

# Interstate 580 Roadway Rehabilitation Project

Alameda County, California

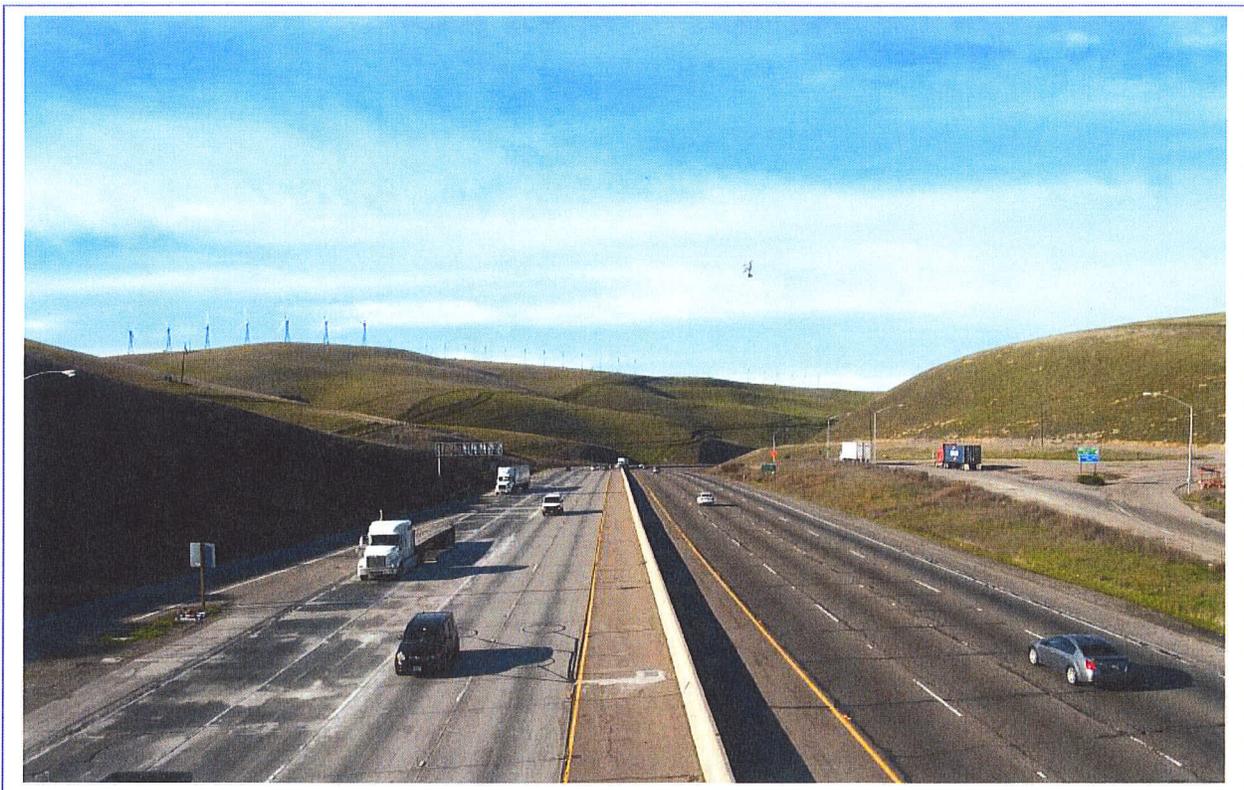
DISTRICT 4 – ALA – 580 (PM0.0/7.8)

DISTRICT 4 – ALA – 205 (PM0.0/1.0)

3G590

EFIS #0412000115

## Initial Study with Proposed Mitigated Negative Declaration



Prepared by the

State of California Department of Transportation



November 2013

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**INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION**

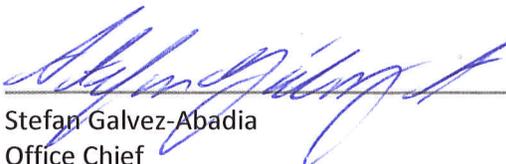
Project Title:	<b>Interstate 580 Roadway Rehabilitation Project</b>
Lead agency name and address:	<b>Department of Transportation (Caltrans) 111 Grand Ave. Oakland, Ca 94612</b>
Project Location:	<b>Alameda 580 PM 0.0-7.8/Alameda 205 PM 0.0-1.0</b>
General Plan Description	<b>Transportation</b>
Zoning	<b>Transportation</b>
Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements):	<b>US Fish and Wildlife Service, California Department of Fish and Wildlife</b>

Additional copies of this document, as well as the technical studies we relied on in preparing it, are available for review at the District office, 111 Grand Ave., Oakland, CA 94612.

We welcome your comments. While you may voice support or opposition for a project, the most beneficial comments include the following:

- Specific alternatives or mitigation measures that would provide better ways to avoid, minimize or mitigate any potential environmental effects of the project
- Concerns that are not addressed in the environmental document
- Inaccuracies or missing information
- Statistical data or facts to support your concern

Please send your written comments to Caltrans by the deadline. Submit email comments to Caltrans at [sheryl.m.garcia@dot.ca.gov](mailto:sheryl.m.garcia@dot.ca.gov) or send postal mail to Caltrans District 4, Attn: Sheryl M. Garcia, PO Box 23660, MS 8B, Oakland, CA 94623-0660. Hard copies or compact disks of the document are available by writing to the above mailing address; electronic copies are online at <http://www.dot.ca.gov/dist4/envdocs.htm>. **Be sure to submit comments by the deadline: 1/31/2014.**

  
 Stefan Galvez-Abadia  
 Office Chief  
 Caltrans District 4 Office of Environmental Analysis

11/26/13  
 Date

To obtain a copy in Braille, in large print, on computer disk, or on audiocassette, please contact: Caltrans, Attn: Sheryl M. Garcia at the address above, call at 510-286-5611, or use the California Relay Service TTY number, 711.

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## Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

### **Project Description**

The California Department of Transportation (Caltrans) proposes to rehabilitate the mainline roadway, and on and off-ramps on Interstate 580 (I-580) from one mile east of North Flynn Road (PM 4.9) in Alameda County near the City of Livermore to the San Joaquin County line (PM 0.0) in the eastbound direction, and from the San Joaquin County line (PM 0.0) to 0.2 mile east of Greenville Road Overhead in Alameda County in and near the City of Livermore (PM 7.8) in the westbound direction. A portion of Interstate 205 (I-205) in both the eastbound (PM 0.0/1.0) and westbound directions (PM 0.0/1.0) is proposed to be rehabilitated. The project also proposes to install additional highway safety features within the project limits.

### **Determination**

This proposed Negative Declaration (ND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an ND for this project. This does not mean that Caltrans' decision regarding the project is final. This ND is subject to modification based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project, and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on Aesthetics, Air Quality, Agriculture and Forest Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology/Water Quality, Mineral Resources, Land Use/Planning, Noise, Paleontological Resources, Population and Housing, Public Services, Recreation, Transportation/Traffic, and Utilities/Service Systems.

The proposed project would have no significant adverse effects on biological resources because the following mitigation measures would reduce potential effects to insignificance:

- Water quality protection measures will be implemented to protect all waters of the US from indirect effects
- Pre-construction surveys of biological resources will be completed
- Species monitoring will be conducted during construction
- Construction windows will be implemented
- General avoidance, minimization, and/or mitigation measures will be implemented

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Melanie Brent  
Deputy District Director  
District 4  
California Department of Transportation

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Date

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## Chapter 1 Proposed Project

### Project Description

The California Department of Transportation (Caltrans) proposes to rehabilitate the mainline roadway, and on and off-ramps on Interstate 580 (I-580) from one mile east of North Flynn Road (PM 4.9) in Alameda County near the City of Livermore to the San Joaquin County line (PM 0.0) in the eastbound direction, and from the San Joaquin County line (PM 0.0) to 0.2 mile east of Greenville Road Overhead in Alameda County in and near the City of Livermore (PM 7.8) in the westbound direction. A portion of Interstate 205 (I-205) in both the eastbound (PM 0.0/1.0) and westbound directions (PM 0.0/1.0) is proposed to be rehabilitated. The project also proposes to install additional highway safety features within the project limits.

### *Alternatives*

#### Build

The proposed build alternative is comprised of the following components:

- **Pavement Rehabilitation**

This project proposes to remove surface Asphalt Concrete (AC), where present, and to replace underlying slabs along westbound (WB) and eastbound (EB) portions of I-580 and I-205. A new surface layer (of up to 9 inches) will be installed through crack, seat, and overlay (CSOL) using a layer of hot mix asphalt-type A (HMA-A), geosynthetic pavement interlayer (GPI), and an open-graded friction course<sup>1</sup> (OGFC). Existing AC shoulders in the project area will be replaced with shoulder backing, which involves the laying of a thin course of granular material to protect the outside edge of the pavement. This action prevents edge cracking and pavement edge loss (Caltrans 2006). Shoulder backing requires an additional footprint of 4 to 8 feet from the edge of pavement.

**Eastbound I-580 (PM 0.0 to PM 4.7):** Proposed Slab Replacement: Proposed CSOL (up to 9 inches) of 0.1-foot HMA-A, GPI, 0.3-foot HMA-A, 0.25-foot HMA-A, and 0.1-foot OGFC. Existing AC shoulders will be replaced with HMA-A plus shoulder backing.

**Westbound I-580 (PM 1.65 to PM 6.9):** Proposed Removal of Existing AC and Slab Replacement: Proposed CSOL (up to 9 inches) of 0.1-foot HMA-A, GPI, 0.3-foot HMA-A, 0.25-foot HMA-A, and 0.1-foot OGFC. Existing AC shoulders will be replaced with HMA-A plus shoulder backing.

**Westbound I-580 (PM 0.0 to PM 1.65) and I-205 (PM 0.0 to PM 1.0):** Proposed removal of existing 0.1-foot AC, stress absorption membrane-rubberized (SAMI-R), 0.3-foot HMA, 0.2-foot RHMA, and 0.1-foot OGFC. Existing AC shoulders will be replaced with HMA-A plus shoulder backing.

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<sup>1</sup> OGFCs typically are constructed with high quality, polish resistant aggregates and provide good frictional characteristics for vehicles traveling at typical highway speeds (U.S. Department of Transportation [USDOT] 1990).

**Westbound I-580 (PM 6.9 to PM 7.8):** Proposed Slab Replacement: Proposed CSOL (up to 9 inches) of 0.1-foot HMA-A, GPI, 0.3-foot HMA-A, 0.25-foot HMA-A, and 0.1-foot OGFC. Existing AC shoulders will be replaced with HMA-A plus shoulder backing.

- **On and Off-Ramp Pavement Rehabilitation**

This project proposes to remove and replace surface layers from seven ramps within the project area and to replace them with either, or a combination of, HMA-A or rubberized hot mix asphalt (gap graded) (RHMA-G). The proposed design features and specific locations for all of the activities are listed below:

**Eastbound Grant Line Road On and Off-Ramps:** Removal of existing AC to CTB layer and place 0.1-foot HMA, place pavement reinforcing fabric, replacement with 0.4-foot HMA-A, 0.2-foot RHMA-G, and 0.1-foot OGFC.

**Westbound Grant Line Road On and Off-Ramps:** Removal of existing AC to AB layer, replacement with 0.4-foot HMA, 0.2-foot RHMA-G, and 0.1-foot OGFC.

**Eastbound North Flynn Road Off-Ramp:** Removal of existing AC to AB layer, replacement with 0.4-foot HMA, 0.2-foot RHMA-G, and 0.1-foot OGFC.

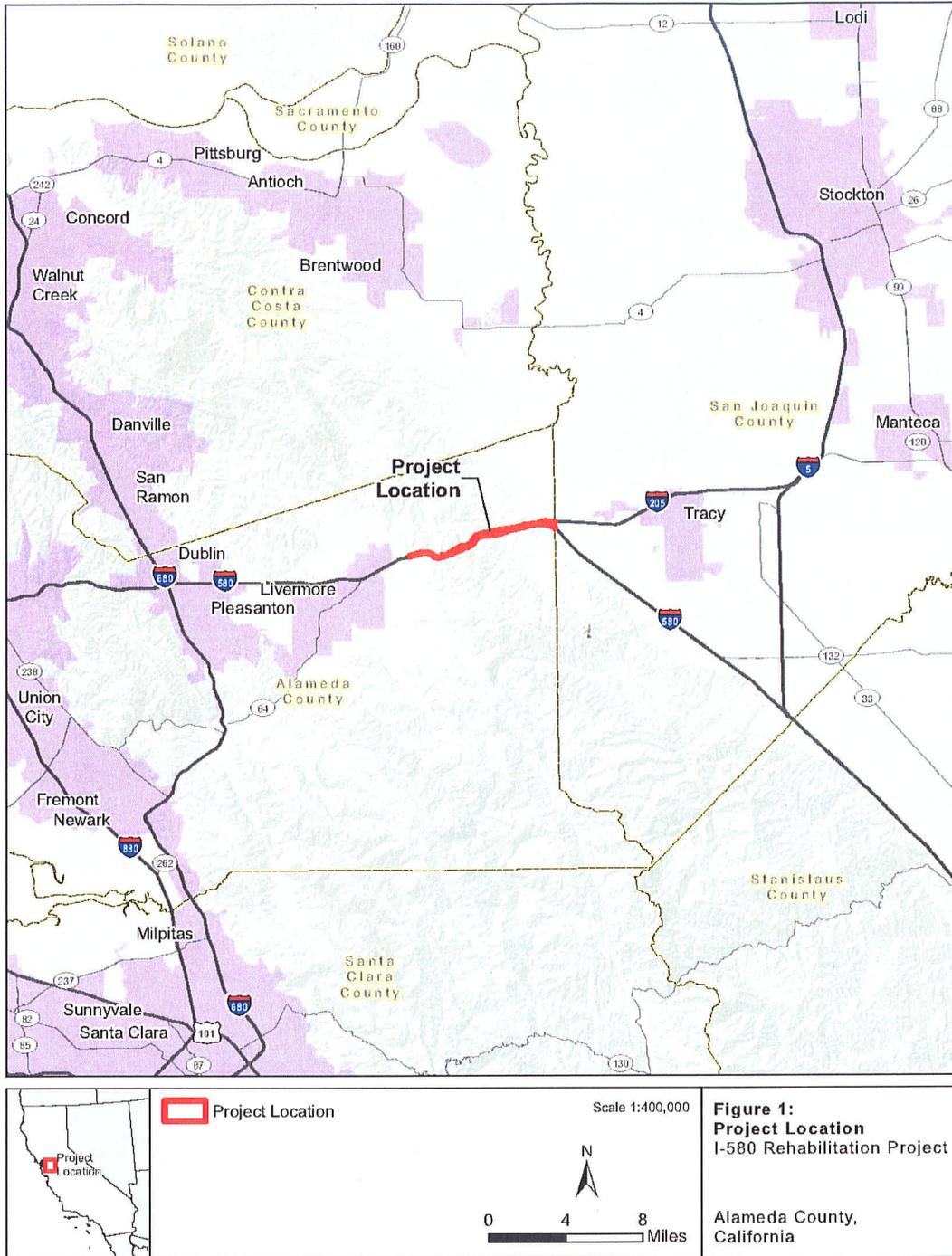
**Westbound North Flynn Road On and Off-Ramps:** Removal of existing AC to CTB layer and place 0.1-foot HMA, place pavement reinforcing fabric, replacement with 0.4-foot HMA-A, 0.2-foot RHMA-G, and 0.1-foot OGFC.

**Other Rehabilitation Activities**

The installation of additional highway safety features are proposed for this project. These activities include the installation of rumble strips, installation of metal beam guard rails (MBGRs) and concrete barriers (Type 60/60C), and replacement of hot mix asphalt (HMA) dikes and concrete curbs. Installation of overhead signage, lighting, flashing beacons, barrier markers, roadside delineators, and guard rail delineators also will occur.

No-Build

Under the No-Build Alternative, the existing highway will remain as is.



**Purpose and Need**

*Need*

The San Francisco Bay Area is heavily vested in the growing international and domestic trade, as well as local distribution of overseas and domestic product. Tens of billions of dollars’ worth of cargo that depart and arrive at the Bay Area’s seaports and airports demonstrate the scale of the activities. A substantial share of the Bay Area domestic trade is with Southern California, the San Joaquin Valley, and other West Coast destinations. The I-580 corridor plays a key role in connecting these trade regions together. Trucks account for 12.5 percent of the vehicle traffic on I-580 through Altamont Summit, indicating that this corridor is a significant component of the State’s and the Bay Area’s economy.

The I-580 corridor between the San Joaquin County line and the Greenville Road Overhead was originally built in 1966 and has had several improvements over the years, including the 2005 widening project to add another lane to the WB direction between the Midway Road Undercrossing (PM 1.04) and west Grant Line Road (PM 2.5). According to the 2008 Pavement Condition Survey Inventory, there are numerous incidents of cracking and faulting in this stretch of the I-580 corridor. Some of the on-ramps, off-ramps, and AC shoulder widths (both inside and outside) do not meet the current design standards in both directions. Some of the existing MBGRs in both directions are in poor condition where they were hit in traffic accidents. There is a critical need to improve the existing condition of I-580 and to enhance traffic safety.

*Purpose*

The purpose of the proposed project is to rehabilitate and reconstruct the existing pavement on the mainline and ramps as well as to improve traffic safety by upgrading and/or replacing the MBGRs with concrete barriers.

**Permits and Agreements Needed**

<b>Permit</b>	<b>Agency</b>	<b>Acquired</b>
Incidental Take Permit	California Department of Fish and Wildlife	Will be acquired during the design phase of the project.
Biological Opinion	US Fish and Wildlife Service	In consultation. Will be acquired prior to final ND/Initial Study.

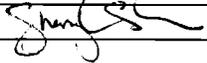
**Environmental Factors Potentially Affected:**

The environmental factors checked below would be potentially affected by this project. Please see the checklist below for additional information:

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities/Service Systems	<input type="checkbox"/>	Mandatory Findings of Significance

**Determination:**

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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
<b>Signature:</b> 	
<b>Date:</b> 11/26/2013	
<b>Printed Name:</b> Sheryl M. Garcia	

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**Chapter 2 CEQA ENVIRONMENTAL CHECKLIST**

**04-Ala-580**  
**04-Ala-205**

**0.0/7.8**  
**0.0/1.0**

**3G590**

Dist.-Co.-Rte.

P.M/P.M.

E.A.

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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**I. AESTHETICS:**

Would the project:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

***Affected Environment***

I-580 is listed as an eligible State Scenic Highway. The portion of I-580 south of the I-580/I-205 split is classified as an Officially Designated State Scenic Highway. Development of a Scenic Highway must incorporate “not only safety, utility and economy, but also beauty” and scenic appearance must be a consideration during the planning, design, and construction processes.

***Environmental Consequences***

The project is anticipated to result in minimal impacts to existing vegetation and outward views from the freeway. The visual quality would remain similar to existing conditions and thus will not alter its eligibility as a State Scenic Highway.

***Avoidance, Minimization, and/or Mitigation Measures***

The project will have minimal impact to existing planting and outward views from the freeway. The following measures have been identified to minimize visual impacts:

- During construction, any grassland areas removed should be re-hydroseeded with an erosion control/natural grass seed mix to help stabilize the slope and/or return impacted areas to their current conditions.
- Overhead signage, lighting, and flashing beacons should be kept to a minimum so as not to create cumulative negative visual impacts throughout the corridor.
- Concrete barriers should be treated with a medium to heavy sand blast finish to reduce glare and incidence of graffiti.

**II. AGRICULTURE AND FOREST RESOURCES:**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project will not affect any agricultural lands or forest resources therefore no avoidance, minimization, and/or mitigation measures are needed.

**III. AIR QUALITY:**

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is exempt from air quality conformity determination. No avoidance, minimization and/or mitigation measures have been identified.

**IV. BIOLOGICAL RESOURCES:**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Wetlands and Water Features

#### *Affected Environment*

A *Natural Environment Study Interstate 580 Roadway Rehabilitation Project* (NES) (October 2013) was prepared for the project. The field delineation identified 0.908 acres of potential waters of the U.S. including wetlands within the Biological Study Area (BSA). The BSA is located in the area between the San Joaquin County line and the city of Livermore in Alameda County. The BSA includes the entire area within the eastbound (EB) side of Interstate 580 (I-580) from the San Joaquin County line (PM 0.0) to PM 4.9 and the westbound (WB) side of I-580 from the San Joaquin County line to 0.1 mile east of Greenville Road (PM 7.8) in Livermore, including the EB and WB on and off-ramps at North Flynn Road. The BSA also includes I-205 from the San Joaquin County line to the intersection with I-580 (PM 1.0). Features of interest include one wetland type, freshwater marsh, and two other water features, intermittent stream and aqueduct (canal). The preliminary delineation indicated that a total of 0.908 acres in the BSA, including 0.103 acres of wetlands and 0.805 acres of other waters, are likely to be jurisdictional. These areas could change following verification by the US Army Corps of Engineers (USACE). No wetland or other water features are located within the construction area. The construction area is the area that includes the permanent and temporary impact areas associated with construction. No jurisdictional features are anticipated to be impacted by the proposed project.

#### *Environmental Consequences*

There are no wetland or water features located within permanent or temporary impact zones. No impacts to jurisdictional features will occur as a result of this project.

#### *Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to waters of the U.S., including wetlands, during project construction. Specific water quality protection measures include water quality inspections (Measure #24), proper treatment of concrete waste (Measure #26), and Caltrans best management practices (BMPs) (Measure #23).

## Special Status Animal Species Occurrences

A *Natural Environment Study Interstate 580 Roadway Rehabilitation Project* (NES) (October 2013) was prepared for the project.

### *Affected Environment*

Based on literature, database searches, and familiarity with the region, a total of 52 wildlife species were initially assessed to determine the potential to occur within the BSA. A wildlife habitat assessment was conducted within the BSA in December 2012 and July 2013, and 32 of these species were removed from consideration based on a low probability of occurring within the BSA. Other than vernal pool species (branchiopods), for which there is a high level of concern by regulatory agencies, species that have a low potential or which are not expected to occur within the BSA are not discussed further. The following special-status species have some potential to occur within the BSA and are addressed in more detail in this section:

#### *Federal and State-listed Species with Potential to Occur*

- California tiger salamander (*Ambystoma californiense*) – Federal Threatened, State Threatened
- California red-legged frog (*Rana draytonii*) – Federal Threatened, State Species of Special Concern
- San Joaquin kit fox (*Vulpes macrotis mutica*) – Federal Endangered, State Threatened
- Longhorn fairy shrimp (*Branchinecta longiantenna*) – Federal Endangered, State Special Animals List
- Vernal pool fairy shrimp (*Branchinecta lynchi*) – Federal Threatened, State Special Animals List
- Vernal pool tadpole shrimp (*Lepidurus packardii*) – Federal Endangered, State Special Animals List

#### *Special-status and Locally Rare Species with Potential to Occur*

- American badger (*Taxidea taxus*) – State Species of Special Concern
- Pallid bat (*Antrozous pallidus*) – State Species of Special Concern
- Townsend’s big-eared bat (*Corynorhinus townsendii*) – State Species of Special Concern
- Hoary bat (*Lasiurus cinereus*) – State Special Animals List
- Western pond turtle (*Actinemys marmorata*) – State Species of Special Concern
- San Joaquin whipsnake (*Masticophis flagellum ruddocki*) – State Species of Special Concern
- Western burrowing owl (*Athene cunicularia hypugaea*) – State Species of Special Concern
- Tricolored blackbird (*Agelaius tricolor*) – State Species of Special Concern
- White-tailed kite (*Elanus leucurus*) – Fully Protected Species under California Fish and Game Code
- California horned lark (*Eremophila alpestris actia*) – State Special Animals List
- Golden eagle (*Aquila chrysaetos*) – Protected under the Bald and Golden Eagle Protection Act, Fully Protected Species under California Fish and Game Code
- Loggerhead shrike (*Lanius ludovicianus*) – State Species of Special Concern
- Midvalley fairy shrimp (*Branchinecta mesovallensis*) – State Special Animals List

### California Tiger Salamander

The Central California Distinct Population Segment of California tiger salamander was listed as federally threatened in 2004 (USFWS 2004), and as threatened under the California Endangered Species Act, on May 20, 2010.

#### *Affected Environment*

None of the aquatic features identified within the BSA are suitable breeding habitat for California tiger salamanders because they are too shallow and/or ephemeral to support breeding.

Suitable upland habitat for aestivation is present as grassland habitat within the BSA. California ground squirrel burrows are relatively abundant on the grassy hillsides within and adjacent to the Caltrans right-of-way (ROW) along I-580 and these could be utilized as upland refugia. There are numerous documented occurrences in ponds within 2 miles of the BSA (CDFW 2013) and there are numerous ponds visible on aerial imagery that could contain suitable breeding habitat and are within the known 1.3-mile dispersal range, and one California Natural Diversity Database (CNDDB) record does indicate a breeding pond within 0.05 miles. The majority of salamanders around a breeding pond will aestivate within 0.4 miles (600 meters) of the pond (Trenham and Shaffer 2005), but adults and juveniles originating from ponds as far as 1.3-miles away may use the BSA for upland refuge. We can conclude that California tiger salamanders have a relatively low potential to occur in grassland habitats within the BSA because most of the BSA is not within 0.4 miles of a pond, but the BSA is generally within the range of migration of several [at least one] ponds that occur in the Altamont Hills.

I-580 represents a major barrier to dispersal of California tiger salamanders. The paved surface of I-580 is not considered to be a viable dispersal corridor for California tiger salamanders because heavy traffic likely causes mortality of almost all individuals attempting to cross. However, there are several natural and artificial wildlife crossings within the BSA that could potentially be used by dispersing California tiger salamanders to cross under I-580, including road underpasses and culverts carrying streams under the freeway.

#### *Environmental Consequences*

California tiger salamanders within the construction area may suffer direct harassment, harm, injury, or mortality as a result of construction activities, including initial site preparation, use of heavy equipment for excavation and backfill, handling of stockpiles and stored materials, rehabilitation of roadway, rehabilitation of shoulder backing, installation of rumble strips, installation of metal beam guard rails (MBGRs) and concrete barriers, adjusting of inlets, replacement of curbs and dikes, as well as installation of overhead signage, lighting, flashing beacons, barrier markers, roadside delineators, and guard rail delineators. The avoidance and minimization measures outlined below and detailed in the General Avoidance and Minimization Measures section below are intended to reduce the likelihood of direct take during project activities.

The proposed concrete barriers may impede the movement of individual California tiger salamanders travelling parallel to I-580. Individuals attempting to travel across the concrete barriers may have their routes blocked by these vertical structures and will have to travel along the roadway until finding an area where they may exit. This will increase the amount of time when they are exposed to being struck by vehicles or captured by a predator and may direct them

onto the paved surface of I-580. The total length of concrete barriers on the project will be approximately 2.34 miles.

California tiger salamanders, although they may only occur at a low density, may be exposed to direct injury or mortality during earthwork within the construction area. Excavation, fill, and other construction activities will impact a total of 35.420 acres of grassland habitat in the BSA that provides potential aestivation, foraging, and dispersal habitat for California tiger salamanders. Temporary impacts will total 29.892 acres and permanent impacts will total 5.528 acres (See Table 1).

The habitat within the construction area is considered to be of marginal quality because of the high levels of roadside disturbance associated with I-580. However, construction of the project will push this zone of roadside disturbance further outward into less disturbed habitat, causing further degradation of habitat due to edge effects. A conclusion may be drawn that the proposed modifications to California tiger salamander habitat within the construction area may have a potential adverse impact on the behavioral patterns of some individuals of this species, including foraging, migration, and aestivation. There will be no adverse impact to breeding behavior because no breeding habitat is located within the construction area.

**Table 1. Summary of Impacts to California Tiger Salamander Habitat**

Land Cover Type	Temporary Impacts (Acres)	Permanent Impacts (Acres)	Total Impacts (Acres)
Grassland	29.892	5.528	35.420
<b>Total</b>	<b>29.892</b>	<b>5.528</b>	<b>35.420</b>

Taking into consideration that the Caltrans I-580 Freeway Performance Initiative (FPI) Project will be developed in the same segment of I-580 as the I-580 Rehabilitation Project, that the I-580 FPI Project will be initiated first, and that some areas of the construction area for these two projects overlap, both temporary and permanent impacts for the I-580 Rehabilitation Project to California tiger salamander habitat are reduced by the I-580 FPI Project's permanent impacts. Habitat impacts for the I-580 Rehabilitation Project that account for the I-580 FPI Project's impacts are shown in Table 2.

**Table 2. Summary of Impacts (Accounting for Impacts from the I-580 FPI Project) to California Tiger Salamander Habitat**

Project Name	Land Cover Type	Temporary Impacts (Acres)	Permanent Impacts (Acres)	Total Impacts (Acres)
I-580 Rehab Project (Proposed project)	Grassland	29.892	5.528	35.420
I-580 FPI Project (Construction area overlap)	Grassland	0.363	.0163	.3793
<b>Proposed Project's Net Impacts</b>	<b>Grassland</b>	<b>29.529</b>	<b>5.365</b>	<b>34.894</b>

*Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures below will reduce the potential for effects to California tiger salamander during project construction. Species-specific measures include biological monitoring (Measure # 4), April 15 to October 15 work window for activity in suitable habitat (Measure # 6), pre-construction surveys (Measure # 7), notification of listed species on site (Measure # 14), prevention of wildlife entrapment (Measure # 15), proper materials storage (Measure # 16), and the prohibition of mono-filament netting (Measure # 25).

Caltrans proposes that the temporary impacts of 29.892 acres will be mitigated through on-site restoration at a ratio of 1:1 and 5.528 acres of permanent impacts will be mitigated at a ratio of 3:1 for 16.584 acres as off-site compensation. The mitigation proposal is based on the current estimate of impacts to suitable habitat within the range of the species. Caltrans proposes this compensatory mitigation for California tiger salamander to meet the requirements of California FGC Section 2081 for obtaining an Incidental Take Permit. Caltrans anticipates that the avoidance and minimization measures, in conjunction with the proposed compensatory mitigation, will reduce potential adverse effects to a negligible level. This mitigation may be used to satisfy the conditions of multiple agencies and jurisdictions including the Federal Endangered Species Act (FESA), CESA, and the California Environmental Quality Act (CEQA) process. Caltrans will consult with USFWS and CDFW to establish mitigation requirements. During consultation, off-site mitigation location and its criteria will be determined, should off-site mitigation be necessary. The final mitigation proposal will be subject to modification during the agency consultation and permitting processes.

*California Red-legged Frog*

*Affected Environment*

Critical habitat was designated for the California red-legged frog in 2010 (USFWS 2010). Critical habitat is located adjacent to the BSA, to the north and south of I-580 (Unit ALA-2, Arroyo Valle) from PM 1.0 to PM 8.2. Critical habitat (Unit ALA-2, Arroyo Valle) in two locations is located within the BSA (Figure 2), including at the Grant Line Road exit (PM 1.5) on the westbound (WB) side of I-580 and between PM 2.65 and PM 3.6 on the eastbound (EB) side of I-580.

There are 19 documented occurrences in ponds within 1 mile of the BSA (CDFW 2013), as well as numerous ponds and streams visible on aerial imagery within 1 mile of the BSA that could contain suitable breeding habitat. Adults and juveniles originating from these ponds and streams may potentially use the BSA for upland refuge. As such, California red-legged frogs have potential to occur in grassland, freshwater marsh, and creek channel habitats within the BSA.

I-580 represents a major barrier to dispersal of California red-legged frogs. The paved surface of I-580 is not considered to be a viable dispersal corridor for California red-legged frogs because heavy traffic likely causes mortality of almost all individuals attempting to cross. However, there are natural and artificial wildlife crossings within the BSA that could potentially be used by dispersing California red-legged frogs to cross under I-580, including underpasses for lightly-used railroads or roads such as the one at Midway Road and culverts carrying streams (e.g. Mountain House Creek, Arroyo Las Positas) under the freeway.

### *Environmental Consequences*

California red-legged frogs within the construction area may experience direct harassment, harm, injury, or mortality as a result of construction activities, including initial site preparation, use of heavy equipment for excavation and backfill, handling of stockpiles and stored materials, rehabilitation of roadways, rehabilitation of shoulder backing, installation of rumble strips, installation of MBGRs and concrete barriers, adjusting of inlets, replacement of curbs and dikes, and installation of overhead signage, lighting, flashing beacons, barrier markers, roadside delineators, and guard rail delineators. The avoidance and minimization measures outlined below and detailed in the General Avoidance and Minimization Measures section below are intended to reduce the likelihood of direct take during project activities.

The proposed concrete barriers may impede the movement of individual California red-legged frogs travelling parallel to I-580. Individuals attempting to travel across the concrete barriers may have their routes blocked by these vertical structures and will have to travel along the roadway until finding an area where they may exit. This will increase the amount of time when they are exposed to being struck by vehicles or captured by a predator and may direct them onto the paved surface of I-580. The total length of concrete barriers on the project will be approximately 2.34 miles.

California red-legged frogs may experience direct injury or mortality during earthwork within the construction area. Excavation, fill, and other construction activities will impact a total of 35.420 acres of grassland habitat in the construction area that provides potential aestivation, foraging, and dispersal habitat for California red-legged frog. Temporary impacts will total 29.892 acres and permanent impacts will total 5.528 acres (Table 3). The habitat within the construction area is considered to be of marginal quality because of the high levels of roadside disturbance associated with I-580. However, construction of the project will push this zone of roadside disturbance further outward into less disturbed habitat, causing further degradation of habitat due to edge effects. A conclusion may be drawn that the proposed modifications to California red-legged habitat within the construction area may have a potential adverse impact on the behavioral patterns of some individuals of this species, including foraging, migration, and aestivation. There is no adverse impact to breeding behavior because no breeding habitat is located within the construction area.

**Table 3. Summary of Impacts to California Red-legged Frog Habitat**

<b>Land Cover Type</b>	<b>Temporary Impacts (Acres)</b>	<b>Permanent Impacts (Acres)</b>	<b>Total Impacts (Acres)</b>
Grassland	29.892	5.528	35.420
<b>Total</b>	<b>29.892</b>	<b>5.528</b>	<b>35.420</b>

Because the I-580 FPI Project will be developed in the same segment of I-580 as the I-580 Rehabilitation Project, the I-580 FPI Project will be initiated first, and some areas of the construction area for these two projects overlap, both temporary and permanent impacts for the I-580 Rehabilitation Project to California red-legged frog habitat are reduced by the I-580 FPI Project's permanent impacts. Habitat impacts for the I-580 Rehabilitation Project that account for the I-580 FPI Project's impacts are shown in Table 4.

**Table 4. Summary of Impacts (Accounting for Impacts from the FPI Project) to California Red-legged Frog Habitat**

<b>Project Name</b>	<b>Land Cover Type</b>	<b>Temporary Impacts (Acres)</b>	<b>Permanent Impacts (Acres)</b>	<b>Total Impacts (Acres)</b>
I-580 Rehab Project (Proposed project)	Grassland	29.892	5.528	<b>35.420</b>
I-580 FPI Project (Construction area overlap)	Grassland	.363	.163	<b>.526</b>
<b>Proposed Project's Net Impacts</b>	<b>Grassland</b>	<b>29.529</b>	<b>5.365</b>	<b>34.894</b>

A total of 4.75 acres of critical habitat is located within the BSA at two locations in the Altamont Pass (Unit ALA-2, Arroyo Valle), including the north side of the WB on and off-ramps at the Grant Line Road exit (PM 1.5) and between PM 2.65 and PM 3.6 on the south side of the EB lanes of I-580. Temporary impacts will total 1.29 acres, and permanent impacts will total 0.48 acres within the construction area, for a total of 1.77 acres.

An impact to critical habitat must not adversely modify the critical habitat to the point that it will no longer aid in the species' recovery. The acreage impact of the proposed project is minor compared to the entire area of critical habitat. Although there is upland habitat within the critical habitat mapped within the BSA that occurs within 200 feet of the edge of aquatic and riparian habitat, no aquatic breeding habitat or non-breeding aquatic habitat occurs within the critical habitat mapped within the BSA.

*Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to California red-legged frog during project construction. Species-specific measures include biological monitoring (Measure # 4), pre-construction surveys (Measure # 7), notification of listed species on site (Measure # 14), prevention of wildlife entrapment (Measure # 15), proper materials storage (Measure # 16), and the prohibition of mono-filament netting (Measure # 25).

Caltrans proposes that the temporary impacts of 29.892 acres will be mitigated through on-site restoration at a ratio of 1:1 and 5.528 acres of permanent impacts will be mitigated at a ratio of 3:1 for 16.584 acres of off-site compensation. The mitigation proposal is based on the current estimate of impacts to suitable habitat within the range of the species. Caltrans anticipates that the avoidance and minimization measures, in conjunction with the proposed compensatory mitigation, will reduce potential adverse effects to a negligible level. This mitigation may be used to satisfy the conditions of multiple agencies and jurisdictions including the FESA, CESA, and CEQA process. Caltrans will consult with USFWS and CDFW to establish mitigation requirements. During consultation, off-site mitigation location and its criteria will be determined, should off-site mitigation be necessary. The final mitigation proposal will be subject to modification during the agency consultation and permitting processes.

### San Joaquin Kit Fox

The San Joaquin kit fox was listed as an endangered species by the USFWS in 1967 (USFWS 1967) and by the State of California in 1971. No critical habitat has been designated for San Joaquin kit fox.

### *Affected Environment*

There are eight recorded occurrences of San Joaquin kit fox within 2 miles of the BSA (CDFW 2013) (Figure 2). Two are located adjacent to the eastern end of the BSA, the first within 0.50 miles of Grant Line Road (CNDDDB occurrence # 1034), and the other within 0.50 miles of the I-580/I-205 interchange (CNDDDB occurrence # 585). These occurrences were recorded in 1975 and 1986, respectively. All of the occurrences were recorded prior to 2000.

This species is rare and sparsely distributed within the northern part of its range (Orloff et al. 1986, Smith et al. 2006, Clark et al. 2007), including Alameda County, and the presence of suitable habitat and CNDDDB records nearby suggest that San Joaquin kit foxes may intermittently be present in low numbers in the region. However, the BSA is at the periphery of the species' range, and the potential that the species would occur within the BSA during the limited time period of construction (approximately 2 years) is low. Although suitably friable soils are present, it is unlikely that San Joaquin kit foxes would dig or use dens within the BSA due to constant disturbance from I-580 and other intersecting roads. However, San Joaquin kit foxes may use grassland within the BSA for dispersal. They are not expected to occur in urbanized areas, except under locally unique conditions, and are not known to occur in Livermore or other urbanized areas of the BSA.

### *Environmental Consequences*

Since this project will occur on the margins of the known current range of San Joaquin kit fox, and because minimization and avoidance measures will be implemented to protect any transient individuals that may enter the construction area, the potential for impacts to San Joaquin kit fox is negligible. The limited number of observations of San Joaquin kit fox reported in the area, and a general consensus that the BSA is outside the typical range of the species, supports a conclusion that if the species does occur, it occurs sporadically and in low numbers. By following the avoidance and minimization measures outlined below and detailed in the General Avoidance and Minimization Measures section below, direct harm or injury from construction equipment and activities would be avoided. Following the minimization measures in regard to vehicle traffic, light and noise, and den-like structures on-site will be effective in minimizing potential effects. No direct impact to suitable habitat for the San Joaquin kit fox through the destruction of foraging or denning habitats is anticipated. Indirect impacts will be avoided through buffers outlined in the avoidance and minimization measures.

The proposed concrete barriers may impede the movement of individual San Joaquin kit foxes travelling parallel to I-580. Individuals attempting to travel across the concrete barriers may have their routes blocked by these vertical structures and will have to travel along the roadway until finding an area where they may exit. This will increase the amount of time when they are exposed to being struck by vehicles or captured by a predator and may direct them onto the paved surface of I-580. The total length of concrete barriers on the project will be approximately 2.34 miles.

*Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to San Joaquin kit fox during project construction. Species-specific measures include biological monitoring (Measure # 4), pre-construction surveys (Measure # 7), notification of listed species on site (Measure # 14), and proper materials storage (Measure # 16).

*Longhorn Fairy Shrimp*

*Affected Environment*

Critical habitat was designated for the longhorn fairy shrimp in 2006 (USFWS 2006b). There is no designated critical habitat within the BSA. The nearest critical habitat for longhorn fairy shrimp is Unit 1B, located 2.0 miles to the north of the BSA (north of PM 7.1).

There is an American bulrush-dominated wetland, located under the I-580/I-205 connector ramps, that may be suitable habitat. However, no wetlands occur within the construction area. A reconnaissance level survey for vernal pool habitats in the BSA noted the potential for development of suitable habitat in the form of scrapes and borrow pits, but there were no apparent suitable habitat features currently existing. A few scrapes were observed that had the potential to pond for a very limited duration, but no scrapes were observed with ponded water following rain. Numerous drainages that would have brief, fast flows were identified in the BSA, but that type of habitat feature is not considered suitable because the species does not occur in aquatic habitats that have flashy, flowing water.

This species has a low potential to be present in the BSA in the wetland identified at the I-580/I-205 connector ramps and in areas where scrapes or borrow pits may be developed because longhorn fairy shrimp eggs can lay dormant until suitable conditions occur or be spread via wind or wildlife.

*Environmental Consequences*

The lack of apparent suitable habitat features within the construction area results in a conclusion that there will be no impacts to this species by the project. If habitat features for longhorn fairy shrimp were present within the construction area, and if that habitat was impacted, the species may experience direct harassment, harm, injury, or mortality as a result of construction activities, including initial site preparation, use of heavy equipment for excavation and backfill, handling of stockpiles and stored materials, rehabilitation of roadways, rehabilitation of shoulder backing, installation of rumble strips, installation of metal beam guard rails (MBGRs) and concrete barriers, adjusting of inlets, replacement of curbs and dikes, and installation of overhead signage, lighting, flashing beacons, barrier markers, roadside delineators, and guard rail delineators. The avoidance and minimization measures in the section below are intended to reduce the likelihood of impacts during project activities.

*Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to longhorn fairy shrimp during

project construction by reducing potential impacts outside the construction area through implementation of BMPs.

### Vernal Pool Fairy Shrimp

#### *Affected Environment*

Critical habitat was designated for vernal pool fairy shrimp in 2006 (USFWS 2006b). There is no designated critical habitat within the BSA. The nearest critical habitat for vernal pool fairy shrimp is Unit 19C, located 0.40 miles to the northwest of the BSA (northwest of PM 7.9).

There is an American bulrush-dominated wetland, located under the I-580/I-205 connector ramps, that may be suitable habitat. However, no wetlands occur within the construction area. A reconnaissance level survey for vernal pool habitats in the BSA noted the potential for development of suitable habitat in the form of scrapes and borrow pits, but there were no apparent suitable habitat features currently existing. A few scrapes were observed that had the potential to pond for a very limited duration, but no scrapes were observed with ponded water following rain. Numerous drainages that would have brief, fast flows were identified in the BSA, but that type of habitat feature is not considered suitable because the species does not occur in aquatic habitats that have flashy, flowing water.

This species has a low potential to be present in the BSA in the wetland identified at the I-580/I-205 connector ramps and in areas where scrapes or borrow pits may be developed because vernal pool fairy shrimp eggs can lay dormant until suitable conditions occur or be spread via wind or wildlife.

#### *Environmental Consequences*

The lack of apparent suitable habitat features within the construction area results in a conclusion that there will be no impacts to this species by the project. If habitat features for vernal pool fairy shrimp were present within the construction area, and if that habitat was impacted, the species may experience direct harassment, harm, injury, or mortality as a result of construction activities, including initial site preparation, use of heavy equipment for excavation and backfill, handling of stockpiles and stored materials, rehabilitation of roadways, rehabilitation of shoulder backing, installation of rumble strips, installation of metal beam guard rails (MBGRs) and concrete barriers, adjusting of inlets, replacement of curbs and dikes, and installation of overhead signage, lighting, flashing beacons, barrier markers, roadside delineators, and guard rail delineators. The avoidance and minimization measures in the General Avoidance and Minimization Measures section below are intended to reduce the likelihood of impacts during project activities.

#### *Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to vernal pool fairy shrimp during project construction by reducing potential impacts outside the construction area through implementation of BMPs.

Vernal Pool Tadpole Shrimp

*Affected Environment*

Critical habitat was designated for vernal pool tadpole shrimp in 2006 (USFWS 2006b). There is no designated critical habitat within the BSA. The nearest critical habitat for vernal pool tadpole shrimp is Unit 14B, located over 20 miles southwest of the BSA.

There is an American bulrush-dominated wetland, located under the I-580/I-205 connector ramps, that may be suitable habitat. However, no wetlands occur within the construction area. A reconnaissance level survey for vernal pool habitats in the BSA noted the potential for development of suitable habitat in the form of scrapes and borrow pits, but there were no apparent suitable habitat features currently existing. A few scrapes were observed that had the potential to pond for a very limited duration, but no scrapes were observed with ponded water following rain. Numerous drainages that would have brief, fast flows were identified in the BSA, but that type of habitat feature is not considered suitable because the species does not occur in aquatic habitats that have flashy, flowing water.

This species has a low potential to be present in the BSA in the wetland identified at the I-580/I-205 connector ramps and in areas where scrapes or borrow pits may be developed because vernal pool tadpole shrimp eggs can lay dormant until suitable conditions occur or be spread via wind or wildlife.

*Environmental Consequences*

The avoidance and minimization measures listed in General Avoidance and Minimization Measures section below will reduce the potential for effects to vernal pool tadpole shrimp during project construction by reducing potential impacts outside the construction area through implementation of BMPs.

*Avoidance, Minimization, and/or Mitigation Measures*

The lack of apparent suitable habitat features within the construction area results in a conclusion that there will be no impacts to this species by the project. If habitat features for vernal pool tadpole shrimp were present within the construction area, and if that habitat was impacted, the species may experience direct harassment, harm, injury, or mortality as a result of construction activities, including initial site preparation, use of heavy equipment for excavation and backfill, handling of stockpiles and stored materials, rehabilitation of roadways, rehabilitation of shoulder backing, installation of rumble strips, installation of metal beam guard rails (MBGRs) and concrete barriers, adjusting of inlets, replacement of curbs and dikes, and installation of overhead signage, lighting, flashing beacons, barrier markers, roadside delineators, and guard rail delineators. The avoidance and minimization measures in General Avoidance and Minimization Measures section below are intended to reduce the likelihood of impacts during project activities.

San Joaquin Whipsnake

*Affected Environment*

Caltrans has identified suitable grassland and shrubland habitat within the BSA. Because there is a CNDDDB occurrence in the area and suitable habitat in the BSA, Caltrans believes that the San Joaquin whipsnake has the potential to disperse through the BSA.

*Environmental Consequences*

Grassland and shrubland in the construction area provides potential habitat for the San Joaquin whipsnake. However, the habitat within the construction area is considered to be of marginal quality because of the high levels of roadside disturbance associated with I-580. Caltrans anticipates that construction will push this zone of roadside disturbance further outward into less disturbed habitat, particularly at ramp widening locations, causing degradation of habitat due to edge effects.

Implementation of avoidance and minimization measures outlined below and detailed in the General Avoidance and Minimization Measures below will prevent direct harm or injury to San Joaquin whipsnakes from construction equipment and activities. Caltrans concludes that the proposed project would not affect the persistence of local populations of San Joaquin whipsnake within the Altamont Pass region.

*Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to San Joaquin whipsnake during project construction. Species specific measures include pre-construction surveys (Measure # 7), notification of listed and other special-status species on site (Measure # 14), prevention of wildlife entrapment (Measure # 15), proper materials storage (Measure # 16), and the prohibition of mono-filament netting (Measure # 25). In the event that individuals are found during pre-construction surveys, they will be relocated to suitable habitat outside of the BSA.

Western Pond Turtle

*Affected Environment*

Aquatic habitat is present within the BSA at Mountain House Creek. The portion of the creek that is within the BSA may be too shallow to harbor resident populations of western pond turtles. Streams within the BSA could be used as a movement corridor between areas of deeper water habitat. Individuals travelling into uplands for nesting or dispersal from other streams or ponds in the vicinity may use grassland or shrubland within the BSA. Western pond turtles may occur within these habitats in the BSA.

*Environmental Consequences*

Direct impacts to the western pond turtle may result from earth-moving activities within 350 feet of Mountain House Creek, and indirect impacts from construction activities near this creek may include water quality degradation from erosion or sediment loading. However, impacts from

earth-moving activities and water quality impacts are unlikely, given the proposed avoidance and minimization measures in the General Avoidance and Minimization Measures section below and Caltrans BMPs. Caltrans concludes that the proposed project would not affect the persistence of local populations of the western pond turtle within the Altamont Pass region.

*Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to western pond turtle during project construction. Species specific measures include pre-construction surveys (Measure # 7) and notification of listed and other special-status species on site (Measure # 14). In the event that individuals are found, they will be relocated to suitable habitat outside of the BSA.

*American Badger*

*Affected Environment*

Suitable habitat is present in grassland and shrubland habitats within the BSA, though habitat is of marginal quality due to continual human disturbance associated with I-580. If any American badgers do occur within the BSA, they are likely to be foraging or dispersing rather than establishing permanent dens. They are not expected to occur in urbanized habitats.

*Environmental Consequences*

Direct impacts to occupied burrows are not expected as a result of the proposed project. Any active badger burrows detected during initial pre-construction surveys within the construction area will be avoided. American badgers may be indirectly affected by noise, light, and visual disturbance. Caltrans anticipates that since the construction area is already highly disturbed due to roadway traffic, badgers are highly unlikely to be present within the construction area. Caltrans concludes that the proposed project would not affect the persistence of local populations of American badgers within the Altamont Pass region.

*Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to American badgers during project construction. Species-specific measures include pre-construction surveys (Measure # 7) and notification of listed and other special-status species on site (Measure # 14). If an individual is found during pre-construction surveys, work will not commence until the individual leaves the work area of its own volition.

*Bat Species*

*Hoary Bat – State Special Animals List*

The hoary bat is a widespread species found in a variety of habitats throughout California. This solitary bat's range includes Canada (near the limit of trees) to South America (Bolster 1998). They are most commonly found in association with forested habitats near water (CDFW 2013). Roosting sites are generally in dense foliage of both coniferous and deciduous trees, at the ends of

branches 10 to 40 feet above the ground, and with open flying space below (Bolster 1998). Moths are the primary food source for hoary bats (Black 1974). Females give birth to young between mid-May and early July.

*Pallid Bat – State Species of Special Concern*

The pallid bat is a medium-sized bat that occurs throughout much of California. They may occur in a wide variety of grasslands, shrublands, and woodlands, though they are generally found in dry, open areas at lower elevations. They typically fly low while foraging for prey. Most prey are caught on the ground or gleaned off of foliage. Prey species include beetles, orthopterans, homopterans, moths, spiders, scorpions, and solpugids (wind scorpions or camel spiders) (CDFW 2008). The species is capable of taking heavy-bodied insects such as June beetles and Jerusalem crickets as well (Jameson and Peeters 2004). Pallid bats make day roosts within caves, crevasses, mines, and occasionally in hollow trees or buildings. Night roosts may be in more open areas such as under porches and open buildings. Pallid bats are particularly sensitive to disturbance from humans at roost sites (CDFW 2008).

*Townsend's Big eared Bat – State Species of Special Concern*

The Townsend's big-eared bat is found throughout California except at high elevations. Maternity colonies have been found in caves, mines, and buildings (Jameson and Peeters 2004), and they will hibernate during the winter in roosts that are cold, but not below freezing. Townsend's big-eared bats feed primarily on small moths, though beetles and other insects may be taken as well. They capture prey in flight by echolocation and by gleaning from foliage. This species is highly sensitive to disturbance at roost sites (CDFW 2008).

Affected Environment

A habitat assessment was conducted for bat species within the BSA. Surveyors inspected all underpasses (bridges that carry I-580 above surface streets, waterways, or other open areas) within the BSA. Overpasses (bridges that carry roads above I-580) were not assessed as they were considered to be unsuitable due to excessive traffic on the freeway below. Surveyed bridges included four road/railroad crossings (a railroad/unsealed road at PM 8.0, an unsealed road at PM 3.9, Grant Line Road at PM 1.5, and Midway Road at PM 1.0), and one elevated highway span at PM 7.1. The bridges at the I-580/I-205 interchange and at North Flynn Road were not surveyed as they pass over the highway. The habitat assessment consisted of an inspection of the exterior of the bridges and would not be considered sufficient to confirm the presence or absence of day-roosting bats within the interior of the bridges.

Although live bats were observed or heard at only one bridge, all of the bridges within the BSA were found to have suitable day roost and night roost habitat based on bridge design elements. The bridges are generally of a box-girder construction, which leaves a hollow interior space below the roadbed in the center of the bridge structure. Weep holes designed for drainage could also make this interior space accessible to bats. In addition, some of the larger bridges also had expansion joints, which are lateral seams in the concrete that sometimes leave gaps suitable for bat roosting. Other types of crevices and angles created by the concrete bridge design also create roosting habitat.

Confirmed day roosts were observed at one bridge, as evidenced by guano deposits, echolocation calls, and individuals observed; however, species or genus-level identifications could not be

made. Potentially suitable night roosts were observed in the understructure of bridges in recessed, protected areas that are high enough above the ground to provide a flyway for bats, although no evidence of night roost use was observed.

### Environmental Consequences

Within the construction area, roosts at bridges may be indirectly impacted by noise, nighttime lighting, vibration from construction activities, and disturbance from humans and equipment during electrical conduit installation on, under, or up to bridges at the railroad crossing (PM 8.0), Grant Line Road (PM 1.5), and Midway Road (PM 1.0). Avoidance and minimization measures outlined below and detailed in the General Avoidance and Minimization Measures section below have been put in place to diminish the probability of impacts to roosting bats within the construction area. Caltrans concludes that the proposed project would not affect the persistence of local populations of bat species within the Altamont Pass region.

### Avoidance, Minimization, and/or Mitigation Measures

The avoidance and minimization measures listed in General Avoidance and Minimization Measures section below will reduce the potential for effects to special-status bat species during project construction. Species specific measures include pre-construction surveys (Measure # 7), notification of listed and other special-status species on site (Measure # 14), and the Caltrans Bats and Bridges Technical Bulletin (Erickson et al. 2002) procedures for construction activities around bat roosts (Measure # 8).

### Western Burrowing Owl

#### *Affected Environment*

Suitable habitat for burrowing owl is present within the BSA in grassland habitats and landscaped areas. Numerous California ground squirrels and their burrows were observed in close proximity to the BSA and burrowing owls may potentially occur in these areas where vegetation is short.

#### *Environmental Consequences*

Direct impacts to occupied burrows are not expected as a result of the proposed project. Any active burrowing owl burrows detected during initial occupancy surveys within or adjacent to the construction area will be avoided (per the measures in the Staff Report on Burrowing Owl Mitigation, CDFG 2012). Burrowing owls may be indirectly affected by noise, light, and visual disturbance. Caltrans has identified that the construction area is highly disturbed by heavy traffic volumes which create ambient noise levels in excess of 67.8 decibels (Caltrans 2013) and high ambient light levels after sundown. Caltrans concludes that the proposed project would not affect the persistence of local populations of burrowing owl within the Altamont Pass region.

#### *Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to western burrowing owl during project construction. Species specific measures from the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game [CDFG] 2012) include occupancy surveys (Measure # 12) and notification of listed and other special-status species on site (Measure # 14).

If burrowing owls are found to occupy burrowing owl habitat in or adjacent to the construction area, avoidance and minimization measures will be determined in consultation with CDFW.

### Migratory Bird Species

#### *Affected Environment*

In general, habitat within the BSA is of marginal quality due to continual human disturbance from I-580 and high traffic volumes associated with the highway. All land cover types within the BSA may be used by one or more bird species for nesting, even bare ground and urbanized areas. Raptors and many smaller bird species may nest in trees within the BSA, and many other birds may nest among grassland, shrubland, and freshwater marsh land cover types. During field surveys and project site visits, Caltrans biologists did not observe any listed bird species within the BSA.

#### *Environmental Consequences*

Grading, tree and brush removal, or vegetation pruning has the potential to impact nesting migratory or other bird species by causing destruction or abandonment of occupied nests and potential disruption of foraging behavior. During construction, common migratory or other bird species may be temporarily displaced by habitat alteration or disturbance due to construction activity. Through the implementation of the proposed avoidance and minimization measures outlined below and detailed in the General Avoidance and Minimization Measures section below, no mortality of migratory or other birds is anticipated. The proposed project has the potential to remove or disturb unoccupied habitat used by nesting or foraging birds. This potential impact would be limited to a relatively small area compared to the extensive nesting and foraging habitat adjacent to the construction area. Caltrans concludes that the proposed project would not affect the persistence of populations of migratory and special-status bird species within the Altamont Pass region.

#### *Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to nesting migratory and other bird species during project construction. Migratory and other bird species-specific measures include a September 1 to February 15 work window for clearing and grubbing activities (Measure # 9), pre-construction surveys for nesting birds if work must occur during the nesting season (February 15 to August 31) (Measure # 10), and, if necessary, non-disturbance buffers for active nests found during pre-construction surveys (Measure # 11), and notification of listed and other special-status species on site (Measure # 14).

### Midvalley Fairy Shrimp

#### *Affected Environment*

There are no recorded occurrences of Midvalley fairy shrimp within 2 miles of the BSA (CDFW 2013). The nearest CNDDDB occurrences are more than 5 miles north of the BSA (CDFW 2013). There is an American bulrush-dominated wetland, located under the I-580/I-205 connector ramps that may provide suitable habitat. No wetlands occur within the construction area. A reconnaissance level survey for vernal pool habitats in the BSA noted a few scrapes that had the

potential to pond for a very limited duration, but no scrapes were observed with ponded water following rain. Numerous drainages that would have brief, fast flows were identified in the BSA, but that type of habitat feature is not considered suitable because the species does not occur in aquatic habitats that have flashy, flowing water. This species has a low potential to be present in the BSA in the wetland identified at the I-580/I-205 connector ramps and in areas where scrapes or borrow pits may be developed.

### *Environmental Consequences*

The lack of apparent suitable habitat features within the construction area results in a conclusion that there will be no impacts to this species by the project. The general avoidance and minimization measures in the General Avoidance and Minimization Measures section below are intended to ensure water quality standards and that no impacts are caused to potential resources outside the defined construction area during project activities. Caltrans concludes that the proposed project would not affect the persistence of local populations of Midvalley fairy shrimp within the Altamont Pass region.

### *Avoidance, Minimization, and/or Mitigation Measures*

The avoidance and minimization measures listed in the General Avoidance and Minimization Measures section below will reduce the potential for effects to resources during project construction by reducing potential impacts outside the construction area through implementation of BMPs.

### *General Avoidance and Minimization Measures*

To avoid and minimize effects to federally and/or State-listed or other special-status-species and their habitats and jurisdictional wetland and water features within the Biological Study Area (BSA)(See Figure 2), Caltrans will implement the following measures:

- 1. Biological Opinion.** Caltrans will include a copy of the Biological Opinion within the construction bid package of the proposed project. The resident engineer or their designee will be responsible for implementing the *Conservation Measures* and *Terms and Conditions* of the U.S. Fish and Wildlife Service (USFWS) Biological Opinion and the California Department of Fish and Wildlife (CDFW) Incidental Take Permit.
- 2. Reinitiation of Consultation.** Caltrans will reinitiate consultation if the project results in effects to listed species not considered in the USFWS Biological Opinion or CDFW Incidental Take Permit.
- 3. Agency Approval for Biological Monitors.** Caltrans will submit the names and qualifications of the biological monitor(s) for USFWS and CDFW approval prior to initiating construction activities for the proposed project.
- 4. Biological Monitoring.** The agency-approved biologist(s) will be on site during initial ground-disturbing activities, and thereafter as needed to fulfill the role of the approved biologist as specified in project permits. The biologist(s) will keep copies of applicable permits in their possession when on site. Through the resident engineer or their designee, the agency-approved biologist(s) shall be given the authority to communicate either verbally or by telephone, email, or hardcopy with all project personnel to ensure that take of listed species is minimized and permit

requirements are fully implemented. Through the resident engineer or their designee, the agency-approved biologist(s) shall have the authority to stop project activities to minimize take of listed species or if he/she determines that any permit requirements are not fully implemented. If the agency-approved biologist(s) exercises this authority, the agencies shall be notified by telephone and email within 48 hours.

**5. Worker Environmental Awareness Training (WEAT).** All construction personnel will attend a mandatory environmental education program delivered by an agency-approved biologist prior to working in the construction area.

**6. Work Window for Listed Species:** All work within suitable habitat for California tiger salamander will occur between April 15 and October 15, when the species is unlikely to be active and there is less potential for an individual to enter the work area, if practicable; otherwise, wildlife exclusion fencing (WEF) will be installed and the WEF will be monitored following rain events.

**7. Pre-construction Surveys:** Prior to initiation of construction activities that include ground disturbance (or bridge disturbance for bats), pre-construction surveys will be conducted by an agency-approved biologist for listed and other special-status species. These surveys will consist of walking surveys of the construction area and, if possible, accessible adjacent areas within at least 50 feet of the construction area. The biologist(s) will investigate all potential cover sites. This includes thorough investigation of mammal burrows, appropriately sized soil cracks, tree roots, debris, and (for bat roosts) bridge structures and trees. Nonpoisonous native vertebrates found in cover sites within the construction area will be documented and relocated to an adequate cover site in the vicinity.

San Joaquin kit fox surveys should identify kit fox habitat features on the project site, evaluate use by kit fox, and, if possible, assess the potential impacts to the kit fox by the proposed activity. If an occupied den is discovered within the construction area, or within 100 feet of the project boundary, an exclusion zone of a minimum of 100 feet around the den will be established.

If the minimum exclusion zone cannot be met, then CDFW and USFWS must be consulted. If a natal/pupping den is discovered, the agencies will be notified immediately.

**8. Construction Activities around Bat Roosts:** As stated in the Caltrans Bats and Bridges Technical Bulletin (Erickson et al. 2002), any area under a confirmed day or night bat roost that is within visual sight of bats will be designated as an environmentally sensitive area (ESA). To minimize impacts to day roosts during the non-volant period when young are present but cannot fly (May 1 to July 31), work should not occur directly under or adjacent to the roost. To minimize impacts to night roosts, construction activities should not occur immediately around a roost site between 10:00 p.m. and sunrise, in particular during the period of highest night-roost use from spring to fall.

Clearing of vegetation and grubbing around roosts is to be minimized wherever possible. Combustion equipment (e.g., pumps, generators, vehicles) should not be used immediately under the roost. The presence of personnel under roost sites should be minimized, particularly during the evening exodus. Lights should not be placed in a location where a roost site would be illuminated.

**9. Work Window for Nesting Birds.** To the extent practicable, clearing and grubbing activities will be conducted during the non-nesting season between September 1 and February 15.

**10. Pre-construction Surveys for Nesting Birds.** Pre-construction surveys for nesting birds will be conducted by a qualified biologist no more than 72 hours prior to the start of construction for activities occurring during the breeding season (February 15 to August 31).

**11. Non-Disturbance Buffer for Nesting Birds.** If work is to occur within 100 feet of active raptor nests or 50 feet of active passerine nests, a nondisturbance buffer will be established at a distance sufficient to minimize disturbance based on the nest location, topography, cover, the species' sensitivity to disturbance, and the intensity/type of potential disturbance.

**12. Occupancy Surveys for Western Burrowing Owl.** Occupancy surveys, as defined in the Staff Report on Burrowing Owl Mitigation (CDFG 2012), shall be conducted by a qualified biologist. If burrowing owls are found to occupy burrowing owl habitat in or adjoining the construction area, avoidance and minimization measures will be determined in consultation with CDFW.

**13. Environmentally Sensitive Area (ESA) Fencing.** Environmentally sensitive areas will be delineated with high visibility temporary fencing at least 4 feet in height to prevent encroachment of construction personnel and equipment outside the construction area described in the project description. The fencing will be removed only when all construction equipment is removed from the site. No project activities will occur outside the delineated construction area.

**14. Listed and Other Special-status Species On Site.** The resident engineer will immediately contact the agency-approved project biologist(s) in the event that a California tiger salamander, California red-legged frog, San Joaquin kit fox, or other special-status species is observed within a construction zone. The resident engineer will suspend construction activities within a 50-foot radius of the animal until the animal leaves the site voluntarily or an agency approved protocol for removal has been established.

**15. Prevention of Wildlife Entrapment.** To prevent inadvertent entrapment of listed and other special-status species during construction, excavated holes or trenches more than 1 foot deep with walls steeper than 30 degrees will be covered by plywood or similar materials at the close of each working day. Alternatively, an additional 4-foot high vertical barrier, independent of exclusionary fences, will be used to further prevent the inadvertent entrapment of listed species. If it is not feasible to cover an excavation or provide an additional 4-foot high vertical barrier, independent of exclusionary fences, one or more escape ramps constructed of earth fill or wooden planks will be installed. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped listed or other special status animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape or the USFWS and/or CDFW will be consulted. The USFWS and CDFW will be notified within 48 hours.

**16. Materials Storage:** California tiger salamanders, California red-legged frogs, San Joaquin kit foxes, and other special-status species, including San Joaquin whipsnake, are attracted to cavity-like structures such as pipes and may seek refuge under construction equipment or debris. They may become trapped or injured if such materials are moved. All construction pipes, culverts, or similar structures, or construction equipment or construction debris left overnight within the

construction area will be inspected by the agency-approved biological monitor prior to being moved.

17. **Night Work.** To the extent practicable, nighttime construction will be minimized, although night work is expected to occur.

18. **Night Lighting.** Except when necessary for construction, driver, or pedestrian safety, lighting of the construction area by artificial lighting during night time hours will be minimized to the maximum extent practicable.

19. **Trash Control.** All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed at least once a day from the construction area.

20. **Firearms.** No firearms will be allowed in the construction area except for those carried by authorized security personnel, or local, State, or Federal law enforcement officials.

21. **Pets.** To prevent harassment, injury, or mortality of sensitive species, no pets will be permitted in the construction area.

22. **Vehicle Use.** Project employees will be required to comply with written guidance governing vehicle use, speed limits on unpaved roads, fire prevention, and other hazards.

23. **Caltrans Best Management Practices (BMPs).** The potential for adverse effects to water quality will be avoided by implementing temporary and permanent BMPs outlined in Section 7-1.01G of the Caltrans' Standard Specifications. Caltrans erosion control BMPs will be used to minimize any wind- or water-related erosion. The State Water Resources Control Board has issued a National Pollution Discharge Elimination System (NPDES) Statewide Storm Water Permit to Caltrans to regulate stormwater and nonstormwater discharges from Caltrans facilities. A Storm Water Pollution Prevention Plan (SWPPP) will be developed for the project, as one is required for all projects that have at least 1.0 acre of soil disturbance. The SWPPP complies with the Caltrans Storm Water Management Plan (SWMP). The SWMP includes guidance for Caltrans design staff to include provisions in construction contracts to include measures to protect sensitive areas and to prevent and minimize stormwater and non-stormwater discharges. The SWPPP will reference the Caltrans Construction Site BMPs Manual. This manual is comprehensive and includes many other protective measures and guidance to prevent and minimize pollutant discharges and can be found online at: <http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm>. Protective measures will be included in the contract, including, at a minimum:

a. No discharge of pollutants from vehicle and equipment cleaning are allowed into storm drains or water courses.

b. Vehicle and equipment fueling and maintenance operations must be at least 50 feet away from water courses.

c. Concrete wastes are collected in washouts and water from curing operations is collected and disposed of and not allowed into water courses.

d. Dust control will be implemented, including use of water trucks and tackifiers to control dust in excavation and fill areas, rocking temporary access road entrances and exits, and covering temporary stockpiles when weather conditions require.

e. Coir rolls will be installed along or at the base of slopes during construction to capture sediment and temporary organic hydromulching will be applied to all unfinished disturbed and graded areas.

f. Work areas where temporary disturbance has removed the pre-existing vegetation will be restored and re-seeded with a native seed mix.

g. Graded areas will be protected from erosion using a combination of silt fences, fiber rolls along toe of slopes or along edges of designated staging areas, and erosion-control netting (such as jute or coir) as appropriate.

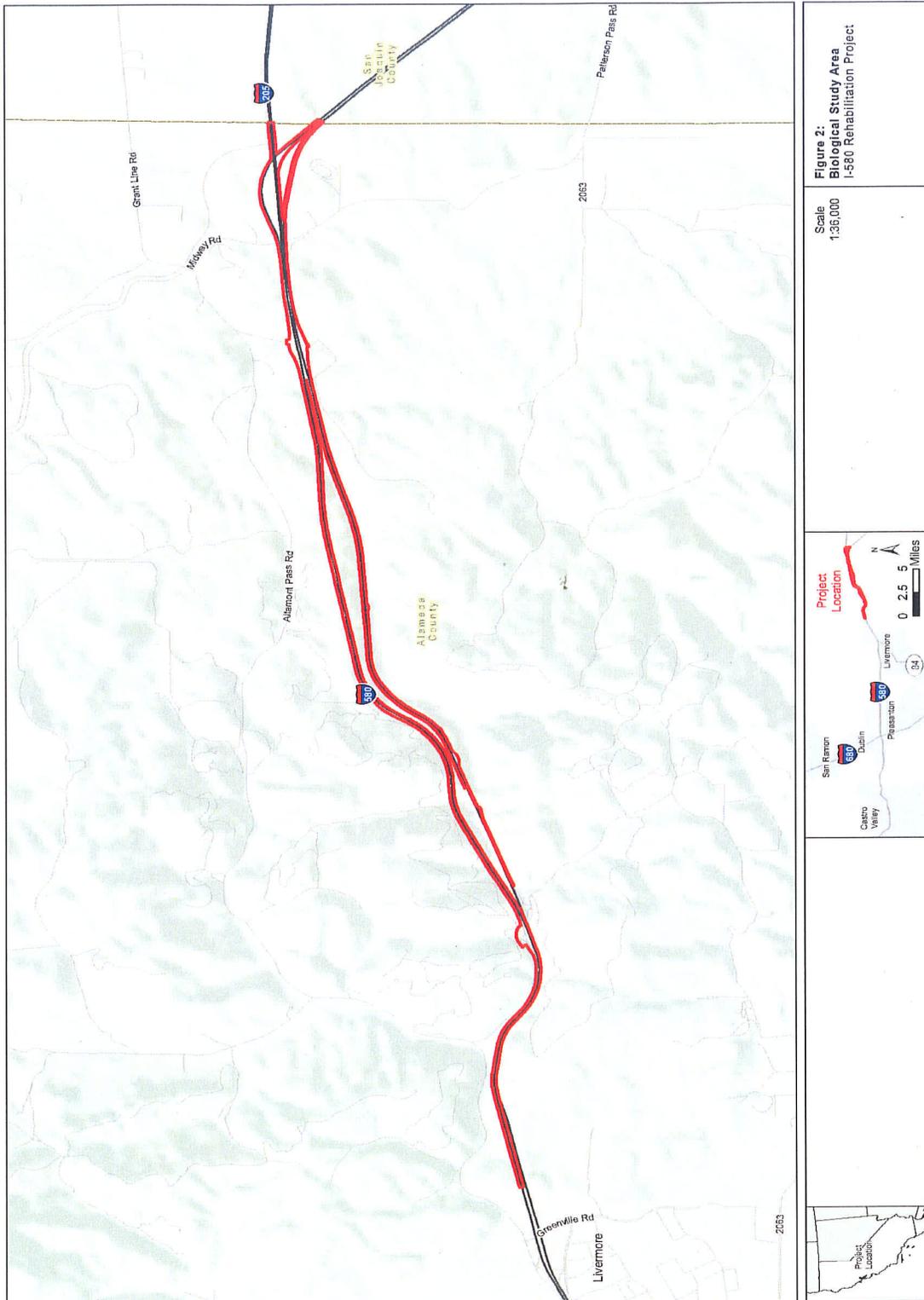
h. A Revegetation Plan will be prepared for restoration of temporary work areas. Areas will be revegetated with native species.

**24. Water Quality Inspections.** Water quality inspector(s) will inspect the site after a rain event to ensure that the stormwater best management practices (BMPs) are adequate.

**25. Mono-filament Erosion Control.** Plastic mono-filament netting (erosion control matting) or similar material will not be used for the project because California tiger salamanders and California red-legged frogs, as well as San Joaquin whipsnakes, may become entangled or trapped in it. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

**26. Concrete Waste.** All grindings and asphaltic-concrete waste will be stored within previously disturbed areas absent of habitat and at a minimum of 50 feet from any aquatic habitat, culvert, or drainage feature.

**27. Revegetation Following Construction.** All areas that are temporarily affected during construction will be revegetated with an assemblage of native grass, shrub, or tree species. Invasive, exotic plants will be controlled within the construction area to the maximum extent practicable, pursuant to Executive Order 13112.



**Figure 2:**  
**Biological Study Area**  
**I-580 Rehabilitation Project**

Scale  
 1:36,000

Project Location

San Ramon  
 Dublin  
 Castro Valley  
 Livermore  
 Pleasanton  
 I-580  
 I-205  
 0 2.5 5 Miles

**V-1. CULTURAL RESOURCES:**

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Two historical resources have been identified in the project area. No work touching the Stone Cut Underpass or the Delta-Mendota Canal and/or Bridge other than overlay will occur. The proposed project is determined to have no impact on cultural resources. If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find.

**V-2. PALEONTOLOGY:**

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

There will be no ground disturbances anticipated to extend beyond previously disturbed ground. No paleontological resources will be affected and therefore no minimization and/or mitigation measures will be required

**VI. GEOLOGY AND SOILS:**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Any proposed engineering design will be carried out in accordance with Caltrans Seismic Design Criteria and Standard Construction Practices.

**VII. GREENHOUSE GAS EMISSIONS:** Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

An assessment of the greenhouse gas emissions and climate change is included in Chapter 3. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the body of the environmental document.

**VIII. HAZARDS AND HAZARDOUS MATERIALS:**

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will have no impact to hazardous waste or materials. No avoidance, minimization, and/or mitigation measures have been identified.

**IX. HYDROLOGY AND WATER QUALITY:**

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This discussion is divided into two sections: IX-1. Hydrology, and IX-2. Water Quality.

**IX-1. HYDROLOGY:**

The proposed project will not alter or change the current site conditions. No impacts are anticipated to surface water flows and drainage.

Based on available Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels for all ramp widening locations, all ramp widening locations are not located within Federal Emergency Management Agency (FEMA) Base Floodplain. The remainder of the project is within FEMA FIRM panel 400G for Alameda County. This panel is not printed which indicates that the site is not in any FEMA special flood hazard area.

**IX-2. WATER QUALITY*****Affected Environment***

The project is located within the Central Valley and San Francisco Bay Regional Water Quality Control Board (RWQCB) jurisdiction (Regions 5 and 2), which is responsible for implementation of State and Federal laws and regulations for water quality protection.

<b>• Regional Board</b>	<b>• Central Valley</b>
Hydrologic Sub-Area #	543.00
Hydrologic Region	San Joaquin
Hydrologic Unit	NORTH DIABLO RANGE
<b>• Regional Board</b>	<b>• San Francisco Bay</b>
Hydrologic Sub-Area #	204.30
Hydrologic Region	San Francisco Bay
Hydrologic Unit	SOUTH BAY
Hydrologic Area	Alameda Creek

The direct receiving water body of the project is Alameda Creek which eventually discharges to the Pacific Ocean. The project is within the area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods.

The project site is within the San Joaquin Valley Groundwater Basin and Tracy Sub-basin Area Groundwater Basin (Basin ID: 5-22.15) (Groundwater Bulletin 118). The San Joaquin Valley comprises the southernmost portion of the Great Valley Geomorphic Province of California. The Great Valley is a broad structural trough bounded by the tilted block of the Sierra Nevada on the east and the complexly folded and faulted Coast Ranges on the west. The Tracy Sub-basin is defined by the areal extent of unconsolidated to semi-consolidated sedimentary deposits that are bounded by the Diablo Range on the west, the Mokelumne and San Joaquin Rivers on the north, the San Joaquin River to the east, and the San Joaquin-Stanislaus County line on the south. The Tracy Sub-basin is located adjacent to the Eastern San Joaquin Sub-basin on the east and the Delta-Mendota Sub-basin on the south. All of the above mentioned sub-basins are located within the larger San Joaquin Valley Groundwater Basin. The Tracy Sub-basin also lies to the south of the Sacramento Valley Groundwater Basin and the Solano Sub-basin. The Tracy Sub-basin is drained by the San Joaquin River and one of its major west side tributaries, Corral Hollow Creek. The San Joaquin River flows northward into the Sacramento and San Joaquin Delta and discharges into the San Francisco Bay. Annual precipitation within the sub-basin ranges from about 11 inches in the south to about 16 inches in the north.

The Basin Plan establishes beneficial uses for waterways and water bodies within the region. The designated beneficial uses for Alameda Creek are Agricultural Water Supply, Freshwater Habitat, Ground Water Recharge, Fish Migration, Water Contract Recreation, Noncontract Water Recreation, Fish Spawning, and Wildlife Habitat.

Under Section 303(d) of the Clean Water Act (CWA), it states, territories and authorized tribes

are required to develop a list of water quality limited segments. These waters on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. No water bodies near the project area where the project discharges are listed on the 303(d) List of Water Quality Limited Segments.

### **Topography & Soil Characteristics**

The topography of the area is rolling terrain, surrounded by the agricultural fields. The Hydrologic group is Group D, soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a clay pan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

### ***Environmental Consequences***

Caltrans has performed many studies to monitor and characterize stormwater runoff from highways throughout the State. Pollutants of Concern in Caltrans runoff found from the "Final Report of the Caltrans BMP Retrofit Pilot Program" were phosphorus, nitrogen, copper, lead, zinc, sediments, general metals (unspecified metals), and litter. Some sources of these pollutants are natural erosion, phosphorus from tree leaves, combustion products from fossil fuels, trash and falling debris from motorists, and the wearing of brake pads.

The area of soil disturbance is approximately 1.8 acres. There are no additional impervious or re-worked areas. The existing impervious area is 35.2 acres.

### ***Avoidance, Minimization and/or Mitigation Measures***

#### 1) CWA Section 401

Caltrans' District Office of Biological Sciences and Permits has concluded that a CWA Section 404 permit is not required from the U.S. Army Corps of Engineers. As such, a CWA Section 401 certification is not required from either Region 2 or 5.

#### 2) CWA Section 402

According to the Caltrans NPDES permit and the CGP, best management practices (BMPs) will be incorporated into this project to reduce the discharge of pollutants during and after construction to the maximum extent practicable (MEP). Since the project will involve more than one acre of DSA, this project is subject to the CGP.

In general, BMPs fall into three main categories:

- a. Design Pollution Prevention BMPs: These BMPs are permanent measures to improve storm water quality by reducing erosion, stabilizing disturbed soil areas, and maximizing vegetated surfaces. Design Pollution Prevention BMPs are expected to be required for this project. These may include riprap for drainage improvements. Erosion control measures will be provided on all disturbed areas.
- b. Temporary Construction Site BMPs: These BMPs are applied during construction

activities to reduce the pollutants in the storm water discharges throughout construction. This project will require Construction Site BMPs including, but not limited to:

- Soil Stabilization: scheduling, preservation of existing vegetation, slope protection, slope interrupter devices, and channelized flow;
  - Sediment Control: run-on or run-off control, storm drain inlet protection, sediment or desilting basins, and sediment traps.
  - Tracking Control: stabilized construction entrances, tire or wheel washes, stabilized construction roadways, and street sweeping and vacuuming;
  - Wind Erosion Control; hydraulic mulch, hydroseeding, and temporary cover;
  - Non-Storm Water Management: temporary stream crossing, clear water diversion, water conservation practices, dewatering operations, paving and grinding operations, potable water/irrigation, vehicle and equipment operations (fueling, cleaning and maintenance), pile driving operations, concrete curing and finishing, and material and equipment use, structure demolition or removal over water; and
  - Waste Management and Materials Pollution Control: material delivery and storage, material use, stockpile management, spill prevention and control, solid and concrete waste management, hazardous waste and contaminated soil management, and sanitary or septic and liquid waste management.
- c. Permanent Treatment BMPs: These BMPs are permanent water quality controls used to remove pollutants from storm water runoff prior to being discharged from Caltrans right-of-way. Since this project is considered a major reconstruction project, it is not exempt from incorporating Treatment BMPs. Treatment BMPs are permanent devices and facilities treating storm water runoff. Typical Treatment BMPs are biofiltration strips or swales with or without soil amendment, infiltration basins, detention basins, traction sand traps, dry weather flow diversions, media filters (Austin and Delaware), gross solids removal devices, multi-chamber treatment trains, and wet basins. In general, biofiltration strips or swales are the most cost-effective alternative.

Based on the sediment risk and the receiving water risk, the project is classified as "Risk Level 2" under the CGP. The requirements for Risk Level 2 projects are presented in Attachment E of the CGP. In summary, Risk Level 2 projects are required:

- a. To prepare a Storm Water Pollution Prevention Plan (SWPPP) that has to be developed and certified by a Qualified SWPPP Developer (QSD);
- b. To develop a Construction Site Monitoring Program by the QSD, which includes the procedures and methods related to the visual monitoring and the sampling and analysis for non-visible pollutants, sediment and turbidity, and pH;
- c. To prepare a Rain Event Action Plan that will include the current construction activity and strategy or actions to be taken for the implementation of BMPs; and
- d. To submit a Storm Water Annual Report, annually, that includes a summary and evaluation of sampling and analysis results as well as any violations or exceedance and corrective actions.

**X. LAND USE AND PLANNING:**

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

***Affected Environment***

Interstate 580 runs east and west through the study area and serves both local and regional traffic in the area. The I-580 corridor is surrounded by a diverse mix of land uses as it traverses the cities of Castro Valley, Dublin, Pleasanton, Livermore, and the Central Valley. In the vicinity of the project, I-580 is classified as a rural freeway that generally consists of rolling/mountainous terrain.

***Environmental Consequences***

The proposed project will not change or alter the current land use and therefore will not have any conflict with current land use plans, policies, or regulations within the project area.

***Avoidance, Minimization, and/or Mitigation Measures***

No avoidance, minimization, and/or mitigation measures are required as there are no impacts to land use or planning identified.

**XI. MINERAL RESOURCES:**

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

There are no mineral resources within the project area. No avoidance, minimization, and/or mitigation measures are needed.

**XII. NOISE:**

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not increase capacity; therefore traffic noise is expected to remain the same. No avoidance, minimization, and/or mitigation measures are identified.

**XIII. POPULATION AND HOUSING:**

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

While the project is expected to improve the efficiency of the highway system, it is not projected to have any growth-inducing effects.

**XIV. PUBLIC SERVICES:**

	Potentially Significant Impact	Less Than Significant with Mitigation	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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is not expected to have any effects to public services. A Traffic Management Plan (TMP) will be prepared during the design phase to ensure that public service vehicle access is not affected during construction.

**XV. RECREATION:**

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

It is anticipated that no changes will occur in traffic patterns and thus will not likely increase the use of existing recreational facilities within the project area. The project will not affect any recreational facilities.

**XVI. TRANSPORTATION/TRAFFIC:**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project does not have any conflict with any plans, congestion management programs, or ordinances. It is anticipated that no changes will occur in traffic patterns. The project will not create an inadequate access to emergency services as it will increase the efficiency of the highway system.

**XVII. UTILITIES AND SERVICE SYSTEMS:**

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will have no impact to utilities or service systems. No avoidance, minimization and/or mitigation measures have been identified.

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE**

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project has minimal impact on potential habitat for special-status species. Please see Section IV. Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project’s impacts were taken into consideration with regards to other projects that have occurred, or will occur within the proposed project’s area. It was determined that the proposed project’s impact to the following environmental factor does not contribute to cumulative effects with those projects:

- Special status species

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project proposes to rehabilitate the existing roadways. The project’s elements will not have any impacts which will cause any adverse effects on human beings either directly or indirectly.

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## Chapter 3 CLIMATE CHANGE

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels. Research from such establishments as the Intergovernmental Panel on Climate Change (IPCC) are primarily concerned with the emissions of GHGs generated by human activity including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF<sub>6</sub>), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light duty trucks, other trucks, buses, and motorcycles make up the largest source (second to electricity generation) of GHG emitting sources. The dominant GHG emitted is CO<sub>2</sub>, mostly from fossil fuel combustion.

There are typically two terms used when discussing the impacts of climate change. "Greenhouse Gas Mitigation" is a term for reducing GHG emissions in order to reduce or "mitigate" the impacts of climate change. "Adaptation," refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels)<sup>2</sup>.

There are four primary strategies for reducing GHG emissions from transportation sources: 1) improving the transportation system and operational efficiencies, 2) reducing growth of vehicle miles traveled (VMT), 3) transitioning to lower GHG emitting fuels, and 4) improving vehicle technologies. To be most effective all four strategies should be pursued collectively. The following Regulatory Setting section outlines state and federal efforts to comprehensively reduce GHG emissions from transportation sources.

### ***Regulatory Setting***

#### *State*

With the passage of several pieces of legislation including State Senate and Assembly bills and Executive Orders, California launched an innovative and pro-active approach to dealing with GHG emissions and climate change. Relevant legislation include the following policies:

- Assembly Bill 1493 (AB 1493), Pavley.
- Executive Order (EO) S-3-05: (signed on June 1, 2005, by former Governor Arnold Schwarzenegger)
- AB 32, the Global Warming Solutions Act of 2006, Núñez and Pavley
- Executive Order S-20-06: (signed on October 18, 2006 by former Governor Arnold Schwarzenegger)
- Executive Order S-01-07: (signed on January 18, 2007 by former Governor Arnold Schwarzenegger)

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<sup>2</sup> [http://climatechange.transportation.org/ghg\\_mitigation/](http://climatechange.transportation.org/ghg_mitigation/)

- Senate Bill 97 (SB 97) Chapter 185, 2007
- Caltrans Director’s Policy 30 (DP-30) Climate Change (approved June 22, 2012): is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. This policy contributes to Caltrans’ stewardship goal to preserve and enhance California’s resources and assets.

### Federal

Although climate change and GHG reduction is a concern at the federal level; currently there are no regulations or legislation that have been enacted specifically addressing GHG emissions reductions and climate change at the project level. Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has promulgated explicit guidance or methodology to conduct project-level GHG analysis. As stated on FHWA’s climate change website (<http://www.fhwa.dot.gov/hep/climate/index.htm>), climate change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Despite the lack of Federal GHG regulations and legislation, FHWA as well as the National Highway Traffic Safety Administration (NHTSA) and U.S. EPA are taking steps to lessen climate change impacts by improving transportation system efficiency, creating cleaner fuels, reducing the growth of vehicle hours travelled, and enabling the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines.

### **Project Analysis**

The proposed project is not a capacity increasing project so it is not anticipated to have any increase in operational GHG emissions as a result.

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.<sup>3</sup> In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines sections 15064(h)(1) and 15130). To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult, if not impossible, task.

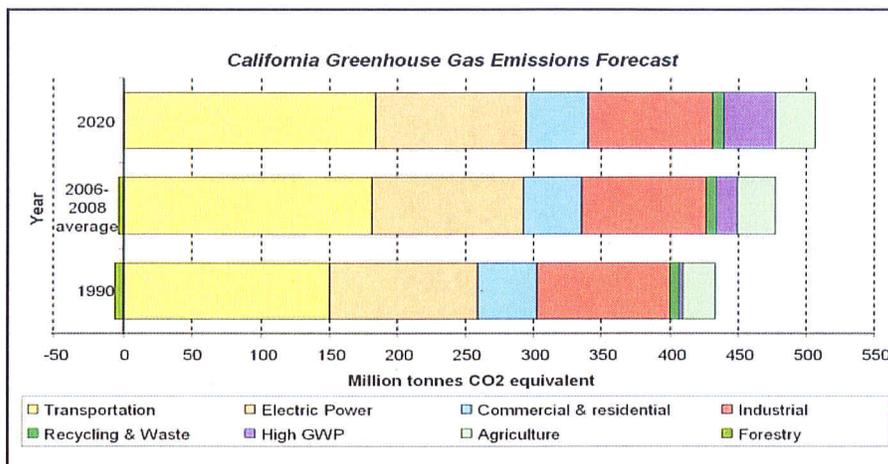
The AB 32 Scoping Plan mandated by AB 32 contains the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the Draft Scoping Plan, ARB released the GHG inventory for California (forecast last updated: October 28, 2010). The forecast is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for

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<sup>3</sup> This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.

**Figure 3 California GREENHOUSE GAS FORECAST**



Source: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

Caltrans and its parent agency, the Transportation Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.<sup>4</sup>

The purpose of this project is to rehabilitate 14.7 miles of roadway and the underlying slabs and asphalt concrete, if present. The reconstruction of the roadway will prevent excess maintenance in the future and reduce roadway friction for vehicles travelling on the roadway. As discussed below, construction emissions will be unavoidable, but there will likely be long-term GHG benefits associated reduced maintenance and improved operation through smoother pavement surfaces.

### **Construction Emissions**

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

<sup>4</sup> Caltrans Climate Action Program is located at the following web address:  
[http://www.dot.ca.gov/hq/tpp/offices/ogm/key\\_reports\\_files/State\\_Wide\\_Strategy/Caltrans\\_Climate\\_Action\\_Program.pdf](http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf)

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

### ***CEQA Conclusion***

Although construction emissions are unavoidable and are expected to be minimal, the proposed project will not increase capacity and is not expected to result in additional operational CO<sub>2</sub> emissions. However, it is Caltrans determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a determination regarding significance of the project's direct impact and its contribution on the cumulative scale to climate change. However, Caltrans is firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the following section.

### ***Greenhouse Gas Reduction Strategies***

There are typically two terms used when discussing the impacts of climate change. "Greenhouse Gas Mitigation" is a term for reducing GHG emissions in order to reduce or "mitigate" the impacts of climate change. "Adaptation," refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels)<sup>5</sup>.

### ***Greenhouse Gas Mitigation***

#### ***AB 32 Compliance***

Caltrans continues to be actively involved on the Governor's Climate Action Team as ARB works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year.

The following measures will be included in the project to reduce the GHG emissions and potential climate change impacts from the project:

- 1) According to Caltrans' Standard Specifications, the contractor must comply with all of the Bay Area Air Quality Management District rules, ordinances, and regulations regarding to air quality restrictions.
- 2) Compliance with Title 13, California Code of Regulations §2449(d)(3)—Adopted by the Air Resources Board on June 15, 2008, this regulation would restrict idling of construction vehicles to no longer than 5 consecutive minutes. The Contractor must comply with this regulation in order to reduce harmful emissions from diesel-powered construction vehicles.
- 3) To the extent that it is feasible for the project, the use of reclaimed water may be used to reduce GHG emissions produced during construction. Currently 30 percent of the electricity used in California is used for the treatment and delivery of water. Use of

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<sup>5</sup> [http://climatechange.transportation.org/ghg\\_mitigation/](http://climatechange.transportation.org/ghg_mitigation/)

reclaimed water helps conserve this energy, which reduces greenhouse gas emissions from electricity production.

### ***Adaptation Strategies***

“Adaptation strategies” refer to how Caltrans and others can plan for the effects of climate change on the State’s transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

Interim guidance has been released by The Coastal Ocean Climate Action Team (CO-CAT) as well as Caltrans as a method to initiate action and discussion of potential risks to the States infrastructure due to projected sea level rise.

All projects that have filed a Notice of Preparation as of the date of EO S-13-08, and/or are programmed for construction funding from 2008 through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines. The proposed project is outside the coastal zone and direct impacts to transportation facilities due to projected sea level rise are not expected.

Executive Order S-13-08 also directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level rise affecting safety, maintenance and operational improvements of the system, and economy of the state. Caltrans continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

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**Appendices**

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**Appendix A*****Acronyms***

AB	Assembly Bill
AC	Asphalt Concrete
ALA	Alameda
BMP	Best Management Practice
BSA	Biological Study Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGP	Construction General Permit
CNDDDB	California Natural Diversity Database
Co	County
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
Co-CAT	Coastal Ocean Climate Action Team
CSOL	Crack, Seal, and Overlay
CWA	Clean Water Act
DSA	Disturbed Soil Area
EA	Expenditure Authorization
EB	Eastbound
EO	Executive Order
ESA	Environmentally Sensitive Areas
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
ft.	Feet
FPI	Freeway Performance Initiative
GHG	Greenhouse Gas
GPI	Geosynthetic Pavement Interlayer
H <sub>2</sub> S	Hydrogen Sulfide
HMA-A	Hot Mix Asphalt-Type A
I-580	Interstate 580
IPCC	Intergovernmental Panel on Climate Change
LOS	Level of Service
MBGRs	Metal Beam Guard Rails
MEP	Maximum Extent Practicable
ND	Negative Declaration
NES	Natural Environment Study

NHTSA	National Highway Traffic Safety Administration
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
O <sub>3</sub>	Ozone
OGFC	Open-Graded Friction Course
Pb	Lead
PM	Post Mile
QSD	Qualified SWPPP Developer
RHMA-G	Rubberized Hot Mix Asphalt (gap graded)
RMS	Ramp Metering System
ROW	Right of Way
Rte	Route
RWQCB	Regional Water Quality Control Board
SO <sub>2</sub>	Sulfur Dioxide
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resource Control Board
USACE	United States Army Corps. Of Engineers
US DOT	United States Department of Transportation
US EPA	United States Environmental Protection Agency
USC	United States Code
USFWS	United States Fish and Wildlife Service
WDR	Waste Discharge Requirement
WPCP	Water Pollution Control Program

**Appendix B**

***Technical Studies prepared by Caltrans***

Visual Assessment Memo, State Route 580 Roadway Rehabilitation Project, District 4 Office of Landscape Architecture, October 2012

Water Quality Report, District 4 Office of Water Quality Program, September 2013

Natural Environment Study, Interstate 580 Roadway Rehabilitation Project, District 4 Office of Biological Science and Permits, October 2013

Location Hydraulic Study, Interstate 580 Roadway Rehabilitation Project, District 4 Office of Hydraulics, October 2013

Cultural Resources Review Memo, Pavement Rehabilitation Project Along I-580 in Alameda County, May 2013

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**Appendix C**

***List of Preparers***

Keith Suzuki, Project Landscape Architect, Office of Landscape Architecture

Sheryl Garcia, Associate Environmental Planner, Office of Environmental Analysis

Glenn Kinoshita, District Branch Chief, Office of Environmental Engineering

Chris Wilson, District Branch Chief, Office of Environmental Engineering

Chris Risdén, Branch Chief, Office of Geotechnical Design West

Craig Tomimatsu, District Branch Chief, Office of Hydraulics

Emily Darko, Archaeologist, Office of Cultural Resources

Frances Schierenbeck, Architectural Historian, Office of Cultural Resources

Christopher States, District Branch Chief, Office of Biological Sciences and Permits

Matthew Gaffney, Engineering Geologist, Office of Geotechnical Design - West

Elizabeth White, Associate Environmental Planner, Office of Environmental Analysis

Melanie C. Hunt, Associate Environmental Planner, Office of Environmental Analysis

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FORM 2A: PERMITS, AGREEMENTS & MITIGATION (PAM) COMMITMENTS-DESIGN PHASE						
TO: _____, OFFICE CHIEF		DATE: _____				
ATTN: Edmund Choy, BRANCH CHIEF		CO. RTE. KP: ALA-580/ALA 205				
DESIGN OFFICE: _____		RI/EIA: 3G590				
		P.E. CONTACT: Danny Kao				
		P.M.: 0.0/7.8, 0.0/1.0				
♦ This form contains a summary of <b>attached</b> permits which contain permit conditions governing construction activities on this project. ♦ Please contact the Project Engineer or listed individuals above for additional information regarding specific information.						
	Y/N	Permit No.	Issue Date	Exp. Date	Construction Window	Comments
UDFG 160103 Streambed Alteration Agreement	N					
SF Bay Conservation & Development Commission	N					
Coastal Dev. Permit, County	N					
Coastal Dev. Permit, State	N					
State Lands Lease Agreement	N					
BWQCB NPDES Permit	N					
BWQCB 401 Certification	N					
BWQCB Contaminated Groundwater Disposal	N					
Endangered Species Consultation Requirements	S					
USACOE 404 Nationwide*	F					
USACOE 404 Individual	N					
USACOE Regional General	N					
USCG Section 9 Permit	N					
USACOE Section 10 Permit	N					
*Indicate NWP TYPE: _____						
SENIOR ENVIRONMENTAL PLANNER		DATE				
Office of Environmental Planning North/South						
The project PS & E has been reviewed and all permits, agreements and mitigation commitments have been addressed as shown on Forms 2A & 2 B						
PROJECT ENGINEER		DATE		T MANAGER		DATE
All permits and their conditions have been reviewed with the contractor and the contractor is aware of the permit conditions.						
RESIDENT ENGINEER		DATE				
<input type="checkbox"/> Attachments						
<small>ix - Listed Contacts, Environmental Planning Section</small>						
<small>Ver 8 July 2005</small>						

See the reverse side of this form for additional information.





**FORM 4: PERMITS, AGREEMENTS AND MITIGATION (PAM) COMMITMENTS - MAINTENANCE & OPERATION PHASE**

To: \_\_\_\_\_, Maintenance Manager Region- \_\_\_\_\_

DATE: \_\_\_\_\_

CO. RTE. KP: ALA-580/ALA 205

Date Completed \_\_\_\_\_

P.E. Contact: Danny Kao

EA for MAINT. \$6590

PM: 0017.8; 0.0/1.0

cc: \_\_\_\_\_, Branch Chief Maintenance Services

\_\_\_\_\_, Maintenance Manager, Specialty Region- \_\_\_\_\_

Below is a summary of environmental mitigation commitments being carried out for this project which require either: (1) further direct action by Maintenance or (2) your awareness and protection of sensitive resources and/or mitigation sites. Please review and sign this form, maintain a copy and return the signed original to the Senior Environmental Planner listed below. If additional information is required please contact the listed individuals for additional information.

Commitments	(1) / (2)	Actions Required	Map Y/N	Monitoring By	Related Permits	Copy Attach. Y/N	Contact
Erosion Control							
Hazardous Material							
Hazardous Materials ESA							
Archaeological ESA							
Biology ESA							
Historical ESA							
Scenic Resources ESA							
Biology Mitigation							
Habitat Restor./Reveg.							
RWQCB-NPDES All Permits							

Senior Environmental Planner \_\_\_\_\_ Date \_\_\_\_\_

Maintenance Manager \_\_\_\_\_ Date JULY-01-97

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## Appendix E

### *Title VI Policy Statement*

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

**DEPARTMENT OF TRANSPORTATION**  
OFFICE OF THE DIRECTOR  
P.O. BOX 942873, MS-49  
SACRAMENTO, CA 94273-0001  
PHONE (916) 654-5266  
FAX (916) 654-6608  
TTY 711  
www.dot.ca.gov



*Flex your power!  
Be energy efficient!*

March 2013

#### **NON-DISCRIMINATION POLICY STATEMENT**

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, please visit the following web page: [http://www.dot.ca.gov/hq/bep/title\\_vi/t6\\_violated.htm](http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm).

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14<sup>th</sup> Street, MS-79, Sacramento, CA 95811. Telephone: (916) 324-0449, TTY: 711, or via Fax: (916) 324-1949.

A handwritten signature in blue ink, appearing to read "Malcolm Dougherty".

MALCOLM DOUGHERTY  
Director

*"Caltrans improves mobility across California"*

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**Appendix F**

***Distribution List***

*Elected Officials*

U.S. Senate

The Honorable Dianne Feinstein  
United States Senate  
One Post Street, Suite 2450  
San Francisco, CA 94104

The Honorable Barbara Boxer  
United States Senate  
70 Washington Street, Suite 203  
Oakland, CA 94607

U.S. House of Representatives

Eric Swalwell  
5075 Hopyard Rd. Suite 220  
Pleasanton, CA 94588

Jeff Denham  
4701 Sisk Road, Suite 202  
Modesto, CA 95356

California State Assembly

Joan Buchanan  
2694 Bishop Drive, Ste. 275  
San Ramon, CA 94583

Susan Talamantes Eggman  
31 East Channel Street  
Suite 306  
Stockton, CA 95202

California State Senate

Loni Hancock  
1515 Clay Street #2202  
Oakland, CA 94612

Ellen Corbett  
1057 MacArthur Blvd, Suite 206  
San Leandro, CA 94577

Cathleen Galgiani  
31 E. Channel Ste 440  
Stockton, CA 95202

Mark DeSaulnier  
1350 Treat Blvd, Suite 240  
Walnut Creek, CA 94596

Local Officials

Mayor John Marchand  
City of Livermore  
1052 S. Livermore Ave  
Livermore, CA 94550

Federal Agencies

Environmental Protection Agency, Region IX  
Federal Activities Office, CMD-2  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Natural Resources Conservation Service  
Area I  
1345 Main Street  
Red Bluff, CA 96080

US Army Corps of Engineers, Sacramento District  
ATTN: Regulatory Branch  
1325 J Street, Room 1480  
Sacramento, CA 95814

U.S. Fish and Wildlife Service  
2800 Cottage Way W-2605  
Sacramento, CA 95825

State Agencies

State Clearinghouse, Executive Officer  
1400 Tenth Street, Room 156  
Sacramento, CA 95812-3044

Bay Area Air Quality Management District  
Jack Broadbent  
Chief Executive Officer  
939 Ellis Street  
San Francisco, CA 94109

California Air Resources Board  
Executive Officer Richard Corey  
1001 I Street  
Sacramento, CA 95812

California Department of Conservation  
Director Mark Nechodom  
801 K Street, MS 24-01  
Sacramento, CA 95814

California Department of Fish & Wildlife  
Region 3  
Regional Manager Scott Wilson  
7329 Silverado Trail  
Napa, CA 94558

California Highway Patrol,  
Special Projects Section\*  
P.O. Box 942898  
Sacramento, CA 92298

California Office of Historic Preservation  
1416 Ninth Street, Room 1442  
Sacramento, CA 95814

California Public Utilities Commission  
Executive Director Paul Clanon  
505 Van Ness Avenue  
San Francisco, CA 94102

Department of Toxic Substances Control  
1001 I Street  
Sacramento, CA 95814-2828

Native American Heritage Commission  
Executive Secretary  
1550 Harbor Blvd, Suite 100  
West Sacramento, CA 95691

Regional Water Quality Control Board  
District 2\*  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

California Department of Housing and  
Community Development  
Director  
2020 West El Camino  
Sacramento, CA 95833

Alameda County Planning Commission  
224 W. Winton, Room 111  
Hayward, CA 94544

California Office of Emergency Services  
3650 Schriever Avenue  
Mather, CA 95655

Regional Agencies

Association of Bay Area Governments  
Kenneth Kirkey  
Planning Director  
101 Eighth Street, P.O. Box 2050  
Oakland, CA 94604-2050

Metropolitan Transportation Commission  
Doug Kimsey  
Planning Director  
101 Eighth Street – Metrocenter  
Oakland, CA 94607

East Bay Regional Park District  
Chris Barton, Senior Planner  
2950 Peralta Oaks Court  
Oakland, CA 94605

County Agencies

Alameda County  
Clerk of the Board of Supervisors  
1221 Oak Street, Suite 536  
Oakland, CA 94612

Alameda County  
Public Works Agency Director  
Daniel Woldensenbet  
399 Elmhurst Street  
Hayward, CA 94544

San Joaquin County  
Clerk of the Board of Supervisors  
44 N. San Joaquin Street  
Stockton, CA 95202

San Joaquin County  
Public Works Agency Director  
Thomas M. Gau  
1810 East Hazelton Avenue  
Stockton, CA 95205

Local Agencies

Cheri Sheets, City Engineer  
City of Livermore  
1052 South Livermore Avenue  
Livermore, CA 94550