The volume of change is influenced by the quantity of moisture, by the kind and amount of clay in the soil, and by the original porosity of the soil. Shrinking and swelling can damage roads and other structures unless special engineering design is incorporated into the project plans.

The California Building Standards Code requires a final geotechnical evaluation to be performed at a design-level to ensure that the roadway sections, sidewalks, and other improvements can accommodate the specific soils, including expansive soils, at those locations. The following mitigation measure presented below provides the requirement for a final geotechnical evaluation. The final geotechnical evaluation would include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people on the project site. The grading and improvement plans, as well as the storm drainage outfall, are required to be designed in accordance with the recommendations provided in the final geotechnical evaluation. Therefore, this potential impact would be reduced to a ***less than significant*** level in relation to this topic.

> ***Mitigation Measure GEO-1:*** *Prior to earthmoving activities, a certified geotechnical engineer, or equivalent, shall be retained to perform a final geotechnical evaluation of the soils at a design-level. The final geotechnical evaluation shall include design recommendations to ensure that soil conditions do not pose a threat to the health and safety of people or structures. The grading and improvement plans, shall be designed in accordance with the recommendations provided in the final geotechnical evaluation*.

Response e): The proposed project would not require the use of septic tanks or alternative waste water disposal systems for the disposal of waste water. Implementation of the proposed project would result in ***no impact*** relative to this topic.

Response f): The field and record surveys did not reveal any surface evidence of paleontological resources on the project site. The project site is not expected to contain subsurface paleontological resources, although it is possible. Damage to or destruction of a paleontological resource would be considered a potentially significant impact under local, state, or federal criteria. Implementation of the following mitigation measure would ensure steps would be taken to reduce impacts to paleontological resources in the event that they are discovered during construction. This would ensure that any potentially significant impacts would be reduced to a ***less than significant*** level regarding this topic.

> ***Mitigation Measure GEO-2:*** *If paleontological resources are discovered during the course of construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Tracy or San Joaquin County shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. If the paleontological resource is considered significant, it should be excavated by a qualified paleontologist and given to a local agency, State University, or other applicable institution, where they could be curated and displayed for public education purposes.*

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?			X	

Responses to Checklist Questions

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring greenhouse gases include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three greenhouse gases have increased globally by 40, 150, and 20 percent, respectively (Intergovernmental Panel on Climate Change [IPCC], 2013).

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

The emissions from a single project will not cause global climate change, however, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. Therefore, the analysis of GHGs and climate change presented in this section is presented in terms of the proposed project's contribution to cumulative impacts and potential to result in cumulatively considerable impacts related to GHGs and climate change.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a proposed project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the *combined* effects from *both* the proposed project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the proposed project's *incremental* effects are cumulatively considerable" and thus significant in and of themselves. The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global

climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

Significance Thresholds

Governor's Office of Planning and Research's (OPR's) Guidance does not include a quantitative threshold of significance to use for assessing a project's GHG emissions under CEQA. Moreover, the California Air Resources Board (CARB) has not established such a threshold or recommended a method for setting a threshold for project-level analysis. In the absence of a consistent statewide threshold, a threshold of significance for analyzing the project's GHG emissions was developed. The issue of setting a GHG threshold is complex and dynamic, especially in light of the California Supreme Court decision in *Center for Biological Diversity v. California Department of Fish and Wildlife* (referred to as the Newhall Ranch decision hereafter). The California Supreme Court ruling also highlighted the need for the threshold to be tailored to the specific project type, its location, and the surrounding setting. Therefore, the threshold used to analyze the project is specific to the analysis herein and the City retains the ability to develop and/or use different thresholds of significance for other projects in its capacity as lead agency and recognizing the need for the individual threshold to be tailored and specific to individual projects.

The SJVAPCD provides guidance for addressing GHG emissions under CEQA. The SJVAPCD requires quantification of GHG emissions for all projects which the lead agency has determined that an EIR is required. Although an EIR is not required for the proposed project, the GHG emissions are quantified below, followed by a consistency analysis with the SJCOG RTP/SCS.

Responses to Checklist Questions

Responses a) and b):

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the proposed project would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 and other GHG pollutants, such as CH_4 and N_2O, from construction.

Operational emissions would be negligible as the project does not propose any new structures or uses that would increase trip generation or VMT. The proposed project's short-term construction-related GHG emissions for buildout of the proposed project were estimated using the SMAQMD Roadway Construction Emissions Model (version 9.0). Emissions are expressed in metric tons of CO_2 equivalent units of measure (i.e., $MTCO_2e$), based on the global warming potential of the individual pollutants.

Short-Term Construction GHG Emissions

Estimated increases in GHG emissions associated with construction of the proposed project are summarized in Table 4.

Table 4: Construction GHG Emissions (Unmitigated Metric Tons)

Project Component	*CH_4*	*N_2O*	*CO_2e*
Widening	0.15	0.01	531.47
California Aqueduct Bridge	0.10	0.00	310.83
Delta Mendota Canal Bridge	0.10	0.00	310.83
Total	**0.35**	**0.01**	**1,153.13**

SOURCE: SMAQMD ROADWAY CONSTRUCTION EMISSIONS MODEL.

As presented in the table, short-term annual construction emissions of GHG associated with development of the project are estimated to be 1,153.13 $MTCO_2e$. These construction GHG emissions are a one-time release and are comparatively much lower than emissions associated with operational phases of a project. Cumulatively, these construction emissions would not generate a significant contribution to global climate change.

Regional Transportation Plan/Sustainable Communities Strategy

SJCOG adopted the Final Draft of the RTP/SCS on June 2018. The RTP/SCS reflects a region-specific, balanced multimodal plan that only achieves the intent and promise of SB 375 and can be implemented through existing and planned programs or policies. The RTP/SCS foundation comprises recent household and job growth forecasts, market demand and economic studies, and transportation studies including SJCOG's Smart Growth Transit Oriented Development Plan, Goods Movement Study, and Regional Bike/Pedestrian/Safe Routes to School Master Plan.

The purpose of the project is to upgrade a second phase of Corral Hollow Road to accommodate the existing and future transportation functions anticipated through General Plan buildout. The proposed project is consistent with the General Plan vision for the project area, and the proposed project supports the future development that is included within the SJCOG projections. Implementation of the proposed project would not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. Improvements to roadway system created by the project represent a planned effort to coordinate improvements to accommodate the future buildout of the General Plan.

Overall, the proposed project would be generally consistent with the goals and strategies of the RTP/SCS.

Conclusion

The maximum short-term annual construction emissions of GHG associated with development of the project are estimated to be 1,153.13 $MTCO_2e$. As stated previously, short-term construction GHG emissions are a one-time release of GHGs and are not expected to significantly contribute to global climate change over the lifetime of the proposed project. Additionally, the project would be generally consistent with the goals, policies, and measures of the RTP/SCS. Therefore, impacts related to GHG emissions and global climate change would be considered ***less than significant***.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
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?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
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?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

Responses to Checklist Questions

Response a): Construction equipment and materials would likely require the use of petroleum based products (oil, gasoline, diesel fuel). The use of these materials is normal at any construction site and will not pose a reasonable risk of release into the environment if properly handled, and transported. However, a release into the environment could pose significant impacts to the health and welfare of people and/or wildlife, and could result in contamination of water, habitat, and agricultural resources. This includes fuels and petroleum products. Implementation of the following mitigation measure would ensure any potential impacts would be reduced to ***less than significant*** levels relative to this topic.

> ***Mitigation Measure HAZ-1:*** *In the event that hazardous materials are encountered during construction, a Soils Management Plan (SMP) shall be submitted and approved by the San Joaquin County Department of Environmental Health. The SMP shall establish management practices for handling and disposal of hazardous materials, including fuels, cleaners, solvents, etc., during construction. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.*

Operational impacts from the proposed project would not result in increased routine transport, use or disposal of hazardous materials. The use, clean up, and disposal of potentially hazardous construction materials is managed according to standard procedures to protect air quality, water quality, and the environment. Implementation of the proposed project would result in a ***less than significant*** impact relative to this topic.

Response b): Operation of the proposed project would not result in a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The use, clean up, and disposal of any potentially hazardous construction materials encountered during construction will be managed according to standard procedures to protect air quality, water quality, and the environment as per state laws and is not expected to result in a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. For example, in such event the project would be subject to the San Joaquin County Department of Environmental Health's Hazardous Materials Business Plan Program, which aims to protect the public health and safety and the environment by establishing business and area plans relating to the handling and release or threatened release of hazardous materials. Implementation of the following mitigation measure would reduce any potential impacts to a ***less than significant*** level relative to this topic.

> ***Mitigation Measure:*** *Implement Mitigation Measure HAZ-1. This mitigation measure is previously presented in Response a, and is re-produced below:*
>
> ***Mitigation Measure HAZ-1:*** *In the event that hazardous materials are encountered during construction, a Soils Management Plan (SMP) shall be submitted and approved by the San Joaquin County Department of Environmental Health. The SMP shall establish management practices for handling and disposal of hazardous materials, including fuels, cleaners, solvents, etc., during construction. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.*

Response c): The proposed project would not emit hazardous emissions or handle hazardous or increase hazardous materials, substances, or waste. The nearest school to the project site is Anthony Traina Elementary School (0.6 miles northeast). Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response d): The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, project implementation would have ***no impact*** relative to this topic.

Response e): The project is located within the airport land use area for the Tracy Municipal Airport, which is located west of the project site. Tracy Municipal Airport is owned and operated by the City of Tracy. Located within the city limits, this general aviation airport provides a range of aviation services including general aviation and jet fuel sales, and hangar and tie down rentals. Portions of the project site are located in Compatibility Zones 2 (Inner Approach/Departure Zone), 3 (Inner Turning Zone), 4 (Outer Approach/Departure Zone), 7 (Traffic Pattern Zone), and 8 (Airport Influence Area). The bridge over the California Aqueduct, which will be replaced as part of the project, is located in Compatibility Zone 7 (Traffic Pattern Zone), and the bridge over the Delta Mendota Canal is located on the border of Compatibility Zones 2 (Inner Approach/Departure Zone) and 3 (Inner Turning Zone).

According to the Airport Land Use Compatibility Plan for this airport, the following actions affect land uses within any compatibility zone:

(1) Proposed residential development, including land divisions, consisting of five or more dwelling units or lots.
(2) Proposed development agreements or amendments to such agreements.
(3) Any proposed expansion of the sphere of influence of a city or special district.
(4) Proposed pre-zoning associated with future annexation of land to a city.
(5) Any discretionary development proposal for projects having a building floor area of 20,000 square feet or greater unless only ministerial approval (e.g., a building permit) is required.
(6) Major capital improvements (e.g., water, sewer, or roads) which would promote urban uses in undeveloped or agricultural areas to the extent that such uses are not reflected in a previously reviewed general plan or specific plan.
(7) Proposed land acquisition by a government entity for any facility accommodating a congregation of people (for example, a school or hospital).
(8) Any off-airport, non-aviation use of land within the runway protection zone (RPZ) of any airport.
(9) Proposals for new development (including buildings, antennas, and other structures) having a height of more than:

- No development is allowed within the RPZ;
- 35 feet above ground level (AGL) within the Inner Approach/Departure Zone;
- 70 feet AGL within Extended Approach/Departure Zone; or
- 150 feet AGL within Sideline Safety or Traffic Pattern Zone.

(10) Any obstruction reviewed by the Federal Aviation Administration (FAA) in accordance with Part 77 of the CFR that receives a finding of anything other than "not a hazard to air navigation."
(11) Any project having the potential to create electrical or visual hazards to aircraft in flight, including:

- Electrical interference with radio communications or navigational signals; Lighting which could be mistaken for airport lighting;
- Glare in the eyes of pilots of aircraft using the airport; and
- Impaired visibility near the airport.

(12) Projects having the potential to cause attraction of birds or other wildlife that can be hazardous to aircraft operations to be increased within the vicinity of an airport accordance with accordance with Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports.*

(13) Proposed non-aviation development of airport property (hotels, motels, restaurants and non-aviation related commercial/office buildings) if such development has not previously been included in an airport master plan or community general plan. (See Policy 3.1.1(f)).

The only action listed above which apply to the proposed project is action 9, reproduced below:

(9) Proposals for new development (including buildings, antennas, and other structures) having a height of more than:

- No development is allowed within the RPZ;
- 35 feet above ground level (AGL) within the Inner Approach/Departure Zone;
- 70 feet AGL within Extended Approach/Departure Zone; or
- 150 feet AGL within Sideline Safety or Traffic Pattern Zone.

The project would include widening of Corral Hollow Road, associated street lighting, and replacement of two bridges (one over the Delta Mendota Canal and one over the California Aqueduct). The roadway widening would not conflict with action 9. The bridge over the California Aqueduct would be located in Compatibility Zone 7 (Traffic Pattern Zone). This bridge would not be over 150 feet AGL, as required by action 9 above. The bridge over the Delta Mendota Canal would be located in Compatibility Zones 2 (Inner Approach/Departure Zone) and 3 (Inner Turning Zone). This bridge would not be over 35 feet AGL, as required by action 9 above. Similarly, if required in Compatibility Zone 2 (Inner Approach/Departure Zone), the roadway lighting would not be over 35 feet AGL.

The proposed roadway widening, traffic signals, and replacement of bridges are not prohibited within the aforementioned Compatibility Zones. The proposed uses and object heights would be allowed within all of the Compatibility Zones. Therefore, the proposed project would not conflict with the Airport Land Use Compatibility Plan for Tracy Municipal Airport, and would not result in a safety hazard or excessive noise for people residing or working in the project area. Further, SJCOG would review the project application to confirm consistency with San Joaquin County's Aviation System Airport Land Use Compatibility Plan.

Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Response f): The project site currently connects to an existing network of City streets. The proposed roadway widening and circulation improvements would allow for greater emergency access relative to existing conditions. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response g): The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The County has areas with an abundance of flashy fuels (i.e. grassland) in the foothill areas of the County. The project would not result in development of structures or housing which would subject residents, visitors, or workers to long-term wildfire danger. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

X. HYDROLOGY AND WATER QUALITY

Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporation**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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:		X		
(i) Result in substantial erosion or siltation on- or off-site;		X		
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;		X		
(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		X		
(iv) Impede or redirect flood flows?		X		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Responses to Checklist Questions

Response a): The proposed project does not contain any drainage connectivity to Waters of the US. The proposed project would not generate wastewater which would require treatment. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. In order to ensure that stormwater runoff from the project site does not adversely increase pollutant levels in adjacent surface waters and stormwater conveyance infrastructure, the application of BMPs to effectively reduce pollutants from stormwater leaving the site during both the construction and operational phases of the project are required. As noted in the project description, a SWPPP would be required to be approved prior to construction activities pursuant to the Clean Water Act.

Through compliance with the NPDES permit requirements, and compliance with the SWPPP, the proposed project would not result in a violation of any water quality standards or waste discharge requirements. Therefore, through compliance with the NPDES, and SWPPP

requirements, the proposed project would result in a ***less than significant*** impact relative to this topic.

Response b): The proposed project would not require ground water supplies, and would not interfere with groundwater recharge. The project area is not a groundwater recharge area. As such, impacts from project implementation would be ***less than significant*** relative to this topic.

Responses c.i)-c.iv): The proposed project would not alter a stream or river. The road right of way is currently an impervious surface that drains to roadside ditches. The widening of this roadway would result in additional impervious surfaces. As a standard practice, the City requires post-project runoff to be equal to or less than pre-project runoff, which would ensure that the proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

Additionally, the project is subject to the requirements of Chapter 11.34 of the Tracy Municipal Code – Stormwater Management and Discharge Control. The purpose of this Chapter is to *"Protect and promote the health, safety and general welfare of the citizens of the City by controlling non-stormwater discharges to the stormwater conveyance system, by eliminating discharges to the stormwater conveyance system from spills, dumping, or disposal of materials other than stormwater, and by reducing pollutants in urban stormwater discharges to the maximum extent practicable."*

This chapter is intended to assist in the protection and enhancement of the water quality of watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Federal Water Pollution Control Act (Clean Water Act, 33 USC Section 1251 et seq.), Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.) and NPDES Permit No. CAS000004, as such permit is amended and/or renewed.

New projects in the City of Tracy are required to provide site-specific storm drainage solutions and improvements that are consistent with the overall storm drainage infrastructure approach presented in the 2012 City of Tracy Citywide Storm Drainage Master Plan. Prior to approval of the improvement plans, a detailed storm drainage infrastructure plan shall be coordinated with the City of Tracy Development Services Department and Utilities Department for review and approval. The project's storm drainage infrastructure plans must demonstrate adequate infrastructure capacity to collect and direct all stormwater generated on the project site to the existing stormwater conveyance system, and demonstrate that the project would not result in on- or off-site flooding impacts.

In order to ensure that stormwater runoff from the project site does not adversely increase pollutant levels in adjacent surface waters and stormwater conveyance infrastructure, or otherwise degrade water quality, a SWPPP would be required. The SWPPP would require the application of BMPs to effectively reduce pollutants from stormwater leaving the site, which would ensure that stormwater runoff does not adversely increase pollutant levels, and would reduce the potential for disturbed soils and ground surfaces to result in erosion and sediment discharge into adjacent surface waters during construction and operational phases of the project.

In order to ensure that stormwater runoff generated at the project site as a result of new impervious surfaces does not exceed the capacity of the existing or planned stormwater drainage system, Mitigation Measure HYDRO-1 requires the project applicant to complete and coordinate a detailed storm drainage infrastructure plan with the City for review and approval. The project's storm drainage infrastructure plans shall, to the satisfaction of the Engineer, demonstrate

adequate infrastructure capacity to collect and direct all stormwater generated on the project site to the City's existing stormwater conveyance system, and demonstrate that the project would not result in on- or off-site flooding impacts.

The following mitigation measure would require that a storm drainage plan be designed and engineered to ensure that post-project runoff is equal to or less than pre-project runoff. Therefore, impacts from project implementation would be reduced to a ***less than significant*** level relative to this topic.

> ***Mitigation Measure HYDRO-1:*** *The project's storm drainage infrastructure plans shall, to the satisfaction of the City, demonstrate adequate infrastructure capacity to collect and direct all stormwater generated on the project site to the City's existing and future stormwater conveyance system, and demonstrate that the project would not result in on- or off-site flooding impacts.*

Response d): The project site is not within a 100-year or 200-year flood zone as delineated by FEMA. The project site is not within a tsunami or seiche zine, Development of the proposed project would not place housing or structures in a flood hazard area. As a result, the proposed project would have a ***less than significant*** impact relative to this topic.

Response e): The Water Quality Control Plan for the Central Valley Region and the 2014 Eastern San Joaquin Integrated Water Resources Master Plan (IRWMP) are the two guiding documents for water quality and sustainable groundwater management in the project area. Consistency with the two plans are discussed below.

Water Quality Control Plan for the Central Valley Region

The Water Quality Control Plan for the Central Valley Region (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where known.

As discussed above, impacts related to water quality during construction and operation would be less-than-significant with implementation of the Mitigation Measure HYDRO-1 and the project-specific SWPPP. The proposed project would create new impervious surfaces along Corral Hollow Road. The long-term operations of the proposed project would not result in long-term impacts to surface water quality from urban stormwater runoff.

2014 Eastern San Joaquin IRWMP

The 2014 Eastern San Joaquin IRWMP defines and integrates key water management strategies to establish protocols and courses of action to implement the Eastern San Joaquin Integrated Conjunctive Use Program. The 2014 Eastern San Joaquin IRWMP is an update and expansion of the 2007 IRWMP prepared for the Eastern San Joaquin Region. There has been significant progress toward implementing the goal of improving the sustainability and reliability of water supplies in the Region, but the process is ongoing and as yet incomplete. The IWRMP does not include requirements for individual projects, such as the proposed project. Instead, the IWRMP outlines projects to be carried out which achieve regional goals, such as reduced water demand, improved efficiency, improved water quality, and improved flood management.

As discussed previously, the project would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. The proposed project would result in new impervious surfaces along the roadway that could reduce rainwater infiltration and groundwater recharge. Rainwater which falls on the widened roadway would flow to the adjacent stormwater facilities. Additionally, the proposed project would not require ground water supplies, and, as such would not interfere with groundwater recharge.

Conclusion

Overall, implementation of the proposed project would have a ***less than significant*** impact related to conflicts with the Basin Plan and the Groundwater Management Plan.

XI. LAND USE AND PLANNING

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Physically divide an established community?				X
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?			X	

Responses to Checklist Questions

Response a): The project site is located in the southern portion of the City of Tracy and unincorporated San Joaquin County. The project site is adjacent primarily to undeveloped land, and agricultural land. The project site would result in the widening of an existing roadway, development of traffic signals, and development of bridge replacements. Development of the project would not result in any physical barriers, such as a wall, or other division, that would divide an existing community, but would serve as an orderly extension of an existing roadway. The project would have ***no impact*** in regards to the physical division of an established community.

Response b): The key planning documents that are directly related to, or that establish a framework within which the proposed project must be consistent, include:

- City of Tracy General Plan; and
- City of Tracy Zoning Ordinance.

The proposed project would not require changes to any land use or zoning designations. Therefore, impacts to land use compatibility would be ***less than significant***.

XII. MINERAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
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?			X	
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?			X	

Responses to Checklist Questions

Response a): As described in the Tracy General Plan EIR, the main mineral resources found in San Joaquin County, and the Tracy Planning Area, are sand and gravel (aggregate), which are primarily used for construction materials like asphalt and concrete. According to the California Geological Survey (CGS) evaluation of the quality and quantity of these resources, the most marketable aggregate materials in San Joaquin County are found in three main areas:

- In the Corral Hollow alluvial fan deposits south of Tracy
- Along the channel and floodplain deposits of the Mokelumne River
- Along the San Joaquin River near Lathrop

Figure 4.8-1 of the General Plan EIR identifies Mineral Resource Zones (MRZs) throughout the Tracy Planning Area. The project site is located within an area designated as MRZ-2. The MRZ-2 designation applies to areas containing mineral resources. The project site is not used for mineral extraction. The project site includes an existing roadway which would be widened as part of the proposed project. The project site fronts a newly proposed development project (Tracy Hills) that has recently obtained entitlements for the construction. The purpose of the project is to upgrade a second phase of Corral Hollow Road to accommodate the existing and future transportation functions anticipated through General Plan buildout. As such, mineral extraction in the project are near existing and future residential and other urban uses is highly unlikely. Therefore, the project would not result in the loss of availability of a known mineral resource. This impact is considered ***less than significant***.

XIII. NOISE

Would the project result in:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
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?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?			X	

Key Noise Terms

Acoustics The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of noise.

A-Weighting A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.

CNEL Community noise equivalent level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second or Hertz.

Impulsive Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.

L_{dn} Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

L_{eq} Equivalent or energy-averaged sound level. This section provides a general description of the existing noise sources in the project vicinity, a discussion of the regulatory setting, and identifies potential noise impacts associated with the proposed project. Project impacts are evaluated relative to applicable noise level criteria and to the existing ambient noise environment.

L_{max} The highest root-mean-square (RMS) sound level measured over a given period of time.

$L_{(n)}$ The sound level exceeded a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50 percent of the time during the one hour period.

Loudness A subjective term for the sensation of the magnitude of sound.

Noise Unwanted sound.

SEL Sound exposure levels. A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.

Responses to Checklist Questions

Response a): Construction Noise

Construction activities have the potential to create temporary, or periodic increases in ambient noise levels in the project vicinity above levels existing without the project. During the construction of the project, including the roadway widening and bridge construction, noise from construction activities would add to the noise environment in the project vicinity. The site improvements and roadway construction would include the use of heavy equipment including grading and compacting that can generate noise. Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration and would likely occur primarily during daytime hours.

Table 5 provides a list of the types of equipment which may be associated with construction activities and the associated noise levels. One residence is located along Corral Hollow Road, northwest of the California Aqueduct. The other nearby residences are located northeast and northwest of the Corral Hollow Road and Linne Road intersection. The nearest residential receptors would be located roughly 25 feet or further from construction activities, although most construction activities would be over 500 feet from a receptor.

Table 5: Construction Equipment Noise

Type of Equipment	*Predicted Noise Level (L_{max} Db)*				*Distances To Noise Contours (Feet)*	
	Noise Level At 50'	*Noise Level At 100'*	*Noise Level At 50'*	*Noise Level At 100'*	*Noise Level At 50'*	*Noise Level At 100'*
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

Noise sensitive receptors near the construction site would, at times, experience elevated noise levels from construction activities; however, construction-related noise generally would occur

during daytime hours only. General Plan Noise Element Policy 4 (Goal N-1.2) establishes the following construction requirements:

> *All construction in the vicinity of noise sensitive land uses, such as residences, hospitals, or convalescent homes, shall be limited to daylight hours or 7:00 a.m. to 7:00 p.m. In addition, the following construction noise control measures shall be included as requirements at construction sites to minimize construction noise impacts:*
>
> - *Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.*
> - *Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction area.*
> - *Utilize "quiet" air compressors and other stationary noise sources where technology exists.*

Implementation of these required measures (i.e., engine muffling, placement of construction equipment, and strategic stockpiling and staging of construction vehicles), and compliance with the City Municipal Code requirements, would serve to further reduce exposure to construction noise levels. Adherence to City General Plan, City Municipal Code Title 4.12, Article 9 (Noise Control Ordinance), would minimize any impacts from noise during construction. Requirements stated above are adopted by the City as Conditions of Approval (COAs) for all new projects prior to project approval.

Additionally, the project site and vicinity were assumed for urban development as part of the City's General Plan and General Plan EIR. Build-out of the City's General Plan land use map, including the proposed roadway widening, will inherently result in construction and construction-related noise levels. Adherence to the City General Plan and City Municipal Code (Title 4.12, Article 9, Noise Control Ordinance), would minimize any impacts from noise during construction to the extent practicable. Because of the nature time and duration of construction activities near sensitive receptors noise impacts from construction activities would cease upon project completion. Therefore, implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Response b): Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 6 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum

threshold or 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

Table 6: Effects of Vibration on People and Buildings

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/sec.	in./sec.		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBORN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

The vibration-generating activities typically happen during construction when activities such as grading and road construction occur. Sensitive receptors which could be impacted by construction-related vibrations, especially vibratory compactors/rollers, are located approximately 25 feet or further from the activity, although most activities would be over 500 feet from a receptor. At this distance, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table 7 shows the typical vibration levels produced by construction equipment.

Table 7: Vibration Levels for Varying Construction Equipment

Type of Equipment	Peak Particle Velocity @ 25 feet (inches/second)	Peak Particle Velocity @ 100 feet (inches/second)
Large Bulldozer	0.089	0.011
Loaded Trucks	0.076	0.010
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.011
Jackhammer	0.035	0.004
Vibratory Hammer	0.070	0.009
Vibratory Compactor/roller	0.210	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006.

Table 7 data indicate that construction vibration levels anticipated for the proposed project are less than the 0.1 in/sec criteria at distances of 50 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading and roadway construction occur. Sensitive receptors could be impacted by construction related vibrations. The nearest residential receptors would be located roughly 25 feet or further from construction activities, although most construction activities would be over 500 feet from a receptor. At these distances, construction vibrations are not predicted to exceed acceptable levels. The use of construction equipment near existing receptors will not exceed the 0.1 in/sec threshold of annoyance criteria and threshold for structure damage of 0.2 in/sec. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. Therefore, this impact would be considered ***less than significant***.

Response c): The project is located within the airport land use area for the Tracy Municipal Airport, which is located west of the project site. Tracy Municipal Airport is owned and operated by the City of Tracy. Located within the city limits, this general aviation airport provides a range of aviation services including general aviation and jet fuel sales, and hangar and tie down rentals. Approximately 500 feet of Corral Hollow Road in the project area is located in the 95 dB single event contour for this airport. The remainder of the site is not in the single event contour.

The project does not include any permanent residents or workers. However, in the short-term, workers along the approximately 500-feet stretch of Corral Hollow Road within the single event contour would likely be subject to noise levels up to 95 dB as a result of the Tracy Municipal Airport operations. These noise levels would be short-term and infrequent. Additionally, as shown in Table 5, the construction workers are subject to loud noises as a result of construction equipment operation. Noise levels can range from 60 dB to 82 dB depending on the equipment type. The infrequent, short-term noise exposure along a small portion of the overall project footprint would not result in health or safety concerns for the workers in the area. Additionally, construction workers typically use safety equipment, such as ear plugs or earmuffs, which can reduce noise levels during particularly noisy activities. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

XIV. POPULATION AND HOUSING

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) 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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Responses to Checklist Questions

Response a): The project does not propose any housing that would result in direct population growth. However, projects that do not directly induce population growth still have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. The project will expand the roadway system. However, improvements to the roadway system created by the project represent a planned effort to coordinate improvements to accommodate the future buildout under the General Plan. Any individual future projects would have to be consistent with the General Plan and are subject to environmental review under CEQA. No substantial population increases would result from implementation of the proposed project. Therefore, implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Response b): The project site is located within the Tracy city limits and contains developed roadways, undeveloped land, and agricultural land. The proposed project would not displace housing or people. Implementation of the proposed project would have ***no impact*** relative to this topic.

XV. PUBLIC SERVICES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

Responses to Checklist Questions

Response a):

Fire Protection

The project site is currently under the jurisdiction of the Tracy Fire Department. The proposed project would not include additional residential units, or people to the City of Tracy. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for fire protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for fire protection services from the Tracy Fire Department. Therefore, implementation of the proposed project will have ***no impact*** to this topic.

Police Protection

The project site is currently under the jurisdiction of the Tracy Police Department. The proposed project would not include additional residential units, or people to the City of Tracy. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for police protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for police protection services from the Tracy Police Department. Therefore, implementation of the proposed project will have ***no impact*** relative to this topic.

Schools

Schools within the City of Tracy are part of the Tracy Unified School District. The proposed project does not include any residential units, or any other type of use that would directly, or indirectly increase the student population in the area. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not result in the need for new school facilities, thus it is anticipated to have ***no impact*** relative to this topic.

Parks

The proposed project does not include any residential units or any other type of use that would directly, or indirectly increase the population, or park demand in the area, or include any other

type of use that would directly increase the park needs. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not have the potential to require construction of additional park and recreational facilities which may cause substantial adverse physical environmental impacts. This, it is anticipated to have ***no impact*** relative to this topic.

Other Public Facilities

The proposed project would not result in a need for other public facilities that are not addressed in the Utilities and Service Section. The proposed project does not trigger the need for new facilities associated with other public services. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Consequently, new facilities or other public services are not proposed at this time. This, it is anticipated to have ***no impact*** relative to this topic.

XVI. RECREATION

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
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?				X
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?				X

Responses to Checklist Questions

Responses a-b): The proposed project does not include any residential units or any other type of use that would increase the population, or park and recreation facility demand in the area, or include any other type of use that would directly increase the use of park and recreation facilities. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not significantly increase the use of existing facilities. Furthermore, it is not anticipated that any substantial physical deterioration of existing facilities would occur, or be accelerated. Implementation of the proposed project would have a ***no impact*** relative to this topic.

XVII. TRANSPORTATION

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Responses to Checklist Questions

Responses a-b): No new structures, uses, or visitor serving areas are included in the project. Therefore, the project is not expected to result in an overall increase in vehicle trips within the area. The project is not anticipated to increase vehicle trips or congestion, or decrease LOS. The project would include sidewalks and bicycle facilities along the widened roadway. Therefore, impacts are considered ***less than significant*** relative to this topic.

Response c): No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The project does not include any design features or incompatible uses that pose a significant safety risk. The project would create no adverse impacts to emergency vehicle access or circulation. Therefore, project implementation would have a ***less than significant*** impact relative to this topic.

Response d): No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The project does not include any design features or incompatible uses that pose a significant safety risk. The project would create no adverse impacts to emergency vehicle access or circulation. Circulation would be improved with the proposed roadway widening and traffic signals. Therefore, project implementation would have a ***less than significant*** impact relative to this topic.

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.		X		

Responses to Checklist Questions

Responses a.i), a.ii): Although no tribal cultural resources have been documented in the project site, the project is located in a region where significant cultural resources have been recorded and there remains a potential that undocumented archaeological resources that may meet the tribal cultural resource definition could be unearthed or otherwise discovered during ground-disturbing and construction activities. Examples of significant archaeological discoveries that may meet the tribal cultural resource definition would include villages and cemeteries. Due to the possible presence of undocumented tribal cultural resources within the project site, construction-related impacts on tribal cultural resources would be potentially significant. The implementation of the following mitigation measure would ensure that this potential impact is reduced to a ***less than significant*** level regarding this topic.

> ***Mitigation Measure:*** *Implement Mitigation Measure CUL-1. This mitigation measure is previously presented in Response a of Section V, Cultural Resources, and is re-produced below:*
>
> ***Mitigation Measure CUL-1:*** *If any cultural resources, including prehistoric or historic artifact, or other indications of archaeological resources are found during grading and construction activities, all work shall be halted immediately within a 200-foot radius of the discovery until the an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).*
>
> *Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.*
>
> *If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the Applicant's expense.*

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
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 projects projected demand in addition to the providers existing commitments?			X	
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?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Responses to Checklist Questions

Response a): The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for water, wastewater, storm water drainage, electric power, natural gas, or telecommunications facilities will be created by the project. The project includes widening of Corral Hollow, installation of traffic signals, and bridge replacement. However, improvements to the roadway system created by the project represent a planned effort to coordinate improvements to accommodate the future buildout of the General Plan. Any individual future projects would have to be consistent with the General Plan and are subject to environmental review under CEQA. Therefore, impacts from the proposed project are considered ***less than significant*** relative to this topic.

Response b): As previously stated, the proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for water supplies will be created by the project operation. The project includes widening of Corral Hollow, installation of traffic signals, and bridge replacement. Improvements to the roadway system created by the project represent a planned effort to coordinate improvements to accommodate the future buildout of the General Plan. Any individual future projects would have to be consistent with the General Plan and are subject to environmental review under CEQA. However, limited amounts of water would be necessary during the construction phase of the project, but this would be a temporary use of water for construction related activities, and would not be in substantial amounts. Therefore, the proposed project would not result in insufficient water supplies available to serve the project from existing

entitlements and resources, and the proposed project would result in a ***less than significant*** impact to water supplies.

Response c): As previously stated, the proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for wastewater treatment, or other water treatment facilities will be created by the project. The project will extend utility systems. However, improvements to utility systems created by the project represent a planned effort to coordinate improvements to accommodate the future buildout of the General Plan. Any individual future projects would have to be consistent with the General Plan and are subject to environmental review under CEQA. Therefore, implementation of the proposed project will have a **less than significant impact** relative to this topic.

Responses d), e): As previously stated, the proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for landfill, or other waste facilities will be created by the project operation. The project includes widening of Corral Hollow, installation of traffic signals, and bridge replacement. However, limited amounts of solid waste could be generated during the construction phase of the project, but this would be temporary, and would not be in substantial amounts, and would not interfere with a waste facility's permitted capacity. The project would not interfere with regulations related to solid waste. Therefore, there implementation of the proposed project will have a ***less than significant*** impact relative to this topic.

XX. WILDFIRE

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
d) 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?			X	
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?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

Responses to Checklist Questions

Responses a, c) The project includes widening of Corral Hollow, installation of traffic signals, and bridge replacement. The proposed roadway improvements would allow for decreased fire risk relative to existing conditions. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed improvements would require long-term roadway maintenance; however, the roadway improvements would not exacerbate fire risk. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response b) The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The County has areas with an abundance of flashy fuels (i.e. grassland) in the County. The project would not result in development of structures or housing which would subject residents, visitors, or workers to long-term wildfire danger. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response d) The project does not propose any housing that would result in direct population growth. However, projects that do not directly induce population growth still have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. The project will expand the roadway system. As such, exposure to people or structures to any significant risk would not result. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
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?			X	
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)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Responses to Checklist Questions

Response a): This Initial Study includes an analysis of the project impacts associated with aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, tribal cultural resources, utilities and service systems, and wildfire. The analysis covers a broad spectrum of topics relative to the potential for the proposed project to have environmental impacts. This includes the potential for the proposed project 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, 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. It was found that the proposed project would have either no impact, a less than significant impact, or a less than significant impact with the implementation of mitigation measures.

For the reasons presented throughout this Initial Study, the proposed project would not 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, 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. With the implementation of mitigation measures presented in this Initial Study, the proposed project would be ***less than significant*** relative to this topic.

Response b): This Initial Study includes an analysis of the project impacts associated with aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, tribal cultural resources, utilities and service systems, and wildfire. The analysis covers a broad spectrum of topics relative to the potential for the proposed project to have environmental impacts. It was found that the proposed project would have either no impact, a less than significant impact, or a less than significant impact with the implementation of mitigation measures. These mitigation measures would also function to reduce the project's contribution to cumulative impacts.

The project would not increase the population or the use of public services and systems, and would not conflict with any applicable plans for the area. The proposed project would increase the capacity of the roadway system, which could allow for future development near the project area. However, all uses accommodated by the extension of utilities would be in accordance with the General Plan and land use map. Furthermore, any future projects would be subject to environmental review under CEQA. There are no significant cumulative or cumulatively considerable effects that are identified associated with the proposed project after the implementation of all mitigation measures presented in this Initial Study. With the implementation of all mitigation measures presented in this Initial Study, the proposed project would have a ***less than significant*** impact relative to this topic.

Response c): The construction phase could affect surrounding neighbors through increases in air emissions and noise; however, the construction effects are temporary and are not substantial. The operational phase air emissions, and noise would be similar to the existing conditions around the project site. Therefore, the operational phase of the proposed project would not cause substantial adverse effects on human beings. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

REFERENCES

California Air Resources Board. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. October 2000. Available at: <https://www.arb.ca.gov/diesel/documents/rrpFinal.pdf>.

California Air Resources Board. 2016. ARB Databases: Aerometric Data Analysis and Management System (ADAM). Available at: <http://www.arb.ca.gov/html/databases.htm>.

California Department of Conservation. 2016. California Important Farmland Finder. Available at: <http://maps.conservation.ca.gov/ciff/ciff.html>.

California Department of Conservation. California Land Conservation Act of 1965 2016 Status Report, The Williamson Act. December 2016.

California Department of Transportation. Transportation Related Earthborn Vibrations. TAV-02-01-R9601 February 20, 2002.

California Energy Commission. 2005. Global Climate Change: In Support of the 2005 Integrated Energy Policy Report. (CEC-600-2005-007.) Available at: <http://www.energy.ca.gov/2005publications/CEC-100-2005-007/CEC-100-2005-007-CMF.PDF>.

California Energy Commission. 2006. Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004. (CEC-600-2006-013-SF.) Available at: <http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-SF.PDF>.

City of Tracy. City of Tracy General Plan Draft Environmental Impact Report. October 4, 2005.

City of Tracy. City of Tracy General Plan. February 1, 2011.

City of Tracy. Tracy Municipal Code. Codified through Ordinance No. 1269, passed June 4, 2019.

De Novo Planning Group. Corral Hollow Road Widening Phase 1 Linne Road to I-580: Biological Assessment, San Joaquin County, California. April 28, 2020.

Federal Highway Administration. Roadway Construction Noise Model User's Guide, FHWA-HEP-05-054. January 2006.

Federal Transit Administration. Transit Noise and Vibration Impact Assessment Guidelines. May 2006

Intergovernmental Panel on Climate Change. 2007. Climate Change 2007: The Physical Science Basis, Summary for Policy Makers. Available at: <http://fire.pppl.gov/ipcc_summary_020207.pdf>.

Peak & Associates, Inc. Determination of Eligibility and Effect for the Corral Hollow Road Widening Project, City of Tracy, San Joaquin County, California. April 2020.

Sacramento Metropolitan Air Quality Management District. Roadway Construction Emissions Model, version 9.0. May 2018. Available at: <http://www.airquality.org/businesses/ceqa-land-use-planning/ceqa-guidance-tools>.

San Joaquin Council of Governments. Airport Land Use Compatibility Plan Update, San Joaquin County Aviation System, San Joaquin County, California. July 2009.

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