

April 2016



# Cottonwood East Rehabilitation

Initial study with proposed Mitigated Negative Declaration



Rehabilitate State Route 58 between Cottonwood Road and State Route 184



06-KER-58-PM R55.4/R59.7

06-15000048

EA 06-0S470



# General Information About This Document

## ***What's in this document:***

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Kern County, California. The document describes the project, the existing environment that could be affected by the project, potential impacts from the project, and proposed avoidance, minimization, and/or mitigation measures.

## ***What you should do:***

- Please read this Initial Study. Additional copies of this document are available for review at the Caltrans district office at 1352 West Olive Avenue in Fresno, California, and the Beale Memorial Library at 701 Truxtun Avenue in Bakersfield, California.

The document can also be accessed electronically at the following website:  
<http://www.dot.ca.gov/dist6/environmental/envdocs/d6/>.

- We welcome your comments. If you have any concerns about the project, please send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address: Richard Putler, Acting Branch Chief, Sierra Pacific Environmental Analysis Branch; California Department of Transportation, 855 M Street, Suite 200, Fresno, CA 93721.
- Submit comments via email to: [richard.putler@dot.ca.gov](mailto:richard.putler@dot.ca.gov).
- Submit comments by the deadline: June 4, 2016

## ***What happens next:***

After comments are received from the public and reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and build all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attn: Richard Putler, Sierra Pacific Environmental Analysis Branch, 855 M Street, Suite 200, Fresno, CA 93721; (559) 445-5286 (Voice), or use California Relay Service 1-800-735-2929 (TTY), 1-800-735-2929 (Voice), or 711.

Rehabilitate State Route 58 in Bakersfield between Cottonwood Road and State Route 184

**INITIAL STUDY  
with Proposed Mitigated Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA  
Department of Transportation

4-28-16  
Date of Approval

Richard Putler  
Richard Putler, Acting Branch Chief  
Sierra Pacific Environmental Analysis Branch  
California Department of Transportation

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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 approximately 4 miles of State Route 58 in Bakersfield from Cottonwood Road at post mile R55.4 to State Route 184 at post mile R59.7. The outside shoulder would also be repaved. This segment of State Route 58 is a three-lane freeway with rigid pavement.

### **Determination**

This proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Caltrans' decision on the project is final. This Mitigated Negative Declaration is subject to change 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, agriculture and forest resources, air quality, cultural resources, paleontological resources, geology and soils, greenhouse gas emissions, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

In addition, the proposed project would have no significantly adverse effect on biological resources and hazards and hazardous materials because the following mitigation measures would reduce potential effects to insignificance:

- Mitigation measures would be detailed in the anticipated Biological Opinion from the U.S. Fish and Wildlife Service for impacts to the San Joaquin kit fox. Standard and Non-Standard special provisions would be included in the construction contract to minimize potential impacts to the San Joaquin kit fox.
- Standard special provisions would be included in the construction contract to minimize potential impacts to burrowing owls and migratory birds.
- Lead-contaminated soils to a depth of 1.0 foot from the shoulders would be handled or disposed of as a hazardous waste.

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Richard Putler, Acting Branch Chief  
Sierra Pacific Environmental Analysis Branch  
California Department of Transportation

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Date







## Project Location Map

### ***Description of Project***

Caltrans proposes to rehabilitate 4 miles of State Route 58 in Bakersfield from Cottonwood Road at post mile R55.4 to State Route 184 at post mile R59.7. In addition, the outside shoulder pavement would be repaved. Trenching and boring would also be required to install Intelligent Transportation System equipment and permanent changeable message signs.

Construction is anticipated to begin in fall 2017. The project is estimated to take approximately 220 days to complete.

No additional right-of-way is anticipated for construction of the proposed project. No traffic detours are anticipated. Lane closures would be required for worker safety

during construction, and night work would occur. The proposed work would not involve work within water channels, changes to existing drainages or culverts, cut and/or fill, or utility relocation.

***Surrounding Land Uses and Setting***

A mix of land uses is located along the State Route 58 corridor parallel to the project area. The area surrounding State Route 58 has been developed mostly with residential and commercial land uses, with a few agricultural parcels and vacant parcels remaining to be developed.

***Potential Permits, Approvals and Agreements for the Proposed Project***

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service	Anticipated: Biological Opinion	<p>Informal Section 7 consultation with the U.S. Fish and Wildlife Service is currently ongoing.</p> <p>The anticipated Letter of Concurrence would be received prior to approval of the final environmental document.</p>
California Department of Fish and Wildlife	2081 Incidental Take Permit	Caltrans would determine the need for a 2081 Incidental Take permit. If the permit is needed, permit approval would be required prior to the start of construction.

# CEQA Environmental Checklist

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 indicated no impacts. A NO IMPACT answer in the last column reflects this determination. Where a clarifying discussion is needed, the discussion either follows the applicable section in the checklist or is placed 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
<b>I. AESTHETICS:</b> 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

**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 Department 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, Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>

**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:

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"/>

**IV. BIOLOGICAL RESOURCES:** Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 Wildlife or U.S. Fish and Wildlife Service?	<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) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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"/>

See Additional Explanations for Questions in the Impacts Checklist that follows this checklist for discussion of threatened and endangered species.

**V. CULTURAL RESOURCES:** Would the project:

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"/>
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"/>
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"/>

**VI. GEOLOGY AND SOILS:** Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>

**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?

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 greenhouse gas 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.

**VIII. HAZARDS AND HAZARDOUS MATERIALS:** Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<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
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"/>

*See Additional Explanations for Questions in the Impacts Checklist that follows this checklist for discussion of aerially deposited lead.*

**IX. HYDROLOGY AND WATER QUALITY:** Would the project:

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"/>
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 storm water 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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>X. LAND USE AND PLANNING:</b> Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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"/>
<b>XI. MINERAL RESOURCES:</b> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<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"/>
<b>XII. NOISE:</b> Would the project result in:				
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"/>
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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
f) 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"/>

**XIII. POPULATION AND HOUSING:** Would the project:

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"/>

**XIV. PUBLIC SERVICES:**

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?	<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"/>

**XV. RECREATION:**

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"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>

**XVI. TRANSPORTATION/TRAFFIC:** Would the project:

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"/>

**XVII. UTILITIES AND SERVICE SYSTEMS:** Would the project:

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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE**

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 type="checkbox"/>	<input checked="" type="checkbox"/>
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"/>
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"/>

## **Additional Explanations for Questions in the Impacts Checklist**

### ***IV. Biological Resources (checklist question a)***

#### ***Affected Environment***

Caltrans completed a Natural Environment Study for the project in February 2016. Caltrans biologists completed field studies in September 2015. The biological study area included the project impact area plus adjacent right-of-way areas on both sides of the State Route 58 corridor. Although the project area is mostly urban in character, the habitat within the Caltrans right-of-way is generally similar: compacted, bare ground with non-native annual grasses and weedy (ruderal) vegetation. Eucalyptus and pepper trees are scattered along the length of the project area. Oleander bushes sit within the highway median in some places.

#### ***Threatened and Endangered Species and Special-Status Species***

Six special-status species have the potential to occur in or near the proposed project: northern leopard frog, San Joaquin kit fox, burrowing owl, Swainson's hawk, pallid bat, and American badger.

#### ***Northern leopard frog (*Lithobates pipiens*)***

The northern leopard frog is a California Species of Special Concern. This medium-sized frog is slender with a narrow head and long legs. Adults average 2 to 4.75 inches long. Adults are generally green, tan, or brown on their back and creamy white on their abdomen. Well-defined, cream-colored back-to-side folds extend from the shoulders to the rump.

Although the species is widely distributed in North America, the northern leopard frog is uncommon and localized in California. Northern leopard frogs are a highly aquatic species that occurs in or near quiet, permanent and semi-permanent water in many habitats including grasslands, wet meadows, woodlands, brushlands, springs, canals, bogs, marshes, and reservoirs. In the Central Valley, the species is known to occur in irrigated portions of Tulare and Kern counties, where natural dispersal occurs along systems of irrigation canals. These frogs are opportunistic feeders, taking a variety of aquatic and terrestrial prey. In California, breeding and egg-laying occur from December to June depending on local conditions.

#### ***San Joaquin kit fox (*Vulpes macrotis mutica*)***

The San Joaquin kit fox is listed as a federally endangered and state threatened species. The San Joaquin kit fox is the smallest fox in North America, with an average body length of 20 inches and weight of about 5 pounds. This fox has large ears that are set close together, a slim body, and a long, bushy, black-tipped tail that is carried low and straight. Its coat ranges from a buff tan during summer months to a silver-gray in the winter.

San Joaquin kit foxes are active year-round and inhabit grassland, scrubland, oak woodland, alkali sink scrubland, vernal pool, and alkali meadow communities. They

are present, but generally less abundant, in agricultural landscapes such as row crops, irrigated pastures, orchards, and vineyards. These foxes require underground dens for temperature regulation, shelter, predator avoidance, and reproduction. San Joaquin kit foxes typically dig their own dens located in loose soils on slopes less than 40 degrees, but also commonly modify existing burrows. They have also been known to use human-made structures (culverts or abandoned pipelines) as den sites.

### Burrowing owl (*Athene cunicularia*)

The burrowing owl is a California Species of Special Concern and is the only owl in North America that nests in underground burrows. This small owl (approximately 9 inches long, with a 15-inch wingspan and 5 to 8 ounces in weight) is brown with white spots on the wings and back, with an off-white breast with brown bars. The eyes are yellow, and the face is highlighted by a white eyebrow. The burrowing owl has long legs and spends a great deal of time standing on the ground or on a small mound near the burrow entrance, or perched on low perches such as brush and fence posts.

Burrowing owls can be active during the day or night. They often inhabit old rodent burrows (typically that of the California ground squirrel), but are capable of digging their own. Their habitat consists of open, dry annual or perennial grasslands, deserts, or open scrublands with low vegetation, soils suitable for digging, and a suitable prey base of burrowing rodents, small reptiles, and insects. Several owl pairs may nest close to one another and form loose colonies, but adult owls will aggressively defend their own burrow against other burrowing owls and predators. Burrowing owl predators include larger raptors, badgers, skunks, snakes, and feral or domestic dogs and cats (particularly near human habitation). Rodent control efforts, such as poisoning and trapping, can reduce the availability of prey and may also contribute to secondary poisoning. Because the burrowing owl often flies low to the ground, collisions with vehicles is another mortality factor for the burrowing owl.

The burrowing owl can be found throughout much of California where suitable habitat occurs. Much of its habitat has been lost to urban and agricultural development, particularly throughout the San Joaquin Valley. Small, isolated populations can be found in pockets of remaining habitat, but the overall population trend has been down over the last several decades.

### Swainson's hawk (*Buteo swainsoni*)

The Swainson's hawk is listed as a state threatened species. The species is also protected by the Migratory Bird Treaty Act. This hawk is slender, with long, pointed wings and a long tail. It displays a great variety in plumage across individuals.

The Swainson's hawk occupies a wide variety of open habitats, though in Central California most nests are located within riparian forests or remnant riparian trees. Nest placement depends on proximity to foraging habitat. Suitable foraging habitat includes native grasslands or lightly grazed dryland pasture, alfalfa and other hay crops, and row crops. In the Central Valley, Swainson's hawks arrive to nesting

locations in late-February and early March and may stay until the start of migration in September.

#### Pallid bat (*Antrozous pallidus*)

The pallid bat is a California Species of Special Concern. The species can be distinguished from all other California bat species by a combination of large size, large eyes, large ears, light tan color, a pig-like snout, and distinctive skunk-like odor. The pallid bat is found throughout most of California, except for the highest elevations of the Sierra Nevada mountain range.

Pallid bats typically roost in small colonies in rock crevices and human-built structures, usually near water. They feed mostly on large insects that are taken from the ground or from the surfaces of vegetation. Males are largely absent from the maternity colony.

#### American badger (*Taxidea taxus*)

The American badger is a California Species of Special Concern. This badger can be distinguished by its white cheeks and a narrow white strip located in the center of its face above the snout. The species is an uncommon, permanent resident that can be found throughout most of the state.

Suitable habitat is characterized by herbaceous shrub and open stages of most habitats with dry, friable soils. In the western United States, badgers feed on ground squirrels and other ground-dwelling animals that use the squirrels' burrow systems. American badgers are active yearlong, day and night, with variable periods of torpor in the winter.

#### Migratory birds

Potentially suitable nesting habitat for a variety of bird and raptor species occurs within the project area, such as the San Joaquin Valley Railroad undercrossing and trees. Migratory birds that may use the project area include raptors such as the red-tailed hawk (*Buteo jamaicensis*) or red-shouldered hawk (*Buteo lineatus*); and passerines, such as the cliff swallow (*Petrochelidon pyrrhonota*) or house finch (*Haemorrhous mexicanus*). Birds within California have an approximate breeding and nesting season of mid-February to early September.

### **Environmental Consequences**

A Natural Environment Study was completed for the project in February 2016. No permanent impacts to habitat are anticipated by the project.

#### Northern leopard frog

No amphibians were observed during the September 2015 biological reconnaissance surveys. There is a California Natural Diversity Database record from June 1965 within the biological study area. The 1965 record is just south of State Route 58, near

the East Side Canal. At the time of the 2015 reconnaissance survey, the canal was dry.

The biological study area contains suitable habitat for northern leopard frogs at the East Side Canal and at two unnamed freshwater ponds outside of the highway right-of-way. While the East Side Canal is piped underneath State Route 58, portions of the canal outside the right-of-way are not. Because the canal outside the right-of-way is exposed, there is a potential that a frog could be in the project area. No direct impacts are expected to the northern leopard frog because there would be no work in the water.

### San Joaquin kit fox

Reconnaissance-level surveys for San Joaquin kit fox dens were done in September 2015. All accessible areas within a 250-foot boundary from the right-of-way was surveyed. In general, the field surveys did not include private residential or commercial property. Inaccessible areas were visually surveyed using binoculars.

During the survey, Caltrans biologists walked transects within the accessible survey areas; transects varied in separation to include 100 percent visual coverage. Data collected during the surveys included information on potential dens. Potential dens were further described in field notes by the number of entrances, global positioning unit coordinates, and proximity to the nearest road. Data categories are further described below.

**Potential Den:** A potential den is any subterranean hole that has entrances of appropriate dimensions and for which available evidence is insufficient to conclude that it is being used or has been used by a kit fox. Dens were not described as having kit fox potential if there were signs of active use by a squirrel (fresh scat, tracks).

Much of the high-density urban environment on the western end of the biological study area was found to be unsuitable for the kit fox and yielded no sign of presence. Low-quality habitat was found near the center of the biological study area, between Mt. Vernon Avenue and Quantico Avenue; a similar quality of habitat was found south of State Route 58 at the East Side Canal where an open, sparsely vegetated basin provides foraging opportunity. The eastern end of the project is a low-density mix of residential and agricultural development. No kit fox or kit fox sign was observed on the eastern end of the project.

Two potential dens were found. The potential dens would not be directly impacted by construction, as all construction activity in the vicinity of the potential dens would be limited to the existing roadway. Surveys will be conducted prior to construction to determine the appropriate buffer distance to place around the potential dens based on observed sign or activity.

The proposed project would not permanently impact any San Joaquin kit fox habitat. The inside shoulder will be widened toward the median east of State Route 184; all additional impacts will take place in existing Caltrans right-of-way or on existing

roadways. The permanent impacts due to the shoulder widening are considered to be minimal due to their small extent and proximity to the heavily traveled highway. Trenching, boring, and staging areas occurring outside of the existing roadway would be surveyed for San Joaquin kit fox sign prior to use. With the implementation of avoidance, minimization and mitigation measures, the project may affect, and is likely to adversely affect the San Joaquin kit fox. Formal consultation with the U.S. Fish and Wildlife Service was initiated on February 9, 2016.

### Burrowing owl

No burrowing owl or burrowing owl sign was observed during the September 2015 biological reconnaissance survey. There are a number of California Natural Diversity Database occurrences from May 2007, approximately 0.4 mile south of State Route 58 near both Cottonwood Road and South Mt. Vernon Avenue. Burrows, created by ground squirrels, were found within the biological study area and may provide suitable habitat.

Small mammal burrows created by ground squirrels are found throughout much of the State Route 58 right-of-way and may provide suitable habitat for burrowing owls. Construction noise may impact breeding behavior, should construction occur during the breeding season. Construction activity would be limited to the existing roadway and a portion of the median, east of State Route 184. Trenching and boring would occur within the current Caltrans right-of-way. Trenching, boring, and staging areas occurring outside of the existing roadway would be surveyed for burrowing owl sign prior to use. Avoidance and minimization efforts would be enforced to reduce the potential to impact the species.

### Swainson's hawk

No Swainson's hawk or evidence of Swainson's hawk presence (feathers or nests) was observed during the September 2015 biological reconnaissance survey. A nine-quad California Natural Diversity Database query revealed one Swainson's hawk occurrence, from April 1935, near the western edge of the biological study area. The present-day western edge of the biological study area has since been developed and no longer provides nesting or foraging habitat. During the biological reconnaissance survey, low-quality foraging habitat was identified within the biological study area, east of State Route 184. The low-quality foraging habitat is made up of fallow field to the north of State Route 58. The vineyard south of State Route 58 is considered unsuitable foraging habitat due to the unavailability of prey during most of the breeding season. Nest placement depends on proximity to foraging habitat. The potential foraging habitat in the project area is mostly orchards and vineyards that are low in both availability and abundance of prey.

The project would not directly impact any Swainson hawk foraging or nesting habitat. Disturbance may result from equipment noise, vibrations, dust, and human presence, should Swainson's hawks appear in the area. Avoidance and minimization efforts would be enforced to reduce the potential disturbance of the species.

### Pallid bat

No pallid bats were observed during the September 2015 biological reconnaissance survey. A nine-quad California Natural Diversity Database query returned one pallid bat occurrence from 1998. The occurrence was near Walker Basin Creek, approximately 8.3 miles southeast of the project site.

The pallid bat is particularly sensitive to disturbance. Disturbance as minor as hiking has been known to cause the bat to abandon a roosting area completely. Given the high level of disturbance from the heavy traffic of State Route 58, it is unlikely that pallid bats use any of the human-made structures within the biological study area. Therefore, the biological study area does not contain suitable roosting habitat for pallid bat, and no direct impacts are expected to the pallid bat.

### American badger

No American badgers were observed during the September 2015 biological reconnaissance survey. The biological study area contains suitable habitat for the American badger along portions of the study area where friable soils are present, mostly on the eastern end of the biological study area. Though suitable habitat is located within the biological study area, all direct project impacts would occur outside of the suitable habitat. No direct impacts are expected to the American badger.

### Migratory Birds

No trees are being removed by the project. Project-related construction activities could result in dust, vibration, and noise disturbance to birds nesting near the project impact area.

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

### Northern leopard frog, pallid bat, and American badger

No impacts to the northern leopard frog, pallid bat or American badger would occur. Therefore, no compensatory mitigation is proposed.

### San Joaquin kit fox

Standard avoidance and minimization measures have been developed from recommendations described in the U.S. Fish and Wildlife Service *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to and during Ground Disturbance* (USFWS 2011).

Construction and Operational Requirements: Construction activities would adhere to the applicable standard construction and operational requirements as described in the U.S. Fish and Wildlife Service *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to and during Ground Disturbance*.

Applicable standard construction and operational requirements include the following:

- Project-related vehicles would observe a daytime speed limit of 20 miles per hour throughout the site in all project areas, except on county roads and state and federal highways. Project-related vehicles would observe a nighttime speed limit of 10 miles per hour. Off-road traffic outside of designated project areas would be prohibited.
- To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of the project, all excavated, steep-walled holes or trenches more than 2 feet deep would be covered at the close of each working day with plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks would be installed. Before such holes are filled, they would be thoroughly inspected for trapped animals. If at any time an injured or entrapped kit fox is discovered, the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife would be notified.
- All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods would be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe would not be moved until the U.S. Fish and Wildlife Service has been consulted. If necessary, and under direct supervision of a qualified biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.
- All food-related trash items such as wrappers, cans, bottles, and food scraps would be disposed of in securely closed containers and removed at least once a week from the project site.
- No pets, such as dogs or cats, would be permitted on the project site to prevent harassment, mortality of kit foxes, or destruction of dens.
- No firearms (except those carried by permitted public safety agents) will be allowed on the project site.
- Nighttime construction will maintain aggressive dust control measures to improve driver and worker visibility at night.
- New sightings of kit fox would be reported to the California Natural Diversity Database. A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed would also be provided to USFWS.

*Pre-Activity Surveys:* Pre-activity clearance surveys for San Joaquin kit fox would be completed at least 14 days prior to but no more than 30 days before the initiation of project activities. Surveys for the San Joaquin kit fox and its dens will be performed throughout the project footprint as well as within 200-foot. of the footprint. A letter report and map of potential and known kit fox dens would be submitted to U.S. Fish and Wildlife Service.

- A representative would be appointed by the project proponent who would be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative would be identified during the environmental awareness training program and his or her name and telephone number would be provided to U.S. Fish and Wildlife Service.
- Any contractor or employee who is responsible for inadvertently killing or injuring a San Joaquin kit fox would be required to immediately report the incident to his or her representative. The representative would contact the California Department of Fish and Wildlife immediately in the case of a dead, injured or entrapped kit fox.
- The Sacramento U.S. Fish and Wildlife Service Office and California Department of Fish and Wildlife would be notified in writing within three working days of the accidental death or injury of a San Joaquin kit fox during project-related activities. Notification would include the date, time and location of the incident or of the finding of a dead or injured animal and any other pertinent information.
- New sightings of kit fox would be reported to the California Natural Diversity Database. A copy of the reporting form and a topographic map clearly marking the location of where the kit fox was observed would also be provided to U.S. Fish and Wildlife Service.

Pre-Activity Surveys: Pre-activity clearance surveys for the San Joaquin kit fox would be completed at least 14 days prior to but no more than 30 days before the initiation of project activities. Surveys for the San Joaquin kit fox and its dens will be performed throughout the project footprint as well as within 200-foot. of the footprint. A letter report and map of potential and known kit fox dens would be submitted to the U.S. Fish and Wildlife Service.

Den Monitoring, Excavation, and Exclusion: Disturbance to all San Joaquin kit fox dens would be avoided to the maximum extent possible. If dens or potential dens are detected within the project footprint during pre-activity surveys, agency permission would be requested to monitor and excavate or exclude dens affected by the project. Active dens would not be excavated during the natal season (approximately January 1–June 30). A qualified biologist would monitor potential dens for four consecutive nights and submit monitoring results in a letter report to the U.S. Fish and Wildlife

Service, and would also oversee the excavation or exclusion of dens with no kit fox use following approval by the U.S. Fish and Wildlife Service.

Dens found within the project footprint that would not be impacted by construction would be monitored and buffered with an exclusion zone as recommended by the U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to and during Ground Disturbance (USFWS 2011).

In the event that preconstruction surveys detect presence of San Joaquin kit fox, a qualified biologist(s) will be present on-site during initial ground disturbing activities. The biologist(s) also will be available on-call when not present on-site.

Environmental Awareness Training Program: A Caltrans biologist would conduct an environmental awareness training for all construction crew members before ground-disturbing activities. The purpose of this training is to inform construction crew members of the potential for kit fox to occur at a site and be affected by construction activities. The training would be repeated to all new crew members. Following the training, crew members would sign an attendance sheet stating that they attended the training and understand the protection measures and construction restrictions. Training materials and records of attendance would be submitted to the U.S. Fish and Wildlife Service.

Construction Monitoring: For activities occurring during the nighttime hours, a qualified biologist(s) will conduct one dusk or dawn reconnaissance survey within 500-foot of areas where evidence of San Joaquin kit fox has been observed. The qualified biologist(s) will also provide weekly San Joaquin kit fox awareness training reminders to night crew personnel.

#### Burrowing owl

- Prior to the initiation of project activities, a qualified biologist would conduct a search for burrowing owl within the biological study area. Should a burrowing owl or burrowing owl sign be observed within the biological study area, no-disturbance buffers would be enforced around active burrows.
- No disturbance should occur within 160 feet of occupied burrows during the non-breeding season (September 1–January 31) or within 250 feet during the breeding season (February 1–August 31). Once applied, nesting season disturbance buffers would remain in place until a qualified biologist verifies that juveniles are foraging independently and are capable of independent survival.

#### Swainson's hawk

- A special provision for migratory birds would be included into the construction contract to ensure that no potentially nesting migratory birds are affected during construction. In the event that work occurs during the nesting season, a qualified biologist would conduct preconstruction nesting surveys. If

nesting Swainson's hawks are observed onsite, the nest would be designated as an environmentally sensitive area, with a 600-foot no-work buffer around the nest until it has been determined by a qualified biologist that the young have fledged. If tree removal is required as a result of construction, removal would occur outside of the nesting season.

### Migratory Birds

Although tree, shrub and vegetation removal is not anticipated, if removal is ultimately deemed necessary, it would occur outside of the nesting season. If a tree needs to be removed during nesting season, it would be surveyed by a qualified biologist prior to removal.

## **VIII. Hazards and Hazardous Materials (checklist question a)**

### ***Affected Environment***

A preliminary site investigation was completed in December 2015 to determine whether aerially deposited lead was present in the project limits. Soil samples were collected and then analyzed. Sixty borings were collected, yielding 180 total samples from depths of 0.0 to 1.0 foot, 1.0 to 2.0 feet and 2.0 to 3.0 feet.

### ***Environmental Consequences***

Due to high soluble lead values in the shoulder areas, soil excavated to a depth of 1.0 foot would be classified as a California hazardous waste. The 90% and 95% upper confidence limit predicted WET lead values were 5.1 and 5.5 milligrams per liter for eastbound State Route 58 and 5.9 and 6.3 milligrams per liter for westbound State Route 58, exceeding the Soluble Threshold Limit Concentration of 5 milligrams per liter. Underlying soils (1.0 to 3.0 feet) would not be considered hazardous. Soil from the median was also considered non-hazardous.

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

- Soil from the shoulders to a depth of 1.0 foot should be managed and disposed of as a hazardous waste or stockpiled and resampled to confirm waste classification per disposal facility requirements.
- Soil considered non-hazardous can be reused onsite, relinquished to the contractor, or disposed of as non-hazardous soil with respect to the lead content.

## Appendix A Effects Determinations

The following species list, obtained from the U.S. Fish and Wildlife Service on January 5, 2016, shows the effect determination of each species. There are no critical habitats within the project area. See Appendix B for the Service's official species list.

Common Name	Scientific Name	Status	Effect Determination
California red-legged frog	<i>Rana draytonii</i>	FT	No effect on species or habitat.
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE	No effect on species or habitat.
Vernal pool fairy shrimp	<i>Branchinecta lunchi</i>	FT	No effect on species or habitat.
Delta smelt	<i>Hypomesus transpacificus</i>	FT	No effect on species or habitat.
Bakersfield cactus	<i>Optunia treleasei</i>	FE	No effect on species or habitat.
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	FE	May affect, likely to adversely affect.
Tipton kangaroo rat	<i>Dipodomys nitratooides nitratooides</i>	FE	No effect on species or habitat.
Blunt-nosed leopard lizard	<i>Gambelia silus</i>	FE	No effect on species or habitat.
Giant garter snake	<i>Thamnophis gigas</i>	FT	No effect on species or habitat.

FT-Federal Threatened FE-Federal Endangered

# Appendix B Species List

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## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Sacramento Fish and Wildlife Office  
FEDERAL BUILDING, 2800 COTTAGE WAY, ROOM W-2605  
SACRAMENTO, CA 95825  
PHONE: (916)414-6600 FAX: (916)414-6713



Consultation Code: 08ESMF00-2016-SLI-1336  
Event Code: 08ESMF00-2016-E-02907  
Project Name: 06-0S470

April 25, 2016

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2)

of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0S470

## Official Species List

**Provided by:**

Sacramento Fish and Wildlife Office  
FEDERAL BUILDING  
2800 COTTAGE WAY, ROOM W-2605  
SACRAMENTO, CA 95825  
(916) 414-6600

**Consultation Code:** 08ESMF00-2016-SLI-1336

**Event Code:** 08ESMF00-2016-E-02907

**Project Type:** TRANSPORTATION

**Project Name:** 06-0S470

**Please Note:** The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.





United States Department of Interior  
Fish and Wildlife Service

Project name: 06-05470

## Endangered Species Act Species List

There are a total of 9 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
California red-legged frog ( <i>Rana draytonii</i> ) Population: Entire	Threatened	Final designated	
<b>Birds</b>			
Southwestern Willow flycatcher ( <i>Empidonax traillii extimus</i> ) Population: Entire	Endangered	Final designated	
<b>Crustaceans</b>			
Vernal Pool fairy shrimp ( <i>Branchinecta lynchi</i> ) Population: Entire	Threatened	Final designated	
<b>Fishes</b>			
Delta smelt ( <i>Hypomesus transpacificus</i> ) Population: Entire	Threatened	Final designated	
<b>Flowering Plants</b>			
Bakersfield cactus ( <i>Opuntia treleasei</i> )	Endangered		

<http://ecos.fws.gov/ipac>, 04/25/2016 01:22 PM



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0S470

Mammals			
San Joaquin Kit fox ( <i>Vulpes macrotis mutica</i> ) Population: wherever found	Endangered		
Tipton kangaroo rat ( <i>Dipodomys nitratoides nitratoides</i> ) Population: Entire	Endangered		
Reptiles			
Blunt-Nosed Leopard lizard ( <i>Gambelia silus</i> ) Population: Entire	Endangered		
Giant Garter snake ( <i>Thamnophis gigas</i> ) Population: Entire	Threatened		



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0S470

## **Critical habitats that lie within your project area**

There are no critical habitats within your project area.



**Summary Table Report**  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Query Criteria: Quad<span style="color:Red"> IS </span>(Lamont (3511838))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks					Population Status		Presence			
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Astragalus hornii</i> var. <i>hornii</i> Horn's milk-vetch	G4G5T2T3 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	400 400	14 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Athene cunicularia</i> burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	350 400	1882 S:11	0	0	0	0	1	10	0	11	10	1	0
<i>Atriplex tularensis</i> Bakersfield smallscale	GX SX	None Endangered	Rare Plant Rank - 1A	350 350	3 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Chloropyron molle</i> esp. <i>hispidum</i> hispid salty bird's-beak	G2T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	400 400	35 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Eumops perotis californicus</i> western mastiff bat	G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern WBGW_H-High Priority	450 450	293 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Gambelia sila</i> blunt-nosed leopard lizard	G1 S1	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	620 620	312 S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Layia leucopappa</i> Comanche Point layia	G1 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	850 850	8 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lithobates pipiens</i> northern leopard frog	G5 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	425 425	22 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lytta moesta</i> moestan blister beetle	G2 S2	None None		560 560	12 S:1	0	0	0	0	0	1	1	0	0	1	0
<i>Lytta morrisoni</i> Morrison's blister beetle	G1G2 S1S2	None None		560 560	10 S:1	0	0	0	0	0	1	1	0	0	1	0
<i>Navarretia setiloba</i> Piute Mountains navarretia	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive USFS_S-Sensitive	600 600	22 S:1	0	0	0	0	1	0	1	0	0	0	1



**Summary Table Report**  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence			
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.	
<i>Opuntia basilaris</i> var. <i>treleasei</i> Bakersfield cactus	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	500 500	49 S:1	0	0	0	0	1	0	1	0	0	0	0	1
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern		487 S:1	0	0	0	0	0	1	1	0	1	0	0	0
<i>Valley Saltbush Scrub</i> Valley Saltbush Scrub	G2 S2.1	None None		340 340	19 S:1	0	0	0	0	0	1	1	0	1	0	0	0
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	G4T2 S2	Endangered Threatened		340 750	977 S:5	0	0	0	0	0	5	4	1	5	0	0	0

## Plant List

5 matches found. [Click on scientific name for details](#)

### Search Criteria

Found in Quad 35118C8

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
<a href="#">Astragalus hornii var. hornii</a>	Horn's milk-vetch	Fabaceae	annual herb	1B.1	S1	G4G5T2T3
<a href="#">Atriplex tularensis</a>	Bakersfield smallscale	Chenopodiaceae	annual herb	1A	SX	GX
<a href="#">Chloropyron molle ssp. hispidum</a>	hispid bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.1	S2	G2T2
<a href="#">Eriastrum hooveri</a>	Hoover's eriastrum	Polemoniaceae	annual herb	4.2	S3	G3
<a href="#">Opuntia basilaris var. treleasei</a>	Bakersfield cactus	Cactaceae	perennial stem succulent	1B.1	S1	G5T1

### Suggested Citation

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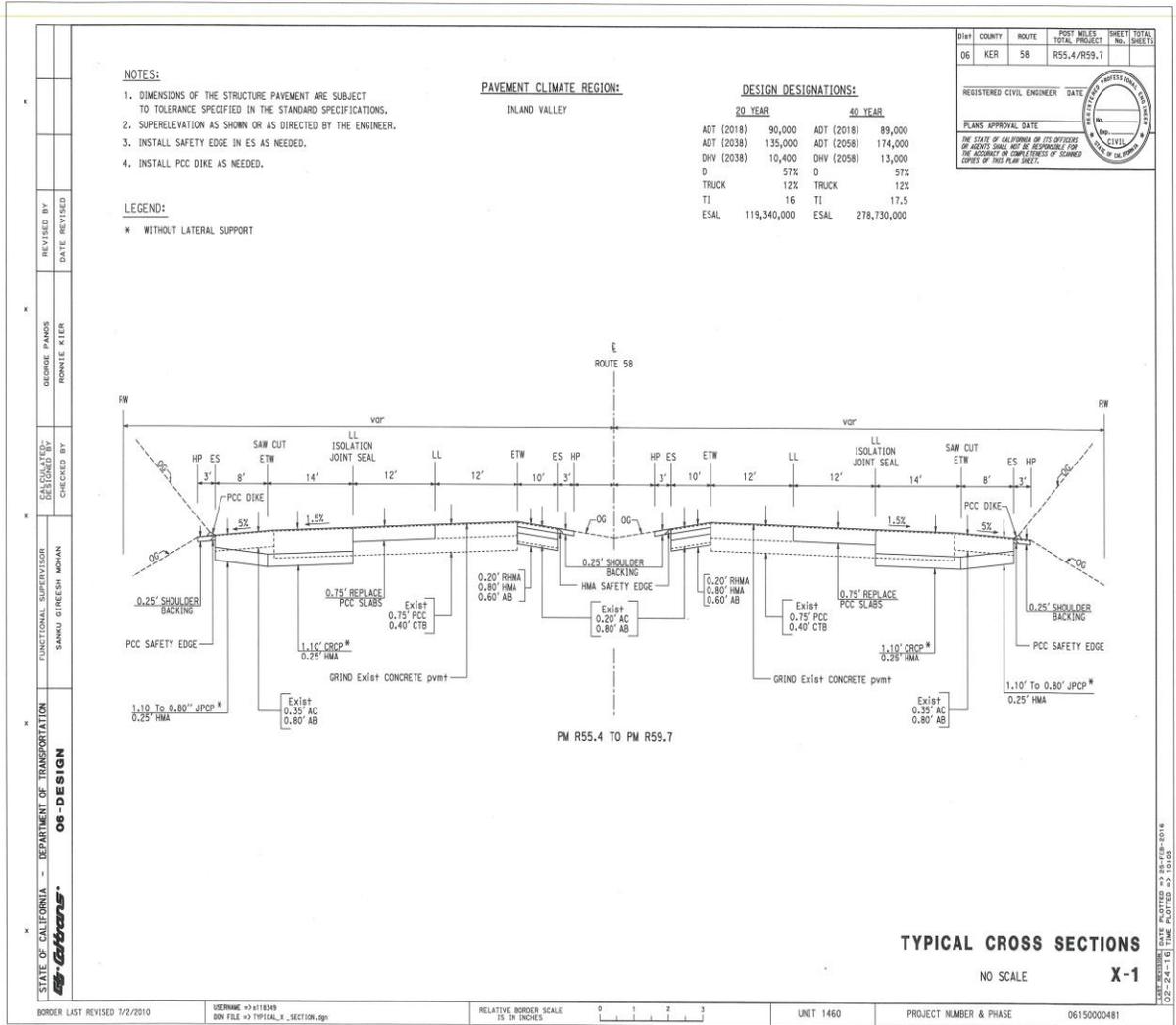
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# Appendix C Typical Cross Section

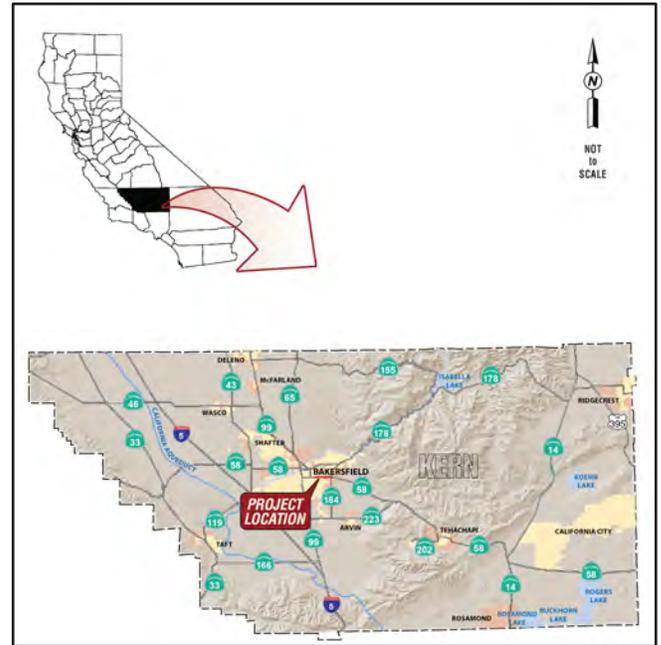






# Cottonwood East Rehabilitation

Initial study with proposed Mitigated Negative Declaration



For project updates and other project information, please go to <http://www.dot.ca.gov/>

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