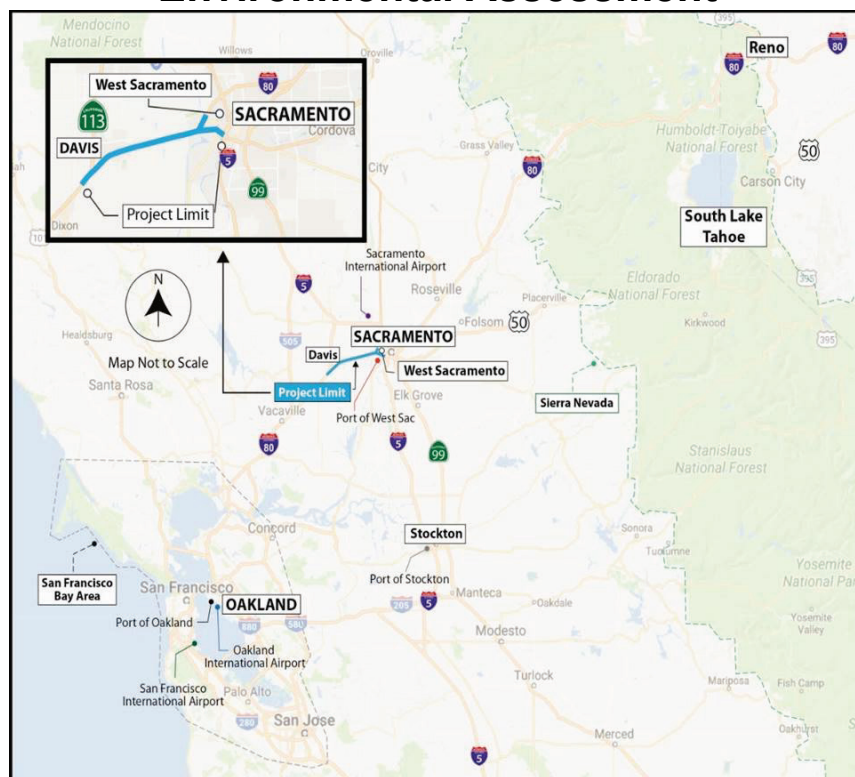


# Yolo 80 Corridor Improvements Project

Caltrans District 3  
703 B St, Marysville, CA 95901  
04-SOL-80-40.7/R44.7; 03-YOL-80-0.00/R11.72; 03-YOL-  
50-0.00/3.12; 03-SAC-50-0.00/L0.617; 03-SAC-80-  
M0.00/M1.36  
EA 03-3H900/EFIS 0318000085

# Appendixes A-H, J-L

## Draft Environmental Impact Report / Environmental Assessment



Prepared by the  
State of California, Department of Transportation



The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016, and executed by Federal Highway Administration and Caltrans.

May 2023



**APPENDIX A**  
**DRAFT SECTION 4(F) FINDINGS FOR**  
**THE YOLO I-80 CORRIDOR**  
**IMPROVEMENTS PROJECT**





## Memorandum

To: Project File Date: April 7, 2023  
File: Yolo-80 Corridor Improvements Project

From: Department of Transportation  
Office of Environmental Analysis  
Masum Patwary – Environmental Scientist C

Subject: Section 4(f) No “Use” Determination

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code (USC) 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

According to Caltrans Standard Environmental Reference website, Chapter 20 guidance, it is a best business practice to document for the project record a “hard look” when one of the following conditions exist: parks, recreational facilities, wildlife refuges, and historic properties found within or next to the project area that do not trigger Section 4(f) protection because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, or 4) the project does not permanently use the property and does not hinder the preservation of the property.

## 1 Project Description

Caltrans proposes to make improvements on I-80 and US 50 from Kidwell Road near the eastern Solano County boundary (near Dixon), through Yolo County, and to West El Camino Avenue on I-80 and on US 50 to I-5 in Sacramento County. The project would add managed lanes on I-80 and US-50 by a combination of lane conversion, restriping, and shoulder and median reconstruction with a concrete barrier. Drainage modifications would be required due to median reconstruction in the locations to which sheet flow currently drains. Existing intelligent transportation system (ITS) elements and infrastructure would be modified, and new ITS elements would be added, including ramp meters, fiber-optic conduit and cables, and overhead signs.

The applicability of Section 4(f) was considered as there are nine (9) public parks including a dog park and bike park, two (2) nature areas, and one (1) wildlife area within the 500-foot buffer, with eight (8) of the recreation areas being directly adjacent to the proposed project and existing Caltrans right-of-way. These facilities would meet the criterion to be protected under Section 4(f) because they are officially designated as parkland, are publicly owned, and opened to the public. These resources are described and depicted in further detail in the information below.

## 2 Section 4(f) Conclusion

The purpose of this memorandum is to document for the project file the determination that the project will not have a Section 4(f) “use” on any of the recreational resources under any of the proposed Build Alternatives as described in the information below. None of the Build Alternatives would result in a permanent use, constructive use, or a temporary occupancy that would adversely affect the activities, features, or attributes of the recreational resources located adjacent to the project area.

## 3 Section 4(f) Overview

Section 4(f), codified in federal law in 49 USC 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.” Section 4(f) protected resources include publicly owned parks; recreational areas of national, state or local significance; publicly owned school playgrounds, wildlife, or waterfowl refuges; or lands from a historic site of national, state, or local significance. One of the first steps in the Section 4(f) consultation process is identifying the entities and individuals who are considered the officials with jurisdiction for various types of property under Section 4(f). In the case of historic sites, the State Historic Preservation Officer (SHPO) has jurisdiction. For publicly owned refuges, recreation areas and parks, the public agency that owns the park is the official with jurisdiction.

Section 4(f) specifies that the Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned park land; recreation area; or wildlife and waterfowl refuge of national, state, or local significance; or land of a historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if the following applies:

- there is no prudent and feasible alternative to using that land; and
- the program or project would include all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

If historic sites are involved, then coordination with the SHPO is also needed.

### 3.1 Section 4(f) Use Definitions

When a proposed project is adjacent to or on a property protected under Section 4(f), the impacts of the proposed project on that property must be evaluated. Section 4(f) defines the impact level by types of “use.” These uses occur when any of the conditions discussed in the following subsections are met.

### **3.1.1 Permanent/Direct Use**

A permanent use of a Section 4(f) resource occurs when property is permanently incorporated into a transportation facility. Permanent use may occur as a result of partial or full acquisition or a permanent easement that allows permanent access onto the property for maintenance or other transportation-related purposes.

### **3.1.2 Constructive Use**

A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate land from the resource, but the project's proximity results in impacts so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only if the protected activities, features, or attributes of the resource are substantially diminished.

### **3.1.3 Temporary Occupancy**

A temporary occupancy of a Section 4(f) resource occurs when a Section 4(f) property is required for project construction-related activities, the property is not permanently incorporated into a transportation facility, and the activity is not considered adverse by the agency with jurisdiction in terms of the preservation purpose of Section 4(f).

Temporary impacts to a Section 4(f) property may trigger the application of Section 4(f). 23 Code of Federal Regulations (CFR) 774.13(d) defines the following five temporary occupation exception criteria that must be met to determine that a temporary occupancy does not rise to the level of permanent/direct or constructive use for the purposes of Section 4(f):

- Duration is temporary (i.e., the occupancy is shorter than the time needed for construction of the project, and there is no change in ownership of the property).
- Scope of work is minor (i.e., the nature and magnitude of the changes to the Section 4(f) properties are minimal).
- There are no anticipated permanent adverse physical impacts or permanent interference with the protected activities, features, or attributes of the property.
- The property is restored to the same or better condition that existed prior to the project.
- There is documented agreement from the appropriate federal, state, or local officials having jurisdiction over the property regarding the previously listed conditions.

## **3.2 De Minimis Impact Determinations**

When impacts to a Section 4(f) property are minor, as agreed to by the agency with jurisdiction over that property, Section 4(f) regulations can be satisfied through a de minimis determination.

De minimis impact is defined in 23 CFR 774.17 as follows:

- For parks, recreational areas, and wildlife and waterfowl refuges, a de minimis impact is one that would not adversely affect the activities, features, or attributes qualifying the property for protection under Section 4(f).
- For historical sites, a de minimis impact means that the California Department of Transportation (Caltrans) has determined that, in accordance with 36 CFR 800, no historical property is affected by the project or the project would have “no adverse effect” on the property in question. The SHPO and Advisory Council on Historic Preservation, if involved, must be notified that Caltrans intends to enter a de minimis finding for properties where the project results in “no adverse effect.”
- The officials with jurisdiction must concur in writing with a de minimis determination. For recreational or refuge properties, concurrence from the officials having jurisdiction over the properties is required. For historical sites, concurrence from the SHPO is required.

### **3.3 Section 6(F) of the Land And Water Conservation Fund Act (16 USC § 460l-8(F) and 36 CFR Part 59.1)**

State and local governments often obtain grants through the Land and Water Conservation Fund (LWCF) Act to acquire or make improvements to parks and recreation areas. Section 6(f) of this act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the Department of Interior's (DOI) National Park Service. Section 6(f) directs the DOI to see that replacement lands of equal value, location and usefulness are provided as conditions to such conversions. Consequently, where conversions of Section 6(f) lands are proposed for highway projects, replacements will be necessary.”

## **4 Project Description**

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts.

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project while avoiding or minimizing environmental impacts. Caltrans proposes to make improvements on I-80 and US 50 from Kidwell Road near the eastern Solano County boundary (near Dixon), through Yolo County, and to West El Camino Avenue on I-80 and on US 50 to I-5 in Sacramento County.<sup>1</sup> The project would add managed lanes on I-80 and US-50 by a combination of lane conversion, restriping, and shoulder and median reconstruction with a concrete barrier. Drainage modifications would be required due to median reconstruction in the locations to which sheet flow currently drains. Existing ITS elements and infrastructure

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<sup>1</sup> I-80 corridor between PM 40.7 and PM 44.7 in Solano County, between PM 0.00 and PM 11.72 in Yolo County, and between PM 0.00 and PM 1.36 in Sacramento County; and US-50 between PM 0.00 and PM 3.12 in Yolo County and between PM 0.00 and PM 0.617 in Sacramento County.

would be modified, and new ITS elements would be added, including ramp meters, fiber-optic conduit and cables, and overhead signs.

## 4.1 Project Alternatives

This section describes alternatives that were developed to meet the purpose and need of the project. The No Build Alternative (Alternative 1) is described below. Build Alternatives 2a, 3a, 4a, 5a, and 6a propose the same geometric footprint, but would incorporate different managed lane types. Build Alternatives 2b, 3b, 4b, 5b, and 6b propose the same geometric footprint, include an I-80 managed lane direct connector, but would incorporate different managed lane types. Build Alternatives 7a and 7b would not construct new lanes but would repurpose an existing lane instead; however, Build Alternative 7b would include the I-80 managed lane direct connector.

- Build Alternative 2a: Add a high-occupancy vehicle lane in each direction for use by vehicles with two or more riders (HOV 2+).
- Build Alternative 2b: Add a high-occupancy vehicle lane in each direction for use by vehicles with two or more riders (HOV 2+) and build an I-80 managed lane direct connector.
- Build Alternative 3a: Add a high-occupancy toll lane in each direction for free use by vehicles with two or more riders (HOT 2+). Single-occupied vehicles would pay a fee for the lane usage.
- Build Alternative 3b: Add a high-occupancy toll lane in each direction for free use by vehicles with two or more riders (HOT 2+) and build an I-80 managed lane direct connector. Single-occupied vehicles would pay a fee for the lane usage.
- Build Alternative 4a: Add a high-occupancy toll lane in each direction for free use by vehicles with three or more riders (HOT 3+). Vehicles with less than three riders would pay a fee for lane usage.
- Build Alternative 4b: Add a high-occupancy toll lane in each direction for free use by vehicles with three or more riders (HOT 3+) and build an I-80 managed lane direct connector. Vehicles with less than three riders would pay a fee for lane usage.
- Build Alternative 5a: Add an express lane in each direction (i.e., everyone would pay a fee to use the lane, regardless of number of riders).
- Build Alternative 5b: Add an express lane in each direction (i.e., everyone would pay a fee to use the lane, regardless of number of riders), and build an I-80 managed lane direct connector.
- Build Alternative 6a: Add a transit-only lane in each direction.

- Build Alternative 6b: Add a transit-only lane in each direction and build an I-80 managed lane direct connector.
- Build Alternative 7a: Repurpose the current number one general-purpose lane for use by vehicles with two or more riders (HOV 2+); no new lanes would be constructed.
- Build Alternative 7b: Repurpose the current number one general-purpose lane for use by vehicles with two or more riders (HOV 2+); no new lanes would be constructed. Build an I-80 managed lane direct connector.

This project contains a number of standardized measures, which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project.

If a HOT lane alternative is chosen as the preferred alternative (Alternatives 4A, 5A, 6A, 4B, 5B or 6B), then additional advanced HOT lane signs will need to be placed from I-80/El Camino Ave to I-80/Truxel Rd and between US 50/ I-5 and US 50/ 99 (Sac 80 PM M1.4/3.64 and SAC 50 PM L0.60/R0.20). If necessary, the environmental document and the utility certification will be revalidated during the PS&E phase.

The Build Alternatives consist of the following three geographic segments.

#### **4.1.1 Segment 1**

Segment 1 stretches from Kidwell Road in Eastern Solano County through Davis to the Eastern end of the Yolo Causeway east of Enterprise Boulevard in West Sacramento. Segment 1 consists of three sub-segments:

- *Segment 1a* is from Kidwell Road to Solano County/Yolo County Line.
- *Segment 1b* is from the Solano/Yolo County Line to west end of the Yolo Causeway.
- *Segment 1c* is from the start of the Yolo Causeway to east of Enterprise Boulevard.

#### **4.1.2 Segment 2**

Segment 2 starts just east of Enterprise Boulevard and continues north on I-80 to West El Camino Avenue.

#### **4.1.3 Segment 3**

Segment 3 starts at the I-80/US-50 Separation and continues east along US-50 to I-5 near downtown Sacramento. Segment 3 consists of two sub-segments:

- *Segment 3a* is the I-80/US-50 Separation to Jefferson Boulevard Undercrossing.
- *Segment 3b* is the Jefferson Boulevard Undercrossing to just east of I-5.

## 4.1.4 Common Design Features of the Build Alternatives

Common design features and standardized measures are shared among the Build Alternatives.

### MANAGED LANES

Managed lanes are highway facilities or a set of lanes where operational strategies are implemented to manage overall traffic congestion or in response to changing conditions (FHWA 2008). Managed lanes can include pricing, vehicle eligibility, or access control concepts. The lanes have flexibility to be used by different types of vehicles, depending on the need and can be actively managed to accommodate peak travel demands. Managed lanes would be designated using a striping pattern to distinguish between the mixed-flow.

### INTELLIGENT TRANSPORTATION SYSTEM/TRANSPORTATION MANAGEMENT SYSTEMS

Each of the Build Alternatives would include placement of ramp meters and other ITS/Transportation Management Systems (TMS) such as closed-circuit television (CCTV) and changeable message signs. Several maintenance pullouts are proposed adjacent to I-80 on-ramps to accommodate an electrical cabinet for proposed ramp meters or other ITS/TMS infrastructure.

Proposed ITS elements would be installed on a new pole foundation; some existing ITS infrastructure in these locations would be abandoned or replaced. Accordingly, it is assumed that each ITS pole foundation would have up to a 6-foot radius permanent footprint with up to 10-foot radius temporary area for construction.

### STRUCTURE MODIFICATIONS

As summarized in Table 1, Build Alternatives would add improvements to existing structures to accommodate proposed managed lanes.

**Table 1. Structure Modifications**

Structure Name	Structure Number	Route	Post Mile	Alternative	Structure Work
South Fork Putah Creek	23-0054 R	Sol 80	42.36	All Build Alternatives	Place fiber-optic conduit
Old Davis Rd Undercrossing	23-0155R	Sol 80	R43.5	All Build Alternatives	Place fiber-optic conduit
South Davis Overhead	23-0156R	Sol 80	R43.93	All Build Alternatives	Place fiber-optic conduit
Putah Creek Pedestrian Undercrossing	22-0194	Yol 80	0.01	All Build Alternatives	Place fiber-optic conduit

Structure Name	Structure Number	Route	Post Mile	Alternative	Structure Work
Richard Boulevard Overcrossing RW NO. 3	TBD	Yol 80	0/0.60	All Build Alternatives	Retaining wall at abutment along eastbound I-80 off-ramp to Richards Boulevard
I-80 Managed Lane Direct Connector	TBD	Yol 80	9.5/10.0	Build Alternatives 2b, 3b, 4b, 5b, 6b, 7b	Proposed managed lane connector retaining wall #1; Proposed managed lane connector retaining wall #2

Source: Caltrans Draft Project Report (July 2021)

## RAMP MODIFICATIONS

Within Segment 2, eastbound ramp modifications would be constructed at I-80 eastbound on-ramp from Richards Boulevard to accommodate realignment within the right-of-way. In addition, ramp modifications would occur at the westbound I-80 off-ramp to County Road (CR)-32A/Chiles Road to accommodate additional bicycle/pedestrian pathway within the right-of-way.

**Bicycle/Pedestrian Facilities**

## BICYCLE/PEDESTRIAN FACILITIES

The Build Alternatives would replace the existing bicycle pathway pavement behind the gas station located north of West Capitol Avenue from PM 9.15 to PM 9.35. The existing bicycle pathway would be rerouted during repaving activities for up to two months, but repaving activities may occur at nighttime to minimize access disruption. To maintain access, bicycles traveling westbound would be redirected along West Capitol Avenue. Bicycles traveling eastbound would be redirected along a short segment of sidewalk on West Capitol Avenue and use the crosswalk at the West Capitol Avenue/westbound I-80 off-ramp intersection<sup>2</sup>. Bicyclists would then continue eastbound along West Capitol Avenue using the existing bicycle lane. Caltrans would add crosswalk pavement marking across the westbound I-80 off-ramp to West Capitol Avenue and near the existing West Capitol Avenue crosswalk. In addition, Caltrans would add advanced warning signs to alert the motorists traveling on the westbound I-80 off-ramp to West Capitol Avenue before reaching the proposed crosswalk. Caltrans would place signage as part of the traffic management plan to note the access updates and identify the bicycle/pedestrian detours.

The Build Alternatives would also replace the existing bicycle pathway pavement from PM 9.1 to the Yolo Causeway bridge deck approach at approximately PM 8.9. While the existing Class I bicycle pathway is closed, a temporary bicycle pathway with K-rail barrier would be placed along the I-80 westbound on-ramp from West Capitol Avenue. Up to 100 linear feet of existing barrier near PM 8.9 would be removed and realigned to allow bicycles to rejoin the existing Class I

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<sup>2</sup> City of West Sacramento Municipal Code 10.32.020 states that bicycles are permitted on the public sidewalk but will yield to any pedestrian.



bicycle pathway along Yolo Causeway. The existing Class I bicycle pathway along the Yolo Causeway would not require closure during construction activities.

The Build Alternatives would extend the westernmost limit of the existing Class I bicycle pathway from I-80 along Yolo Causeway to connect to CR-32A. The pathway extension would be located adjacent to the westbound I-80 off-ramp to CR 32A and would be approximately 12 feet wide. The area surrounding the pathway extension would be graded to comply with the Americans with Disabilities Act of 1990 (ADA) regulations. A concrete barrier would separate the pathway extension from westbound off-ramp vehicular traffic. Once construction of the pathway extension along westbound I-80 off-ramp is complete, the Build Alternatives would conduct pavement rehabilitation from CR 32A to Levee Road. During pavement rehabilitation activities, Levee Road would be closed. Bicycles would be redirected along the newly constructed pathway extension on westbound I-80 off-ramp to access the existing Class I bicycle pathway along Yolo Causeway, which would be built prior to rehabilitation activities on Levee Road.

The Build Alternatives would include widening the shoulders of CR-32A from the existing Levee Road path to just east of CR-105 to accommodate a standard Class I bicycle path. In addition, the Build Alternatives would include widening the shoulders of CR-32A from CR-105 to the proposed Class I bicycle path along CR-32A to accommodate a standard Class II bicycle lane. Construction of the Class II bicycle lane would involve widening the shoulders by 4 feet for the Class II 6-foot lane on both sides with standard edge line striping. No barriers would be constructed. Caltrans would coordinate with Yolo County Public Works Department to complete this bicycle pathway design along CR 32A.

## **PARK-AND-RIDE FACILITY**

Within Segment 2 of each of the Build Alternatives, a Park-and-Ride Facility would be constructed on the east side of Enterprise Boulevard in a 4.5-acre lot and would provide for approximately 300 parking spaces. Users of the Park-and-Ride Facility would have the option to park their cars for the day and connect to several county and regional transit services. The facility would be located partially within the existing Caltrans right-of-way and partially outside the existing Caltrans right-of-way.

## **SIGNAGE**

The Build Alternatives would include roadside signs and overhead signs to provide symbolic or text messages that would guide and warn motorists and regulate the flow of traffic. Some of the signs would have hours of operation that restrict certain classes of vehicles during peak periods. Other signs would have information for motorists of the conditions or hazards that they are approaching.

Roadside signs would include regulatory and warning signs, route shields, and guide signs. These signs would be located on wood or metal posts. Wood posts would be approximately 6-inches by 6-inches while metal posts would be approximately 2.5 inches by 2.5 inches.

Roadside signs would be mounted on the freeway concrete median barrier or placed adjacent to the edge of the travel way up to 30 feet. However, placement of roadway signs would avoid environmentally sensitive areas.

Overhead signs would be mounted on versatile truss structures spanning above the travel lanes. The total height of the overhead sign structure (including the sign) would depend on the type of sign being mounted but would not likely exceed 40 feet in height. Overhead sign structures would have a concrete foundation of up to 6.5 feet diameter and would either be supported on a cast-in-drilled-hole pile foundation or supported by a structure.

## **LIGHTING**

Street lighting would be added near CR-32A at the proposed bicycle pathway extension adjacent to the westbound off-ramp. Within Segment 2, bridge deck lighting with Type 21 Barrier-Rail-Mounted Lighting Standards would be constructed. Additional street lighting would be added to the Bryte Bend Bridge (I-80 Sacramento River Bridge Overhead), but it may also be added at proposed auxiliary lane locations if determined necessary during the design phase. Some nighttime lighting would occur during nighttime construction work activities. Signage would use reflective lettering.

## **ROAD CUT/FILL**

Some locations would require full structural section reconstruction, and other locations would require cut or fill of the embankment due to road widening.

## **GRINDING**

Cold planing, the process of removing part of the surface of a paved area, would be required throughout the project limits. Cold planing would be required for ramp conforms at all ramps and may be required at other locations along the travel way wherever hot mix asphalt is currently in place. A mill (cold planing) and fill operation may be proposed to repair roadway surface scarring that occurs during temporary restriping associated with some stage construction operations.

## **SITE PREPARATION**

Site preparation would include delineating construction work areas, installing environmentally sensitive area (ESA) fencing around sensitive habitats and cultural resource areas, installing wildlife exclusion fencing around staging areas, installing best management practices (BMPs) in accordance with the project's Stormwater Pollution Prevention Plan (SWPPP), and removing vegetation, as summarized in Appendix E.

## UTILITIES

Build Alternatives 2a, 3a, 4a, 5a, 6a, and 7a would not result in potential conflicts with existing utilities that are present along the I-80/US-50 corridor utility companies would require verification of facilities and involvement in construction plans. Accordingly, prior to construction, an estimated 15 test hole sites would be drilled at eight different locations for natural gas lines running transversely underneath I-80, the Yolo Causeway, and West Capitol Avenue in Sacramento where the new managed lane would be constructed with retaining walls and columns. Positive findings would verify whether the gas line would require relocation or how to redesign the project components to avoid conflicts with existing utilities.

Under all Build Alternatives, removal of an existing overhead sign near Westacre Park, within Caltrans right-of-way, would require an overhead electrical distribution line to be temporarily de-energized. Under Build Alternatives 2b, 3b, 4b, 5b, 6b, and 7b, up to four 115-kilovolt overhead utility towers may be relocated or tower height increased near the new I-80 managed lane direct connector at the I-80/US-50 separation in West Sacramento.

## FIBER-OPTIC CABLE

The Build Alternatives would install a fiber-optic cable and associated fiber-optic splice boxes within the roadbed at the eastbound outside shoulder of I-80 from west of Kidwell Road in Solano County at PM 40.7 to PM 4.35 in Yolo County. Cut and cover or trenching would be the primary construction method and would require excavation of up to 42 inches deep to install within a 12-foot buffer surrounding the running line. Fiber-optic cable may also be placed via directional borings to avoid conflicts with existing utilities.

## RIGHT-OF-WAY AND TEMPORARY CONSTRUCTION EASEMENTS

The Build Alternatives would require Caltrans to acquire two private fee parcels to construct the proposed Park-and-Ride Facility at Enterprise Boulevard (2.8 acres). A total of seven temporary construction easements would be required along the project alignment.

## STAGING AREAS

Staging areas would be located at the I-80/West El Camino Avenue interchange, South River Road, I-80/Richards Boulevard interchange, the I-80 and SR-113 interchange, West Capitol Avenue, and along Kidwell Road. These areas total 53.31 acres and would be used for equipment maintenance and storage of equipment, construction materials, fuels, lubricants, solvents, and other possible contaminants during construction.

## TRAFFIC MANAGEMENT DURING CONSTRUCTION

Various Transportation Management Plan (TMP) elements such as portable changeable message signs (CMS) and the California Highway Patrol Construction Zone Enhanced

Enforcement Program would be used to minimize delays to the traveling public. Flaggers would be used to divert traffic. Prior to construction, a detailed TMP would be prepared.

Ramp closures are anticipated at all ramp locations adjacent to proposed widening or proposed mainline paving. Traffic would be detoured to the next interchange. Caltrans would also place signage as part of the TMP to note the access updates and identify the bicycle/pedestrian detours. Caltrans would install a cross walk at the westbound I-80 off-ramp across right turn movement to West Capitol Avenue as well as a temporary flashing beacon located upstream.

Build Alternatives 2b, 3b, 4b, 5b, 6b, and 7b may require a temporary, full closure on westbound US-50. Full closures would occur during the hours of the lowest volume of traffic (e.g., nighttime) or during a continuous 24- or 48-hour operation. The primary detour for westbound US-50 traffic would be to use northbound I-5 to westbound I-80. Local traffic would use other interchanges in the area.

## **VEGETATION AND TREE REMOVAL**

Vegetation clearing would be required and would be confined to the area within the project footprint, including construction access routes. Vegetation removal and clearing would be completed with hand tools where possible. Chainsaws, grinders, and excavators would be used for vegetation that cannot be removed by hand. All vegetation would be removed within proposed cut and fill lines as well as within temporary impact lines where ITS components would be constructed. Within areas of temporary impact, vegetation removal would be avoided to the extent possible.

## **CONSTRUCTION EQUIPMENT**

The equipment used for the proposed work of the Build Alternatives would be similar among the Build Alternatives. Center median work would use excavators, scrapers, motor graders, loaders, backhoes, pavers, concrete barrier slip form pavers, truck-mounted cranes, 18-wheel trucks, dump trucks, and water trucks. Reconstruction and modification of ramps/gores/shoulder embankments would use excavators, motor graders, loaders, backhoes, pavers, 18-wheel trucks, dump trucks, and water trucks. Road surfacing work, including placement for sensors in the road surface, would use core drillers, trailers containing and dispersing sealant, and water trucks.

Construction of the I-80 managed lane direct connector under Build Alternatives 2b, 3b, 4b, 5b, 6b, and 7b would require pile driving to install the footings to a depth of up to 40 feet. Equipment would also include a crane (for pile driving), excavator, dozer, loader, manlift, articulated 4x4 forklift, truck, dump truck, trailer unit air compressor, and water truck. This construction equipment would also be used for structural sign mounts along with a truck-mounted crane for all Build Alternatives. A truck-mounted auger would be used for installing roadside signs.

## **GROUND DISTURBANCE**

The depth of ground disturbance would vary throughout the project limits. At locations where CMS, sign structures, or piles would be installed, disturbance could be up to 30 feet deep. As described, construction of the I-80 managed lane direct connector under Build Alternatives 2b, 3b, 4b, 5b, 6b, and 7b would require pile driving to install the footings to a depth of up to 40 feet. At locations of culverts, depth of ground disturbance could vary from 3 feet to 10 feet (i.e., the estimated depth to the bottom of a culvert or inlet). At locations of linear electrical facilities such as fiber-optic and conduit installations, the ideal depth is typically 4 feet, assuming 42 inches of cover; however, depth could be increased to avoid conflicts with existing or proposed drainage or existing utilities.

## **SITE CLEANUP AND POST-CONSTRUCTION ACTIVITIES**

All construction materials and debris would be removed from the construction work areas and recycled or properly disposed of off-site. Caltrans would restore all areas temporarily disturbed by project activities, such as staging areas and access roads, to near or better than preconstruction conditions in accordance with applicable permits and Caltrans requirements.

### **4.1.5 Unique Features of the Build Alternatives**

#### **BUILD ALTERNATIVES 2A AND 2B: HOV 2+ MANAGED LANE**

##### ***LANE CONFIGURATION – BUILD ALTERNATIVES 2A AND 2B***

Build Alternatives 2a and 2b would begin at the Solano/Yolo County Line west of Davis to West El Camino Avenue on I-80 and end at I-5 on US-50 in Sacramento County. Build Alternatives 2a and 2b would include an HOV 2+ managed lane in the eastbound and westbound direction. This would be accomplished by constructing in the median from the Solano/Yolo County line to west of the Yolo Causeway and continuing eastward by restriping to West El Camino Avenue on I-80 and to I-5 on US-50 in Sacramento County.

Build Alternative 2b would involve construction of an I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 2a. The I-80 managed lane direct connector would provide a direct connection of the HOV 2+ managed lane by flying over US-50 at the I-80/US-50 Interchange. The connector would include a retaining wall on either side and would travel underneath the existing eastbound connector from I-80 to US-50. The proposed managed lane direct connector would be constructed of columns and include concrete barrier type 842 railings.

##### **SEGMENT 1**

Segments 1a, 1b, and 1c would be restriped with 6-inch thermoplastic traffic stripes for three mixed-flow lanes and one managed lane in each direction, westbound and eastbound.

Within Segment 1b, from just west of the Solano/Yolo County Line to the west end of the Yolo Causeway, the project would involve replacement of the existing inside shoulders and construction of the eastbound and westbound median from around Richards Boulevard to 1.5 miles east of Mace Boulevard to accommodate managed lanes in the eastbound and westbound directions. The new shoulders and construction areas would be asphalt concrete material. The median barriers would be upgraded from a metal beam guard rail to a reinforced concrete barrier.

## SEGMENT 2

Within Segment 2, the Bryte Bend Bridge would be restriped to accommodate the HOV 2+ managed lane in each direction. Reducing lane and shoulder widths would accommodate a fourth lane on the Bryte Bend Bridge. The bridge striping would change from three lanes (two 12-foot lanes and one 11.5-foot lane) to four lanes (four 11-foot lanes) with 1-foot inside and 2.5-foot outside shoulders.

## SEGMENT 3

Within Segment 3a, from I-80/US-50 Separation to Jefferson Boulevard Undercrossing, the pavement would be restriped to convert one mixed-flow lane in each direction to managed lanes.

Within Segment 3b, from the Jefferson Boulevard Undercrossing to just east of I-5, the Jefferson Boulevard Undercrossing (Br. No. 22-0106 L/R), and the Sacramento River viaduct (Br. No. 24-0014 R/L) between Jefferson Boulevard and the I-5/US-50 interchange would be restriped to add an additional managed lane in each direction.

### ***LANE ACCESS – BUILD ALTERNATIVES 2A AND 2B***

An HOV lane is a type of managed lane that allows qualified users, who meet the minimum number of passengers, to use the managed lane. The number of vehicle occupants required to qualify can vary depending on location. Under Build Alternatives 2a and 2b, vehicles with two or more occupants would be permitted to access the HOV lane, and all other vehicles would be prohibited from using those lanes. The HOV lanes would be designated using a striping pattern and a diamond marking to distinguish them from mixed-flow lanes and would operate only during peak commute hours.

### ***SIGNAGE – BUILD ALTERNATIVES 2A AND 2B***

Approximately 45 overhead signs would be replaced or proposed within the project area. Several existing overhead signs would be removed and not replaced. In addition, 311 roadside signs would be replaced and 221 roadside signs are proposed within the median or the shoulder. Proposed signage would be the same for Build Alternatives 2a and 2b.

### ***DRAINAGE/CULVERTS – BUILD ALTERNATIVES 2A AND 2B***

Anticipated work includes extending existing culverts through existing unpaved medians, extending existing culverts at locations where construction may occur outside the existing edge

of pavement lining, and possibly abandoning existing culverts where median construction would occur in crowned sections of the roadway. New drainage inlets and culverts are proposed to be replaced or repaired to accommodate areas where existing shoulders are being narrowed, to accommodate additional runoff due to the increased pavement area, or to perpetuate existing drainage patterns. The linings of one pipe would occur using cast-in-place-pipe lining (CIPP). CIPP is a method to repair pipes without needing to trench by inserting a liner inside the existing culvert pipe.

Build Alternative 2a and Build Alternative 2b would construct 5 new culverts and replace or improve 21 existing culverts. As described, many of the proposed drainage features would be located within the construction footprint of the median for the new HOV 2+ managed lane. In addition, proposed culverts would traverse beneath the freeway to convey drainage to a new outlet. In these instances, the freeway would be trenched using an excavator and the barrel would be installed. Once the barrel is installed, the trench would be backfilled and compacted back to preconstruction conditions. Trenching across the freeway travel lanes would occur in segments during low peak (nighttime) traffic hours to maintain access. Construction of each new or replaced culvert would occur over approximately two nights; however, construction of several culverts could occur concurrently as further described in the construction schedule. It is assumed each of these culvert repair or replacement areas would have a 20-foot by 20-foot temporary construction impact footprint, not to exceed the roadway right-of-way. Proposed drainage features for the I-80 managed lane direct connector, under Build Alternative 2b, would occur within the construction footprint of the I-80 managed lane direct connector.

#### ***CONSTRUCTION SCHEDULE – BUILD ALTERNATIVES 2A AND 2B***

Construction of Build Alternative 2a is anticipated to take approximately 443 construction working days over 22 months. Construction of Build Alternative 2b is anticipated to take approximately 732 construction working days over 36 months. Construction would potentially commence in Spring 2025. Due to high daytime traffic volumes, nighttime work would be expected. Both daytime and nighttime work should be anticipated throughout the project duration.

#### **BUILD ALTERNATIVES 3A AND 3B: HOT 2+ MANAGED LANE**

Build Alternatives 3a and 3b would be the same as Build Alternatives 2a and 2b, respectively, but would include an HOT 2+ managed lane instead of an HOV 2+ lane. Build Alternative 3b would involve construction of the I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 3a.

The HOT managed lane would allow vehicles with a minimum two-person occupancy to use the lane for free, while single-occupied vehicles would pay for the lane usage. All other project components would be the same as Build Alternatives 2a and 2b, respectively, with the exception of signage locations.

Approximately 79 overhead signs would be replaced or proposed within the project area. Several existing overhead signs would be removed and not replaced. In addition, 311 roadside

signs would be replaced and 373 roadside signs are proposed within the median or the shoulder.

### **BUILD ALTERNATIVES 4A AND 4B: HOT 3+ MANAGED LANE**

Build Alternatives 4a and 4b would be the same as Build Alternatives 2a and 2b, respectively, but would include an HOT 3+ managed lane instead of an HOV 2+ lane. Build Alternative 4b would involve construction of the I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 4a.

The HOT managed lane would allow vehicles with a minimum three-person occupancy to use the lane for free. Vehicles with less than three riders would pay for the lane usage. Vehicles with two passengers may pay reduced or full tolls to travel within the HOT lane. All other project components would be the same as Build Alternatives 2a and 2b, respectively, with the exception of signage locations.

Proposed signage for Build Alternatives 4a and 4b would be the same as Build Alternatives 3a and 3b, respectively.

### **BUILD ALTERNATIVES 5A AND 5B: EXPRESS MANAGED LANE**

Build Alternatives 5a and 5b would be the same as Build Alternatives 2a and 2b, respectively, but would include an express lane instead of an HOV 2+ lane. Build Alternative 5b would involve construction of the I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 5a. An express lane is a managed lane that allows vehicles of any occupancy to access a dedicated lane once a toll is paid. All other project components would be the same as Build Alternatives 2a and 2b, respectively, with the exception of signage locations.

Proposed signage for Build Alternatives 5a and 5b would be the same as Build Alternatives 3a and 3b, respectively.

### **BUILD ALTERNATIVES 6A AND 6B: TRANSIT-ONLY MANAGED LANE**

Build Alternatives 6a and 6b would be the same as Build Alternatives 2a and 2b, respectively, but would include transit-only managed lanes instead of HOV 2+ lanes. Build Alternative 6b would involve construction of the I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 6a. A transit-only lane is a managed lane that allows only approved public transit vehicles, such as bus services, to access a dedicated lane. All other project components would be the same as Build Alternatives 2a and 2b, including the proposed signage for Build Alternatives 6a and 6b, respectively.



## **BUILD ALTERNATIVES 7A AND 7B: REPURPOSE LANES TO HOV 2+ MANAGED LANE**

Build Alternatives 7a and 7b would repurpose the current number one general-purpose lanes to HOV 2+ managed lanes. No new lanes would be constructed. Build Alternative 7b would involve construction of the I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 7a.

### ***LANE CONFIGURATION—BUILD ALTERNATIVES 7A AND 7B***

Build Alternatives 7a and 7b would maintain the existing median pavement delineation, unpaved median, and add an HOV 2+ lane by repurposing an existing mixed-flow lane (lane number one). As a result, Build Alternatives 7a and 7b would not shift the edge of travel way into the median or require barrier beam removal within the median.

### ***LANE ACCESS—BUILD ALTERNATIVES 7A AND 7B***

Vehicles with two or more occupants would be permitted to access the HOV 2+ lane, and all other vehicles would be prohibited from using them. The HOV 2+ lanes would be designated using a striping pattern and a diamond marking to distinguish them from mixed-flow lanes. HOV 2+ lanes would only operate during peak commute hours.

### ***SIGNAGE—BUILD ALTERNATIVES 7A AND 7B***

Proposed signage for Build Alternatives 7a and 7b would be the same for Build Alternatives 2a and 2b, respectively.

### ***DRAINAGE/CULVERTS – BUILD ALTERNATIVES 7A AND 7B***

Build Alternatives 7a and 7b would repurpose the current number one general-purpose lanes to HOV 2+ managed lanes. Therefore, culvert construction associated with Build Alternative 7a would only be related to replacements or improvements to 18 existing culverts. Build Alternative 7b would construct 5 new culverts associated with the I-80 managed lane direct connector. Construction methods would be the same as Build Alternative 2a and 2b, respectively. The lining of one pipe would also occur using CIPP. As stated earlier, CIPP is a method to repair pipes without needing to trench by inserting a liner inside the existing culvert pipe.

### ***CONSTRUCTION SCHEDULE – BUILD ALTERNATIVES 7A AND 7B***

Construction of Build Alternative 7a is anticipated to take approximately 180 construction working days over 10 months. Construction of Build Alternative 7b is anticipated to take 732 construction working days over 36 months to complete. Construction would potentially commence in Spring 2025. Due to high daytime traffic volumes, nighttime work would be expected. Both daytime and nighttime work should be anticipated throughout the project duration.

## **ALTERNATIVE 1 – NO BUILD ALTERNATIVE**

Alternative 1, the No Build Alternative, would maintain the existing conditions, and no work would be conducted to relieve current traffic congestion to improve traffic flow, mobility, and travel time reliability while at the same time reducing vehicle emissions and travel costs. The No Build Alternative would not provide a transportation facility that functions for all users, including bicyclists, pedestrians, local transit services, and freight. Recurring travel demand would continue to exceed the current design capacity of the highway, resulting in severe traffic congestion and impaired mobility. Additionally, the transportation network would not include adequate facilities for all modes of transportation.

The No Build Alternative assumes programmed and planned improvements to the current corridor. While there are numerous planned or programmed transportation projects within the region that can impact future travel patterns, this section focuses only on those future baseline improvements that directly impact the project area. The baseline improvement projects within the project area are listed in Table 2.

## **5 Description of Section 4(f) Resources**

Section 4(f) resources in the project area include publicly owned recreational resources and historic properties. The study area for Section 4(f) was 500 feet from the edge of the proposed project. This distance is based on the nature of the proposed project.

### **5.1 Historic Properties**

The Caltrans Office of Cultural Resources Studies conducted research, architectural history surveys, extended phase I studies, and evaluations of cultural resources within the area of potential effects (APE) in various dates in 2021. Identification and evaluation efforts by Caltrans have resulted in the documentation of one historic property within the APE: Reclamation District 900 (RD 900). Caltrans assumed RD 900 to be eligible for listing in the National Register under Criterion A for the purposes of this project only, pursuant to Stipulation VIII.C.4 of the Section 106 PA. Caltrans, pursuant to Section 106 PA Stipulation X.B.2, found that there will be no adverse effect. The undertaking will not destroy or alter any contributing feature of RD 900 and will not affect the resource's integrity or ability to convey its historical significance, and the project would have no adverse effect.

SHPO concurred with the findings on January 12, 2022. As such, the undertaking would not result in any Section 4(f) use or de minimis finding to any historic properties or historical resources, regardless of alternative.

### **5.2 Public Parks and Wildlife Facilities**

Table 1 summarizes public parks and wildlife areas within 500 feet of the project area, which are also depicted on Figure 2 at the end of this report. There are nine (9) public parks including a dog park and bike park, two (2) nature areas, and one (1) wildlife area within the 500-foot buffer,

with eight (8) of the recreation areas being directly adjacent to the proposed project and existing Caltrans right-of-way.

**Table 2. Public Parks and Wildlife Areas within 500 Feet of the Proposed Project, Listed Generally East to West.**

Park Name	Facility Type	Distance/Relationship to Project
River Otter Park	Public Park	Adjacent
Sand Cove Park	Public Park	400 feet
Meadowdale Park	Public Park	Adjacent
Southside Park	Public Park	500 feet
O'Neil Park	Public Park	500 feet
Westacre Park	Public Park	Adjacent
Roland Hensley Bike Park	Public Bike Park	Adjacent
Yolo Bypass Wildlife Area*	Wildlife Area	Adjacent and Underneath
Playfields Park*	Public Park	50 feet
Toad Hallow Dog Park	Public Dog Park	400 feet
Putah Creek Riparian Reserve	Trails/Nature Area	Adjacent
U.C. Davis Arboretum	Trails/ Nature Area	Adjacent

\*These resources received funds from the LWCF Act and are therefore also 6(f) resources

### 5.2.1 River Otter Park

River Otter Park is managed by the City of Sacramento and is located adjacent to the project area at 2303 Barandas Drive, Sacramento. The small (1.88-acre) park features a playground, volleyball court, and picnic tables.

### 5.2.2 Sand Cove Park

Sand Cove Park is a beach and river access park maintained by the City of Sacramento that spans 9.88 acres and is approximately 400 feet from the project area. Fishing and other water activities are common, with a small parking lot and access off the Garden Highway.

### 5.2.3 Meadowdale Park

Meadowdale Park is located at 3625 West Capitol Avenue in West Sacramento and is adjacent to the project area. The 4-acre park is managed by the City of West Sacramento and includes picnic tables, barbeques, a playground, and parking. Access is from West Capitol Avenue.

### 5.2.4 Southside Park

Southside Park is managed by the City of Sacramento and is located at 2115 6th Street, Sacramento. It is approximately 500 feet from the proposed project area. The 20-acre park has

numerous facilities including tennis courts, basketball courts, wading pool, jogging path, picnic tables, and age-specific playgrounds.

### **5.2.5 O'Neil Park**

O'Neil Park is located at 715 Broadway, Sacramento, and consists of a lighted soccer field and a baseball/softball field with restroom facilities and parking. It is maintained and managed by the City of Sacramento and is approximately 500 feet from the project area, with access and street parking is along Broadway and 8th Streets.

### **5.2.6 Westacre Park**

Westacre Park is located adjacent to the project area at 1755 Evergreen Avenue in West Sacramento. The City of West Sacramento maintains the 5-acre park which features an enclosed skateboard park, picnic tables, and shade areas. The parking lot for Westacre Park is accessed from Evergreen Avenue.

### **5.2.7 Roland Hensley Bike Park**

The small (0.5 acre) Roland Hensley Bike Park in West Sacramento is a Class one bicycle lane at 4940 West Capitol Avenue, which connects to the east end of the Yolo Causeway Bicycle Path. It includes a picnic area and water fountain. Access to parking for the City of West Sacramento managed park is from Tule Jake Road.

### **5.2.8 Yolo Bypass Wildlife Area**

The Yolo Bypass Wildlife Area comprises 17 separate management units covering approximately 16,600 acres, with the portion along the project area managed by California Department of Fish and Wildlife, Bay Delta Region. It is protected habitat for fish, waterfowl, migratory birds, raptors, invertebrates, snakes, and turtles. Vegetation types include managed seasonal and permanent wetland, natural seasonal wetland, natural perennial wetland, and riparian woodland. The wildlife area is open daily to the public for wildlife viewing and fishing. The wildlife area includes designating self-driving tours along levees. Land also includes Tule Ranch, a working cattle ranch with extensive vernal pool areas.

### **5.2.9 Playfields Park**

Playfields Park is maintained by the City of Davis and is located at 2500 Research Drive, Davis, and is approximately 16 acres in size and is approximately 50 feet from the project area. It features three baseball/softball fields, a soccer field, batting cages, basketball hoops and playground equipment. The large parking lot is accessed from Research Drive.

### **5.2.10 Toad Hollow Dog Park**

Toad Hollow Dog Park is a 2.5-acre City of Davis off-leash dog park and is approximately 400 feet from the project area. The address is 1919 2nd Street, Davis. It has shade trees, benches, and parking accessed from 2nd Street.

### **5.2.11 Putah Creek Riparian Reserve**

The University of California, Davis (U.C. Davis) Putah Creek Riparian Reserve is a 640-acre natural riparian and grassland ecosystem that runs along the southern edge of the UC Davis campus. Most of the reserve is open to the public and is maintained and operated by the UC Davis Arboretum and Public Garden.

### **5.2.12 University of California Davis Arboretum and Public Garden**

The UC Davis Arboretum and Public Garden spans the campus's 5,300-plus acres and includes the historic Arboretum. It connects with the Putah Creek Riparian Reserve and is open to the public. The gardens, natural areas and landscapes are open 24 hours a day, every day of the year. Access is at various locations, but the vistor headquarters are located off Le Rue Road.

## **5.3 Potential Impacts to Section 4(f) Resources**

This section provides an evaluation of the potential use of recreation facilities subject to Section 4(f) evaluation within the 500-foot project study area. No public parks, recreation facilities, historic properties, or archaeological sites are expected to have a "permanent/direct use" under Section 4(f) because the project would not result in permanent partial or full acquisition or easement of a Section 4(f) resource. The nature of the project would not result in a constructive ("indirect") use that could substantially impair the key activities, features or attributes of protected facilities or resources due to the project's proximity.

Construction-related activities within Roland Hensley Bike Park and Yolo Bypass Wildlife Area would result in a temporary occupancy as further described in Section 4.3.4, but the duration of the occupancy would be temporary, the scope of work would be minor, no adverse impacts to protected activities or access would occur, the property would be restored to same or better condition than existing prior to the project, and the local jurisdictions would be involved accordingly. Therefore, the requirements for an exception under 23 CFR 774.13(d) will be met. Concurrence with the official with jurisdiction for each of these properties will be obtained before approval of the final environmental document.

Of the public facilities subject to further Section 4(f) evaluation, there are seven (7) facilities close enough to the project to necessitate more detailed analysis (Figure 3). As confirmed with the additional analysis, the project would not result in any Section 4(f) use to any recreation resources, regardless of Build Alternative.

### **5.3.1 River Otter Park**

River Otter Park is located adjacent to project area at 2303 Barandas Drive, Sacramento. The park is currently located along the Interstate 80 (I-80) right-of-way, and access would not be disrupted under Build Alternatives 2a and 2b through 7a and 7b as no construction, staging, or other work is proposed near the park. As such, there is no Section 4(f) impact under any proposed alternative and there would be no proximity impacts.

#### **DIRECT USE**

There would be no acquisition of park property, and therefore no direct use of the park.

#### **CONSTRUCTIVE USE**

The park is currently adjacent to the Caltrans I-80 right-of-way and is therefore currently subject to indirect air quality and noise impacts.

The Air Quality Report prepared for the project determined that dust would be generated during grading and construction operations (Caltrans 2023a). Diesel exhaust from construction vehicles may also pose both a health and nuisance impact to nearby receptors. However, these construction activities are expected to occur during a relatively short time. Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures will be implemented when practical, during all phases of construction work: Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 "Dust Control," Section 14-9 "Air Quality" (Standard Measure GHG-1) and Section 18 "Dust Palliatives." The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Yolo-Solano Air Quality Management District (YSAQMD).

The Noise Study Report prepared for the project determined that construction activities would result in temporary increases to noise and vibration at adjacent receptors (Caltrans 2022a). However, construction activities would follow applicable local regulations and would be short-term and intermittent. Furthermore, all construction equipment would be required to conform with Section 14-8.02, Noise Control, of the Caltrans Standard Specifications. In addition, noise-generating activities would be restricted between certain hours and unnecessary idling within 100 feet of residences would be prohibited. As a result, indirect air quality and noise impacts as a result of the proposed project are not expected to result in substantial impairment to any of the park's activities, features or attributes. Therefore, there would not be a constructive use of River Otter Park.

## **TEMPORARY OCCUPANCY**

No construction activities or project components are proposed within River Otter Park. Access to park facilities would not be disrupted, and park users would not be impacted. Standard measures would further reduce potential noise or air quality impacts during construction along the I-80 corridor, as described above..

### **5.3.2 Meadowdale Park**

Meadowdale Park is located at 3625 West Capitol Avenue in West Sacramento. Alternatives 2a and 2b through 7a and 7b would have no impact because no construction, staging, or work is planned near this resource. However, Build Alternative 2b, 3b, 4b, 5b, 6b, and 7b include cut and fill excavation for a new connector ramp approximately 100 feet from the park. There would be no proximity impacts.

## **DIRECT USE**

There would be no acquisition of park property, and therefore no direct use of the park.

## **CONSTRUCTIVE USE**

Indirect air quality and noise impacts as a result of the proposed project are not expected to result in a constructive use of Meadowdale Park. The park is currently adjacent to the Caltrans I-80 right-of-way and is therefore currently subject to indirect air quality and noise impacts.

The Air Quality Report prepared for the project determined that dust would be generated during grading and construction operations (Caltrans 2023a). Diesel exhaust from construction vehicles may also pose both a health and nuisance impact to nearby receptors. However, these construction activities are expected to occur during a relatively short time. Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures will be implemented when practical, during all phases of construction work: Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 "Dust Control," Section 14-9 "Air Quality" (Standard Measure GHG-1) and Section 18 "Dust Palliatives." The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the SMAQMD and the YSAQMD.

The Noise Study Report prepared for the project determined that construction activities would result in temporary increases to noise and vibration at adjacent receptors (Caltrans 2022a). However, construction activities would follow applicable local regulations and would be short-term and intermittent. Furthermore, all construction equipment would be required to conform with Section 14-8.02, Noise Control, of the Caltrans Standard Specifications. In addition, noise-generating activities would be restricted between certain hours and unnecessary idling within

100 feet of residences would be prohibited. As a result, indirect air quality and noise impacts as a result of the proposed project are not expected to result in substantial impairment to any of the park's activities, features or attributes. Therefore, there would not be a constructive use that would substantially impair the activities, features, and attributes of the park.

### **TEMPORARY OCCUPANCY**

There would be no temporary use of the park and access to the park would remain open.

### **5.3.3 Westacre Park**

Westacre Park is located adjacent to the project area at 1755 Evergreen Avenue in West Sacramento. The parking lot for Westacre Park is accessed from Evergreen Avenue, and access would not be disrupted. As detailed below, there would not be an impact under Build Alternatives 2a and 2b through 7a and 7b and no proximity impacts because no construction is proposed near the park.

### **DIRECT USE**

There would be no acquisition of park property, and therefore no direct use of the park.

### **CONSTRUCTIVE USE**

Under all Build Alternatives, removal of an existing overhead sign near Westacre Park, within the Caltrans right-of-way, would require an overhead electrical distribution line to be temporarily de-energized. In addition, a roadway sign is proposed adjacent to Westacre Park, within the Caltrans I-80 right-of-way. According to the visual impact analysis prepared for the project, potential visual effects are buffered by mature trees, which would remain (Caltrans 2022b).

The Air Quality Report prepared for the project determined that dust would be generated during grading and construction operations (Caltrans 2023a). Diesel exhaust from construction vehicles may also pose both a health and nuisance impact to nearby receptors. However, these construction activities are expected to occur during a relatively short time. Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures will be implemented when practical, during all phases of construction work: Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 "Dust Control," Section 14-9 "Air Quality" (Standard Measure GHG-1) and Section 18 "Dust Palliatives." The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the SMAQMD and the YSAQMD.

The Noise Study Report prepared for the project determined that construction activities would result in temporary increases to noise and vibration at adjacent receptors (Caltrans 2022a).



However, construction activities would follow applicable local regulations and would be short-term and intermittent. Furthermore, all construction equipment would be required to conform with Section 14-8.02, Noise Control, of the Caltrans Standard Specifications. In addition, noise-generating activities would be restricted between certain hours and unnecessary idling within 100 feet of residences would be prohibited. As a result, indirect air quality and noise impacts as a result of the proposed project are not expected to result in substantial impairment to any of the park's activities, features or attributes. Therefore, there would not be a constructive use that would substantially impair the activities, features, and attributes of the park. Therefore, impacts from the project would not constitute a constructive use.

## **TEMPORARY OCCUPANCY**

No construction activities or project components are proposed within Westacre Park. Access to park facilities would not be disrupted, and park users would not be impacted. Standard measures would further reduce potential noise or air quality impacts during construction along the I-80 corridor, as described above. Access to the park will be maintained during construction.

### **5.3.4 Roland Hensley Bike Park**

Roland Hensley Bike Park in 4940 West Capitol Avenue, West Sacramento, connects to the east end of the Yolo Causeway Bicycle Path. Access to the bike park would not be permanently altered under any alternative. The existing bicycle pathway would be rerouted during repaving activities, but repaving activities may occur at nighttime to minimize access disruption. To maintain access, bicycles traveling westbound would be detoured along West Capitol Avenue. Bicycles traveling eastbound would be redirected along a short segment of sidewalk on West Capitol Avenue and use the crosswalk at the West Capitol Avenue/westbound I-80 off-ramp intersection. Bicyclists would then continue eastbound along West Capitol Avenue using the existing bicycle lane. Caltrans would install a cross walk at the westbound I-80 off-ramp across right turn movement to West Capitol Avenue as well as a temporary flashing beacon located upstream. Because park and bicycle access would be continued, no Section 4(f) impacts would occur as a result of any Build Alternatives 2a and 2b through 7a and 7b, but constructive use is analyzed in more detail below.

## **DIRECT USE**

There would be no acquisition of park property, and therefore no direct use of the park.

## **CONSTRUCTIVE USE**

Indirect air quality and noise impacts as a result of the proposed project are not expected to result in a constructive use of Roland Hensley Bike Park. Under Alternatives 2b, 3b, 4b, 5b, 6b, and 7b, construction of a connector ramp is proposed but this work is approximately 550 feet from the park, and noise or dust is not anticipated to impact the resource. Therefore, there are no proximity impacts that would rise to the level of substantial impairment.

## TEMPORARY OCCUPANCY

Temporary occupancy is supported in detail in this section. As described, implementation of the any of the Build Alternatives would include repaving of the existing Class I bikeway through Roland Hensley Bike Park to improve the condition of the existing recreational resource to be better than existing prior to the project. During construction, bicycles would be detoured and connectivity would remain open, as described above. Users would not be impacted as required by Caltrans Standard Measure TT-1, which states that pedestrian and bicycle access would be maintained during construction. As part of Standard Measure TT-3, a traffic management plan would include the detour plan. In addition, a 0.2 acre construction staging area is located partially within the park; however, would be located in an areas that is already paved and fenced off from the bike path. As such, the construction staging area would have no effect on the recreational function of the park. None of the temporary construction-related impacts would adversely affect the activities, features, or attributes of the park.

Specifically, temporary occupancy is supported by the following: (1) the duration of the proposed work is temporary (less than the approximately 443 construction working days estimated for construction ), less than the overall project construction period (## months/years), and no change in property ownership would occur; (2) the work is confined to paving the trail portion and minor staging in an unused area only, and would result in minimal changes to the resource, including improvement to the trail; (3) no permanent adverse impacts to the park and no interference on either a permanent or temporary basis with the protected activities, features, or attributes of the park would occur, as detours and night work would help ensure that access would not be impeded; (4) the disturbed land would be fully restored to at least as good condition, in this case improved; and, (5) concurrence by the City of West Sacramento, as the officials with jurisdiction, will be obtained before the approval of the final environmental document..

### 5.3.5 Yolo Bypass Wildlife Area

The Yolo Bypass Wildlife Area's approximately 16,600 acres, with 30 acres (0.02 percent) overlapping the Environmental Study Limit. No Section 4(f) impact is anticipated for the Yolo Bypass Wildlife Area. Build Alternatives 2a and 2b through 7a and 7b would not directly or temporarily use the wildlife area and would be no significant construction work which would/could cause a constructive use. There would be no proximity impacts.

## DIRECT USE

Implementation of the any of the Build Alternatives would not require acquisition of park property, and therefore no direct use of the wildlife area.

## **CONSTRUCTIVE USE**

The project does not propose construction activities, beyond restriping, in the portion of I-80 that traverses above the Yolo Bypass Wildlife Area. Therefore, indirect air quality and noise impacts as a result of the proposed project are not expected to result in a constructive use.

## **TEMPORARY OCCUPANCY**

Temporary occupancy is supported in detail in this section. Implementation of the Build Alternatives would include pavement rehabilitation from CR 32A to Levee Road, of which a sliver of Levee Road appears to be partially located within the Yolo Bypass Wildlife Area. During pavement rehabilitation activities, Levee Road would be closed. Bicycles would be detoured along the newly constructed pathway extension on westbound I-80 off-ramp to access the existing Class I bicycle pathway along Yolo Causeway, which would be built prior to rehabilitation activities on Levee Road. Access would not be disrupted, and users would not be impacted. In addition, the features of the wildlife area that qualify the resource under Section 4(f) and Section 6(f) are associated with the wildlife viewing and hiking trails located south of I-80, and are not associated with Levee Road (CDFW 2021).

Specifically, temporary occupancy is supported by the following: (1) the duration of the proposed work is temporary less than the approximately 443 construction working days estimated for construction), less than the overall project construction period, and no change in property ownership would occur; (2) the work is confined to pavement rehabilitation activities on Levee Road, and would result in minimal changes to the resource; (3) no permanent adverse impacts to the resource and no interference on either a permanent or temporary basis with the protected activities, features, or attributes of the park would occur, and detours would help ensure that access would not be impeded; (4) the disturbed land would be fully restored to at least as good condition, in this case improved; and, (5) concurrence by the California Department of Fish and Wildlife as the officials with jurisdiction, will be obtained before the approval of the final environmental document.

### **5.3.6 Putah Creek Riparian Reserve**

The UC Davis Putah Creek Riparian Reserve is a 640-acre natural riparian and grassland ecosystem that runs along the southern edge of the UC Davis campus. Most of the reserve is open to the public and is maintained and operated by the UC Davis Arboretum and Public Garden. Build Alternatives 2a and 2b through 7a and 7b would not result in a Section 4(f) impact because no project elements or construction is planned near the reserve besides placing fiber-optic conduit along the existing structure at PM 42.36.

## **DIRECT USE**

There would be no acquisition of park property, and therefore no direct use of the reserve would occur.

## CONSTRUCTIVE USE

Indirect air quality and noise impacts as a result of the proposed project are not expected to result in a constructive use of Putah Creek Riparian Reserve. Small portions of the reserve are located near the project and is currently adjacent to the Caltrans I-80 right-of-way and is therefore currently subject to indirect air quality and noise impacts.

The Air Quality Report prepared for the project determined that dust would be generated during grading and construction operations (Caltrans 2023a). Diesel exhaust from construction vehicles may also pose both a health and nuisance impact to nearby receptors. However, these construction activities are expected to occur during a relatively short time. Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures will be implemented when practical, during all phases of construction work: Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 "Dust Control," Section 14-9 "Air Quality" (Standard Measure GHG-1) and Section 18 "Dust Palliatives." The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the SMAQMD and the YSAQMD.

The Noise Study Report prepared for the project determined that construction activities would result in temporary increases to noise and vibration at adjacent receptors (Caltrans 2022a). However, construction activities would follow applicable local regulations and would be short-term and intermittent. Furthermore, all construction equipment would be required to conform with Section 14-8.02, Noise Control, of the Caltrans Standard Specifications. In addition, noise-generating activities would be restricted between certain hours and unnecessary idling within 100 feet of residences would be prohibited. As a result, indirect air quality and noise impacts as a result of the proposed project are not expected to result in substantial impairment to any of the park's activities, features or attributes. Therefore, there would not be a constructive use that would substantially impair the activities, features, and attributes of the park. Therefore, impacts from the project would not constitute a constructive use.

## TEMPORARY OCCUPANCY

There would be no temporary use or impacts to access to the Putah Creek Riparian Reserve or to access to the reserve.

### 5.3.7 University of California Davis Arboretum and Public Garden

The UC Davis Arboretum and Public Garden spans the campus's 5,300-plus acres and includes the historic Arboretum. It connects with the Putah Creek Riparian Reserve and is open to the public. The gardens, natural areas and landscapes are open 24 hours a day, every day of the year. Access is at various locations, but the visitor headquarters is located off Le Rue Road. No alternative would result in a Section 4(f) use to the resource.

## **DIRECT USE**

There would be no acquisition of park property, and therefore no direct use of the park

## **CONSTRUCTIVE USE**

Portions of the resources are located near the proposed project. However, indirect air quality and noise impacts as a result of the proposed project are not expected to result in a constructive use of UC Davis Arboretum and Public Garden. The resource is currently adjacent to the Caltrans I-80 right-of-way and is therefore currently subject to indirect air quality and noise impacts.

The Air Quality Report prepared for the project determined that dust would be generated during grading and construction operations (Caltrans 2023a). Diesel exhaust from construction vehicles may also pose both a health and nuisance impact to nearby receptors. However, these construction activities are expected to occur during a relatively short time. Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures will be implemented when practical, during all phases of construction work: Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 "Dust Control," Section 14-9 "Air Quality" (Standard Measure GHG-1) and Section 18 "Dust Palliatives." The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the SMAQMD and the YSAQMD.

The Noise Study Report prepared for the project determined that construction activities would result in temporary increases to noise and vibration at adjacent receptors (Caltrans 2022a). However, construction activities would follow applicable local regulations and would be short-term and intermittent. Furthermore, all construction equipment would be required to conform with Section 14-8.02, Noise Control, of the Caltrans Standard Specifications. In addition, noise-generating activities would be restricted between certain hours and unnecessary idling within 100 feet of residences would be prohibited. As a result, indirect air quality and noise impacts as a result of the proposed project are not expected to result in substantial impairment to any of the park's activities, features or attributes. Therefore, there would not be a constructive use that would substantially impair the activities, features, and attributes of the park. Therefore, impacts from the project would not constitute a constructive use.

A new overhead sign is proposed within Caltrans right-of-way but would be visible from the UC Davis Arboretum and Public Garden. According to the visual impact analysis prepared for the project (Caltrans 2022b), the overall level of visual impact is expected to be low because of the sign's distance from potential viewers and vegetative screening (as depicted below). Therefore, no proximity impacts that rise to the level of substantial impairment are anticipated.

## TEMPORARY OCCUPANCY

There would be no temporary use of the University of California Davis Arboretum and access to the garden will be maintained during construction.



Photo source and date: Stantec, April 2021



Existing View and Simulated Conditions from PM SOL R43.28 looking south.

## 6 Description of Section 6(f) Resources

The project is adjacent to two recreation areas, both in Yolo County, which were developed with LWCF federal assistance (Section 6, LWCF Act of 1965). These are the Yolo Bypass Wildlife Area and the Playfields Park at 2500 Research Drive, Davis. Known as Section 6(f) properties, properties acquired or developed with LWCF assistance will be retained and used for public outdoor recreation; any conversion of use, wholly or partly, would require the approval of National Park Service. The proposed project would not result in any conversion or use of the Yolo Bypass Wildlife Area or the Playfields Park, nor would it restrict or reduce public access.

## 7 References

Caltrans (California Department of Transportation). 2023a. Draft Air Quality Report. January 2023.

Caltrans. 2022a. Noise Study Report. June 2022.

Caltrans. 2022b. Visual Impact Assessment. August 2022.

Caltrans. 2021a. Draft Community Impact Assessment. June 2021.

Caltrans. 2019. Project Study Report – Project Development Support (PSR-PDS) to Request Programming for Capital Support (Project Approval and Environmental Document Phase) on Route Solano 80/Yolo 80/Yolo 50/Sacramento 50/Sacramento 80 between Kidwell Road in Solano and US-50/I-5 Interchange & I-80/West El Camino Interchange. PDF.

CDFW (California Department of Fish and Wildlife). 2021. Yolo Bypass Wildlife Area Viewing and Hiking Trail Map. Accessed February 23, 2023.

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=99259&inline> Federal Highway Administration (FHWA). 1987. Federal Highway Administration Technical Advisory T6640.8A. Accessed April 18, 2021.

[https://www.environment.fhwa.dot.gov/Legislation/NEPA/guidance\\_preparing\\_env\\_documents.aspx](https://www.environment.fhwa.dot.gov/Legislation/NEPA/guidance_preparing_env_documents.aspx)

FHWA (U.S. Department of Transportation Federal Highway Administration). 2012. FHWA Section 4(f) Policy Paper. Accessed April 18, 2021.

<https://www.environment.fhwa.dot.gov/legislation/section4f/4fpolicy.aspx>

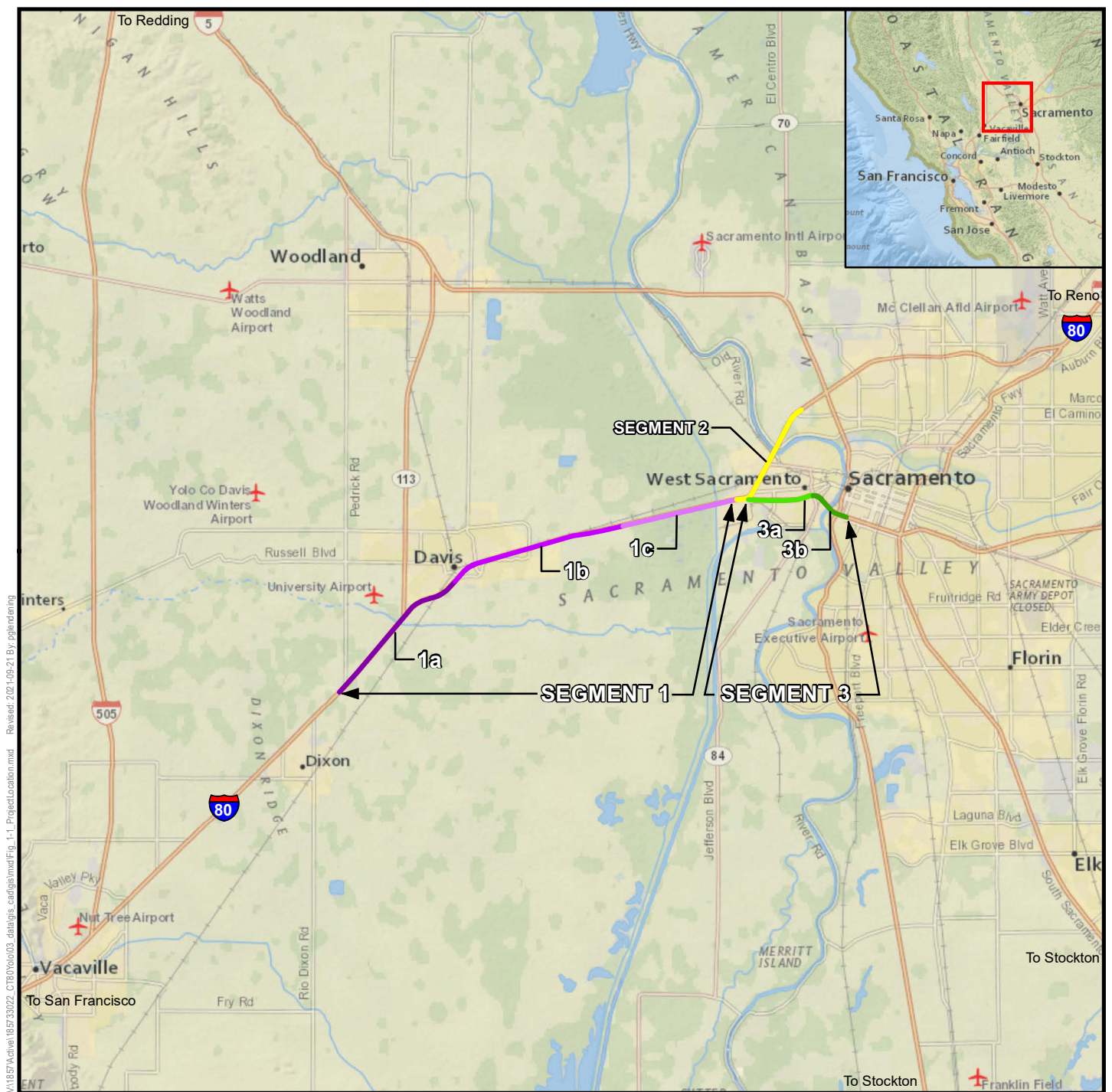
FHWA. 1993. Environmental Review Toolkit – NEPA Implementation: The Development of Logical Project Termini. Online:

[https://www.environment.fhwa.dot.gov/legislation/nepa/guidance\\_project\\_termini.aspx](https://www.environment.fhwa.dot.gov/legislation/nepa/guidance_project_termini.aspx). Accessed January 7, 2021.

FHWA. 2008. Managed Lanes: A Primer. Accessed February 9, 2021.

[https://ops.fhwa.dot.gov/publications/managelanes\\_primer/](https://ops.fhwa.dot.gov/publications/managelanes_primer/).



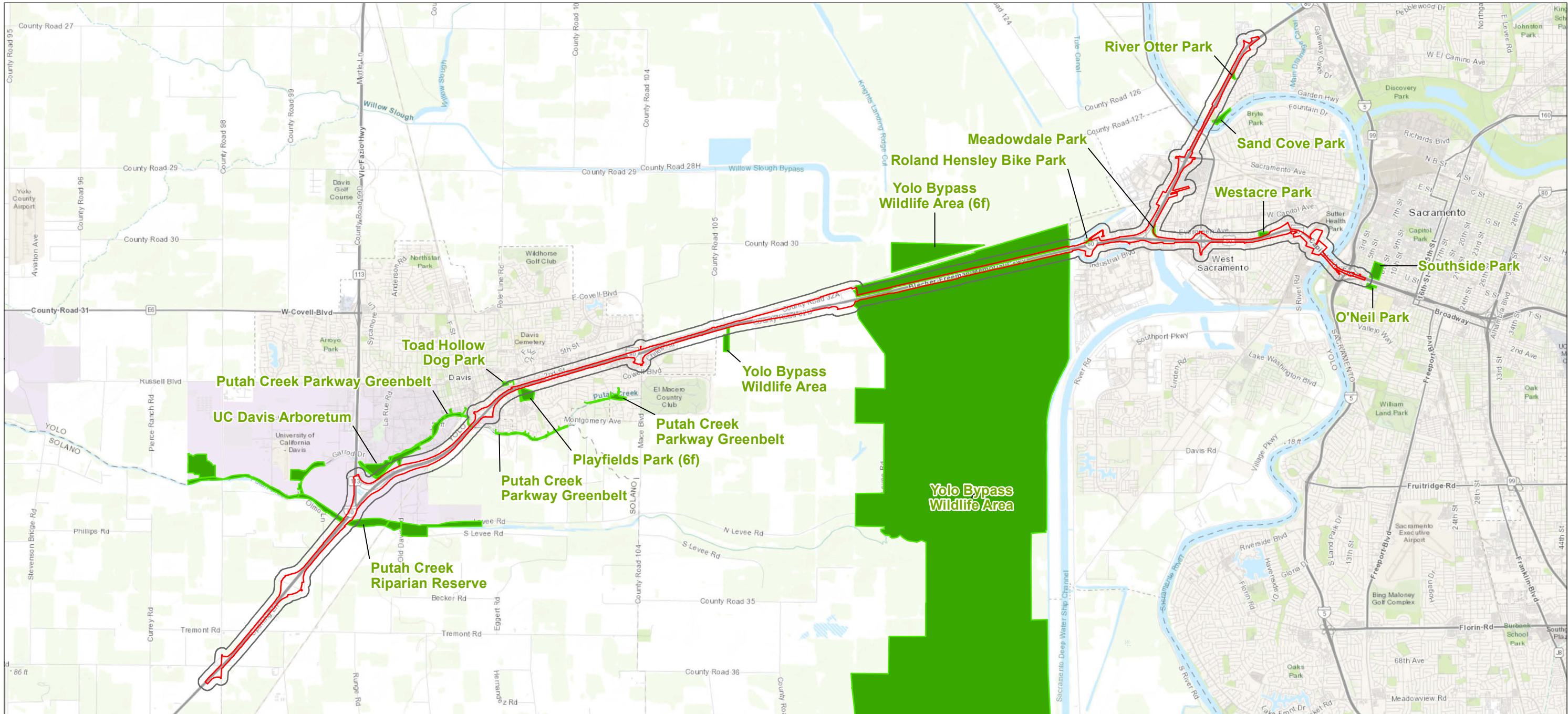


V:\1857\Adm\185733022\_CTB\060303\_dialgls\_cad\fig1.mxd Fig. 1-1 Project Location.mxd Revised: 2021-05-21 By: pgl/ehd

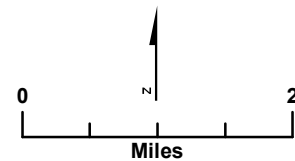
**Figure 1**  
**Project Location and Vicinity**  
 Yolo 80 Corridor Improvement Project  
 EA 03-3H900  
 Solano, Yolo, and Sacramento Counties, California

**Service Layer Credits:**  
 ESRI, National Geographic, DigitalGlobe, GeoEye





- ESL
- 500-ft ESL Buffer
- Potential Section 4(f) and Section 6(f) Recreation Areas

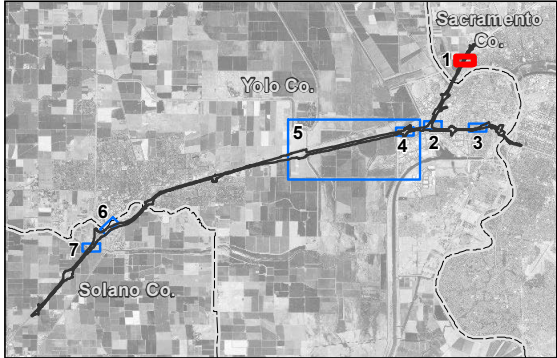


**Figure 2**  
**Overview of Recreation Areas**  
 within 500 feet of the Project  
 Yolo 80 Corridor Improvement Project  
 EA 03-3H900  
 Solano County, Yolo County,  
 Sacramento County, California

**Notes**  
 1. Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet  
 2. Data Sources: Caltrans, Stantec, 2021  
 3. Background: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



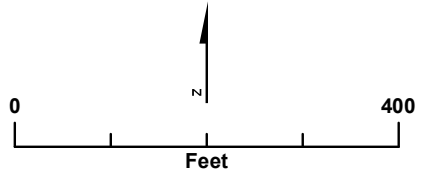
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**Notes**  
1. Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet  
2. Data Sources: CalTrans, Stantec, 2021  
3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- R/W
- ESL
- Post Mile
- Signage and Read Point Locations**
- Alternatives 3a, 3b, 4a, 4b, 5a and 5b only

Potential 4(f) and 6(f) Recreation Areas

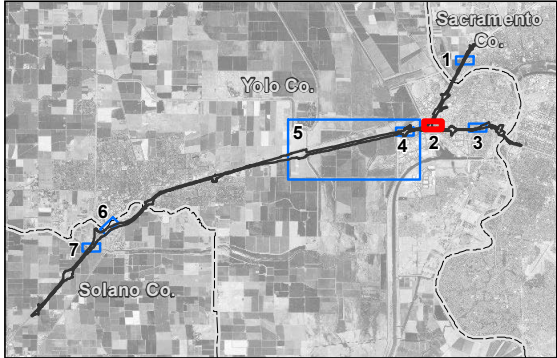
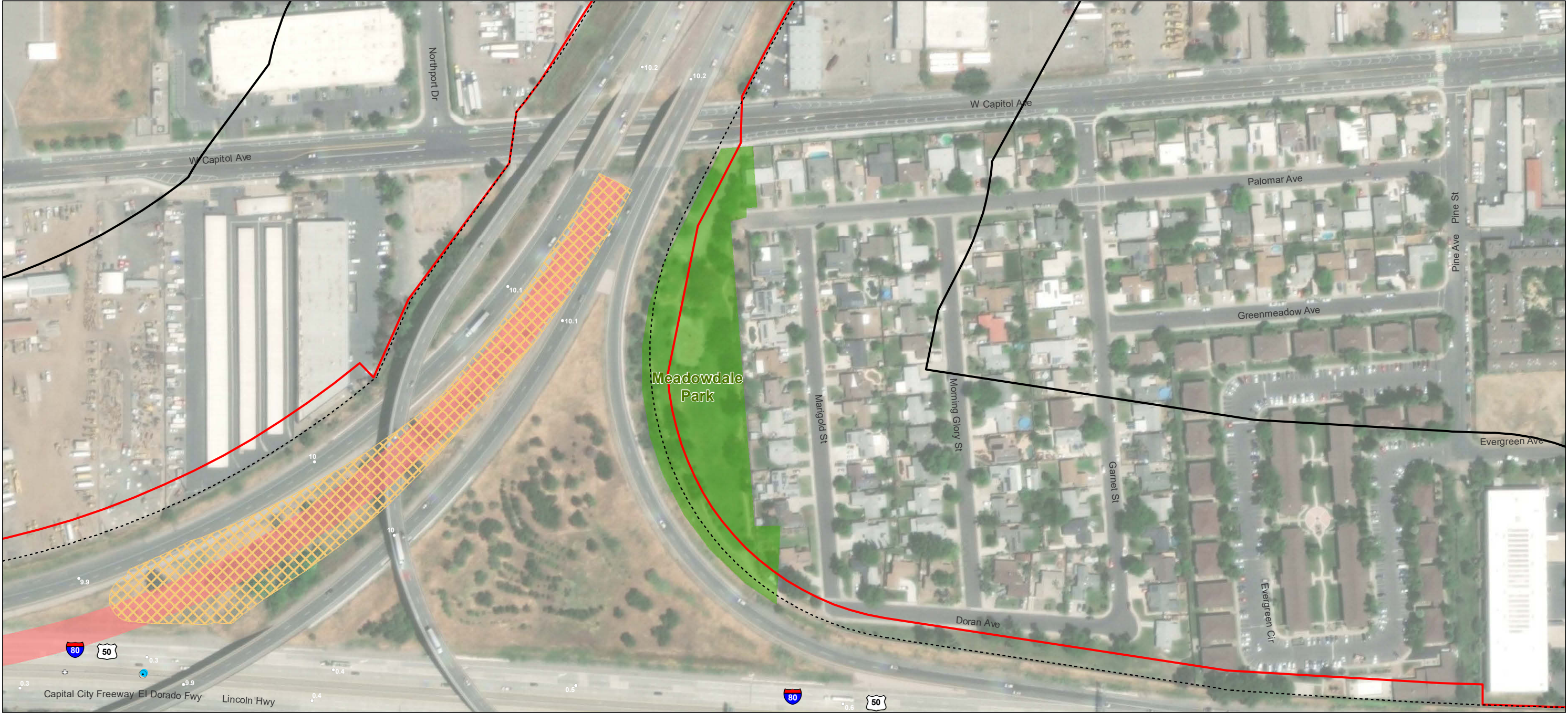


**Note:** The project design components depicted in this figure are preliminary. Proposed surface treatments such as striping are not included.

**Figure 3**  
**Detail of Potential Section 4(f) and Section 6(f) Recreation Areas**  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California  
Sheet 1 of 7



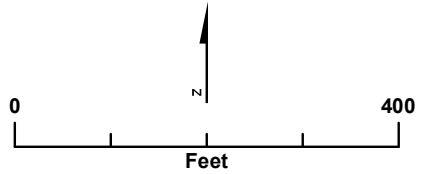
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- Notes**
1. Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
  2. Data Sources: CalTrans, Stantec, 2021
  3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- R/W
- ESL
- Post Mile
- I-80 Connector Structure (Alternatives 2b, 3b, 4b, 5b, 6b, and 7b only)
- Cut-Fill Disturbance Area (Alternatives 2b, 3b, 4b, 5b, 6b, and 7b only)
- Signage and Read Point Locations**
- Alternatives 2a, 2b, 6a, 6b, 7a and 7b only
- ⊕ Read Point (Alternatives 3a, 3b, 4a, 4b, 5a and 5b only)

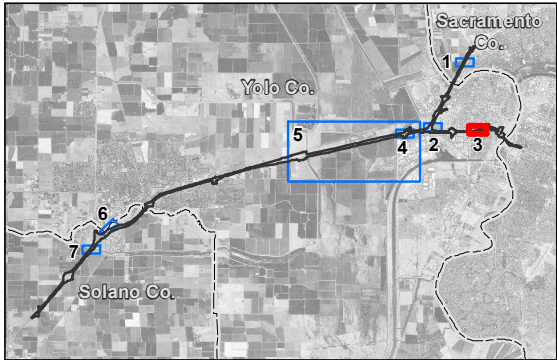
■ Potential 4(f) and 6(f) Recreation Areas



**Figure 3**  
**Detail of Potential Section 4(f) and Section 6(f) Recreation Areas**  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California  
Sheet 2 of 7

**Note:** The project design components depicted in this figure are preliminary. Proposed surface treatments such as striping are not included.



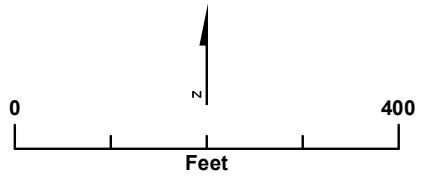


**Notes**  
1. Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet  
2. Data Sources: CalTrans, Stantec, 2021  
3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- R/W
- ESL
- Post Mile
- Trash Rack
- Signage and Read Point Locations**
  - All Alternatives
  - Alternatives 3a, 3b, 4a, 4b, 5a and 5b only
- Culverts and Drainage**
  - All Alternatives

Potential 4(f) and 6(f) Recreation Areas

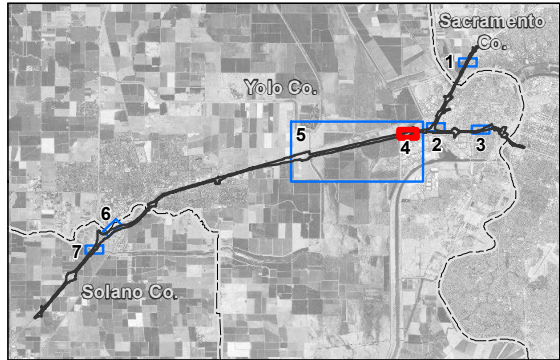
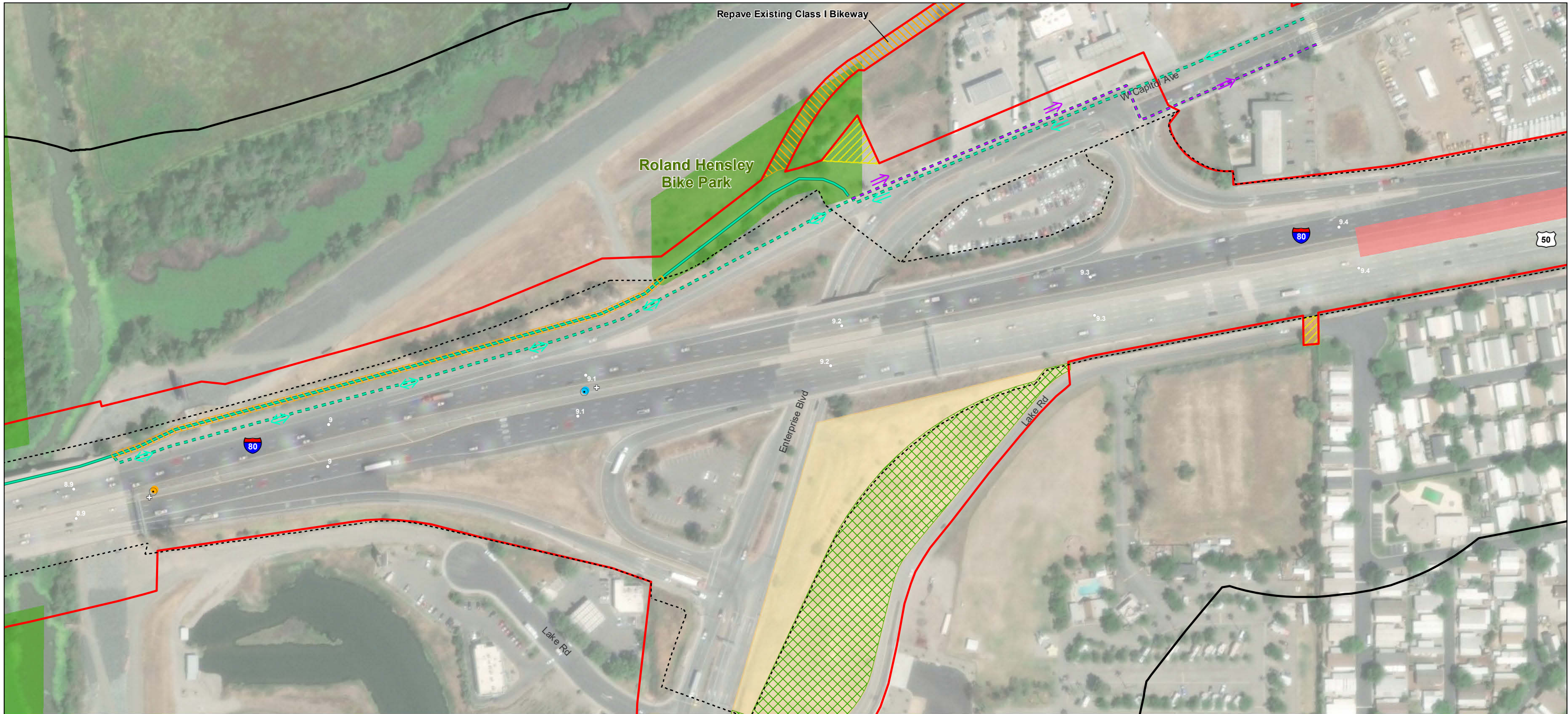
**Note:** The project design components depicted in this figure are preliminary. Proposed surface treatments such as striping are not included.



**Figure 3**  
**Detail of Potential Section 4(f) and Section 6(f) Recreation Areas**  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California  
Sheet 3 of 7



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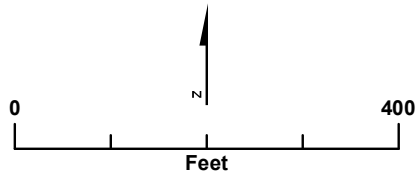
- Notes**
1. Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
  2. Data Sources: CalTrans, Stantec, 2021
  3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- R/W
- ESL
- Post Mile
- Proposed Park & Ride Lot
- Permanent Easement
- Temporary Disturbance
- Culvert Work Area
- Temporary Construction Easement
- I-80 Connector Structure (Alternatives 2b, 3b, 4b, 5b, 6b, and 7b only)
- Existing Class I Bikeway
- Temporary Bike Detour
- Temporary Bike Detour (eastbound only)

- Signage and Read Point Locations**
- Alternatives 2a, 2b, 6a, 6b, 7a and 7b only
  - Alternatives 3a, 3b, 4a, 4b, 5a and 5b only
  - Read Point (Alternatives 3a, 3b, 4a, 4b, 5a and 5b only)

Potential 4(f) and 6(f) Recreation Areas

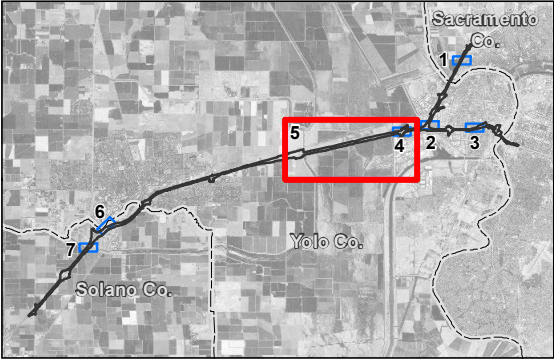
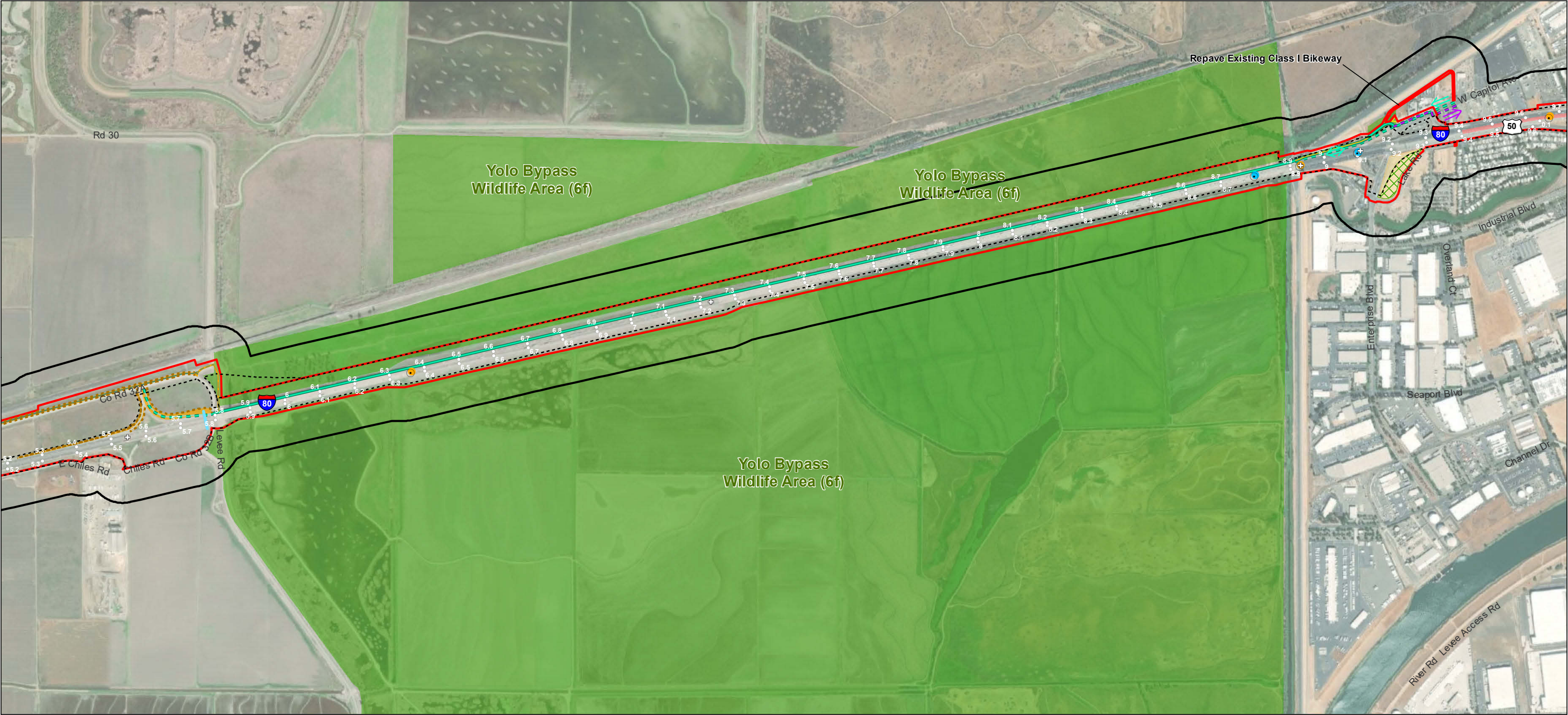
**Note:** The project design components depicted in this figure are preliminary. Proposed surface treatments such as striping are not included.



**Figure 3**  
**Detail of Potential Section 4(f) and Section 6(f) Recreation Areas**  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California  
Sheet 4 of 7



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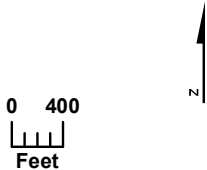


**Notes**  
1. Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet  
2. Data Sources: CalTrans, Stantec, 2021  
3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- R/W
- ESL
- Post Mile
- Proposed Park & Ride Lot
- Permanent Easement
- Temporary Disturbance
- Culvert Work Area
- Cut-Fill
- Cut-Fill Disturbance Area
- Temporary Construction Easement
- I-80 Connector Structure (Alternatives 2b, 3b, 4b, 5b, 6b, and 7b only)

- Existing Class I Bikeway
- Extension of Class I and Class II Bikeway, Option A
- Extension of Class I Bikeway, Option B
- Temporary Bike Detour
- Temporary Bike Detour (eastbound only)
- Pullout
- Signage and Read Point Locations**
  - Alternatives 2a, 2b, 6a, 6b, 7a and 7b only
  - Alternatives 3a, 3b, 4a, 4b, 5a and 5b only
  - Read Point (Alternatives 3a, 3b, 4a, 4b, 5a and 5b only)
- Culverts and Drainage**
  - All Alternatives

Potential 4(f) and 6(f) Recreation Areas



**Figure 3**  
**Detail of Potential Section 4(f) and Section 6(f) Recreation Areas**  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California  
Sheet 5 of 7

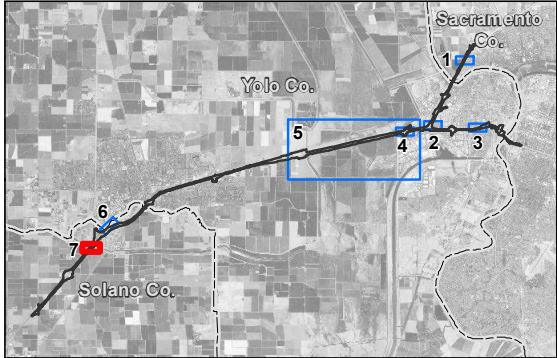
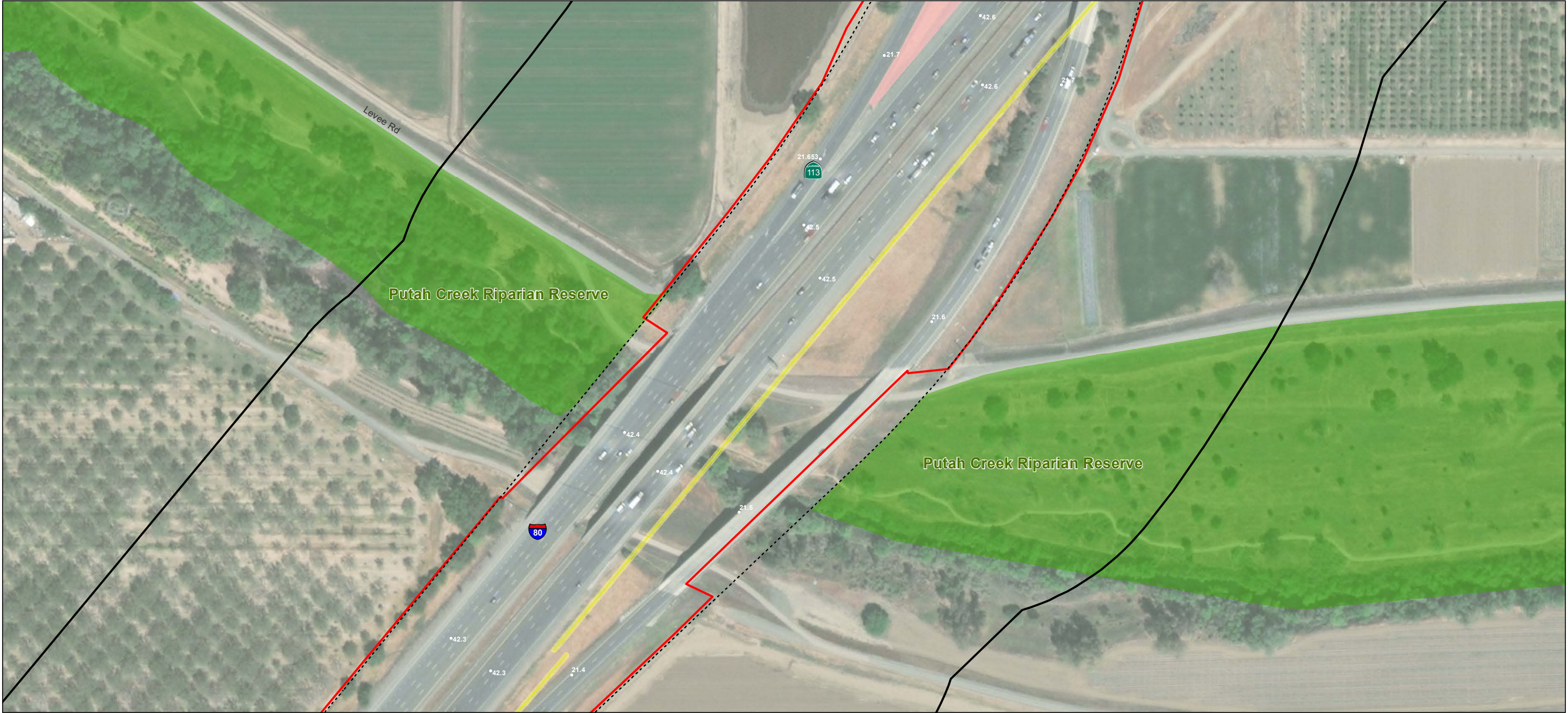
**Note:** The project design components depicted in this figure are preliminary. Proposed surface treatments such as striping are not included.







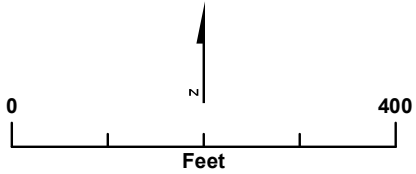
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**Notes**  
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2. Data Sources: CalTrans, Stantec, 2021  
3. Background: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- R/W
- ESL
- Post Mile
- Fiber Optic Cable
- Fiber Optic Cable Disturbance Area
- Staging Area

Potential 4(f) and 6(f) Recreation Areas



**Note:** The project design components depicted in this figure are preliminary. Proposed surface treatments such as striping are not included.

**Figure 3**  
**Detail of Potential Section 4(f) and Section 6(f) Recreation Areas**  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California  
Sheet 7 of 7



**APPENDIX B**  
**TITLE VI POLICY STATEMENT**



## California Department of Transportation

OFFICE OF THE DIRECTOR  
P.O. BOX 942873, MS-49 | SACRAMENTO, CA 94273-0001  
(916) 654-6130 | FAX (916) 653-5776 TTY 711  
[www.dot.ca.gov](http://www.dot.ca.gov)



September 2022

### NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: <https://dot.ca.gov/programs/civil-rights/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at [Title.VI@dot.ca.gov](mailto:Title.VI@dot.ca.gov).

A handwritten signature in black ink, appearing to read 'Tony Tavares'.

TONY TAVARES  
Director



**APPENDIX C**  
**AVOIDANCE, MINIMIZATION, AND/OR**  
**MITIGATION MEASURES SUMMARY**



## Appendix C Avoidance, Minimization, and/or Mitigation Measures Summary

Resource Area	Measure Reference	Avoidance, Minimization, and/or Mitigation Measure
Aesthetics	AMM AES-1: Avoid or minimize glare through the selection of materials and finishes	Implement paint finishes that are matte, satin, or non-glare producing only. Concrete colors/finishes be selected to reduce their potential to become a source of glare.
Aesthetics	AMM AES-2: Minimize high contrast rock slope protection	Colors and/or stains which match or complement the predominant immediately adjacent landscape color will be used where stormwater energy dissipation and/or slope stabilization devices are used.
Aesthetics	AMM AES-3: Account for the loss of plantings and vegetation by providing replacement highway plantings and vegetation	Plans will be prepared which maintain and repair corridor landscaping and vegetation where proper setbacks exist and where feasible. Plans will ensure work within any existing classified landscape freeway maintains the status of the landscaped freeway. Appropriate replacement planting will be provided when existing planting (including oleander) is removed to a level considered roughly proportionate, with a target of 100%/1:1 and not less than 60%. Plantings would occur as will to the original impacts as possible. When native, naturally occurring or specimen trees are removed, replacement plantings will reflect the visual importance of the plantings lost.
Aesthetics	AMM AES-4: Reduce views of new overhead signage and read points from visually sensitive locations	Where new overhead signage and/or read points are proposed, consider refinements to its final location to avoid or screen direct views from sensitive viewsheds such as those of homeowners and recreationalists. Integrate read points into existing and proposed overhead structures where feasible.
Aesthetics	AMM AES-5: Minimize I-80 connector structure design profile	The I-80 connector structure design refinements will be prioritized to minimize its prominence, scale, and mass and avoid the need to raise/relocate adjacent powerline towers.
Biological Resources	AMM BIO-1: USACE and RWQCB Permitting	Before any discharge of dredge or fill material into waters of the United States or waters of the State, the required permits/authorizations will be obtained from the USACE and the RWQCB. All terms and conditions of the required permits/authorizations will be implemented.
Biological Resources	AMM BIO-2: CDFW Permitting	Before any activities that will obstruct the flow of, or alter the bed, channel, or bank of any feature subject to Fish and Game Code Section 1600, notification of streambed alteration will be submitted to CDFW. If required, a streambed alteration agreement will be obtained from CDFW and all conditions of the agreement will be implemented.
Biological Resources	AMM BIO-3: Restoration of Aquatic Resources	Aquatic resources subject to agency jurisdiction that are temporarily affected by Project construction will be restored as close as practicable to their original contour and conditions within 10 days of the completion of construction activities.

Resource Area	Measure Reference	Avoidance, Minimization, and/or Mitigation Measure
Biological Resources	AMM BIO-4: Western Pond Turtle	If western pond turtles are encountered within the BSA during construction, work activity in the immediate vicinity will cease until any turtles have left the work area on their own or a CDFW approved biologist move the individual out of harm's way.
Biological Resources	AMM BIO-5: Worker Training for Western Pond Turtle	Prior to initiation of construction activities, workers shall participate in environmental awareness training provided by a qualified biologist. The training shall instruct workers regarding: (1) how to identify the turtle; (2) the habitats used by the turtle; (3) the potential for turtle egg clutches (i.e., nest sites) to be discovered during vegetation clearing; and (4) what to do if a turtle or suspected egg clutch is encountered during construction activities.
Biological Resources	AMM BIO-6: Preconstruction Tricolored Blackbird and Yellow-Headed Blackbird Surveys	Pre-construction surveys for tricolored blackbird and yellow-headed blackbird should be conducted prior to any ground-disturbing activities within 500-feet of mapped Potentially Suitable Habitat. Pre-construction surveys should be conducted in mid-March, mid-April, mid-May, and mid-June given that the dates of nesting in northern California are not consistent from year to year and the species may nest twice in the same nesting season at the same or different locations. The recommendation of a survey every 30 days during the nesting season is based on the potential length of the nesting season in the Sacramento Valley (i.e., mid-March to mid-July) and total time required for incubation and fledging (i.e., 21 to 25 days). Note that the full complement of four survey visits can be reduced accordingly if work starts after mid-March and surveys can be avoided entirely if work starts between August 1 and March 1 (outside the nesting season).
Biological Resources	AMM BIO-7: Preconstruction Burrowing Owl Surveys	A minimum of one pre-construction survey for occupied burrowing owl burrows within 500 feet of the BSA in suitable habitat (e.g., grasslands) will be conducted by a qualified biologist within 15 days prior to the initiation of construction activities, regardless of the timing of construction. If any occupied burrows are identified, appropriate conservation measures (as determined by a qualified biologist) will be implemented. No disturbance will occur within 150 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). These measures may also include establishing a construction free buffer zone around the active nest site in coordination with the CDFW, biological monitoring of the active nest site, and delaying construction activities in the vicinity of the active nest site until the young have fledged.
Biological Resources	AMM BIO-8: Burrowing Owl Exclusion Plan	If burrowing owls are detected within the BSA during the non-breeding season and maintaining a 150-foot no-disturbance buffer is not practicable, a qualified biologist shall submit an exclusion plan to CDFW. The exclusion plan will generally follow the guidelines outlined in Appendix E of the <i>Staff Report on Burrowing Owl Mitigation</i> (CDFG 2012). The exclusion plan will consist of installing one-way doors in potential burrows, daily monitoring, and collapsing burrows once it is determined that the burrows are unoccupied. Exclusion may only take place during the non-breeding season (September 1 to January 31) and may be an ongoing effort during this time period. This will allow the owls to exit burrows if they are present, but not return.



Resource Area	Measure Reference	Avoidance, Minimization, and/or Mitigation Measure
Biological Resources	AMM BIO-9: Burrowing Owl Direct Disturbance	If occupied burrows are detected during the breeding season and maintaining a 250-foot no-disturbance buffer is not practicable, CDFW will be consulted to determine alternative measures to minimize the potential for disturbance to occupied burrows and nesting activities. Measures may include but are not limited to continuous biological monitoring by a qualified biologist until it has been determined that the young have fledged and are no longer reliant on the nest for parental care or survival, or the construction is complete. No direct disturbance of burrows with eggs or young can be conducted without written authorization from the CDFW.
Biological Resources	AMM BIO-10: White-Tailed Kite Consultation	If a no-disturbance buffer around an active northern harrier or white-tailed kite nest is not practicable, CDFW will be consulted to determine alternative measures to minimize the potential for Project-related disturbance to the nest site that could result in nest abandonment or other forms of take. Measures may include but are not limited to continuous biological monitoring by a qualified biologist until it has been determined that the young have fledged and are no longer reliant on the nest or parental care for survival or the construction is complete. If the nesting pair shows signs of distress (i.e., adults leaving the nest when eggs or young chicks are present) as a result of Project-related activities, the monitoring biologist shall have authority to stop work until it is determined that the adults have returned and are no longer showing signs of distress.
Biological Resources	AMM BIO-11: White-Tailed Kite Avoidance	If consultation with CDFW results in a determination that take of a white-tailed kite nest may not be avoidable, then all activities that are likely to result in such take will be delayed until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival. White-tailed kites are a fully protected species, and CDFW is not able to provide an Incidental Take Permit for this species.
Biological Resources	AMM BIO-12: Tree Removal	To the extent practicable, removal of large trees with cavities shall occur before bat maternity colonies form (i.e., prior to March 1) or after young bats are volant (i.e., after August 31). To the greatest extent practicable, trees will be removed in pieces, rather than felling the entire tree. It is recommended that removal be done late in the day or in the evening to reduce the likelihood of evicted bats falling prey to diurnal predators and will take place during warm weather conditions conducive to bat activity.
Biological Resources	AMM BIO-13: Preconstruction Bat Surveys	If construction (including the removal of large trees) occurs during the non-volant season (March 1 through August 31), a qualified biologist shall conduct a pre-construction survey of the areas identified as high and moderate roosting potential in the Bat Habitat Assessment for maternity colonies. The pre-construction survey will be performed no more than 14 days prior to the implementation of construction activities (including staging and equipment access). If a lapse in construction activities for 14 days or longer occurs between those dates, another pre-construction survey will be performed. If any maternity colonies are detected, appropriate conservation measures (as determined by a qualified biologist) shall be implemented. These measures may include but are not limited to establishing a construction-free buffer zone around the maternity colony site, biological monitoring of the maternity colony, and delaying construction activities in the vicinity of the maternity site.

Resource Area	Measure Reference	Avoidance, Minimization, and/or Mitigation Measure
Biological Resources	AMM BIO-14: Bat Protection Plan	A bat species protection survey plan will be developed. The plan will include items such as having a qualified biologist present on-site to conduct monitoring during construction in/near bat roosting habitat.
Biological Resources	AMM BIO-15: Structural Changes to Bat Roosting Habitat	To the greatest extent practicable, structural changes may be made to any known roost proposed for removal (determined by pre-construction surveys), to create conditions in the roost that are undesirable to roosting bats and encourage the bats to leave on their own (e.g., open additional portals so that temperature, wind, light, and precipitation regime in the roost change). Structural changes to the roost will be performed during the appropriate exclusion timing (listed above) to avoid harming bats.
Biological Resources	AMM BIO-16: VELB Avoidance Area	Activities that may damage or kill an elderberry shrub (e.g., trenching, paving, etc.) may need an avoidance area of at least 6 meters (20 feet) from the drip-line, depending on the type of activity.
Biological Resources	AMM BIO-17: Worker Education for VELB	A qualified biologist will provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance.
Biological Resources	AMM BIO-18: VELB Timing	As much as feasible, all activities that could occur within 50 meters (165 feet) of an elderberry shrub, will be conducted outside of the flight season of the VELB (March - July).
Biological Resources	AMM BIO-19: Erosion Control and Re-Vegetation	Erosion control will be implemented, and the affected area will be re-vegetated with appropriate native plants.
Biological Resources	AMM BIO-20: Elderberry Shrub Transplanting	<p>If the elderberry shrub cannot be avoided, or if indirect effects will result in the death of stems or the entire shrub, then it should be relocated following the transplanting guidelines:</p> <ul style="list-style-type: none"> <li>• Monitor. A qualified biologist will be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures.</li> <li>• Exit Holes. Exit-hole surveys will be completed immediately before transplanting. The number of exit holes found, GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted will be reported to the Service and to the CNDDDB.</li> <li>• Timing. Elderberry shrubs will be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the shrub and increase transplantation success. Transplanting Procedure. Transplanting will follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (<a href="http://www.tcia.org/">http://www.tcia.org/</a>).</li> <li>• Trimming Procedure. Trimming will occur between November and February and should minimize the removal of branches or stems that exceed 1 inch in diameter.</li> </ul>
Biological Resources	AMM BIO-21: Compensation for Loss of VELB Habitat	To mitigate for the removal of elderberry shrubs, Caltrans will purchase credits at a 1:1 ratio at a USFWS-approved conservation bank

Resource Area	Measure Reference	Avoidance, Minimization, and/or Mitigation Measure
Biological Resources	AMM BIO-22: GGS Timing	Ground disturbing activity will be conducted between May 1 and October 1, which is the active season for GGS, in order to minimize impacts to the species.
Biological Resources	AMM BIO-23: GGS Exclusionary Fencing	Where practicable, snake exclusion fencing will be placed around the BSA (fenced area) before construction during the active period for GGS (May 1–October 1) and be maintained through the construction period until the Project has been completed.
Biological Resources	AMM BIO-24: Agency Notification for GGS	Caltrans will notify CDFW and the USFWS one week prior to when construction is scheduled to commence.
Biological Resources	AMM BIO-25: Worker Education for GGS	A Worker Environmental Awareness Training Program for construction personnel will be conducted by a USFWS/CDFW-approved biologist for all construction workers including contractors, prior to the start of construction activities. This training will instruct workers to recognize GGS and their habitats.
Biological Resources	AMM BIO-26: Preconstruction Survey for GGS	Twenty-four hours prior to construction activities, BSA shall be surveyed for GGS by USFWS/CDFW-approved biologist. Surveys of the BSA should be repeated if a 2-week or greater lapse in construction activity occurs. If GGS is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined that the GGS will not be harmed. Any sightings and any incidental take will be reported to the USFWS and CDFW immediately by telephone at (916) 414-6600 or (916) 358-2900, respectively, and e-mail or written letter addressed to the Chief, Sacramento Division (USFWS) or North Central Region (CDFW), within 1 working day of the incident.
Biological Resources	AMM BIO-27: GGS Environmentally Sensitive Area	The canals and rice fields adjacent to the BSA will be flagged and designated as an Environmentally Sensitive Area during the construction period.
Biological Resources	AMM BIO-28: GGS Post Construction Report	Upon completion of the Project, all disturbed areas within the BSA will be revegetated using native plant species, and post-monitoring work and pictures will be reported to USFWS and CDFW showing that temporary impacts have been restored to pre-construction conditions.
Biological Resources	AMM BIO-29: GGS Escape Ramp	At the end of each workday, permittee shall place an escape ramp at each end of any open trenches. This will allow any animals that may have been entrapped in the trench overnight to climb out. The escape ramp may be constructed of dirt fill, wood planking, or other suitable material and placed at an angle no greater than 30 degrees.
Biological Resources	AMM BIO-30: Compensation for Loss of GGS Habitat	Caltrans will mitigate for the permanent loss of GGS habitat through the purchase of GGS mitigation bank credits. These mitigation credits will be purchased from a USFWS- and CDFW-approved GGS mitigation bank possessing a conservation easement in perpetuity with available credits located in the Sacramento County service area prior to impacts to the species. Caltrans shall purchase these credits and provide a bill of sale acceptable and approved by CDFW/USFWS before construction begins. To compensate for the permanent loss of approximately 4.299 acres of GGS habitat, Caltrans will purchase 12.897 acres (a 3:1 ratio) of GGS credits.

Resource Area	Measure Reference	Avoidance, Minimization, and/or Mitigation Measure
Biological Resources	AMM BIO-31: Preconstruction SWHA Survey	If construction is to occur between February 1 and August 31, a qualified biologist will conduct preconstruction surveys for nesting Swainson's hawk, white-tailed kite, and northern harrier. The preconstruction surveys will include the project footprint and a 0.5-mile buffer for Swainson's hawk. The survey will be conducted no more than 15 days prior to the initiation of construction to ensure no active nests will be disturbed.
Biological Resources	AMM BIO-32: SWHA Agency Consultation	If a no-disturbance buffer around an active Swainson's hawk nest is not practicable, CDFW will be consulted to determine alternative measures to minimize the potential for Project-related disturbance to the nest site that could result in nest abandonment or other forms of take. Measures may include but are not limited to continuous biological monitoring by a qualified biologist until it has been determined that the young have fledged and are no longer reliant on the nest or parental care for survival or the construction is complete. If the nesting pair shows signs of distress (i.e., adults leaving the nest when eggs or young chicks are present) as a result of Project-related activities, the monitoring biologist shall have authority to stop work until it is determined that the adults have returned and are no longer showing signs of distress.
Energy	AMM ENERGY-1: Construction Energy Efficiency Plan.	As part of the Plans, Specifications, and Estimates (PS&E), the Resident Engineer will prepare a Construction Energy Efficiency Plan, which may include the following: <ul style="list-style-type: none"> <li>• Reuse of existing rail, steel, and lumber, wherever possible, such as for falsework, shoring, and other applications during the construction process</li> <li>• Recycling of asphalt taken up from roadways, if practicable and cost-effective</li> <li>• Use of newer, more energy-efficient equipment, where feasible, and maintenance of older construction equipment to keep in good working order</li> <li>• Promoting of scheduling of construction operations to efficiently use construction equipment (i.e., only haul waste when haul trucks are full and combine smaller dozer operations into a single comprehensive operation, where possible)</li> <li>• Promotion of construction employee carpooling.</li> </ul>
Environmental Justice	AMM EJ-1 (3a, 3b, 4a, 4b, 5a, and 5b)	Caltrans will establish a variable pricing for express lanes or provide discounted per-mile tolls, credits, rebates and/or exemptions based on income levels and cost of living.
Environmental Justice	AMM EJ-2 (Build Alternatives (3a, 3b, 4a, 4b, 5a, and 5b)	Caltrans will offset the financial burden of enrolling in electronic tolling program. The toll authority will consider improving methods for environmental justice communities and other users to obtain toll tags/transponders. For example, the toll authority will ensure that drivers without a credit card or bank accounts can receive toll tags and waive or redefine the monthly minimum balance requirements for low-income users and provide translation services to community travelers with Limited English Proficiency (LEP).
Environmental Justice	AMM EJ-3 (Build Alternatives 3a, 3b, 4a, 4b, 5a, and 5b):	Caltrans will use no less than 50 percent of excess toll revenue to improve multi-modal transit, expand transportation choice, and other transportation improvements that will distribute benefits to environmental justice communities identified in this report.

Resource Area	Measure Reference	Avoidance, Minimization, and/or Mitigation Measure
Geology/Soils/Seismic/Topography	AMM GEO-1: Culvert Replacement Best Management Practices and Construction Monitoring	During construction, Caltrans or its contractor will be responsible for evaluating potential damage to existing facilities, implementing necessary preventative measures, and monitoring effects on facilities during construction.
Geology/Soils/Seismic/Topography	AMM GEO-2	With respect to worker safety during construction, Caltrans' Standard Specifications and California Division of Occupational Safety and Health Administration (Cal OSHA) requires employers to comply with hazard-specific safety and health standards. Pursuant to Section 5(a) (1) of OSHA, employers must provide their employees with a workplace free from recognized hazards likely to cause death or serious physical harm.
Geology/Soils/Seismic/Topography	AMM GEO-3	<p>As part of the final design phase, Caltrans requires preparation of the geotechnical design reports that incorporate the results of additional subsurface field work and laboratory testing. Site specific subsurface soil conditions, slope stabilities, and groundwater conditions within the Build Alternative area will be verified during the preparation of these geotechnical design reports. The identification of the site-specific soil conditions within the project limits will be used to determine the appropriate final design for the foundations and footings that will support the proposed Build Alternative improvements.</p> <p>Caltrans' standard design and construction guidelines incorporate engineering standards that address seismic risks. Proposed structures constructed within the geologic study area will consider seismically induced liquefaction and settlement during the final design phase.</p>
Hazardous Waste and Materials	AMM HAZ-1 Asbestos and Lead-Based Paint Survey.	During the design phase, existing bridge or structures that will be disturbed by the project will be tested for asbestos and lead-based paint by a qualified and licensed inspector prior to construction. All asbestos-containing material or lead-based paint, if found, will be removed by a certified contractor in accordance with local, state, and federal requirements.
Hazardous Waste and Materials	AMM HAZ-2 National Emission Standards for Hazardous Air Pollutants Notification.	Prior to construction, the contractor will prepare a demolition/renovation/rehabilitation notification/permit form and attachments to be submitted to the Air Pollution Control District (APCD) or Air Quality Management District (AQMD) as required by the National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR Part 61, Subpart M, and California Health and Safety Code section 39658(b)(1).
Hazardous Waste and Materials	AMM HAZ-3 Aerially Deposited Lead Preliminary Site Investigation.	Prior to construction, Caltrans will conduct a preliminary site investigation for aerially deposited lead. Soil samples collected to evaluate aerially deposited lead will be analyzed for total lead and soluble lead in accordance with Department of Toxic Substances Control's requirements to determine appropriate actions that will ensure the protection of construction workers, future site users, and the environment.
Hazardous Waste and Materials	AMM HAZ-4 Hazardous Materials Incident Contingency Plan.	Prior to construction, the contractor will prepare a hazardous materials incident contingency plan to report, contain, and mitigate roadway spills. The plan will designate a chain of command for notification, evacuation, response, and cleanup of roadway spills. This plan is to be prepared by the contractor.

Resource Area	Measure Reference	Avoidance, Minimization, and/or Mitigation Measure
Hydrology and Floodplain	AMM HF-1 (Build Alternatives 2a and 2b)	Increased peak flows will be moderated by the use of detention basin risers in existing infrastructure. Caltrans will install detention basin risers to tie into existing storm drains on the upstream side at two locations in the city of Davis—one detention basin rise inlet is proposed at the storm drain crossing on Mace Boulevard south of I-80 and the other will be at the WB I-80 off-ramp to Chiles Road.
Noise	AMM NOI-1	Noise-generating construction activities shall be restricted to between 7:00 a.m. and 7:00 p.m. on weekdays, with no construction occurring on weekends or holidays. If work is necessary outside of these hours, Caltrans shall require the contractor to implement a construction noise monitoring program and provide additional noise controls where practical and feasible. Pile driving activities shall be limited to daytime hours only.
Paleontological Resources	AMM PALEO-1: Paleontological Evaluation Report	During the design phase, a qualified paleontologist must prepare a PER. If the PER results in an evaluation that the project does not risk encountering paleontological resources, no further measures are required.
Paleontological Resources	AMM PALEO-2: Paleontological Resources Management Plan	During the design phase, a qualified paleontologist will prepare a PMP. The PMP will incorporate the results of the PER along with design details to develop a plan for where and when construction activities are at risk of encountering fossils and construction monitoring will occur. The PMP will also include procedures for worker training, and actions for construction staff to follow if fossils are encountered. It will also include a curation agreement for the housing and identification of any fossils found.
Paleontological Resources	AMM PALEO-3: Paleontological Resources Monitoring	During construction, areas of high paleontological sensitivity identified during the PER and PMP will be monitored by a qualified paleontological monitor. The monitor will spot-check locations where foundation, utility, and/or culvert work extends deeper than 4 feet below ground surface into native soils (not fill material).
Wildfire	AMM WF-1: Implement Fire Prevention Practices	<p>During the construction, Caltrans will implement the following fire prevention practices to reduce the potential for wildfire.</p> <ul style="list-style-type: none"> <li>• Prepare names and emergency telephone numbers of the nearest fire suppression agencies before the start of job site activities and post at a prominent place at the job site.</li> <li>• Prepare a fire prevention plan required by the California Division of Occupational Safety and Health before the start of job site activities.</li> <li>• Cooperate with fire prevention authorities in performance of the work.</li> <li>• Immediately report fires occurring within and near the project limits by dialing 911 and to the nearest fire suppression agency by using the emergency phone numbers retained at the job site.</li> <li>• Prevent Project personnel from setting open fires that are not part of the work.</li> <li>• Prevent the escape of and extinguish fires caused directly or indirectly by job site activities.</li> </ul>

Key:

APCD=Air Pollution Control District

AQMD=Air Quality Management District

NESHAP=National Emission Standards for Hazardous Air Pollutants  
PS&E=Plans, Specifications, and Estimates  
BSA=Biological Study Area  
CDFW=California Department of Fish and Wildlife  
GGS=giant garter snake  
OSHA=Occupational Safety and Health Act  
PER= Paleontological Evaluation Report  
PMP= Paleontological Resources Management Plan  
RWQCB=Regional Water Quality Control Board  
SWHA= Swainson's hawk  
USACE=U.S. Army Corps of Engineers  
USFWS=U.S. Fish and Wildlife Service  
VELB=Valley elderberry longhorn beetle





## **APPENDIX D**

## **REFERENCES**



# **Appendix D** List of References

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## **Chapter 1 Proposed Project**

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# **APPENDIX E**

## **PROJECT FEATURES**



## Appendix E Standard Measures

Resource Area	Standard Measure Number	Standard Measure Title and Description
Air Quality	Standard Measure AQ-1	<p>Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures shall be implemented when practical, during all phases of construction work:</p> <p>Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 "Dust Control", Section 14-9 "Air Quality" and Section 18 "Dust Palliatives".</p> <p>The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the SMAQMD and YSAQMD.</p>
Aesthetics/ Visual Resources	Standard Measure AR-1	Aesthetic treatment (such as tribal patterns) to the bridges/guardrails/retaining walls would be included to address context sensitivity.
Aesthetics/ Visual Resources	Standard Measure AR-2	Temporary access roads, construction easements, and staging areas that were previously vegetated would be restored to a natural contour and revegetated with regionally-appropriate native vegetation.
Aesthetics/ Visual Resources	Standard Measure AR-3	Where feasible, guardrail terminals would be buried; otherwise, an appropriate terminal system would be used, if appropriate.
Aesthetics/ Visual Resources	Standard Measure AR-4	Where feasible, construction lighting would be limited to within the area of work.
Aesthetics/ Visual Resources	Standard Measure AR-5	Where feasible, the removal of established trees and vegetation would be minimized. Environmentally sensitive areas would have Temporary High Visibility Fencing (THVF) installed before start of construction to demarcate areas where vegetation would be preserved and root systems of trees protected.
Biological Resources	Standard Measure BIO-1	<b>General.</b> Before start of work, as required by permit or consultation conditions, a Caltrans biologist would meet with the contractor to brief them on environmental permit conditions and requirements relative to each stage of the proposed project, including, but not limited to, work windows, drilling site management, and how to identify and report regulated species within the project areas.

Resource Area	Standard Measure Number	Standard Measure Title and Description
Biological Resources	Standard Measure BIO-2	<p><b>Animal Species.</b></p> <ul style="list-style-type: none"> <li>A. To protect migratory and nongame birds (occupied nests and eggs), if possible, vegetation removal would be limited to the period outside of the bird breeding season (removal would occur between September 16 and January 31). If vegetation removal is required during the breeding season, a nesting bird survey would be conducted by a qualified biologist within one week prior to vegetation removal. If an active nest is located, the biologist would coordinate with CDFW to establish appropriate species-specific buffer(s) and any monitoring requirements. The buffer would be delineated around each active nest and construction activities would be excluded from these areas until birds have fledged, or the nest is determined to be unoccupied.</li> <li>B. Pre-construction surveys for active raptor nests within one-quarter mile of the construction area would be conducted by a qualified biologist within one week prior to initiation of construction activities. Areas to be surveyed would be limited to those areas subject to increased disturbance because of construction activities (i.e., areas where existing traffic or human activity is greater than or equal to construction-related disturbance need not be surveyed). If any active raptor nests are identified, appropriate conservation measures (as determined by a qualified biologist) would be implemented. These measures may include, but are not limited to, establishing a construction-free buffer zone around the active nest site, biological monitoring of the active nest site, and delaying construction activities near the active nest site until the young have fledged.</li> <li>C. To prevent attracting corvids (birds of the Corvidae family which include jays, crows, and ravens), no trash or foodstuffs would be left or stored on-site. All trash would be deposited in a secure container daily and disposed of at an approved waste facility at least once a week. Also, on-site workers would not attempt to attract or feed any wildlife.</li> <li>D. Artificial night lighting may be required. To reduce potential disturbance to sensitive resources, lighting would be temporary, and directed specifically on the portion of the work area actively under construction. Use of artificial lighting would be limited to Cal/OSHA work area lighting requirements.</li> <li>E. Protocol surveys would be performed for Swainson's hawk, burrowing owl, and giant garter snake during the breeding season for each construction season (every year of construction). If species are discovered during construction, work would stop in the area of discovery and coordination with the appropriate resource agencies would occur.</li> <li>F. An Aquatic Giant Garter Snake (GGS) Habitat Dewatering Plan would be prepared. The plan would include appropriate measures, including the identification of dewatering areas. The Contractor will dewater suitable habitat (e.g., wetlands, drainages, rice fields) and ensure the habitat remains dry for at least 15 consecutive days after April 15 and prior to excavating or filling potential habitat. Dewatering would be limited to April 15 to October 1.</li> </ul>



Resource Area	Standard Measure Number	Standard Measure Title and Description
Biological Resources	Standard Measure BIO-3	<p><b>Invasive Species.</b></p> <p>Invasive non-native species control would be implemented. Measures would include:</p> <ul style="list-style-type: none"> <li>• Straw, straw bales, seed, mulch, or other material used for erosion control or landscaping which would be free of noxious weed seed and propagules.</li> <li>• All equipment would be thoroughly cleaned of all dirt and vegetation prior to entering the job site to prevent importing invasive non-native species. Project personnel would adhere to the latest version of the California Department of Fish and Wildlife Aquatic Invasive Species Cleaning/Decontamination Protocol (Northern Region) for all field gear and equipment in contact with water.</li> </ul>
Biological Resources	Standard Measure BIO-4	<p>A. Plant Species, Sensitive Natural Communities, and Environmentally Sensitive Habitat Areas.</p> <p>B. Seasonally appropriate, pre-construction surveys for sensitive plant species would be completed (or updated) by a qualified biologist prior to construction in accordance with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018).</p> <p>C. A Revegetation Plan would be prepared which would include a plant palette, establishment period, watering regimen, monitoring requirements, and pest control measures. The Revegetation Plan would also address measures for wetland and riparian areas temporarily impacted by the project.</p> <p>D. Prior to the start of work, Temporary High Visibility Fencing (THVF) and/or flagging would be installed around sensitive natural communities, environmentally sensitive habitat areas, rare plant occurrences, intermittent streams, and wetlands and other waters, where appropriate. No work would occur within fenced/flagged areas.</p> <p>E. Where feasible, the structural root zone would be identified around each large diameter tree (&gt;2-foot DBH) directly adjacent to project activities, and work within the zone would be limited.</p> <p>F. When possible, excavation of roots of large diameter trees (&gt;2-foot DBH) would not be conducted with mechanical excavator or other ripping tools. Instead, roots would be severed using a combination of root-friendly excavation and severance methods (e.g., sharp-bladed pruning instruments or chainsaw). At a minimum, jagged roots would be pruned away to make sharp, clean cuts.</p> <p>G. After completion, all superfluous construction materials would be completely removed from the site. The site would then be restored by regrading and stabilizing with a hydroseed mixture of native species along with fast growing sterile erosion control seed, as required by the Erosion Control Plan.</p>
Community Character and Cohesion	Standard Measure COM-1*	<p><b>Public Outreach Program.</b> Caltrans will prepare and implement a planned public outreach program to keep the area residents, businesses, emergency service providers, and transit operators informed of the Project construction schedule.</p>

Resource Area	Standard Measure Number	Standard Measure Title and Description
Cultural Resources	Standard Measure CR-3	If cultural materials are discovered during construction, work activity within a 60-foot radius of the discovery would be stopped and the area secured until a qualified archaeologist can assess the nature and significance of the find in consultation with the State Historic Preservation Officer (SHPO).
Cultural Resources	Standard Measure CR-4	<p>If human remains and related items are discovered on private or State land, they would be treated in accordance with State Health and Safety Code § 7050.5. Further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to California Public Resources Code (PRC) § 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendant (MLD).</p> <p>Human remains and related items discovered on federally-owned lands would be treated in accordance with the Native American Graves Repatriation Act of 1990 (NAGPRA) (23 USC 3001). The procedures for dealing with the discovery of human remains, funerary objects, or sacred objects on federal land are described in the regulations that implement NAGPRA 43 CFR Part 10. All work in the vicinity of the discovery shall be halted and the administering agency's archaeologist would be notified immediately. Project activities in the vicinity of the discovery would not resume until the federal agency complies with the 43 CFR Part 10 regulations and provides notification to proceed.</p>
Equity	Standard Measure EQ-1*	If a tolled lane option (Alternatives 3a, 3b, 4a, 4b, 5a, or 5b) is selected as the preferred alternative, Caltrans' future-appointed tolling authority would be required to implement a tolling program in alignment with Caltrans Language Access Plan (2020) and Deputy Directive 91-R2, which would accommodate use of toll lane options by limited English proficiency community members. Caltrans 2020 Language Access Plan lays out reasonable steps to provide limited English proficiency individuals with meaningful access to all Caltrans activities, including the provision of translation and interpretation services to the public. The tolling authority would adhere to these policies.
Geological Resources	Standard Measure GS-1	The project would be designed to minimize slope failure, settlement, and erosion using recommended construction techniques and Best Management Practices (BMPs). New earthen slopes would be vegetated to reduce erosion potential
Geological Resources	Standard Measure GS-2	In the unlikely event that paleontological resources (fossils) are encountered, all work within a 60-foot radius of the discovery would stop, the area would be secured, and the work would not resume until appropriate measures are taken.
Greenhouse Gas	Standard Measure GHG-1	Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality (Caltrans Standard Specification [SS] 14-9).
Greenhouse Gas	Standard Measure GHG-2	Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than 5 minutes.

Resource Area	Standard Measure Number	Standard Measure Title and Description
Greenhouse Gas	Standard Measure GHG-3	Caltrans Standard Specification “Emissions Reduction” ensures construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board (CARB) (Caltrans SS 7-1.02C).
Greenhouse Gas	Standard Measure GHG-4	Use of a Transportation Management Plan (TMP) to minimize vehicle delays and idling emissions. As part of this, traffic would be scheduled and directed to reduce congestion and related air quality impacts caused by idling vehicles along the highway during peak travel times.
Greenhouse Gas	Standard Measure GHG-5	All areas temporarily disturbed during construction would be revegetated with appropriate native species, as appropriate. Landscaping reduces surface warming and, through photosynthesis, decreases CO <sub>2</sub> . This replanting would help offset any potential CO <sub>2</sub> emissions increase.
Greenhouse Gas	Standard Measure GHG-6	Pedestrian and bicycle access will be maintained during project activities.
Hazards and Hazardous Materials	Standard Measure HW-1	Per Caltrans requirements, the contractor(s) would prepare a project-specific Lead Compliance Plan (CCR Title 8, § 1532.1, the “Lead in Construction” standard) to reduce worker exposure to lead-impacted soil. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of lead-impacted soil.
Hazards and Hazardous Materials	Standard Measure HW-2	When identified as containing hazardous levels of lead, traffic stripes would be removed and disposed of in accordance with Caltrans Standard Special Provision “Residue Containing Lead from Paint and Thermoplastic.”
Hazards and Hazardous Materials	Standard Measure HW-3	If treated wood waste (such as removal of sign posts or guardrail) is generated during this project, it would be disposed of in accordance with Standard Specification “Treated Wood Waste.”
Noise	Standard Measure NOI-1*	<b>Construction Equipment.</b> All construction equipment shall conform to Section 14-8.02, Noise Control, of the latest Standard Specifications. <ul style="list-style-type: none"> <li>• Control and monitor noise resulting from work activities.</li> <li>• Do not exceed 86 dBA Lmax at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.</li> <li>• Equip an internal combustion engine with the manufacturer recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler</li> </ul>
Noise	Standard Measure NOI-2*	<b>Maintaining Internal Combustion Engines.</b> All internal combustion engines would be maintained properly to minimize noise generation. Equip all internal combustion engine driven equipment with manufacturer recommended intake and exhaust mufflers that are in good condition and appropriate for the equipment.
Noise	Standard Measure NOI-3*	<b>Idling of Internal Combustion Engines.</b> Unnecessary idling of internal combustion engines within 100 feet of residences shall be strictly prohibited.

Resource Area	Standard Measure Number	Standard Measure Title and Description
Noise	Standard Measure NOI-4*	<b>Sensitive Receptors.</b> Noise-generating equipment shall be located as far as practical from sensitive receptors when sensitive receptors adjoin or are near the construction project area.
Noise	Standard Measure NOI-5*	<b>Quiet Air Compressors.</b> "Quiet" air compressors and other "quiet" equipment shall be utilized where such technology exists.
Transportation and Traffic	Standard Measure TT-1	Pedestrian and bicycle access would be maintained during construction.
Transportation and Traffic	Standard Measure TT-2	The contractor would be required to schedule and conduct work to avoid unnecessary inconvenience to the public and to maintain access to driveways, houses, and buildings within the work zones.
Transportation and Traffic	Standard Measure TT-3	A Transportation Management Plan (TMP) would be applied to the project.
Utilities and Service Systems	Standard Measure UE-1	All emergency response agencies in the project area would be notified of the project construction schedule and would have access to I-80 and US 50 throughout the construction period.
Utilities and Service Systems	Standard Measure UE-2	Caltrans would coordinate with utility providers to plan for relocation of any utilities to ensure utility customers would be notified of potential service disruptions before relocation.
Utilities and Service Systems	Standard Measure UE-3	The contractor would be required to submit a jobsite fire prevention plan as required by Cal OSHA before starting job site activities. In the event of an emergency or wildfire, the contractor would cooperate with fire prevention authorities.

Resource Area	Standard Measure Number	Standard Measure Title and Description
Water Quality	Standard Measure WQ-1	<p>The project would comply with the Provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2012-0011-DWQ) as amended by subsequent orders, which became effective July 1, 2013, for projects that result in a land disturbance of one acre or more, and the Construction General Permit (Order 2009-0009-DWQ).</p> <p>Before any ground-disturbing activities, the contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP) (per the Construction General Permit Order 2009-0009-DWQ) or Water Pollution Control Program (WPCP) (projects that result in a land disturbance of less than one acre) that includes erosion control measures and construction waste containment measures to protect Waters of the State during project construction.</p> <p>The SWPPP or WPCP would identify the sources of pollutants that may affect the quality of stormwater; include construction site Best Management Practices (BMPs) to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management; include non-stormwater BMPs; and include routine inspections and a monitoring and reporting plan. All construction site BMPs would follow the latest edition of the Caltrans Storm Water Quality Handbooks: Construction Site BMPs Manual to control and reduce the impacts of construction-related activities, materials, and pollutants on the watershed.</p> <p>The project SWPPP or WPCP would be continuously updated to adapt to changing site conditions during the construction phase.</p> <p>Construction may require one or more of the following temporary construction site BMPs:</p> <ul style="list-style-type: none"> <li>Any spills or leaks from construction equipment (i.e., fuel, oil, hydraulic fluid, and grease) would be cleaned up in accordance with applicable local, state, and/or federal regulations.</li> <li>Accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities would be removed by dewatering.</li> <li>Water generated from the dewatering operations would be discharged on-site for dust control and/or to an infiltration basin, or disposed of offsite.</li> <li>Temporary sediment control and soil stabilization devices would be installed.</li> <li>Existing vegetated areas would be maintained to the maximum extent practicable.</li> <li>Clearing, grubbing, and excavation would be limited to specific locations, as delineated on the plans, to maximize the preservation of existing vegetation.</li> <li>Vegetation reestablishment or other stabilization measures would be implemented on disturbed soil areas, per the Erosion Control Plan.</li> <li>Soil disturbing work would be limited during the rainy season.</li> </ul>

Resource Area	Standard Measure Number	Standard Measure Title and Description
Water Quality	Standard Measure WQ-2	<p>The project would incorporate pollution prevention and design measures consistent with the 2016 Caltrans Storm Water Management Plan. This plan complies with the requirements of the Caltrans Statewide NPDES Permit (Order 2012-0011-DWQ) as amended by subsequent orders.</p> <p>The project design may include one or more of the following:</p> <ul style="list-style-type: none"> <li>• Vegetated surfaces would feature native plants, and revegetation would use the seed mixture, mulch, tackifier, and fertilizer recommended in the Erosion Control Plan prepared for the project.</li> <li>• Where possible, stormwater would be directed in such a way as to sheet flow across vegetated slopes, thus providing filtration of any potential pollutants.</li> </ul>
Water Quality	Standard Measure WQ-3*	<p><b>Dewatering.</b> During the design phase, if groundwater dewatering activities are anticipated, Caltrans will coordinate with the District NPDES Coordinator to prepare a dewatering and discharge work plan in compliance with the 2018 Caltrans Standard Specifications (2018 CSS), Section 13-4.03G, which will include parameters and requirements for monitoring during construction activities.</p>
Water Quality	Standard Measure WQ-4*	<p><b>Stormwater Data Report.</b> During design, Caltrans will prepare a Stormwater Data Report which will describe whether Permanent Treatment BMPs will be considered.</p>

Notes: \* = Standard Measures that were not identified in the Caltrans North Region Standard Measures and Best Management Practices, dated June 9, 2021.

# **APPENDIX F**

## **ABBREVIATIONS AND ACRONYMS**





## Appendix F Abbreviations and Acronyms

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°F	degrees Fahrenheit
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ADA	American with Disabilities Act of 1990
ADL	aerially deposited lead
AMM	avoidance and minimization measure
AP	Agricultural Preserve
APE	area of potential effect
APN	Assessor's Parcel Number
ARB	Air Resources Board
BFE	base flood elevation
BMP	best management practice
BSA	biological study area
CAFE	Corporate Average Fuel Economy
Cal OSHA	California Division of Occupational Safety and Health Administration
CALFIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAPTI	California Action Plan for Transportation Infrastructure
CARB	California Air Resources Board
CARB	California Air Resources Board
CCP	Congested Corridor Plan
CCTV	closed-circuit television
CD	consistency determination
CDFG	California Fish and Game Code
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH <sub>4</sub>	methane
CIA	Community Impact Assessment
CIPP	cast-in-place-pipe
CMS	changeable message signs
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CR	County Road
CRHR	California Register of Historical Resources
CSMP	Corridor System Management Plan
CTC	California Transportation Commission
CTP	California Transportation Plan

CTP	California Transportation Plan
CVFPB	Central Valley Flood Protection Board
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationships
dBA	A-weighted decibels
DDT	dichlorodiphenyltrichloroethane
Department	California Department of Transportation
DPS	distinct population segment
DSA	Disturbed Soil Area
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act
EMFAC	EMission FACtors
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	environmentally sensitive area
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FONSI	Finding of No Significant Impact
FP	fully protected
FPPA	Farmland Protection Policy Act
GDP	gross domestic product
GGs	giant garter snake
GHG	greenhouse gas
GSRD	gross solid removal device
GWP	global warming potential
GWP	global warming potential
H&SC	Health and Safety Code
HCP	Habitat Conservation Plan
HCP/NCCP	Habitat Conservation Plan/Natural Community Conservation Plan
HFC	hydrofluorocarbon
HFC	hydrofluorocarbon
HFCs	hydrofluorocarbons
HMA	hot mix asphalt
HMMP	Habitat Mitigation and Monitoring Plan
HOT	high-occupancy toll
HOV	high-occupancy vehicle
I-5	Interstate 5
I-80	Interstate 80
ITP	Incidental Take Permit
ITS	intelligent transportation system
KV	key value

LCFS	low carbon fuel standard
LCP	Lead-Containing Paint
LEDPA	least environmentally damaging practicable alternative
L <sub>eq[h]</sub>	The 1-hour A-weighted equivalent sound level
LOS	level of service
LOTBs	log of test borings
LRA	Local responsibility area
LRDP	Long-range Development Plan
MBTA	Migratory Bird Treaty Act
MLD	most likely descendants
MM	mitigation measure
MMT	million metric tons
MMTCO <sub>2e</sub>	million metric tons of carbon dioxide equivalent
MOU	memorandum of understanding
MPO	Metropolitan Planning Organization
MS4	municipal separate storm sewer system
MTC	Metropolitan Transportation Commission
MTIP/SCS	Metropolitan Transportation Improvement Program/Sustainable Communities Strategy
N <sub>2</sub> O	nitrous oxide
NAC	Noise Abatement Criteria
NAHC	Native American Heritage Commission
NAVD 88	North American Vertical Datum of 1988
NCCP	Natural Communities Conservation Plan
NEPA	National Environmental Policy Act of 1969
NES	Natural Environment Study
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic and Safety Administration
NMFS	National Marine Fisheries Service
NO <sub>2</sub>	nitrogen dioxide
NOA	naturally occurring asbestos
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OHWM	ordinary high-water mark
OPR	Office of Planning and Research
PA	Programmatic Agreement
PA&ED	Project Approval and Environmental Document
pcb	polychlorinated biphenyl
PDT	Project Development Team
PER	Paleontological Evaluation Report
PG&E	Pacific Gas and Electric
PID	Project Initiation Document
PM	post mile
PM <sub>10</sub>	respirable particulate matter

PM <sub>2.5</sub>	fine particulate matter
PM <sub>10</sub>	respirable particulate matter
PMP	Paleontological Mitigation Plan
PPV (in/sec)	peak particle velocity (inches per second)
PQS	Professionally Qualified Staff
PRC	Public Resources Code
project	Yolo 80 Corridor Improvement/YOL 80 Bus/Carpool Lanes Project
PSR-PDS	Project Study Report-Project Development Support
RCRA	Resource Conservation and Recovery Act
RD	Reclamation District
RTIP	Regional Transportation Improvement Program
RTP	regional transportation plan
RTPA	Regional Transportation Planning Agency
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SACSIM	regional travel forecasting model system
SB	Senate Bill
SCCP	Solutions for Congested Corridor Program
SCS	Sustainable Communities Strategy
SCS	Sustainable Communities Strategy
SF <sub>6</sub>	sulfur hexafluoride
SFHA	Special Flood Hazard Area
SHOPP	State Highway Operation and Protection Program
SHPO	State Historic Preservation Officer
SHS	State Highway System
SLR	sea-level rise
SMAQMD	Sacramento Metro Air Quality Management District
SMF	Sacramento International Airport
SR	State Route
SSC	Species of Special Concern
STA	Solano Transportation Authority
STIP	State Transportation Improvement Program
SVAB	Sacramento Valley Air Basin
SWDR	Stormwater Data Report
SWHA	Swainson's hawk
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAR	traffic analysis report
TCE	temporary construction easement
TCR	Interstate 5 Transit Corridor Report
TDM	Transportation Demand Management
TMDL	Total Maximum Daily Load
TMP	Transportation Management Plan
TMS	Transportation Management Systems
TSM	Transportation System Management

TWW	Treated wood waste
UAIC	United Auburn Indian Community
UC Davis	University of California, Davis
US-50	U.S. Route 50
USACE	U.S. Army Corps of Engineers
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VAU	visual assessment unit
VELB	Valley elderberry longhorn beetle
VIA	Visual Impact Assessment
VMT	vehicle miles traveled
VOC	volatile organic compound
vph	vehicles per hour
WDR	Waste Discharge Requirement
Williamson Act	California Land Conservation Act of 1965
YBWA	Yolo Bypass Wildlife Area
YSAQMD	Yolo-Solano Air Quality Management District



**APPENDIX G**  
**NOTICE OF PREPARATION**





## Notice of Preparation

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### Notice of Preparation

To: Responsible/Trustee Agency From: Department of Transportation, D03  
(Address) 703 B Street - Marysville, CA 95901  
(Address)

**Subject: Notice of Preparation of a Draft Environmental Impact Report**

California Department of Transportation (Caltrans), District 03 will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study ( ☐ is ☒ is not ) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Attn: Masum Patwary, Yolo80Corridor@dot.ca.gov at the address shown above. We will need the name for a contact person in your agency.

Project Title: I-80 Corridor Improvement Project

Project Applicant, if any: Caltrans D03

Date

6/7/2021

Signature



Title

Environmental Office Chief

Telephone

530-933-8071

**Reference:** California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

## **Notice of Preparation**

**Project Title:** I- 80 Corridor Improvements Project  
**EA:** 03-3H900

### **Project Location:**

The project is located in Solano, Yolo, and Sacramento Counties on the I-80 corridor between post miles (PMs) 40.7 and 44.7 in Solano County, PMs between PMs 0.00 and 11.72 in Yolo County, and between PMs 0.00 and 1.36 in Sacramento County; on the US-50 corridor between PMs 0.00 and 3.12 in Yolo County and between PMs 0.00 and 0.617 in Sacramento County. The total project length is approximately 20.8 centerline miles.

### **Project Background:**

I-80 is the primary freeway serving the movement of people and goods between Northern California and the eastern United States. Within the Sacramento region, the route serves local and commute traffic, traffic to and from the Bay Area, and recreational traffic to and from the Reno/Tahoe region, and is a primary corridor for goods movement. Within the corridor, the Yolo Bypass Wildlife Area and floodplain limits east-west linkages, funneling many modes and forms of transportation into the narrow I-80 corridor between the cities of Davis and West Sacramento.

I-80 provides direct linkages between agricultural and manufacturing industries in the Central Valley; the Bay Area; and the Ports of Oakland, Richmond, Stockton, West Sacramento, and to the eastern United States. The segment of I-80 within the project limits also serves daily commuters from Sacramento and surrounding cities, such as the City of Davis. It is also the primary access route to the Port of West Sacramento, Sacramento International Airport (SMF), and large distribution centers.

The I-80/US-50 corridor experiences heavy congestion during the commute periods due to high vehicular demand. Data analysis shows that the peak hour and direction occurs during the 5:00 PM to 6:00 PM in the eastbound direction and significant AM peak period delay on westbound I-80 occurs between 8:00 AM to 10:00 AM. The corridor has infrastructure deficiencies, such as short weaving and merging areas, lane drops that create bottlenecks, incomplete ramp metering and auxiliary lane systems, and inadequate ITS elements. The corridor also experiences heavy recreational traffic, leading to heavy congestion on weekends and holidays.

### **Project Description:**

The California Department of Transportation (Caltrans) proposes to construct improvements consisting of managed lanes, pedestrian/bicycle facilities, and Intelligent Transportation System (ITS) elements along Interstate 80 (I-80) and United States Route 50 (US-50) from Kidwell Road near the eastern Solano County boundary (near Dixon), through Yolo County, and to West El Camino Avenue on I-80 and Interstate 5 (I-5) on US-50 in Sacramento County.

The project proposes to add auxiliary lanes at eastbound I-80 between Old Davis Rd and Richards Blvd and WB I-80 between Jefferson Blvd and Harbor Blvd, widen the roadway to the median or to the outside, cold planning, reconstruction of roadway structural sections, construction of Clear Recovery Zone (CRZ), extension or replacement of existing cross culverts, installation of Intelligent Transportation System (ITS) components and overhead signs, restriping, potential construction of soundwalls, modification of roadside ditches, bicycle and pedestrian facility improvements, and installation of a new park and ride facility.

**Alternatives:**

“Managed lanes” is a broad term for implementation of various lane configurations that may be used by specific types of vehicles, maximum number of riders in the vehicle, paying for use of a certain lane, or a combination. This project is evaluating different managed lanes alternatives to determine the one with the least impact which best meets the need of the project. The alternatives are:

- No build alternative – no change to the current conditions
- Build – Add a new High Occupancy Vehicle (HOV) lane in each direction for use by vehicles with two or more riders (HOV2+) in each direction.
- Build – Add a High Occupancy Toll (HOT) lane for use by vehicles with two or more riders (HOT 2+) in each direction widen median
- Build – Add a High Occupancy Toll lane for use by vehicles with three or more riders (HOT 3+) in each direction
- Build - Add an Express Lane in each direction (Everyone using the lane pays to use the lane, regardless of number of riders).
- Build – Add a transit-only lane in each direction
- Build - Repurpose current #1 lane to a High Occupancy Vehicle lane for use by vehicles with two or more riders (HOV 2+) in each direction. (no build alt)
- Build – Add a High Occupancy Vehicle lane for use by vehicles with two or more riders (HOV 2+) in each direction with HOV to HOV connector at the I-80/Hwy 50 interchange

**Probable Environmental Effects:**

The proposed project is expected to result in temporary and permanent environmental effects. The draft Environmental Impact Report/Environmental Assessment will determine what resources would be affected, the level of significance, and feasible measures to reduce impacts. Probable environmental effects of the proposed project are outlined below.

**Aesthetics**

The proposed project may result in impacts to visual resources and the visual quality of the site and its surroundings. During the environmental phase of the project, studies will be conducted to determine potential impacts to visual resources.

**Air Quality**

The proposed project may result in long-term air quality impacts from operational activities and will generate temporary short-term air quality impacts from construction activities, however the impacts are not expected to be significant and minimization measures will be implemented during construction. Caltrans will analyze project impacts to air quality including criteria pollutants and operational air quality.

**Biological Resources**

There is a potential for biological resources to be located within the proposed project area. During the environmental phase of the project, studies will be conducted to determine potential impacts toward special status plant and animal species and associated critical habitat. Studies will also be conducted to determine potential effects toward riparian and wetland habitats as well as Waters of the State/United States.

#### Cultural

There is potential for cultural resources to be located within the proposed project area. Studies will be conducted during the environmental phase to determine the potential impacts to these resources.

#### Paleontological Resources

There is potential for paleontological resources to be located within the project area. Studies will be conducted during the environmental phase to determine the potential impacts to paleontological resources.

#### Hazards/Hazardous Materials

There is potential for hazards/hazardous materials to be located within the proposed project area. During the environmental phase of the project, studies will be conducted to determine potential impacts.

#### Hydrology and Water Quality

The proposed project could impact water quality. Studies will be conducted during the environmental phase to evaluate potential water quality impacts or degradation to receiving waters as a result of the proposed project.

#### Noise

The proposed project could result of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. Studies will be conducted during the environmental phase to evaluate potential noise impacts.

#### Energy/Greenhouse Gases

The proposed project could increase the number of through-lanes and vehicle miles traveled. Studies will be conducted during the environmental phase to evaluate potential impacts to energy and greenhouse gases.

#### Transportation

The proposed project could increase the number of through-lane traffic and may contribute to induced travel. Studies will be conducted during the environmental phase to evaluate potential impacts induced VMT has on the corridor.

#### Utilities/Service Systems

The proposed project could require the relocation of existing facilities; including but not limited to gas, electric and communications facilities. Studies will be conducted during the environmental phase to evaluate potential impacts to utilities and service systems.

#### **NOP Scoping Meeting**

NOP scoping meeting will be held virtually on July 28, 2021.

# Memorandum

*Making Conservation  
a California Way of Life*

**To:** Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit  
All Reviewing Agencies

**Date:** August 17, 2021

**From:** CA Department of Transportation (Caltrans) D3

**Subject:** RE: SCH # 2021060117; 03-3H900 Yolo 80 Corridor Improvements Project

The Lead Agency (Caltrans) is providing notice regarding the above project that a rescheduled virtual open house/ scoping meeting will be held on August 25, 2021 from 6:00 to 8:00 PM. Access to the virtual open house meeting can be found at:

<https://deavpm.wixsite.com/yolo80corridor/live-meeting>

Caltrans previously submit a Notice of Preparation (NOP) to the State Clearinghouse, dated June 6, 2021 for the Yolo 80 Corridor Improvements Project. A revised NOP is attached here, with the new virtual meeting date noted.

## Attachment

1. Revised Notice of Preparation, dated August 16, 2021

## Notice of Preparation

---

### Notice of Preparation

To: Responsible/Trustee Agency From: Department of Transportation, D03  
(Address) 703 B Street - Marysville, CA 95901  
(Address)

**Subject: Notice of Preparation of a Draft Environmental Impact Report**

California Department of Transportation (Caltrans), District 03 will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study ( ☐ is ☒ is not ) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Attn: Masum Patwary, Yolo80Corridor@dot.ca.gov at the address shown above. We will need the name for a contact person in your agency.

**Project Title:** I-80 Corridor Improvement Project

**Project Applicant, if any:** Caltrans D03

Date 08/16/2021 Signature Mike Bartlett  
Title Environmental Office Chief  
Telephone 530-933-8071

**Reference:** California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

## **Notice of Preparation**

### **Project Title:**

Yolo 80 Bus/Carpool Lanes (Yolo 80 Corridor Improvements Project; EA: 03-3H900)

### **Project Location:**

The project is located in Solano, Yolo, and Sacramento Counties on the I-80 corridor between post miles (PMs) 40.7 and 44.7 in Solano County, PMs between PMs 0.00 and 11.72 in Yolo County, and between PMs 0.00 and 1.36 in Sacramento County; on the US-50 corridor between PMs 0.00 and 3.12 in Yolo County and between PMs 0.00 and 0.617 in Sacramento County. The total project length is approximately 20.8 centerline miles.

### **Project Background:**

I-80 is the primary freeway serving the movement of people and goods between Northern California and the eastern United States. Within the Sacramento region, the route serves local and commute traffic, traffic to and from the Bay Area, and recreational traffic to and from the Reno/Tahoe region, and is a primary corridor for goods movement. Within the corridor, the Yolo Bypass Wildlife Area and floodplain limits east-west linkages, funneling many modes and forms of transportation into the narrow I-80 corridor between the cities of Davis and West Sacramento.

I-80 provides direct linkages between agricultural and manufacturing industries in the Central Valley; the Bay Area; and the Ports of Oakland, Richmond, Stockton, West Sacramento, and to the eastern United States. The segment of I-80 within the project limits also serves daily commuters from Sacramento and surrounding cities, such as the City of Davis. It is also the primary access route to the Port of West Sacramento, Sacramento International Airport (SMF), and large distribution centers.

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### **Project Description:**

The California Department of Transportation (Caltrans) proposes to construct improvements consisting of managed lanes, pedestrian/bicycle facilities, and Intelligent Transportation System (ITS) elements along Interstate 80 (I-80) and United States Route 50 (US-50) from Kidwell Road near the eastern Solano County boundary (near Dixon), through Yolo County, and to West El Camino Avenue on I-80 and Interstate 5 (I-5) on US-50 in Sacramento County.

The project proposes to add auxiliary lanes at eastbound I-80 between Old Davis Rd and Richards Blvd and WB I-80 between Jefferson Blvd and Harbor Blvd, widen the roadway to the median or to the outside, cold planning, reconstruction of roadway structural sections, construction of Clear Recovery Zone (CRZ), extension or replacement of existing cross culverts, installation of Intelligent Transportation System (ITS) components and overhead signs, restriping, potential construction of soundwalls, modification of roadside ditches, bicycle and pedestrian facility improvements, and installation of a new park and ride facility.

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“Managed lanes” is a broad term for implementation of various lane configurations that may be used by specific types of vehicles, maximum number of riders in the vehicle, paying for use of a certain lane, or a combination. This project is evaluating different managed lanes alternatives to determine the one with the least impact which best meets the need of the project. The alternatives are:

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- Build – Add a transit-only lane in each direction
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Cultural



There is potential for cultural resources to be located within the proposed project area. Studies will be conducted during the environmental phase to determine the potential impacts to these resources.

#### Paleontological Resources

There is potential for paleontological resources to be located within the project area. Studies will be conducted during the environmental phase to determine the potential impacts to paleontological resources.

#### Hazards/Hazardous Materials

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The proposed project could impact water quality. Studies will be conducted during the environmental phase to evaluate potential water quality impacts or degradation to receiving waters as a result of the proposed project.

#### Noise

The proposed project could result of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. Studies will be conducted during the environmental phase to evaluate potential noise impacts.

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#### Transportation

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#### **NOP Scoping Meeting**

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# Memorandum

*Making Conservation  
a California Way of Life*

**To:** Governor's Office of Planning and Research      **Date:** October 17, 2022  
State Clearinghouse and Planning Unit  
All Reviewing Agencies

**From:** CA Department of Transportation (Caltrans) D3

**Subject:** RE: SCH # 2021060117; 03-3H900 Yolo 80 Corridor Improvements Project

The Lead Agency (Caltrans) previously submitted a Notice of Preparation (NOP) to the State Clearinghouse, dated June 6, 2021 (revised August 16, 2021), for the Yolo 80 Corridor Improvements Project. A second revised NOP is attached to this memorandum. The second NOP revision includes clarification of the proposed managed lane strategies and alternatives.

## Attachment

1. Revised Notice of Preparation, dated October 17, 2022

## Notice of Preparation

---

### Notice of Preparation

To: Responsible/Trustee Agency

From: Department of Transportation, D03


703 B Street - Marysville, CA 95901

(Address)

(Address)

**Subject: Notice of Preparation of a Draft Environmental Impact Report**

California Department of Transportation (Caltrans), District 03 will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (  is not ) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Attn: Masum Patwary, Yolo80Corridor@dot.ca.gov at the address shown above. We will need the name for a contact person in your agency.

Project Title: Yolo 80 Corridor Improvements Project

Project Applicant, if any: Caltrans D03

Date 10/17/2022

Signature Mike Bartlett

Title Environmental Office Chief

Telephone 530-933-8071

**Reference:** California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

# Notice of Preparation

**Project Title:**

Yolo 80 Corridor Improvements Project; EA: 03-3H900

**Project Location:**

The project is located in Solano, Yolo, and Sacramento Counties on the I-80 corridor between post miles (PMs) 40.7 and R44.7 in Solano County, PMs between PMs 0.00 and R11.72 in Yolo County, and between PMs 0.00 and M3.63 in Sacramento County; on the US-50 corridor between PMs 0.00 and 3.12 in Yolo County and between PMs 0.00 and L2.48 in Sacramento County.

**Project Background:**

I-80 is the primary freeway serving the movement of people and goods between Northern California and the eastern United States. Within the Sacramento region, the route serves local and commute traffic, traffic to and from the Bay Area, and recreational traffic to and from the Reno/Tahoe region, and is a primary corridor for goods movement. Within the corridor, the Yolo Bypass Wildlife Area and floodplain limits east-west linkages, funneling many modes and forms of transportation into the narrow I-80 corridor between the cities of Davis and West Sacramento.

I-80 provides direct linkages between agricultural and manufacturing industries in the Central Valley; the Bay Area; and the Ports of Oakland, Richmond, Stockton, West Sacramento, and to the eastern United States. The segment of I-80 within the project limits also serves daily commuters from Sacramento and surrounding cities, such as the Cities of Davis, West Sacramento, and Sacramento. It is also the primary access route to the Port of West Sacramento, Sacramento International Airport (SMF), and large distribution centers.

The I-80/US-50 corridor experiences heavy congestion during the commute periods due to high vehicular demand. Data analysis shows that the peak period and direction occur approximately from 2:15 PM to 6:45 PM in the eastbound direction from SR 113 in Davis to the I-5/US 50 separation, and in the westbound direction from 4:30 PM to 6:30 PM. The AM peak period delays occur on I-80 eastbound and westbound from 6:15 AM to 10:30 AM from Davis to the I-5/I-80 separation. The corridor has infrastructure deficiencies, such as short weaving and merging areas, lane drops that create bottlenecks, incomplete ramp metering and auxiliary lane systems, and inadequate ITS elements. The corridor also experiences heavy recreational traffic, leading to heavy congestion on weekends and holidays.

**Need:**

Interstate 80 (I-80) from the Kidwell Road Interchange in eastern Solano County, through Yolo County, and to I-80 / West El Camino Interchange, and United State Route 50 (US 50) from the US-50 / I-80 Junction in Yolo County to US-50 / Interstate 5 (I-5) Junction in Sacramento County are vitally important transcontinental routes for commuters, transit, freight and recreational traffic. Short weaving and merging areas result in traffic incidents, inefficient throughput of automobile and transit, and significantly impacts freight economic competitiveness and efficiencies. Bottlenecks caused by the morning, evening, and weekend recreational travel at the I-80 Yolo Causeway between Davis and West Sacramento limits person throughput; leads to unreliable automobile, transit, and freight travel times; and produces pollution directly to fifteen disadvantage communities living within the limits of the project. Limited travel time incentives for carpool/vanpool/transit usage promotes single occupancy vehicles, higher number of vehicles, higher VMT, and deficient person throughput within the project limits. The lack of Intelligent Transportation Systems (ITS) infrastructure exacerbates the inefficient throughput and contributes to unreliable automobile, freight, and transit travel times which impedes local, regional, and interstate economic sustainability.

**Purpose:**

The proposed project will extend the Managed Lane network to provide multimodal transportation options including dedicated bicycle/pedestrian facilities, a new Mobility Hub/Park n Ride facility with transit transfer services which will further reduce the number of vehicles on the state highway system, interchange modernization, freight reliability, transit prioritization and ITS elements to improve safety, transit time reliability, manage Vehicle Miles Travelled (VMT) and reduce GHG and other traffic-related emissions. Included in the project are preemptive transit signals at ramp meters and traffic signals at adjacent ramp intersections within the project limits to allow buses to move quicker than passenger vehicles further improving transit reliability and making transit a more viable alternative to driving. The reduced traffic-related emissions will greatly benefit those living along the corridor, especially people living in disadvantaged communities in West Sacramento that are within the project limits. The addition of ITS infrastructure, like Changeable Message Signs (CMS) and Closed Caption Television's (CCTV), will help expedite traveler information to warn the public of changing travel conditions, enhance incident response time and reduce secondary collisions.

The project will improve transit access and viability for YoloBus, Fairfield/Suisun Transit, Sacramento Regional Transit including existing or planned electric bus service between University of California, Davis (UCD) campus, UCD Medical Center in Sacramento, Kaiser Permanente Medical Center in downtown Sacramento, and Sacramento International Airport. The termini to the bike and pedestrian facility and crossing on each side of the causeway will be improved to enhance access, safety, and mobility. Roadway congestion pricing identified in SACOG's (MTP/SCS) will also manage VMT.

**Project Description:**

The California Department of Transportation (Caltrans) proposes to construct improvements consisting of tolled managed lanes with direct I-80 connectors at the I-80/US 50 separation, pedestrian/bicycle facilities, and Intelligent Transportation System (ITS) elements along Interstate 80 (I-80) and United States Route 50 (US-50) from Kidwell Road near the eastern Solano County boundary (near Dixon), through Yolo County, and to Truxel Road on I-80 and to State Route 99 (SR 99) on US-50 in Sacramento County. The project will construct new managed lanes on I-80 from Solano/Yolo County line to El Camino Avenue, and on US 50 from I-80/US 50 separation to I-5 in Sacramento County, for a total length of approximately 17 centerline or 34 lane miles.

The project proposes to add auxiliary lanes at eastbound I-80 between Old Davis Rd and Richards Blvd and WB I-80 between Jefferson Blvd and Harbor Blvd, widen the roadway to the median or to the outside, cold planning, reconstruction of roadway structural sections, construction of Clear Recovery Zone (CRZ), extension or replacement of existing cross culverts, installation of Intelligent Transportation System (ITS) components and overhead signs, restriping, potential construction of soundwalls, modification of roadside ditches, bicycle and pedestrian facility improvements, and installation of a new Mobility hub/Park n Ride facility.

**Alternatives:**

"Managed lanes" is a broad term for implementation of various lane configurations that may be used by specific types of vehicles, maximum number of riders in the vehicle, paying for use of a certain lane, or a combination. The draft environmental impact report will analyze the following managed lane alternatives in addition to the "no build" alternative:

- No build alternative – no change to the current conditions.
- Build – Construct a new High Occupancy Vehicle (HOV) lane in each direction for use by vehicles with two or more riders (HOV2+) in each direction.
- Build – Construct a high-occupancy toll lane in each direction for vehicles with two or more riders (HOT 2+) and other exempt vehicles without charge; other vehicles will pay a variable fee adjusted in response to demand.
- Build – Construct a high-occupancy toll lane in each direction for vehicles with three or more riders (HOT 3+) and other exempt vehicles without charge; other vehicles will pay a variable fee adjusted in response to demand.
- Build - Construct an Express Lane in each direction; all vehicles (with exceptions for some exempt vehicles like transit) pay a variable fee based on number of riders and in response to

demand.

- Build – Construct a transit-only lane in each direction.
- Build - Repurpose current #1 lane to a HOT 3+ lane or transit only lane in each direction.

### **Probable Environmental Effects:**

The proposed project is expected to result in temporary and permanent environmental effects. The draft Environmental Impact Report/Environmental Assessment will determine what resources would be affected, the level of significance, and feasible measures to reduce impacts. Probable environmental effects of the proposed project are outlined below.

#### Aesthetics

The proposed project may result in impacts to visual resources and the visual quality of the site and its surroundings. During the environmental phase of the project, studies will be conducted to determine potential impacts to visual resources.

#### Air Quality

The proposed project may result in long-term air quality impacts from operational activities and will generate temporary short-term air quality impacts from construction activities, however the impacts are not expected to be significant and minimization measures will be implemented during construction. Caltrans will analyze project impacts to air quality including criteria pollutants and operational air quality.

#### Biological Resources

There is a potential for biological resources to be located within the proposed project area. During the environmental phase of the project, studies will be conducted to determine potential impacts toward special status plant and animal species and associated critical habitat. Studies will also be conducted to determine potential effects toward riparian and wetland habitats as well as Waters of the State/United States.

#### Cultural

There is potential for cultural resources to be located within the proposed project area. Studies will be conducted during the environmental phase to determine the potential impacts to these resources.

#### Paleontological Resources

There is potential for paleontological resources to be located within the project area. Studies will be conducted during the environmental phase to determine the potential impacts to paleontological resources.

#### Hazards/Hazardous Materials

There is potential for hazards/hazardous materials to be located within the proposed project area. During the environmental phase of the project, studies will be conducted to determine potential impacts.

#### Hydrology and Water Quality

The proposed project could impact water quality. Studies will be conducted during the environmental phase to evaluate potential water quality impacts or degradation to receiving waters as a result of the proposed project.

#### Noise

The proposed project could result of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. Studies will be conducted during the environmental phase to evaluate potential noise impacts.

#### Energy/Greenhouse Gases

The proposed project could increase the number of through-lanes and vehicle miles traveled. Studies will be conducted during the environmental phase to evaluate potential impacts to energy

and greenhouse gases.

#### Transportation (VMT)

The proposed project could increase the number of through-lane traffic and may contribute to induced travel. Studies will be conducted during the environmental phase to evaluate potential impacts induced VMT has on the corridor.

#### Utilities/Service Systems

The proposed project could require the relocation of existing facilities; including but not limited to gas, electric and communications facilities. Studies will be conducted during the environmental phase to evaluate potential impacts to utilities and service systems.

#### Equity

The proposed project is within fifteen disadvantage communities. The project will conduct equity studies during the environmental phase to evaluate potential impacts.





# **APPENDIX H**

## **LIST OF TECHNICAL STUDIES**



# **Appendix H** List of Technical Studies

---

## **Air Quality and Greenhouse Gas**

Caltrans. 2023. Air Quality Report. March 2023.

Caltrans. 2023. Air Quality Report. August 2023.

## **Biological Resources**

Caltrans. 2021. Nesting Swainson's Hawk Protocol Survey Report. August 2021.

Caltrans. 2022. Bat Species of Special Concern Habitat Assessment. July 2022.

Caltrans. 2022. Botanical Resources Survey Report. September 2022.

Caltrans. 2022. Giant Garter Snake Habitat Assessment. August 2022.

Caltrans. 2022. Nesting Burrowing Owl Protocol Survey. July 2022.

Caltrans. 2022. Tricolored Blackbird Nesting Habitat Assessment. August 2022.

Caltrans. 2022. Valley Elderberry Longhorn Beetle Habitat Assessment. August 2022.

Caltrans. 2023. Aquatic Resources Delineation Report. March 2023.

Caltrans. 2023. Biological Assessment. March 2023.

Caltrans. 2023. Natural Environment Study. March 2023.

## **Community/Environmental Justice**

Caltrans. 2023. Community Impacts Assessment (draft). April 2023.

Caltrans. 2023. Community Impacts Assessment (draft). Revised July 2023.

## **Cultural**

Caltrans. 2021. Cultural resources study. September 2021.

## **Cumulative**

Caltrans. 2023. Cumulative Impacts Assessment (draft). May 2023.

Caltrans. 2023. Cumulative Impacts Assessment (draft). Revised August 2023.

## **Drainage**

Wood Rodgers, Inc. 2021. Preliminary Drainage Report. Prepared for Caltrans District 3. May 2021.

## **Energy**

Caltrans. 2023. Environmental Impact Evaluation – Energy. April 2023.

Caltrans. 2023. Environmental Impact Evaluation – Energy. Revised August 28, 2023.

## **Geological/Geotech**

Caltrans. 2020. Structure Preliminary Geotechnical Report for I-80 HOV Connector. January 22, 2020.

Caltrans. 2021. Structure Preliminary Geotechnical Report for Richards Blvd. OC Retaining Wall (RW) No. 3. March 2021.

Caltrans. 2021. Structure Preliminary Geotechnical Report for I-80 HOV Connector Retaining Wall (RW) No. 1 & 2. May 14, 2021.

Caltrans. 2021. District Preliminary Geotechnical Report (DPGR) for I-80 Corridor Improvement Project. July 2, 2021.

## **Hazards and Hazardous Materials**

Caltrans. 2021. Hazardous Waste Initial Site Assessment. February 2021.

## **Hydrology and Floodplain**

Caltrans. 2021. EA 03-3H900: I-80 Managed Lanes Project, 04-SOL-80-40.7/R44.7; 03-YOL-80-0.00/R11.72; 03-YOL-50-0.00/3.12; 03-SAC-50-0.00/L0.617; 03-SAC-80-M0.00/M1.36 - Floodplain Hydraulics Study. July 16, 2021.

## **Noise**

Caltrans. 2021. Noise Abatement Decision Report. Supplemented by the November 2021 Draft Noise Study Report. December 2021.

## **Paleontology**

Caltrans. 2021. Paleontological Identification Report. March 2, 2021.

Caltrans. 2023. Paleontological Identification Report. Revised July 2023.

## **Section 4(f)**

Caltrans. 2023. Section 4(f) No “Use” Determination (draft). May 2023.

## **Traffic, and Bicycle and Pedestrian**

Caltrans. 2023. Pedestrian and Bicycle Travel Impact Assessment. February 2023.

Caltrans. 2023. Transportation Analysis Report. July 2023.

Caltrans. 2023. VMT Mitigation Estimates – Executive Summary. April 26, 2023.

Caltrans. 2023. VMT Mitigation Plan. July 2023.

Fehr and Peers. 2022. I-80/US 50 Managed Lanes – Phase B Forecasts and Performance Measures. December 15, 2022.

Caltrans. 2021. I-80/ US 50 Managed Lanes Traffic Forecasts Memorandum. October 22, 2021.

Caltrans. 2021. I-80/ US-50 Managed Lanes Traffic Data Memorandum. January 8, 2021.

Caltrans. 2021. I-80/ US-50 Managed Lanes Travel Demand Modeling Report. October 2021.

Caltrans. 2021. I-80/ US-50 Travel Pattern Data Memorandum. February 10, 2021.

Caltrans. 2021. Origin destination report. March 2021.

## **Visual**

Caltrans. 2022. Visual Impact Assessment. June 22, 2022.

## **Water Quality**

Caltrans. 2022. Water Quality Assessment. October 3, 2022.



# **APPENDIX I**

## **PRELIMINARY DESIGN PLANS**

**These plans are provided under separate cover.**





# **APPENDIX J**

## **AIR QUALITY CALCULATIONS**



# Air Quality Report

## YOLO 80 Corridor Improvements Project

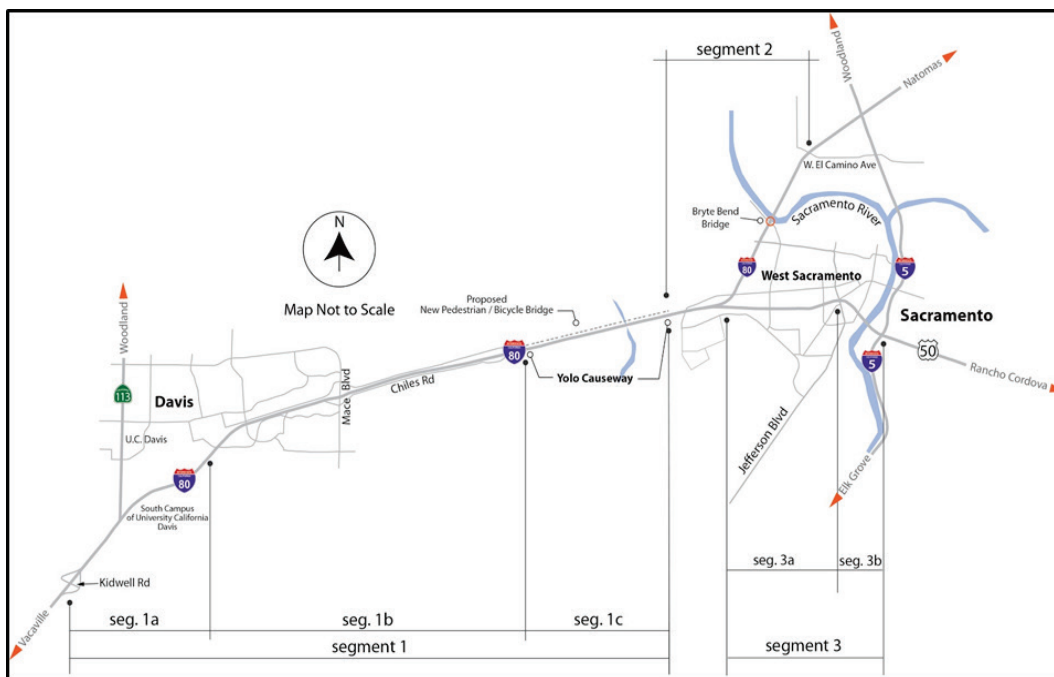
YOL/SAC-80, PM 0.0/11.72 & 0.0/1.36

US-50 PM 0.0/0.617 in Sacramento County and

US-50 PM 0.0/3.12 in Yolo County

EA: 03-3H900

E-FIS: 0318000085



July 2023

U.S. Department of Transportation

State of California

Prepared By: Jason Lee

Date: 7/14/2023

Jason Lee, Air Quality Specialist  
Office of Environmental Engineering  
Caltrans District 3



## Table of Contents

<b>Chapter 1</b>	<b>Introduction and Project Description.....</b>	<b>1</b>
1.1	Introduction .....	1
1.2	Project Description.....	1
<b>Chapter 2</b>	<b>Air Quality Setting .....</b>	<b>4</b>
2.1	Regulatory Background.....	5
2.1.1	Federal Standards .....	5
2.1.2	State Standards.....	6
2.1.3	Local Air Quality Management District Rules and Regulations.....	6
2.2	Attainment Status.....	6
2.3	Criteria Pollutants.....	7
2.3.1	Ozone (O <sub>3</sub> ) .....	8
2.3.2	Nitrogen Dioxide (NO <sub>2</sub> ) .....	9
2.3.3	Particulate Matter (PM <sub>10</sub> and PM <sub>2.5</sub> ) .....	9
2.3.4	Carbon Monoxide (CO).....	10
2.3.5	Sulfur Dioxide (SO <sub>2</sub> ) .....	10
2.4	Mobile Source Air Toxics .....	10
2.5	Climate Change .....	12
2.5.1	Regulatory Setting .....	13
2.5.2	Project Analysis .....	16
<b>Chapter 3</b>	<b>Existing Conditions.....</b>	<b>17</b>
<b>Chapter 4</b>	<b>Transportation Conformity .....</b>	<b>19</b>
<b>Chapter 5</b>	<b>Impact Analysis .....</b>	<b>20</b>
5.1	Carbon Monoxide Analysis .....	21
5.2	PM <sub>2.5</sub> /PM <sub>10</sub> Analysis .....	22
5.3	Climate Change .....	26
5.4	Mobile Source Air Toxins .....	27
<b>Chapter 6</b>	<b>Construction Impacts.....</b>	<b>31</b>
6.1	Construction Dust .....	31
6.2	Construction Equipment Exhaust .....	32
6.3	GHG Construction Emissions.....	33
<b>Chapter 7</b>	<b>Avoidance, Minimization, and Mitigation Measures.....</b>	<b>33</b>
7.1	Operational Minimization.....	33
7.2	Construction Minimization .....	33

## Appendixes

<b>Appendix A</b>	<b>Appendix A. Conformity Checklist</b>
<b>Appendix B</b>	<b>Appendix B. SAGOC MTP/SCS and MTIP Information (ID: CAL21276)</b>
<b>Appendix C</b>	<b>Interagency Consultation</b>
<b>Appendix D</b>	<b>Project Limits with Segments 1-3</b>
<b>Appendix E</b>	<b>Road Construction Emission Model Inputs and Outputs</b>
<b>Appendix F</b>	<b>Sensitive Receptors Maps</b>

## List of Tables

Table 1.	Attainment Status for Sacramento/Yolo Counties .....	7
Table 2.	Table of State and Federal Ambient Air Quality Standards .....	8
Table 3.	Criteria Air Pollutants Data (Sacramento T St Monitoring Station) .....	17
Table 4.	Project Total AADT, Truck AADT, and VMT for Opening, MTIP, and Design Years .....	21
Table 5.	Total Daily PM <sub>10</sub> Emissions with *alternative a and alternative b .....	24
Table 6.	Total Daily PM <sub>2.5</sub> Emissions with *alternative a and alternative b .....	25
Table 7.	Daily GHG Emissions (US ton) with *alternative a and alternative b .....	26
Table 8.	Daily MSAT Emissions (lbs) with *alternative a and alternative b .....	28
Table 9.	Maximum Construction Emissions .....	32

## List of Figures

Figure 1.	Vicinity Map .....	3
Figure 2.	FHWA Projected National MSAT Emission Trends 2020 – 2060 For Vehicles Operating On Roadways .....	12
Figure 3.	California Greenhouse Gas Forecast .....	17
Figure 4.	AQ Monitoring Station located in Downtown Sacramento .....	19

# Chapter 1 Introduction and Project Description

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## 1.1 Introduction

The California Department of Transportation (Caltrans), District 3, in collaboration with stakeholders, proposes to construct improvements consisting of managed lanes, pedestrian/bicycle facilities, and Intelligent Transportation System (ITS) elements along Interstate 80 (I-80) and United States Route 50 (US-50) from Kidwell Road near the eastern Solano County boundary (near Dixon), through Yolo County, and to West El Camino Avenue on I-80 and Interstate 5 (I-5) on US-50 in Sacramento County. The purpose of this project is to improve multimodal mobility on the I-80 and US-50 corridors in Solano, Yolo, and Sacramento Counties. This project will decrease congestion growth through the corridor and the effects congestion has on transit and freight. It will improve travel transit times, reliability, access, and viability through the corridor. This project will also increase people throughput by increasing transit, bicycle/pedestrian, and carpool use. The project will also address non-recurrent congestion caused by incidents, including collisions, by improving incident detection, verification, response and clearing.

Caltrans is both, the lead agency for the project's CEQA document, and as assigned by the FHWA, is the lead agency for the project's NEPA document. This air quality report addresses the potential short-term and long-term air quality impacts of the proposed improvements.

## 1.2 Project Description

The proposed alternatives for this project includes with a flyover connector (b alternative) or without a flyover connector (a alternative). The "b" alternative would further improve operations by providing a direct connection of the managed lanes by flying over US-50 at the I-80/US-50 interchange:

- Alternative 1: No-Build.
- Build Alternative 2: Add a High Occupancy Vehicle (HOV) lane in each direction for use by vehicles with two or more riders (HOV 2+), and build an I-80 managed lane direct connector (Alt 2b) or without (Alt 2a).
- Build Alternative 3: Add a High Occupancy Toll (HOT) in each direction for use by vehicles with two or more riders (HOT 2+), and build an I-80 managed lane direct connector (Alt 3b) or without (Alt 3a). Single-occupied vehicles would pay a fee for the lane usage.
- Build Alternative 4: Add a HOT lane in each direction for use by vehicles with three or more riders (HOT 3+) Lane in Each Direction, and build an I-80 managed lane direct connector (Alt 4b) or without (Alt 4a). Vehicles with less than three riders would pay a fee for lane usage.

- Build Alternative 5: Add an Express Lane in each direction (everyone using the lane pays to use the lane, regardless of number of riders.), and build an I-80 managed lane direct connector (Alt 5b) or without (Alt 5a).
- Build Alternative 6: Add a Transit-only lane in each direction, and build an I-80 managed lane direct connector (Alt 6b) or without (Alt 6a).
- Build Alternative 7: Repurpose the current number one general-purpose lane for use by vehicles with two or more riders (HOV 2+); no new lanes would be constructed. Build an I-80 managed lane direct connector (Alt 7b) or without (Alt 7a).

A few common design features and standardized measures are shared among the Build Alternatives. They include:

- Managed Lanes - The Build Alternatives each have managed lane options. Alternatives 2 and 8 includes a new High Occupancy Vehicle (HOV 2+) lane in each direction, while Alternatives 3 and 4 include new High Occupancy Toll (HOT) lanes, HOT 2+ and HOT 3+ respectively. Alternative 5 adds an Express Lane in each direction (i.e., everyone using the lane pays to use the lane, regardless of number of riders). Alternative 6 adds a Transit-only lane in each direction. Alternative 7 repurposes the current #1 general purpose lane to HOV 2+ and no new lanes would be constructed. Alternative 8 adds a HOV 2+ lane in each direction with I-80 connector ramp.
- Integrated Corridor Management – An Integrated Corridor Management system would be installed that incorporates data collected from traffic sensors, control devices, probe vehicles, transit monitoring systems, and user-generated data through mobile applications and social media networks to inform signal timing plans at intersections and/or ramp metering rates for freeway on-ramps.
- Intelligent Transportation System (ITS) - Each of the Build Alternatives would include placement (or relocation) of ramp meters, street lighting, traffic monitoring stations, closed-circuit television (CCTV), and changeable message signs (CMS).
- Signage - Each Build Alternative would include several different types and placement of new signs to provide graphic or text messages that inform motorists of toll zones and lane operating rules.

This Project is included in the SACOG Regional Transportation Plan (RTP), 2020 Metropolitan Transportation Plan (MTP)/Sustainable Communities Strategies (SCS), as project number CAL21276. It is also included in SACOG's 2021-2024 Metropolitan Transportation Improvement Program (TIP) as Project 12 of 552.

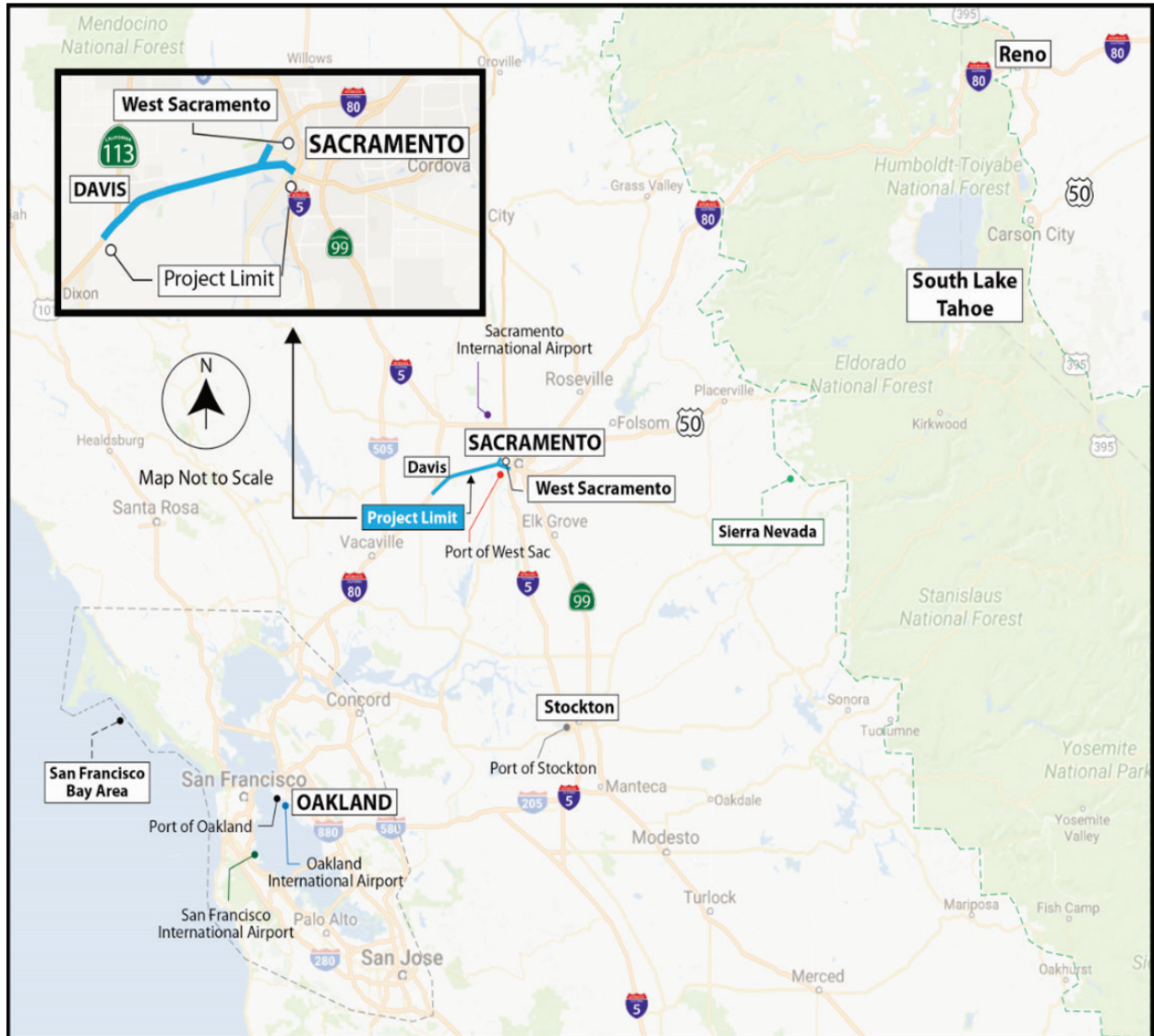


Figure 1. Vicinity Map



## Chapter 2 Air Quality Setting

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Air quality of a region is determined by the climatological conditions, topography, and the types and amounts of pollutants. California is divided geographically into 15 air basins. An air basin generally has similar meteorological and geographic conditions. The proposed project is located in Solano, Yolo, and Sacramento Counties, which is governed by the Yolo-Solano County Air Pollution Control District (YSAQMD) and the Sacramento Metropolitan Air Quality Management District (SMAQMD), which are located in the Sacramento Valley Air Basin (SVAB). The SVAB includes Butte, Colusa, Glenn, Sacramento, Shasta, Sutter, Tehama, Yolo, Yuba, and portions of Placer and Solano Counties.

The SVAB is bounded by the Sierra Nevada Mountain Range to the east and the Coastal Mountain Ranges to the west. Topography in the Sacramento Valley is generally flat, with elevations anywhere from slightly below sea level near the Sacramento/San Joaquin Delta to over 2,150 feet above sea level at the Sutter Buttes. Hot dry summers and mild rainy winters characterize the Mediterranean climate of the SVAB. During the year, the temperature may range from 20 to 115 degrees Fahrenheit with summer highs usually in the 90s and winter lows occasionally below freezing.

Average annual rainfall is about 20 inches with about 75 percent occurring during the rainy season generally from November through March. The prevailing winds are moderate in strength and vary from moist clean breezes from the south to dry land flows from the north.

The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants when certain meteorological conditions exist. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells lie over the Sacramento Valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of particulate matter pollutants are highest when these conditions are combined with smoke or when temperature inversions trap cool air, fog and pollutants near the ground.

The ozone season (May through October) in the Sacramento Valley is characterized by stagnant morning air or light winds, with the delta sea breeze arriving in the afternoon out of the southwest.

In addition, longer daylight hours provide a plentiful amount of sunlight to fuel photochemical reactions between ROG and NO<sub>x</sub>, which result in ozone formation. Likewise, PM<sub>2.5</sub> peak concentrations typically occur during the winter season (November – February) when temperature inversion and low wind speeds trap and concentrate PM<sub>2.5</sub> emissions, cooler temperature and high humidity increase the secondary formation of particulates.

As an air basin, air quality in the Sacramento region is impacted not only by pollutants generated within the region, but also by pollutants generated in the San Francisco Bay Area and the San Joaquin Valley, which are carried into the Sacramento region by Delta breezes. The

effect of pollutants transported from the San Francisco Bay Area or from the San Joaquin Valley on air quality in the Sacramento region can vary from substantial to inconsequential on any given day, largely determined by accompanying meteorological conditions. Thus, the success of the Sacramento region in attaining better air quality is partially contingent on the achievement of better air quality in nearby areas that affect Sacramento's air quality.<sup>1</sup>

## 2.1 Regulatory Background

The project area is subject to air quality planning programs established by the Federal Clean Air Act of 1970 and the California Clean Air Act of 1988. Both of these acts provide for the protection of public health, timetables for achieving and maintaining ambient standards, and a requirement to develop a plan to assist in guiding air quality improvement efforts of state and local agencies. National and state ambient air quality standards have been identified for a number of criteria pollutants, which include ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and particulate matter, both PM<sub>10</sub> and PM<sub>2.5</sub>.

In addition to the above listed legislation, the Environmental Protection Agency (EPA) regulates a list of hazardous air pollutants (HAPs) or air toxics (64 Federal Register [FR] 38706). HAPs are air contaminants that are known or suspected to cause cancer, serious illness, or death. These contaminants originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), air sources (e.g., dry cleaners), and stationary sources (e.g., factories or refineries).

Transportation conformity is required under Clean Air Act section 176(c) to ensure that federally supported highway and transit project activities are consistent with the purpose of State Implementation Plans (SIPs) to attain and maintain national ambient air quality standards (NAAQS). Conformity currently applies to areas that are designated nonattainment, and those re-designated to attainment after 1990 ("maintenance areas" with plans developed under Clean Air Act section 175A) for the following transportation-related criteria pollutants: O<sub>3</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, CO, and NO<sub>2</sub>. Conformity to the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS. The transportation conformity regulation is found in 40 CFR part 93 and provisions related to conformity SIPs are found in 40 CFR 51.390.

### 2.1.1 Federal Standards

NAAQS were established by the Federal Clean Air Act of 1970 (amended in 1977 and 1990) for six "criteria" pollutants. These criteria pollutants now include CO, O<sub>3</sub>, NO<sub>2</sub>, PM<sub>10</sub>, sulfur dioxide (SO<sub>2</sub>), and lead (Pb). In 1997, the EPA added PM<sub>2.5</sub> as a criteria pollutant. The air pollutants standards that have been established are considered for the most prevalent air pollutants that are known to be hazardous to human health. At the federal level, the U.S. EPA requires states to attain and maintain compliance with the federal standards as mandated by the Clean Air Act.

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<sup>1</sup> SACOG. Conformity Analysis for the 2021/2024 Metropolitan Improvement Program and amendment #1 to the Metropolitan Transportation Plan and Sustainable Communities Strategy 2040, adopted November 2019.

The U.S. EPA requires non-compliant states to prepare and submit air quality plans showing how the standards will be met. The U.S. EPA also has programs to prevent significant deterioration of air quality and to identify and regulate toxic air pollutants.

## **2.1.2 State Standards**

California established ambient air quality standards as early as 1969 through the Mulford-Carroll Act. Air pollutants regulated under the 1989 California Clean Air Act (amended in 1992) are similar to those regulated under the Federal Clean Air Act. In many cases, California standards are more stringent than the NAAQS. The California Clean Air Act requires attainment of California ambient air quality standards (CAAQS). The California Air Resources Board (CARB) regulates mobile emissions sources and oversees the activities of county and regional air quality districts. CARB regulates local air quality indirectly by establishing vehicle emission standards through its planning, coordinating, and research activities.

## **2.1.3 Local Air Quality Management District Rules and Regulations**

The SMAQMD operates at the local level with primary responsibility for attaining and maintaining the Federal and State ambient air quality standards in Sacramento County. The SMAQMD works jointly with U.S. EPA, CARB, SACOG, other air districts in the Sacramento region, county and city transportation and planning departments, and various non-governmental organizations to improve air quality through a variety of programs. These programs include the adoption of regulations, policies and guidance, extensive education and public outreach programs, as well as emission reducing incentive programs.

The YSAQMD is responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws for Yolo-Solano County. The two districts are located in Northern California in the Sacramento Valley Air Basin. All projects are subject to SMAQMD and YSAQMD rules and regulations in effect at the time of construction.

## **2.2 Attainment Status**

Areas that do not violate ambient air quality standards are considered to have attained the standard. Violations of ambient air quality standards are based on air pollutant monitoring data and are evaluated for each air pollutant. Table 1 lists the state and federal attainment status for all regulated pollutants. Under the federal standards, the regional O<sub>3</sub> designation is Nonattainment (Severe 15). Yolo County is in attainment of all other NAAQS. Sacramento County is designated as Maintenance (Moderate) for PM<sub>10</sub> and Nonattainment (Moderate) for PM<sub>2.5</sub>. For the more stringent CAAQS, both Sacramento County and Yolo County are designated Nonattainment for O<sub>3</sub> and PM<sub>10</sub> and are in attainment of all other State standards.

**Table 1. Attainment Status for Sacramento/Yolo Counties**

Pollutant	State Status	Federal Status
Ozone (O <sub>3</sub> )	Nonattainment	Nonattainment-severe 15
Particulate Matter (PM <sub>10</sub> )	Nonattainment	Sacramento County: Maintenance – Moderate Yolo County: Attainment – Unclassifiable
Fine Particulate Matter (PM <sub>2.5</sub> )	Sacramento County: Attainment Yolo County: Unclassified	Sacramento County: Nonattainment – Moderate Yolo County: Nonattainment – Moderate
Carbon Monoxide (CO)	Attainment	Unclassifiable/Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Unclassifiable/Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Unclassifiable/Attainment
Sulfates	Attainment	Unclassifiable/Attainment
Lead	Attainment	Unclassifiable/Attainment

## 2.3 Criteria Pollutants

The Clean Air Act requires the U.S. EPA to set National Ambient Air Quality Standards (NAAQS) for six criteria air contaminants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, lead, and sulfur dioxide. It also permits states to adopt additional or more protective air quality standards if needed. California has set standards for certain pollutants. Table 1 documents the current air quality standards. Air quality studies generally focus on six pollutants that are most commonly measured and regulated: Lead, CO, O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, and suspended particulate, i.e., PM<sub>10</sub> and PM<sub>2.5</sub>. These are referred to as “criteria” air pollutants (Table 2).

**Table 2. Table of State and Federal Ambient Air Quality Standards**

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>		
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>
Ozone (O <sub>3</sub> ) <sup>8</sup>	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.070 ppm (137 µg/m <sup>3</sup> )		
Respirable Particulate Matter (PM <sub>10</sub> ) <sup>9</sup>	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		—		
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>9</sup>	24 Hour	—	—	35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	12.0 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m <sup>3</sup> )	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )		9 ppm (10 mg/m <sup>3</sup> )	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		—	—	
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>10</sup>	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	100 ppb (188 µg/m <sup>3</sup> )	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )		0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	
Sulfur Dioxide (SO <sub>2</sub> ) <sup>11</sup>	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	75 ppb (196 µg/m <sup>3</sup> )	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m <sup>3</sup> )	
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (for certain areas) <sup>11</sup>	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) <sup>11</sup>	—	
Lead <sup>12,13</sup>	30 Day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m <sup>3</sup> (for certain areas) <sup>12</sup>	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m <sup>3</sup>		
Visibility Reducing Particles <sup>14</sup>	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence			
Vinyl Chloride <sup>12</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography			

See footnotes on next page ...

See footnotes on next page ...

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California Air Resources Board (5/4/16)

### 2.3.1 Ozone (O<sub>3</sub>)

Ground-level ozone is the principal component of smog. Ozone is not directly emitted into the atmosphere, but instead forms through a photochemical reaction of reactive organic gases

(ROG) and nitrogen oxides (NO<sub>x</sub>), which are known as ozone precursors. Ozone levels are highest from late spring through autumn when precursor emissions are high and meteorological conditions are warm and stagnant. Motor vehicles create the majority of ROG and NO<sub>x</sub> emissions in California. Evidence from the reviewed studies indicated that significant harmful health effects could occur among both adults and children if exposed to levels above these standards. Ozone exposure is also associated with symptoms such as coughing, chest tightness, shortness of breath, and the worsening of asthma symptoms. The greatest risk for harmful health effects belongs to outdoor workers, athletes, children, and others who spend greater amounts of time outdoors during periods where ozone levels exceed air quality standards. Elevated ozone levels can reduce crop and timber yields, as well as damage native plants. Ozone can also damage materials such as rubber, fabrics, and plastics.

### **2.3.2 Nitrogen Dioxide (NO<sub>2</sub>)**

NO<sub>2</sub>, a reddish-brown gas, irritates the lungs. It can cause breathing difficulties at high concentrations. Like O<sub>3</sub>, NO<sub>2</sub> is not directly emitted, but is formed through a reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO<sub>2</sub> are collectively referred to as nitrogen oxides (NO<sub>x</sub>) and are major contributors to O<sub>3</sub> formation. NO<sub>2</sub> also contributes to the formation of PM<sub>10</sub> (see discussion of PM<sub>10</sub> below). Elevated NO<sub>2</sub> levels can aggravate acute and chronic respiratory diseases. NO<sub>2</sub> concentrations in the air basin have been below ambient air quality standards; therefore, NO<sub>2</sub> concentrations from land use projects are not a concern.

### **2.3.3 Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)**

Particulate matter (PM) is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials, such as metals, soot, soil, and dust. Particles 10 microns or less in diameter are defined as "respirable particulate matter" or "PM<sub>10</sub>". Fine particles are 2.5 microns or less in diameter (PM<sub>2.5</sub>) and can contribute significantly to regional haze and reduction of visibility. Inhalable particulates found in the region come from smoke, vehicle exhaust, and dust. Although particulates are found naturally in the air, most particulate matter found in the region is emitted either directly or indirectly by wood burning, motor vehicles, construction, agricultural activities, and wind erosion of disturbed areas.

Most PM<sub>2.5</sub> is comprised of combustion products such as smoke or vehicle exhaust. Respirable particulate matter, especially PM<sub>2.5</sub>, is unhealthy to breathe and has been associated with premature mortality and other serious health effects. PM<sub>10</sub> poses a health concern because these particulates can be inhaled into and accumulate in the respiratory system. PM<sub>2.5</sub> is believed to pose the greatest health risks. Because of their small size (approximately three percent of the average width of a human hair), fine particles can lodge deeply into the lungs.

Extensive research reviewed by CARB indicates that exposure to outdoor PM<sub>10</sub> and PM<sub>2.5</sub> levels exceeding current ambient air quality standards is associated with increased risk of hospitalization for lung and heart-related respiratory illness, including emergency room visits for asthma. PM exposure is also associated with increased risk of premature deaths, especially in

the elderly and people with pre-existing cardiopulmonary disease. In children, studies have shown associations between PM exposure and reduced lung function, increased respiratory symptoms, and illnesses. Besides reducing visibility, the acidic portion of PM (e.g., nitrates and sulfates) can harm crops, forests, aquatic, and other ecosystems.

### **2.3.4 Carbon Monoxide (CO)**

Carbon monoxide (CO), a colorless and odorless gas, interferes with the transfer of oxygen to the brain. It can cause dizziness and fatigue, and can impair central nervous system functions. CO is emitted from the incomplete combustion of fossil fuels. Automobile exhausts account for the majority of the CO emissions; however, burning wood in fireplaces and wood stoves can contribute a substantial amount as well. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic.

### **2.3.5 Sulfur Dioxide (SO<sub>2</sub>)**

Sulfur oxides, primarily SO<sub>2</sub>, are a product of high-sulfur fuel combustion. The main sources of SO<sub>2</sub> are coal and oil used in power stations, in industries, and for domestic heating. SO<sub>2</sub> is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO<sub>2</sub> concentrations have been reduced to levels well below the state and national standards, but further reductions in emissions are needed to attain compliance with standards for PM<sub>10</sub>, of which SO<sub>2</sub> is a contributor. Regional SO<sub>2</sub> concentrations have been well below ambient air quality standards; therefore, SO<sub>2</sub> concentrations from land use projects are not a concern.

### **2.3.6. Lead (Pb)**

Lead is normally not an air quality issue for transportation projects unless the project involves disturbance of soils containing high levels of aerially deposited lead or painting or modification of structures with lead-based coatings. In these cases, construction impact analysis should describe monitoring and abatement requirements of Caltrans' Standard Specifications and Standard Special Provisions for aerially deposited lead or for lead paint removal and sandblasting. Identify any portions of the project site that will be subject to aerially deposited lead management or soil-bound lead management related to bridges during construction. Note whether the project is near an industrial lead emissions source, especially one related to a nonattainment designation, if applicable. Determine and document whether expected soil disturbance would generate lead concentrations high enough to trigger regulatory involvement. Disturbance of lead paint must meet U.S. EPA and air district rules (Caltrans Standard Specifications 14-9.02, 2015). Disclose any local and air district rules that apply to sandblasting and other activities related to lead paint removal or disturbance, if applicable.

## **2.4 Mobile Source Air Toxics**

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. EPA regulate 188 air

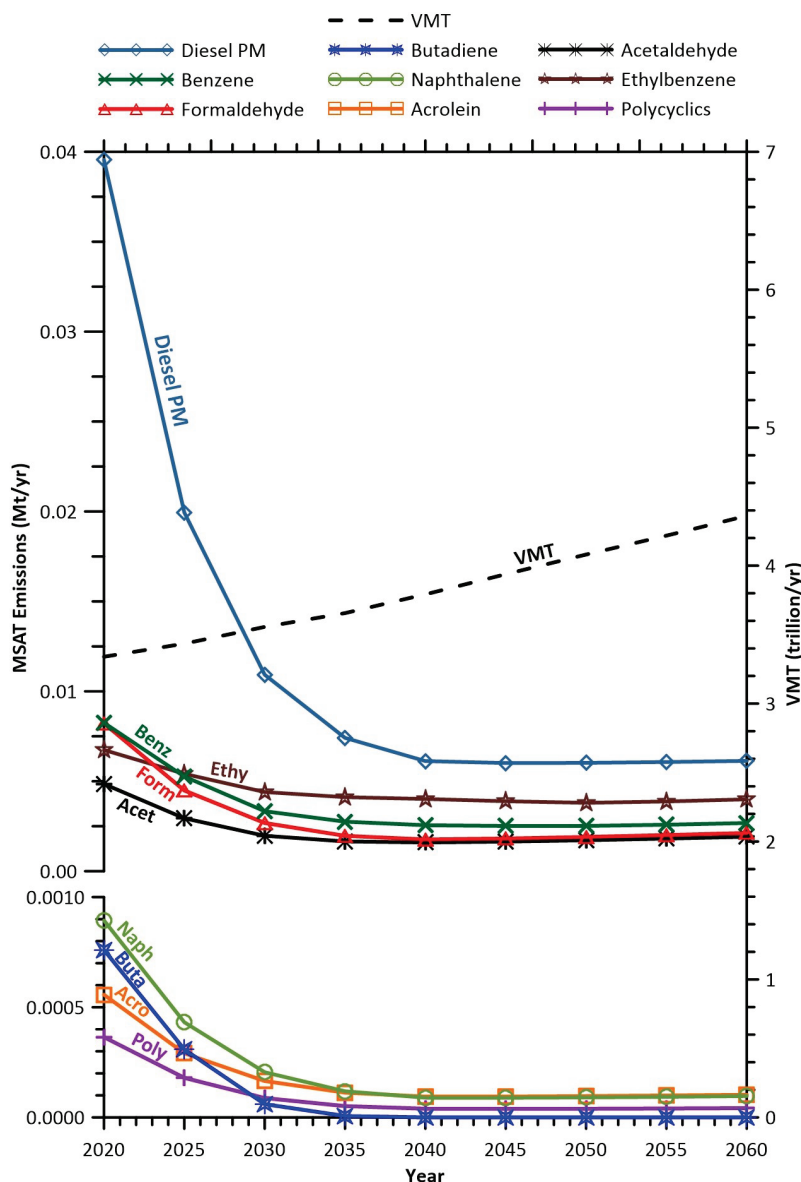
toxics, also known as hazardous air pollutants. The U.S. EPA has assessed this expansive list in its rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are part of U.S. EPA's Integrated Risk Information System (IRIS) (<https://www.epa.gov/iris>). In addition, the U.S. EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-hazard contributors from the 2011 National Air Toxics Assessment (NATA) (<https://www.epa.gov/national-air-toxics-assessment>). These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While the Federal Highway Administration (FHWA) considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future U.S. EPA rules.

The 2007 U.S. EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using U.S. EPA's MOVES2014a model, even if vehicle activity (vehicle-miles traveled, VMT) increases by 45 percent from 2010 to 2050 as forecast, a combined reduction of 91 percent in the total annual emission rate for the priority MSATs is projected for the same time period, as shown in Figure 2.

Using EPA's MOVES3 model, as shown in Figure 2, FHWA estimates that even if VMT increases by 31 percent from 2020 to 2060 as forecast, a combined reduction of 76 percent in the total annual emissions for the priority MSAT is projected for the same time period.



**Figure 2. FHWA Projected National MSAT Emission Trends 2020 – 2060 For Vehicles Operating On Roadways**



Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors  
Source: EPA MOVES3 model runs conducted by FHWA, March 2021.

## 2.5 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.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988, has led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts 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 the 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 cooperatively. The following Regulatory Setting section outlines state and federal efforts to comprehensively reduce GHG emissions from transportation sources.

## **2.5.1 Regulatory Setting**

### **2.5.1.1 State**

With the passage of several pieces of legislation including State Senate and Assembly bills and Executive Orders, California launched an innovative and proactive approach to dealing with GHG emissions and climate change.

Assembly Bill 1493 (AB 1493), Pavley, Vehicular Emissions: Greenhouse Gases, 2002: This bill requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year.

Executive Order (EO) S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to 1) year 2000 levels by 2010, 2) year 1990 levels by 2020, and 3) 80 percent below the year 1990 levels by 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.

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

Assembly Bill 32 (AB 32), Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 sets the same overall GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that ARB create a scoping plan and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.”

Executive Order S-20-06 (October 18, 2006): This order establishes the responsibilities and roles of the Secretary of the California Environmental Protection Agency (Cal/EPA) and state agencies with regard to climate change.

Executive Order S-01-07 (January 18, 2007): This order set forth the low carbon fuel standard for California. Under this EO, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by 2020.

Senate Bill 97 (SB 97) Chapter 185, 2007, Greenhouse Gas Emissions: This bill required the Governor’s Office of Planning and Research (OPR) to develop recommended amendments to the California Environmental Quality Act (CEQA) Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 375 (SB 375), Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the California Air Resources Board (CARB) to set regional emissions reduction targets from passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a “Sustainable Communities Strategy” (SCS) that integrates transportation, land-use, and housing policies to plan for the achievement of the emissions target for their region.

Senate Bill 391 (SB 391) Chapter 585, 2009 California Transportation Plan: This bill requires the State’s long-range transportation plan to meet California’s climate change goals under AB 32.

### **2.5.1.2 Federal**

Although climate change and GHG reduction are a concern at the federal level, currently no regulations or legislation 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 issued explicit guidance or methods to conduct project-level GHG analysis.<sup>3</sup> FHWA supports the approach that climate change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making. Climate change considerations can be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety

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<sup>3</sup> To date, no national standards have been established regarding mobile source GHGs, nor has U.S. EPA established any ambient standards, criteria or thresholds for GHGs resulting from mobile sources.

and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

The four strategies outlined by FHWA to lessen climate change impacts correlate with efforts that the state is undertaking to deal with transportation and climate change; these strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and a reduction in travel activity.

Climate change and its associated effects are also being addressed through various efforts at the federal level to improve fuel economy and energy efficiency, such as the “National Clean Car Program” and EO 13514 - Federal Leadership in Environmental, Energy and Economic Performance.

Executive Order 13514 (October 5, 2009): This order is focused on reducing greenhouse gases internally in federal agency missions, programs and operations, but also directs federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

U.S. EPA’s authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court’s ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six greenhouse gases constitute a threat to public health and welfare. Thus, it is the Supreme Court’s interpretation of the existing Act and EPA’s assessment of the scientific evidence that form the basis for EPA’s regulatory actions. U.S. EPA in conjunction with NHTSA issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010.<sup>4</sup>

The U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations.

The final combined standards that made up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards implemented by this program are expected to reduce GHG emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

On August 28, 2012, U.S. EPA and NHTSA issued a joint Final Rulemaking to extend the National Program for fuel economy standards to model year 2017 through 2025 passenger

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<sup>4</sup> <http://www.c2es.org/federal/executive/epa/greenhouse-gas-regulation-faq>

vehicles. Over the lifetime of the model year 2017-2025 standards this program is projected to save approximately four billion barrels of oil and two billion metric tons of GHG emissions.

The complementary U.S. EPA and NHTSA standards that make up the Heavy-Duty National Program apply to combination tractors (semi-trucks), heavy-duty pickup trucks and vans, and vocational vehicles (including buses and refuse or utility trucks). Together, these standards will cut greenhouse gas emissions and domestic oil use significantly. This program responds to President Barack Obama's 2010 request to jointly establish greenhouse gas emissions and fuel efficiency standards for the medium- and heavy-duty highway vehicle sector. The agencies estimate that the combined standards will reduce CO<sub>2</sub> emissions by about 270 million metric tons and save about 530 million barrels of oil over the life of model year 2014 to 2018 heavy duty vehicles.

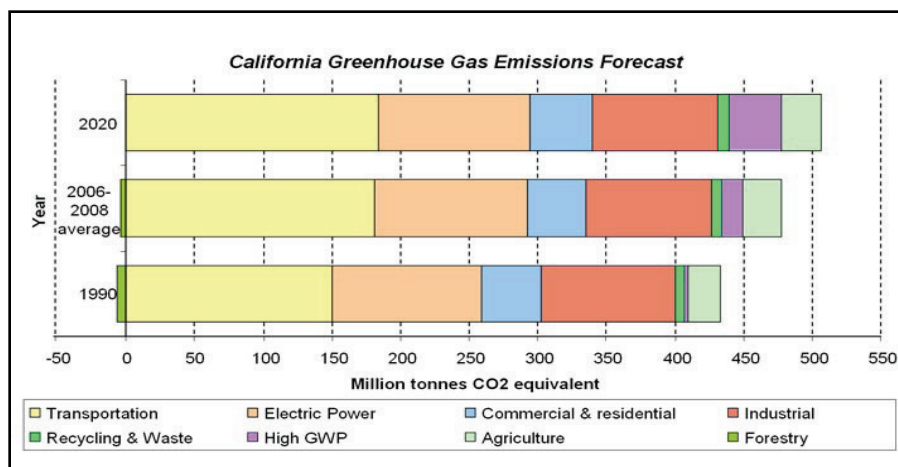
## 2.5.2 Project Analysis

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>5</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 to make this determination is a difficult, if not impossible, task.

The AB 32 Scoping Plan mandated by AB 32 includes the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the Draft Scoping Plan, the 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 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.

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<sup>5</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 U.S. Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).



**Figure 3. California Greenhouse Gas Forecast**

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

The Department 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, the Department has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.<sup>6</sup>

## Chapter 3 Existing Conditions

The California Air Resources Board maintains the only monitoring station that collects ambient air quality data in the vicinity of Sacramento County. The nearest monitoring location (Figure 4, 1309 T street, Sacramento) is located in Sacramento County approximately 0.75 miles northeast of the project location. Data from the monitoring station is shown in **Error! Reference source not found.**

**Table 3. Criteria Air Pollutants Data (Sacramento T St Monitoring Station)**

Pollutant	Averaging Time	Applicable Standard	2017	2018	2019	2020	2021
Ozone (O <sub>3</sub> )	1-Hour	Maximum Concentration (ppm)	0.107	0.097	0.100	0.112	0.091
		Number of Days State Standard Exceeded	0	0	0	0	0
	8-Hour	Maximum Concentration (ppm)	0.077	0.084	0.074	0.076	0.080

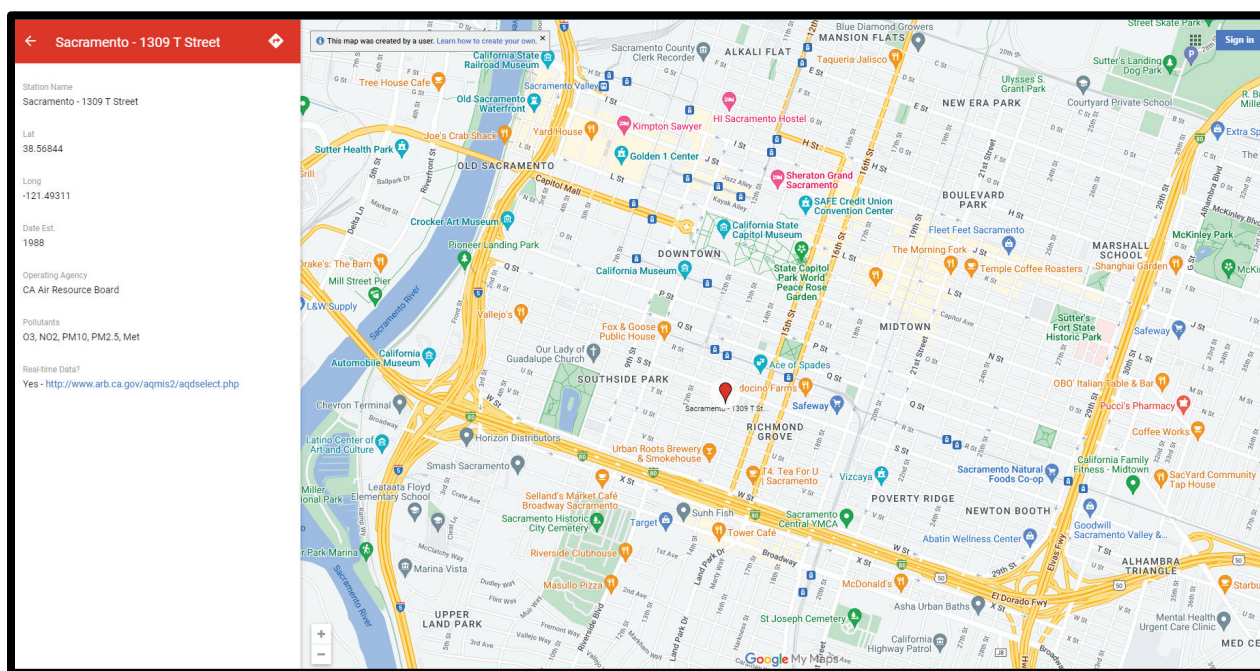
<sup>6</sup> Caltrans Climate Action Program is located at the following web address:  
[http://www.dot.ca.gov/hq/tpp/offices/ogm/key\\_reports\\_files/State\\_Wide\\_Strategy/Caltrans\\_Climate\\_Action\\_Program.pdf](http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf)

Pollutant	Averaging Time	Applicable Standard	2017	2018	2019	2020	2021
		Number of Days National Standard Exceeded (>0.075ppm)	3	1	1	3	1
		Number of Days State Standard Exceeded (>0.07ppm)	3	1	1	3	1
Particulate Matter (PM <sub>10</sub> )	24-Hour	Maximum Concentration (µg/m <sup>3</sup> )	150.3	309.5	179.1	298	132
		Number of Days National Standard Exceeded	0	6	1	4	0
		Number of Days State Standard Exceeded	0	22	24	25	59
	Annual	State Annual Average (20 µg/m <sup>3</sup> )	0	29.7	20.7	20.2	31.2
Particulate Matter (PM <sub>2.5</sub> )	24-Hour	Maximum Concentration (µg/m <sup>3</sup> )	46.0	263.3	37.1	30.7	26.2
		Number of Days State Standard Exceeded	6	0	0	0	0
	Annual	National Annual (12.0 µg/m <sup>3</sup> )	9.2	11.4	7.7	14.8	8.8
Carbon Monoxide (CO)*	1-Hour	Maximum Concentration (ppm)	1.8	3.2	1.4	4.3	2.2
		Number of Days National Standard Exceeded	0	0	0	0	0
		Number of Days State Standard Exceeded	0	0	0	0	0
	8-Hour	Maximum Concentration (ppm)	1.2	3.0	1.3	1.6	1.3
		Number of Days State Standard Exceeded	0	0	0	0	0

\* Carbon monoxide concentrations have not been measured at the T Street station since 2006; the nearest monitoring station is located approximately 1 mile north to the project location at 100 Bercut Dr, Sacramento  
Source: <http://www.epa.gov/airdata/>

Sensitive receptors are locations where people susceptible to the effects of air pollution may stay for extended periods of time. These locations include land uses such as residential, schools, playgrounds, parks, childcare centers and hospitals. There are several land uses and many residences that are within close vicinity of the project. The project limits are depicted with a map in Appendix D.





**Figure 4. AQ Monitoring Station located in Downtown Sacramento**

The No-Build (No Action) Alternative consists of those transportation projects that are already planned for construction by or before 2029. Consequently, the No-Build alternative represents future travel conditions in the YOL-80 Corridor Improvement study area without the YOL-80 Corridor Improvement project and is the baseline against which the other YOL-80 Corridor Improvement Project alternatives will be assessed to meet NEPA requirements.

## Chapter 4 Transportation Conformity

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The Sacramento Area Council of Governments (SACOG) is an association of local governments in the six-county Sacramento Region. Its members include the counties of El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba and the 22 cities within. SACOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues.

SACOG prepares the MTIP and MTP/SCS. The MTIP is a short-term listing of surface transportation projects that receive federal funds, require federal action, or are regionally significant. SACOG prepares and adopts the MTIP every two years.

Only projects included in the MTP/SCS may be incorporated into the MTIP. The MTIP derives all its projects either directly from the MTP/SCS or indirectly from the policies within it. The MTP/SCS is the long range policy and planning document while the MTIP is the short range implementing document that enables those planned project to begin work. Specifically, the



MTIP lists those projects from the MTP/SCS that have committed or reasonably available funding and intend to begin a phase of work during the four years of the MTIP.

Transportation projects in nonattainment or maintenance areas receiving federal funding or approval must be found to conform to the current State Implementation Plan or SIP. Each region in the state submits its emissions budgets and strategies for reducing air emissions of pollutants that are above NAAQS to the CARB. After review and approval, CARB submits these plans for the entire State as the SIP for each nonattainment or maintenance pollutant. The primary requirements of the transportation conformity rule are that implementation of transportation plans or programs cannot produce more emissions of pollutants than budgeted in the latest SIP.

Transportation planning is coordinated with this “conformity” process. The MTIP must conform to the SIP by having an emissions budget from on-road mobile sources including estimated emissions from planned projects that does not exceed the emissions budget in the SIP. For an individual project to conform to the SIP, it must be contained in a conforming MTIP. SACOG analyzes the MTIP for air quality conformity and FHWA is responsible for determining that the MTIP conforms to the latest approved SIP.

Sacramento and Yolo Counties are currently designated as nonattainment for fine particulate matter (PM<sub>2.5</sub>) and Ozone. Since this area is considered a nonattainment area for one of the NAAQS it is subject to the Federal Clean Air Act conformity requirements. With Federal Conformity requirements, PM<sub>2.5</sub> analysis in this Air Quality Report suffices because of the level of Project Analysis’ requirements. Furthermore, the YOL-80 Managed Lanes project is a capacity increasing project, which is required to meet conformity requirements including a project level analysis and an Interagency Consultation. This project was submitted to the conformity-working group on October 4, 2021 and the group determined the project was not a POAQC on October 18, 2021 (see Appendix C).

## Chapter 5 Impact Analysis

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The operational emissions analysis compares emissions for existing/baseline conditions to the forecasted conditions for the No-Build and Build alternatives given the Project’s opening year (2029), RTP horizon year (2040), and design year (2049) with and without a HOV-HOV connector based on the traffic data provided from the Traffic Forecasting from Caltrans (Table 3). Air pollutant emissions associated with the roadways in the Project area were estimated using specific traffic data and conditions provided by the Caltrans District 3 traffic forecasting and the CT-EMFAC2021 emission model.

**Table 4. Project Total AADT, Truck AADT, and VMT for Opening, MTIP, and Design Years**

Opening Year 2029	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
AADT	157,663	173,786	173,806	171,958	169,971	160,847	156,565
*Truck%	*7.7						
Truck%	7.4						
*Truck AADT	11,667	*13,352	*13,354	*13,212	*13,059	*12,359	*12,029
Truck AADT		12,860	12,862	12,725	12,578	11,903	11,586
VMT	3,880,995	4,237,651	4,239,821	4,196,181	4,176,124	3,953,571	3,867,187
MTIP Year 2040	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
AADT	162,995	175,741	175,832	173,350	172,582	163,081	159,511
*Truck%	*7.7						
Truck%	7.4						
*Truck AADT	12,062	*13,504	*13,511	*13,320	*13,261	*12,531	*12,257
Truck AADT		13,005	13,012	12,828	12,771	12,068	11,804
VMT	4,026,381	4,324,520	4,329,187	4,272,099	4,252,533	4,025,319	3,931,677
Design Year 2049	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
AADT	180,290	190,023	190,807	187,630	186,647	176,866	174,064
*Truck%	*7.7						
Truck%	7.4						
*Truck AADT	13,341	14,599*	14,624*	14,465*	14,318*	13,587*	13,372*
Truck AADT		14,062	14,120	13,885	13,812	13,088	12,881
VMT	4,495,673	4,683,131	4,691,980	4,642,888	4,599,005	4,381,640	4,276,831

\*The numbers were resulted in no connector between I-80 and SR50 (Alt a)

## 5.1 Carbon Monoxide Analysis

U.S. EPA declared that Transportation Conformity requirements related to CO in Sacramento ended on June 1, 2018. That date marked 20 years from the redesignation of the areas to attainment and implementation of a maintenance plan. The approved maintenance plan for Sacramento did not extend the maintenance plan period beyond 20 years from redesignation.

Consequently, Transportation Conformity requirements for CO ceased to apply after June 1, 2018 (i.e., 20 years after the effective date of the U.S. EPA's approval of the first ten-year maintenance plan and redesignation of the areas to attainment for the CO NAAQS).

## 5.2 PM<sub>2.5</sub>/PM<sub>10</sub> Analysis

In November 2015, the U.S. EPA released an updated version of Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas (Guidance) for quantifying the local air quality impacts of transportation projects and comparing them to the PM NAAQS (75 FR 79370). The U.S. EPA originally released the quantitative guidance in December 2010, and released a revised version in November 2013 to reflect the approval of EMFAC 2011 and U.S. EPA's 2012 PM NAAQS final rule. The November 2015 version reflects MOVES2014 and its subsequent minor revisions such as MOVES2014a, to revise design value calculations to be more consistent with other U.S. EPA programs, and to reflect guidance implementation and experience in the field. Note that EMFAC, not MOVES, should be used for project hot-spot analysis in California. The Guidance requires a hot-spot analysis to be completed for a project of air quality concern (POAQC). The following explanations are why this project is not a POAQC in italic with the final rule in 40 CFR 93.123(b)(1) defines a POAQC as:

(i) New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;

*The 2029, 2040 and 2049 average annual daily traffic (AADT), along the project limits are projected to be above 150,000 average daily traffic, as shown in Table 3. The average diesel truck percentage within the project limit (see Table 3) was estimated about 7.7% without a HOV-HOV connector and 7.4% with a HOV-HOV connector. This is less than the percentage of diesel trucks (i.e., 8%) considered to be significant pursuant to the PM Guidance. Furthermore, the projected fleet mix will not change significantly through the horizon year.*

(ii) Projects affecting intersections that are at Level-of-Service (LOS) D, E, or F with a significant number of diesel vehicles, or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;

*The project would not introduce a significant number of diesel vehicles to the project area.*

(iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;

*The project does not comprise a bus or rail terminal or transfer point.*

(iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and

*The project does not comprise expansion of a bus or rail terminal.*

(v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM<sub>2.5</sub> and PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

*The project is not in, nor will it affect, a location of violation or possible violation.*

The proposed project has undergone Interagency Consultation regarding POAQC determination.

Interagency Consultation participants concurred that the project is not a POAQC on October 15, 2021 by EPA and on October 18, 2021 by FHWA. The proposed project is not considered a POAQC because it does not meet the definition as defined in U.S. EPA's Transportation Conformity Guidance. Therefore, PM hot-spot analysis is not required. Documentation of concurrence are provided in this section and in Appendix C.

This project is located in a particulate matter PM<sub>2.5</sub> maintenance area and has been determined that the project is not a project of air quality concern (see Appendix C). Project-level hot-spot analysis for particulate matter is therefore not required for a conformity determination.

Table 4 and 5 show that the total daily PM<sub>10</sub> and PM<sub>2.5</sub> emissions with a HOV-HOV connector for the Build and No Build alternatives in the opening year and the horizon year would be higher than existing conditions. However, the increase of total daily PM<sub>10</sub> emissions considers not substantial as estimated about 9.1%, 6.4%, 3.1% of PM<sub>10</sub> of Alternative 2 with opening year 2029, MTP year 2040, and Design year 2049, respectively. For PM<sub>2.5</sub> with a HOV-HOV connector, it considers not large as estimated about 8.6%, 5.6%, 1.9% of Alternative 2 with opening year 2029, MTP year 2040, and Design year 2049, respectively. It would anticipate that the decreases of PM<sub>10/2.5</sub> with build would be greater due to less traffic generated without a HOV-HOV connector. Therefore, the difference between Build and No Build would be not significant in terms of PM<sub>10</sub> and PM<sub>2.5</sub> in regards to the increase of total AADT between Build and No Build with a HOV-HOV connector. The approved RTP and TIP for the project area has no PM mitigation or control measures that relate to the project's construction or operation. Therefore, a written commitment to implement PM control measures is not required.

**Table 5. Total Daily PM<sub>10</sub> Emissions with \*alternative a and alternative b**

Opening Year 2029	Baseline (Existing Yr 2019)	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
*PM <sub>10</sub> (lb)	610.8	632.2	*597.4	*597.2	*593.4	*589.7	*561.5	*544.0
PM <sub>10</sub> (lb)	610.8	632.2	689.9	687.9	672.9	648.6	628.6	628.4
*%Change between Build/No-Build	NA	NA	-5.5	-5.5	-6.1	-6.7	-11.2	-14.0
%Change between Build/No-Build	NA	NA	9.1	8.8	6.4	2.6	-0.6	-0.6
*%Change between Existing/Build	NA	3.5	-2.2	-2.2	-2.9	-3.5	-8.1	-10.9
%Change between Existing/Build	NA	3.5	13.0	12.6	10.2	6.2	2.9	2.9
MTIP Year 2040	Baseline (Existing Yr 2019)	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
*PM <sub>10</sub> (lb)	610.8	660.6	*609.3	*607.6	*597.6	*594.4	*571.6	*555.8
PM <sub>10</sub> (lb)	610.8	660.6	703.0	702.4	690.9	686.3	660.8	642.3
*%Change between Build/No-Build	NA	NA	-7.8	-8.0	-9.5	-10.0	-13.5	-15.9
%Change between Build/No-Build	NA	NA	6.4	6.3	4.6	3.9	0.1	-2.8
*%Change between Existing/Build	NA	8.2	-0.2	-0.5	-2.2	-2.7	-6.4	-9.0
%Change between Existing/Build	NA	8.2	15.1	15.0	13.1	12.4	8.2	5.2
Design Year 2049	Baseline (Existing Yr 2019)	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
*PM <sub>10</sub> (lb)	610.8	746.3	*668.6	*671.5	*665.5	*659.4	*630.8	*613.8
PM <sub>10</sub> (lb)	610.8	746.3	772.0	775.0	764.4	762.8	729.1	709.0
*%Change between Build/No-Build	NA	NA	-10.4	-10.0	-10.8	-11.6	-15.5	-17.8
%Change between Build/No-Build	NA	NA	3.5	3.9	3.0	2.2	-2.3	-5.0

Opening Year 2029	Baseline (Existing Yr 2019)	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
*%Change between Existing/Build	NA	22.2	9.5	9.9	9.0	8.0	3.3	0.5
%Change between Existing/Build	NA	22.2	26.4	26.9	25.1	24.9	19.4	6.1

\*All results from emissions without a HOV-HOV connector (alt a)

**Table 6. Total Daily PM<sub>2.5</sub> Emissions with \*alternative a and alternative b**

Opening Year 2029	Baseline (Existing Yr 2019)	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
*PM <sub>2.5</sub> (lb)	139.2	127.5	*120.0	*119.8	*119.3	*118.9	*113.8	*110.9
PM <sub>2.5</sub> (lb)	139.2	127.5	138.5	137.6	135.5	134.5	131.4	128.0
*%Change between Build/No-Build	NA	NA	-6.3-	-6.0	-6.4	-6.7	-10.7	-13.0
%Change between Build/No-Build	NA	NA	8.6	7.9	6.3	5.5	3.1	0.4
*%Change between Existing/Build	NA	-8.4	-13.7	-13.9	-14.3	-14.6	-18.2	-20.3
%Change between Build/No-Build	NA	-8.4	-0.5	-1.1	-2.7	-3.4	-5.6	-8.0
MTIP Year 2040	Baseline (Existing Yr 2019)	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
*PM <sub>2.5</sub> (lb)	139.2	128.2	*117.5	*116.8	*114.6	*113.9	*110.9	*108.0
PM <sub>2.5</sub> (lb)	139.2	128.2	135.4	135.0	132.5	131.4	128.2	124.8
*%Change between Build/No-Build	NA	NA	-8.3	-8.9	-10.6	-11.2	-13.5	-15.8
%Change between Build/No-Build	NA	NA	5.6	5.3	3.4	0.8	0.1	-2.7
*%Change between Existing/Build	NA	-7.9	-15.6	-16.0	-17.7	-18.2	-20.3	-22.4
%Change between Existing/Build	NA	-7.9	-2.7	-3.0	-4.8	-5.6	-7.9	-10.3

Design Year 2049	Baseline (Existing Yr 2019)	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
*PM <sub>2.5</sub> (lb)	139.2	145.4	*128.4	*129.1	*128.1	*127.0	*122.5	*118.4
PM <sub>2.5</sub> (lb)	139.2	145.4	148.1	148.5	146.8	146.7	141.5	136.6
*%Change between Build/No-Build	NA	NA	-11.7	-11.2	-11.9	-12.7	-15.7	-18.6
%Change between Build/No-Build	NA	NA	1.9	2.1	1.0	0.9	-2.7	-6.1
*%Change between Existing/Build	NA	4.5	-7.8	-7.3	-8.0	-8.8	-12.0	-14.9
%Change between Build/No-Build	NA	4.5	6.4	6.7	5.5	5.4	1.7	-1.9

\*All results from emissions without a HOV-HOV connector (alt a)

## 5.3 Climate Change

The proposed project will improve traffic flow and reduce congestion within the project limits. These improvements will most likely result in a slight increase in GHG emitted for the opening year 2029 and MTIP year 2040 since they will improve traffic flow with increasing vehicle miles traveled. However, in the design year 2049, GHG emissions Alt 2-7 are anticipated to be less produced than Alt 1 (Table 6). Please note that this project would produce lesser GHG due to less traffic anticipated without a HOV-HOV connector. For the comparison under NEPA with Build and No Build of Alternative 2, the project would produce more GHG in Opening year 2029 (10.9%) and result in reduction of GHG in Design year 2049 (-1.4%) with the connector. For the comparison under CEQA with Build and Baseline of Alternative 2, reduction of GHG would anticipate with Opening year 2029 (-1.4%) and Design year 2049 (-10.8%) with the connector. It is noted that GHG emissions would be improved with the project resulted in from the increase of 2.2 to 10.9% in Opening Year 2029 to the reduction indicating -1.4 to -4.9% in Design Year 2049 regarding all the alternatives 2-7 between build and no build (Table 6). Furthermore, the improved reduction of GHG would be anticipated between existing and build in the comparison of Opening year 2029 (-1.4 ~ -9.2%) and Design year 2049 (-10.8 ~ -14.0%).

**Table 7. Daily GHG Emissions (US ton) with \*alternative a and alternative b**

Opening Year 2029	Baseline (Existing Yr 2019)	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
*CO <sub>2</sub> e (US ton)	1318.7	1172.4	*1118.5	*1109.1	*1092.5	*1076.4	*1031.0	*1063.9
CO <sub>2</sub> e (US ton)	1318.7	1172.4	1299.9	1293.3	1275.3	1258.8	1197.8	1236.6
*%Change between Build/No-Build	NA	NA	-4.5	-5.4	-6.8	-8.1	-12.0	-9.2

%Change between Build/No-Build	NA	NA	10.9	10.3	8.8	7.4	2.2	5.5
*%Change between Existing/Build	NA	-11.1	-15.1	-15.8	-17.1	-18.3	-21.8	-19.3
%Change between Existing/Build	NA	-11.1	-1.4	-1.9	-3.3	-4.5	-9.2	-6.2
Design Year 2049	Baseline (Existing Yr 2019)	Alt 1 (No Build)	Alt 2 (HOV)	Alt 3 (HOT)	Alt 4 (HOT 3+)	Alt 5 (Express Lane)	Alt 6 (Transit)	Alt 7 (Take-A-Lane)
*CO <sub>2</sub> e (US ton)	1318.7	1192.9	*1014.5	*1002.2	*988.2	*977.7	*989.5	*974.2
CO <sub>2</sub> e (US ton)	1318.7	1192.9	1176.4	1166.8	1144.7	1134.0	1152.6	1135.1
*%Change between Build/No-Build	NA	NA	-27.0	-27.9	-28.9	-29.7	-28.8	-29.9
%Change between Build/No-Build	NA	NA	-1.4	-2.2	-4.0	-4.9	-3.4	-4.8
*%Change between Existing/Build	NA	-9.5	-23.0	-23.9	-25.0	-25.8	-24.9	-26.1
%Change between Existing/Build	NA	-9.5	-10.8	-11.5	-13.2	-14.0	-12.6	-13.9

\*All results from emissions without a HOV-HOV connector (alt a)

## 5.4 Mobile Source Air Toxins

FHWA released updated guidance in Jan. 18, 2023 for determining when and how to address MSAT impacts in the NEPA process for transportation projects. FHWA identified three levels of analysis:

- No analysis for exempt projects or projects with no potential for meaningful MSAT effects;
- Qualitative analysis for projects with low potential MSAT effects; and
- Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

Projects with no impacts generally include those that a) qualify as a categorical exclusion under 23 CFR 771.117, b) qualify as exempt under the FCAA conformity rule under 40 CFR 93.126, and c) are not exempt, but have no meaningful impacts on traffic volumes or vehicle mix.

Projects that have low potential MSAT effects are those that serve to improve highway, transit, or freight operations or movement without adding substantial new capacity or creating a facility that is likely to substantially increase emissions. The large majority of projects fall into this category.



Projects with high potential MSAT effects include those that:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of Diesel Particulate Matter in a single location; or
- Create new or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000, or greater, by the design year; and
- Are proposed to be located in proximity to populated areas or, in rural areas, in proximity to concentrations of vulnerable populations (i.e., schools, nursing homes, hospitals).

The latest version of CT-EMFAC, CT-EMFAC2021, was used to estimate emissions of benzene, 1,3-butadiene, acetaldehyde, formaldehyde, acrolein, ethylbenzene, naphthalene, DPM, and POM. Please note that appendix D illustrates the extent of the area considered in the MSAT analysis. Traffic activity data were estimated for each of different periods of a representative day in the baseline, opening 2029, and horizon 2049 years. Emissions were estimated for all MSATs using CT-EMFAC2021, based on EMFAC2021 and speciation factors provided by ARB and U.S. EPA.

**Table 8. Daily MSAT Emissions (lbs) with \*alternative a and alternative b**

Scenario/ Analysis Year		1,3- butadiene	Acetal- dehyde	Acrolein	Benzene	Diesel PM	Ethyl- benzene	Formal- dehyde	Naphtha- lene	POM
2019	Baseline (Existing Conditions)	0.84	3.89	0.08	11.84	24.57	4.59	8.87	0.77	0.22
2029	No-Build Alt1	0.36	1.82	0.04	6.23	7.32	2.77	4.09	0.34	0.10
	*Build Alt 2	*0.34	*1.68	*0.03	*5.64	*7.67	*2.48	*3.78	*0.31	*0.09
	Build Alt 2	0.39	1.94	0.04	6.61	8.64	2.90	4.37	0.37	0.11
	*Build Alt 3	*0.33	*1.64	*0.03	*5.52	*7.56	*2.42	*3.69	*0.31	*0.09
	Build Alt 3	0.38	1.88	0.04	6.42	8.59	2.82	4.24	0.36	0.10
	*Build Alt 4	*0.33	*1.64	*0.03	*5.52	*7.56	*2.42	*3.69	*0.31	*0.09
	Build Alt 4	0.37	1.84	0.04	6.30	8.39	2.77	4.14	0.35	0.10
	*Build Alt 5	*0.32	*1.64	*0.03	*5.53	*7.04	*2.45	*3.69	*0.30	*0.09
	Build Alt 5	0.37	1.83	0.04	6.26	8.23	2.76	4.12	0.35	0.10
	*Build Alt 6	0.32	1.65	0.03	5.55	6.57	2.47	3.69	0.30	0.30
	Build Alt 6	0.37	1.90	0.04	6.50	7.40	2.90	4.26	0.35	0.10
	*Build Alt 7	0.36	1.80	0.04	6.17	7.16	2.72	4.06	0.33	0.10
	Build Alt 7	0.42	2.08	0.04	7.23	8.07	3.20	4.70	0.39	0.12
	*% Diff. between Alt 2 and No Build	-6.7	-7.6	-6.7	-9.5	4.7	-10.7	-7.5	-6.4	-7.3

Scenario/ Analysis Year		1,3- butadien e	Acetal- dehyde	Acrolein	Benzene	Diesel PM	Ethyl- benzene	Formald ehyde	Naphtha- lene	POM
	% Diff. between Alt 2 and No Build	9.2	6.5	14.5	6.0	18.0	4.7	6.9	9.5	8.4
	*% Diff. between Alt 3 and No Build	-8.8	-9.7	-8.5	-11.5	3.3	-12.6	-9.6	-8.6	-9.7
	% Diff. between Alt 3 and No Build	6.2	3.4	12.1	3.0	17.4	1.7	3.7	6.8	5.3
	*% Diff. between Alt 4 and No Build	-9.9	-9.8	-11.5	-11.5	-0.6	-12.2	-9.8	-9.7	-10.0
	% Diff. between Alt 4 and No Build	3.8	1.1	7.9	1.0	14.7	0.0	1.4	4.5	2.9
	*% Diff. between Alt 5 and No Build	-10.5	-9.5	-11.5	-11.3	-3.9	-11.6	-9.6	-10.3	-10.4
	% Diff. between Alt 5 and No Build	2.8	0.5	6.7	0.4	12.5	-0.5	0.8	3.4	2.2
	*% Diff. between Alt 6 and No Build	-11.5	-9.4	-13.3	-10.9	-10.3	-10.9	-9.7	-11.3	-10.8
	% Diff. between Alt 6 and No Build	3.6	4.3	4.8	4.2	1.1	4.4	4.2	3.7	3.5
	*% Diff. between Alt 7 and No Build	-0.1	-0.7	0.6	-1.1	-2.2	-1.7	-0.6	-0.7	0.0
	% Diff. between Alt 7 and No Build	17.1	14.7	20.6	16.0	10.2	15.3	15.0	16.4	16.4
2049	No-Build Alt1	0.26	0.95	0.03	5.45	4.58	2.64	2.24	0.22	0.06
	*Build Alt 2	*0.18	*0.68	*0.02	*3.72	*4.99	*1.78	*1.60	*0.16	*0.04
	Build Alt 2	0.21	0.78	0.02	4.28	5.70	2.05	1.82	0.18	0.05
	*Build Alt 3	*0.17	*0.66	*0.02	*3.63	*4.84	*1.74	*1.56	*0.15	*0.04
	Build Alt 3	0.20	0.75	0.02	4.16	5.61	1.99	1.77	0.17	0.05
	*Build Alt 4	0.17	0.65	0.02	3.60	4.69	1.73	1.54	0.15	0.04
	Build Alt 4	0.20	0.75	0.02	4.13	5.38	1.98	1.75	0.17	0.05
	*Build Alt 5	0.17	0.65	0.02	3.59	4.55	1.73	1.53	0.15	0.04
	Build Alt 5	0.20	0.75	0.02	4.13	5.18	1.99	1.75	0.17	0.05
	*Build Alt 6	0.20	0.77	0.02	4.32	4.10	2.09	1.80	0.18	0.05
	Build Alt 6	0.24	0.89	0.02	5.05	4.63	2.44	2.09	0.20	0.05
	*Build Alt 7	0.19	0.72	0.02	4.04	4.55	1.94	1.70	0.17	0.04
	Build Alt 7	0.23	0.84	0.02	4.72	5.16	2.27	1.97	0.20	0.05

Scenario/ Analysis Year		1,3- butadien e	Acetal- dehyde	Acrolein	Benzene	Diesel PM	Ethyl- benzene	Formald ehyde	Naphtha- lene	POM
	*% Diff. between Alt 2 and No Build	-29.7	-28.8	-30.5	-31.8	8.9	-32.6	-28.8	-29.5	-28.7
	% Diff. between Alt 2 and No Build	-18.3	-18.7	-18.6	-21.5	24.4	-22.5	-18.7	-18.6	-18.0
	*% Diff. between Alt 3 and No Build	-32.0	-30.5	-32.2	-33.4	5.7	-34.0	-30.6	-31.6	-30.7
	% Diff. between Alt 3 and No Build	-21.0	-21.0	-21.2	-23.6	22.5	-24.5	-21.0	-21.0	-21.1
	*% Diff. between Alt 4 and No Build	-33.0	-31.2	-33.1	-34.0	2.2	-34.5	-31.3	-32.5	-31.4
	% Diff. between Alt 4 and No Build	-22.2	-21.8	-22.0	-24.3	17.4	-25.0	-21.9	-22.3	-21.1
	*% Diff. between Alt 5 and No Build	-33.4	-31.6	-34.7	-34.2	-0.7	-34.6	-31.7	-33.1	-32.2
	% Diff. between Alt 5 and No Build	-22.8	-21.9	-23.7	-24.2	13.1	-24.7	-22.1	-22.8	-21.5
	*% Diff. between Alt 6 and No Build	-21.1	-19.5	-21.2	-20.8	-10.6	-20.9	-19.6	-20.4	-19.9
	% Diff. between Alt 6 and No Build	-6.9	-6.9	-8.5	-7.4	1.1	-7.5	-7.0	-7.0	-6.1
	*% Diff. between Alt 7 and No Build	-24.4	-24.2	-25.4	-25.9	-0.8	-26.5	-24.1	-24.0	-24.1
	% Diff. between Alt 7 and No Build	-10.9	-12.4	-12.7	-13.4	12.6	-14.1	-12.2	-11.0	-11.1

The proposed project would be categorized under high potential MSAT effects which require a Quantitative analysis to differentiate alternatives.

Considering the differences in projected corridor-level vehicle miles traveled (VMT) for each of the build alternatives, Alternatives 2 and 3 were analyzed for air quality purposes along with the No-Build Alternative based on a HOV-HOV connector and without (Table 7). Build Alternatives 2 and 3 have traffic forecasts very similar to each other and expected to be built as preferred alternatives in the future, the difference being the operation of HOV lanes (Alternative 2) versus HOT lanes (Alternatives 3) along the corridor was tabulated. Therefore, the impacts from Build Alternative 2 and 3 are used to represent the air quality impacts of this project provides the most conservative estimate of potential emissions among the seven alternatives.

The increases in MSAT emissions under Alternatives 2 and 3 in 2029 relative to the No Build Alternative would likely be associated with addition of HOV sections that would be built across the Sacramento and Yolo Counties in the vicinity. But, MSAT emissions in Design Year 2049 resulted in reductions of 8 out of 9 toxic chemicals (Table 7). Even if some increases of MSAT do occur relative to the No Build Alternative in Opening year 2029, they too will be substantially reduced in the future due to implementation of EPA's vehicle and fuel regulations. Furthermore, it would result in the greater decreased MSAT (minus % Differences in Table 7) in the absence of a HOV-HOV connector due to lesser induced traffic.

As shown in Figure 2, MSAT emission rates are anticipated to decrease substantially, especially for diesel PM, by the opening year of 2029 and even further by the horizon year of 2049. The area surrounding the project is not heavily industrialized and comprises only approximately six percent heavy trucks. The project would not substantially increase the percentage of trucks traveling along I-80 of the project limits, and local truck emissions may in fact decrease in future analysis years 2029 and 2049 due to penetration of electric heavy duty trucks. In sum, under all Build Alternatives in the opening year and design year it is expected there would be negligible increases in MSAT emissions relative to the No Build Alternative due to the dispersion across the SACOG region and to EPA's MSAT reduction programs.

Moreover, U.S. EPA regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES3 model forecasts a combined reduction of over 76 percent in the total annual emission rate for the priority MSAT from 2020 to 2060 while vehicle-miles of travel are projected to increase by over 31 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

## **Chapter 6 Construction Impacts**

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Construction is expected to begin in 2024 and last less than four years. Although construction is planned to last approximately four years, no construction activities are anticipated to last more than five years at any individual site. Emissions from construction-related activities are thus considered temporary as defined in 40 CFR 93.123(c)(5); and are not required to be included in PM hot-spot analyses to meet conformity requirements. Construction-related emissions are generally short-term in duration but may still cause adverse air quality impacts.

### **6.1 Construction Dust**

Dust would be generated during grading and construction operations. The amount of dust generated would be highly variable and is dependent on the size of the area disturbed, amount of activity, soil conditions and meteorological conditions.

Although grading and construction activities would be temporary, they would have the potential to cause both nuisance and health air quality impacts. PM<sub>10</sub> is the pollutant of greatest concern associated with dust. If uncontrolled, elevated PM<sub>10</sub> levels could occur downwind of actively

disturbed areas. In addition, dust fall on adjacent properties could be a nuisance. If uncontrolled, dust generated by grading and construction activities would have an adverse effect on air quality.

## 6.2 Construction Equipment Exhaust

Daily Maximum construction emissions were estimated using the latest version of Caltrans' CAL-CET2021 emissions model which uses emission factors from EMFAC2021 developed by CARB. Detailed construction plans were not available at the time of this analysis. Therefore, equipment quantities and construction phases provided by CAL-CET2021 (version 1.0.2) were used along with maximum Project durations provided by the Caltrans' design engineering team. Appendix E lists all the construction inputs provided and entered into CAL-CET2021. (see Appendix E for model inputs and outputs). Inputs to the model included the construction start date, total construction cost, estimated working days, and project length. Table 8 shows the maximum construction emissions per project phase.

**Table 9. Maximum Construction Emissions**

Project Phase	ROG	NOx	PM <sub>10</sub>	PM <sub>2.5</sub>
Grubbing/Land Clearing	10.0 lbs/day	67.4 lbs/day	214.1 lbs/day	25.2 lbs/day
Roadway Excavation/Removal	13.8 lbs/day	107.7 lbs/day	96.0 lbs/day	15.0 lbs/day
Structure Excavation/Removal	10.6 lbs/day	59.2 lbs/day	135.7 lbs/day	16.4 lbs/day
Base/Subbase/Imported Borrow	15.2 lbs/day	129.7 lbs/day	139.6 lbs/day	20.2 lbs/day
Structure Concrete	11.7 lbs/day	67.8 lbs/day	4.3 lbs/day	4.2 lbs/day
Paving	13.7 lbs/day	105.9 lbs/day	5.7 lbs/day	5.5 lbs/day
Drainage/Utilities/Sub-Grade	11.0 lbs/day	48.5 lbs/day	67.8 lbs/day	4.4 lbs/day
Traffic Signalization	17.4 lbs/day	137.3 lbs/day	6.6 lbs/day	6.4 lbs/day
Total (Tons/Construction project)	2.0	13.5	6.1	1.3
SMAQMD Standard Levels	-	85 lbs/day	80 lbs/day	82 lbs/day
YSAQMD Standard Levels	55 lbs/day	55 lbs/day	80 lbs/day	-

Caltrans has statewide jurisdiction on projects within its right of way. Since the setting for projects varies extensively across the state, Caltrans has not and will not develop standard levels for CEQA. Further, because most air district thresholds have not been established by regulation or by delegation from a federal or state agency with regulatory authority over Caltrans, Caltrans is not required to adopt those standard levels in Caltrans' documents. The SMAQMD and YSAQMD standard levels are provided for reference.

Construction equipment and associated heavy-duty truck traffic generate diesel exhaust. Diesel exhaust poses both a health and nuisance impact to nearby receptors. These construction activities are expected to occur during a relatively short time. See the next section for a list of construction-related mitigation measures.

## **6.3 GHG Construction Emissions**

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. 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 reduced to some degree by longer intervals between maintenance and rehabilitation events. Currently, neither Caltrans nor SMAQMD/YSAQMD have adopted GHG standard levels that apply to construction projects. For informational purposes, GHG emissions from project construction were estimated using CAL-CET2021 version 1.0.2. There will be approximately 5532 tons of CO<sub>2</sub> generated over the course of the entire construction project.

# **Chapter 7 Avoidance, Minimization, and Mitigation Measures**

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## **7.1 Operational Minimization**

No avoidance or minimization measures are required, as the project would not produce substantial operational air quality impacts.

## **7.2 Construction Minimization**

Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures shall be implemented when practical, during all phases of construction work:

Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 “Dust Control”, Section 14-9 “Air Quality” and Section 18 “Dust Palliatives”.

The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the SMAQMD and YSAQMD.

## Appendix A Appendix A.Conformity Checklist

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### Transportation Air Quality Conformity Findings Checklist

#### PROJECT INFORMATION

Project Name: YOL-80 Corridor Improvements Project

DIST-CO-RTE-PM: 03-YOL/SAC-80, PM 0.0/11.72 & 0.0/1.36 and US-50 PM0.0/0.617

In Sacramento County and US-50 PM 0.0/3.12 in Yolo County

EA: 03-3H900

Federal Aid Number: [REDACTED]

Document Type: ☐ 23 USC 326 CE ☐ 23 USC 327 CE ☒ EA ☐ EIS

#### CHECKLIST

**Step 1.** Is the project located in a nonattainment or maintenance area for ozone, nitrogen dioxide, carbon monoxide (CO), PM<sub>2.5</sub>, or PM<sub>10</sub> per [EPA's Green Book](#) listing of non-attainment areas?

☐ If no, go to Step 17. Transportation conformity does not apply to the project.

☒ If yes, go to Step 2.

**Step 2.** Is the project exempt from conformity per [40 CFR 93.126](#) or [40 CFR 93.128](#)?

☐ If yes, go to Step 17. The project is exempt from all project-level conformity requirements (40 CFR 93.126 or 128) (check one box below and identify the project type, if applicable).

☐ 40 CFR 93.126<sup>1</sup>

Project type from Table 2:

☐ 40 CFR 93.128

☒ If no, go to Step 3.

**Step 3.** Is the project exempt from regional conformity per [40 CFR 93.127](#)?

☐ If yes, go to Step 8. The project is exempt from regional conformity requirements (40 CFR 93.127) (identify the project type).

Project type: [REDACTED]

☒ If no, go to Step 4.

**Step 4.** Is the project located in a region with a currently conforming RTP and TIP?

☒ If yes, the project is included in a currently conforming RTP and TIP per 40 CFR 93.115. The project's design and scope have not changed significantly from what was assumed in RTP conformity analysis (40 CFR 93.115[b]) Go to Step 8.

☐ If no and the project is located in an isolated rural area, go to Step 5.

☐ If no and the project is not located in an isolated rural area, **STOP** and do not proceed until a conforming RTP and TIP are adopted.

<sup>1</sup> Please refer to [Clarifications on Exempt Project Determinations](#) to verify exempt project type from Table 2. Road diets, auxiliary lanes less than one-mile, and ramp metering may be exempt under "projects that correct, improve, or eliminate a hazardous location or feature."





## Appendix B Appendix B.SAGOC MTP/SCS and MTIP Information (ID: CAL21276)

Development Only)							
830	Project Development Only	Various: SAC, PLA	Caltrans D3	G- System Management, Operations, and ITS	I-80 Managed Lanes from Yolo/Sac County line to the I-80/SR65 IC	Convert existing HOV lanes to toll lanes or possibly install a reversible lane	\$ -
1299	Planned	Various: SAC, PLA	Caltrans D3	C- Maintenance & Rehabilitation	In Sacramento and Placer Counties on Route 80 at various locations - Infill planting to preserve landscape freeway status	Infill planting to preserve landscape freeway status	\$ 1,250,000 \$ 2,048,27
3613	Planned	Various: SAC, SUT	Caltrans D3	G- System Management, Operations, and ITS	System Management/Traffic Operations System on SR99 between the San Joaquin County Line and SR20	Operational Improvements: traffic monitoring stations, closed circuit television, highway advisory radio, changeable message signs, and other system management infrastructure in Sacramento and Sutter Counties.	\$ 5,000,000 \$ 7,422,52
276	Programmed	Various: SOL, YOL, SAC	Caltrans D3	B- Road & Highway Capacity	I-80 / U.S. 50 Managed Lanes in both directions	On I-80 just west of Davis in both directions from the Kidwell Rd IC in Solano County (I-80 to the U.S. 50/I-5 interchange and I-80/West El Camino interchange) in Sacramento: Construct managed lanes, pedestrian/bicycle facilities and ITS elements (project description may change based on results from the Managed Lanes Study. Project is being evaluated for Expressed Toll Lanes, High Occupancy Toll Lanes, HOV lanes and reversible lanes). EA 3H900	\$ 442,000,000
775	Programmed	Various: YOL /COL	Caltrans D3	G- System Management, Operations, and ITS	I-5 Vertical Clearance Improvements in Yolo and Colusa Counties	In Yolo, Colusa, and Glenn Counties: increase vertical clearance of structures 22-0155, 22-0156, 22-0157, 15-0067, and 15-0075; improve 22-0155 and 22-0157 to current standards from current fair health rating (Accelerated Freight Delivery Project). 3H391	\$ 14,674,000
532	Planned	Various: YUB, SUT	Yuba Sutter Transit	E- Transit Capital (Vehicles)	Commuter Bus Replacement B	Replace 5 Commuter Buses	\$ 3,125,000 \$ 3,535,65
534	Planned	Various: YUB, SUT	Yuba Sutter Transit	E- Transit Capital (Vehicles)	Commuter Bus Replacement C	Replace 5 Commuter Buses	\$ 3,125,000 \$ 3,807,50
298	Programmed	Various: YOL, YUB, SUT	Caltrans D3	E- Transit Capital (Vehicles)	Commuter Bus Replacement C	Replace 2 Commuter Buses	\$ 1,562,500 \$ 1,953,13
323	Programmed	Various: YOL, YUB, SUT	Caltrans D3	E- Transit Capital (Vehicles)	Commuter Bus Replacement B	Replace 2 Commuter Buses	\$ 1,562,500 \$ 1,953,13
333	Programmed	Various: YOL, YUB, SUT	Caltrans D3	E- Transit Capital (Vehicles)	Commuter Bus Replacement B	Replace 2 Commuter Buses	\$ 1,562,500 \$ 1,953,13



## Appendix C Interagency Consultation

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**From:** Shengyi Gao <SGao@sacog.org>

**Sent:** Monday, October 18, 2021 5:35 PM

**To:** Vaughn, Joseph (FHWA) <Joseph.Vaughn@dot.gov>; Fong, Alexander Y@DOT <alexander.fong@dot.ca.gov>; Johnson, Antonio (FHWA) <antonio.johnson@dot.gov>; Dave Johnston <dave.johnston@edcgov.us>; David Yang <DYang@airquality.org>; Coleman, Douglas B@DOT <douglas.coleman@dot.ca.gov>; King, Heather@ARB <Heather.King@arb.ca.gov>; Janice Lam Snyder <JLam@airquality.org>; Jerry Barton <jbarton@edctc.org>; John Ungvarsky <Ungvarsky.John@epa.gov>; Jose Luis Caceres <JCaceres@sacog.org>; Karina O'Connor <oconnor.karina@epa.gov>; Kathleen Hanley <khanley@pctpa.net>; Sanchez, Lucas@DOT <Lucas.Sanchez@dot.ca.gov>; Mark Loutzenhiser <mloutzenhiser@airquality.org>; Pittenger, Patrick (FHWA) <patrick.pittenger@dot.gov>; Paul Hensleigh <PHensleigh@ysaqmd.org>; Paul Philley <pphilley@airquality.org>; Renee DeVere-Okie <RDeVere-Okie@sacog.org>; Tavitias, Rodney A@DOT <rodney.tavitias@dot.ca.gov>; Christian, Shalanda M@DOT <shalanda.christian@dot.ca.gov>; Sondra Spaethe <sspaethe@fraqmd.org>; Wright Molly <mwright@airquality.org>; Cho, Youngil@DOT <Youngil.Cho@dot.ca.gov>; Kalandiyur, Nesamani@ARB <nesamani.kalandiyur@arb.ca.gov>; Yu-Shuo Chang <YChang@placer.ca.gov>; Hendrawan, Kevin@ARB <Kevin.Hendrawan@arb.ca.gov>

**Cc:** Lee, Jason@DOT <jason.lee@dot.ca.gov>

**Subject:** RE: POAQC of Caltrans I80 improvements project (CAL21276), due 10/15

EXTERNAL EMAIL. Links/attachments may not be safe.

Hi all,

The Project Level Conformity Group has determined that the Caltrans I80 improvements project (CAL21276) is NOT a Project of Air Quality Concern (POAQC).

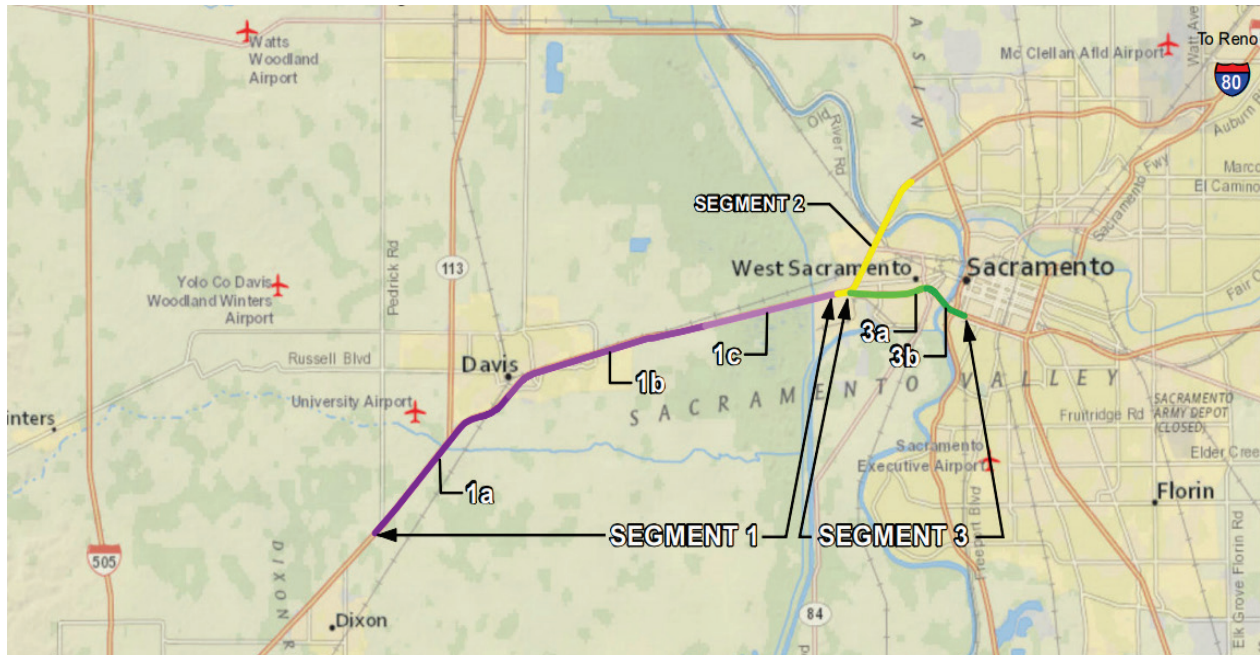
EPA concurred on 10/15/2021 and FHWA concurred on 10/18/2021.

Thanks to you all!



## Appendix D Project Limits with Segments 1-3

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## **Appendix E** Road Construction Emission Model Inputs and Outputs

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Yolo 80 Corridor Improvements Project  
Air Quality Report

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PROJECT: YOL-80 ML Project (EA-03-3H900) - Roadway DATE:

**PROJECT INFORMATION**

Project Start Date (mm/dd/yy) 06/28/25 Road Type Freeway Project Length 20.8 (miles) Project Type Mainline Improvements Construction Cost \$211,111,111 Estimated Working Days 198

Caltrans Construction Price Index  
2020 - 4th Quarter, last 12 months 100.00  
Latest 4th Quarter, last 12 months

Operation	Start Dates (mm/dd/yy)	Length of Operations (working days)	Daily Disturbed Areas (acres)		Mitigation Factors
			Optional Input	Default	
Land Clearing/Grubbing	06/30/25	12		20.97	50%
Roadway Excavation & Removal	07/16/25	28		8.99	50%
Structural Excavation & Removal	08/25/25	19		13.25	50%
Base/Subbase/Imported Borrow	09/19/25	19		13.25	50%
Structural Concrete	10/16/25	20			
Paving	11/13/25	37			
Drainage/Environment/Landscaping	01/05/26	40			
Traffic Signalization/Signage/Striping/Painting	03/02/26	23			
Other Operations	04/02/26				
Total Working Days (calculated)		198 working days			

**Painting and Asphalt Application**

Painting Water-Based Coating (gallons) Solvent-Based Coating (gallons) Total Weight (tons) Diluent Content 35 (%)

**FLEET INFORMATION**

Off-Road Engine Emission Standards Default

Terms & Conditions Version History User's Guide **Input** Output Notes Methodology Calculation Default A Default A Supplemental Defa ...

YOLO 80 Corridor Improvements Air Quality Report

YOLO 80 Corridor Improvements Air Quality Report

Yolo 80 Corridor Improvements Project  
Air Quality Report

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ProjectName... YOL-80 ML Bridges

PROJECT: YOL-80 ML Bridges DATE:

**PROJECT INFORMATION**

Clear All User Input for Project Information

Project Start Date (mm/dd/yy) 06/28/25  
Road Type Freeway  
Project Length 1.1 (miles)

Project Type Bridge Construction & Preservation  
Construction Cost \$47,600,000  
Estimated Working Days 820

Caltrans Construction Price Index  
2020 - 4th Quarter, last 12 months 100.00  
Latest 4th Quarter, last 12 months

Price index data can be requested from Caltrans Headquarters

**Operation**

Operation	Start Dates (mm/dd/yy)	Length of Operations (working days)	Daily Disturbed Areas (acres)		Mitigation Factors
			Optional Input	Default	
Land Clearing/Grubbing	06/30/25	15		0.92	50%
Roadway Excavation & Removal	07/21/25	56		0.25	50%
Structural Excavation & Removal	10/07/25	97		0.14	50%
Base/Subbase/Imported Borrow	02/19/26	88		0.16	50%
Structural Concrete	06/23/26	384			
Paving	12/13/27	42			
Drainage/Environment/Landscaping	02/09/28	37			
Traffic Signalization/Signage/Striping/Painting	03/31/28	101			
Other Operations	08/21/28				
Total Working Days (calculated)		820 working days			

Update Gantt Chart

**Operation Date**

Operation	01/01/22	11/20/22	10/10/23	08/29/24	07/19/25	06/08/26
Land Clearing/Grubbing						
Roadway Excavation & Removal						
Structural Excavation & Removal						
Base/Subbase/Imported Borrow						
Structural Concrete						
Paving						
Drainage/Environment/Landscaping						
Traffic Signalization/Signage/Striping/Painting						
Other Operations						

**Painting and Asphalt Application**

Painting Water-Based Coating (gallons)  
Solvent-Based Coating (gallons)  
Cutback Asphalt Total Weight (tons)  
Diluent Content 35 (%)

**FLEET INFORMATION**

Reset Default Values for Fleet Information

Off-Road Engine Emission Standards Default

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Yolo 80 Corridor Improvements Project  
Air Quality Report

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1																
2																
3	PROJECT: YOL-80 ML Bridges															DATE: <input type="text"/>
4																
5																
6																
7	Summary of Project Emissions and Consumption															
8		TOG	ROG	CO	NOx	PM10	PM2.5	CO2	CH4	N2O	BC	HFC	Diesel Fuel	Gasoline Fuel	Electricity	
9	Daily Average (lbs/day; gal fuel/day; kWh electricity/day)	1.915	1.796	8.193	10.248	1.380	0.759	2770	0.062	0.133	0.118	0.140	88	29	9,343	
10	Maximum Daily Average (lbs/day; gal fuel/day; kWh electricity/day)	3.402	3.173	22.788	21.350	9.656	1.825	4918	0.133	0.212	0.185	0.278	179	57	26,910	
11	Annual Average (tons/year; gal fuel/year; kWh electricity/year)	0.196	0.184	0.840	1.050	0.141	0.078	284	0.006	0.014	0.012	0.014	18,132	5,944	1,915,344	
12																
13	Summary by Source															
14	Source	TOG	ROG	CO	NOx	PM10	PM2.5	CO2	CH4	N2O	BC	HFC	Diesel Fuel	Gasoline Fuel	Electricity	
15	On-Road	0.045	0.036	0.750	0.522	0.007	0.006	598	0.004	0.050	0.002	0.058	25,342	23,777	7,661,375	
16	Off-Road	0.740	0.700	2.610	3.680	0.283	0.277	537	0.022	0.004	0.047	-	47,186	-	-	
17	Area-Wide Fugitive Dust	-	-	-	-	0.276	0.028	-	-	-	-	-	-	-	-	
18	Painting and Asphalt Application	0.000	0.000	-	-	-	-	-	-	-	-	-	-	-	-	
19	Project Total	0.785	0.736	3.359	4.202	0.566	0.311	1136	0.026	0.054	0.048	0.058	72,528	23,777	7,661,375	
20																
21																
22	Summary by Operation															
23	Project Phases	TOG	ROG	CO	NOx	PM10	PM2.5	CO2	CH4	N2O	BC	HFC	Diesel Fuel	Gasoline Fuel	Electricity	
24	Land Clearing/Grubbing	0.009	0.008	0.046	0.049	0.072	0.010	13	0.000	0.001	0.001	0.000	965	197	32,733	
25	Roadway Excavation & Removal	0.061	0.057	0.374	0.382	0.098	0.036	90	0.002	0.004	0.005	0.003	6,662	1,291	208,473	
26	Structural Excavation & Removal	0.079	0.074	0.247	0.393	0.093	0.031	124	0.003	0.007	0.004	0.006	8,124	2,759	541,689	
27	Base/Subbase/Imported Borrow	0.150	0.140	1.003	0.939	0.144	0.080	216	0.006	0.009	0.006	0.007	15,796	3,055	802,499	
28	Structure Concrete	0.376	0.354	1.219	1.723	0.108	0.106	441	0.010	0.019	0.024	0.025	27,582	9,284	2,560,787	
29	Paving	0.023	0.022	0.071	0.153	0.012	0.011	32	0.001	0.002	0.002	0.001	2,110	660	353,872	
30	Drainage/Environment/Landscaping	0.034	0.032	0.100	0.198	0.016	0.015	42	0.001	0.002	0.003	0.002	2,773	814	453,367	
31	Traffic Signalization/Signage/Striping/Painting	0.054	0.050	0.300	0.364	0.022	0.022	177	0.002	0.011	0.004	0.014	8,515	5,717	2,717,954	
32	Other Operation	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	-	-	-	
33	Total	0.785	0.736	3.359	4.202	0.566	0.311	1136	0.026	0.054	0.048	0.058	72,528	23,777	7,661,375	

Terms & Conditions

Version History

User's Guide

Input

Output

Notes

Methodology

Calculation

Default A

Default A Supplemental

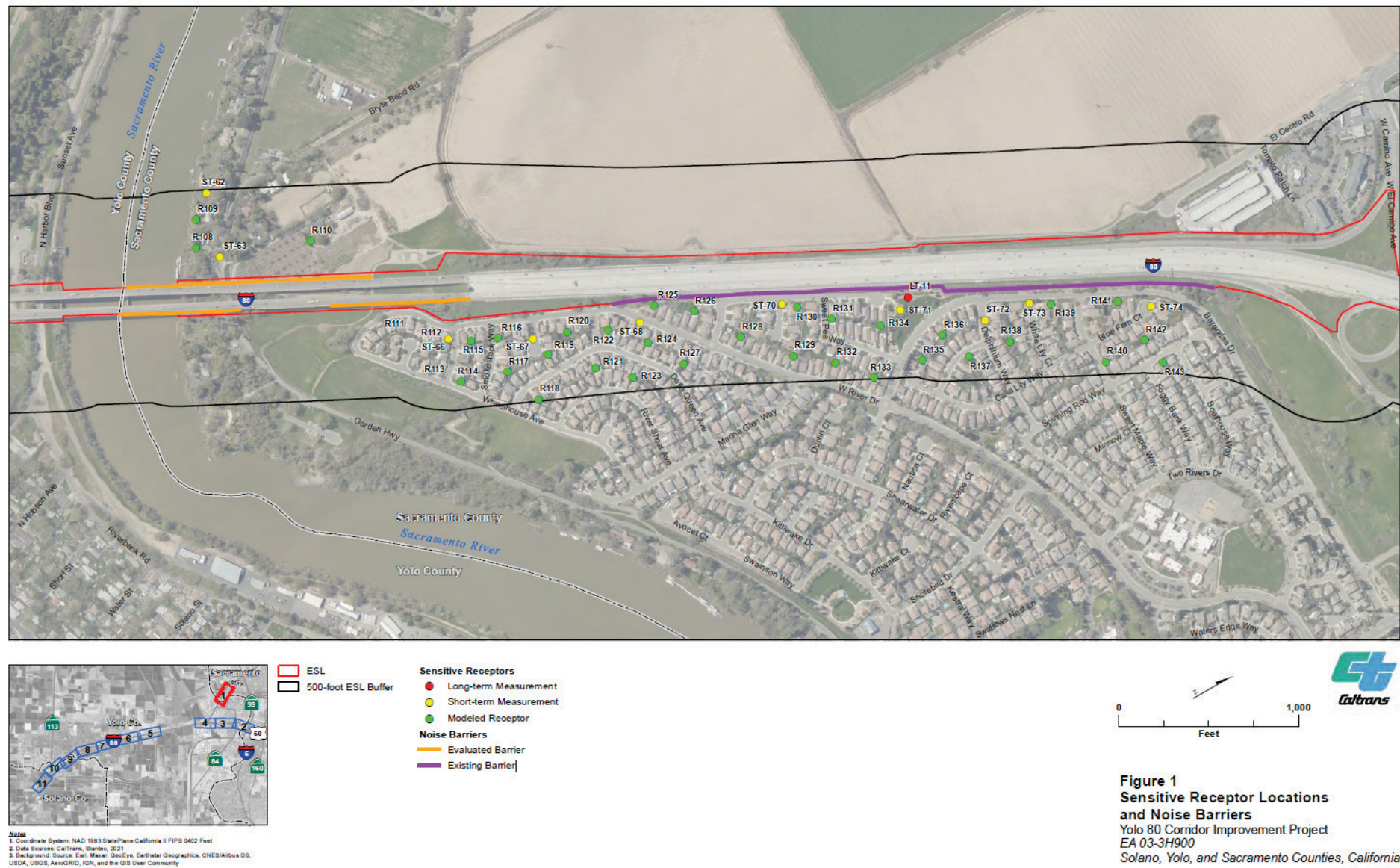
Data ...

Zoom level. Click to open the Zoom dialog box

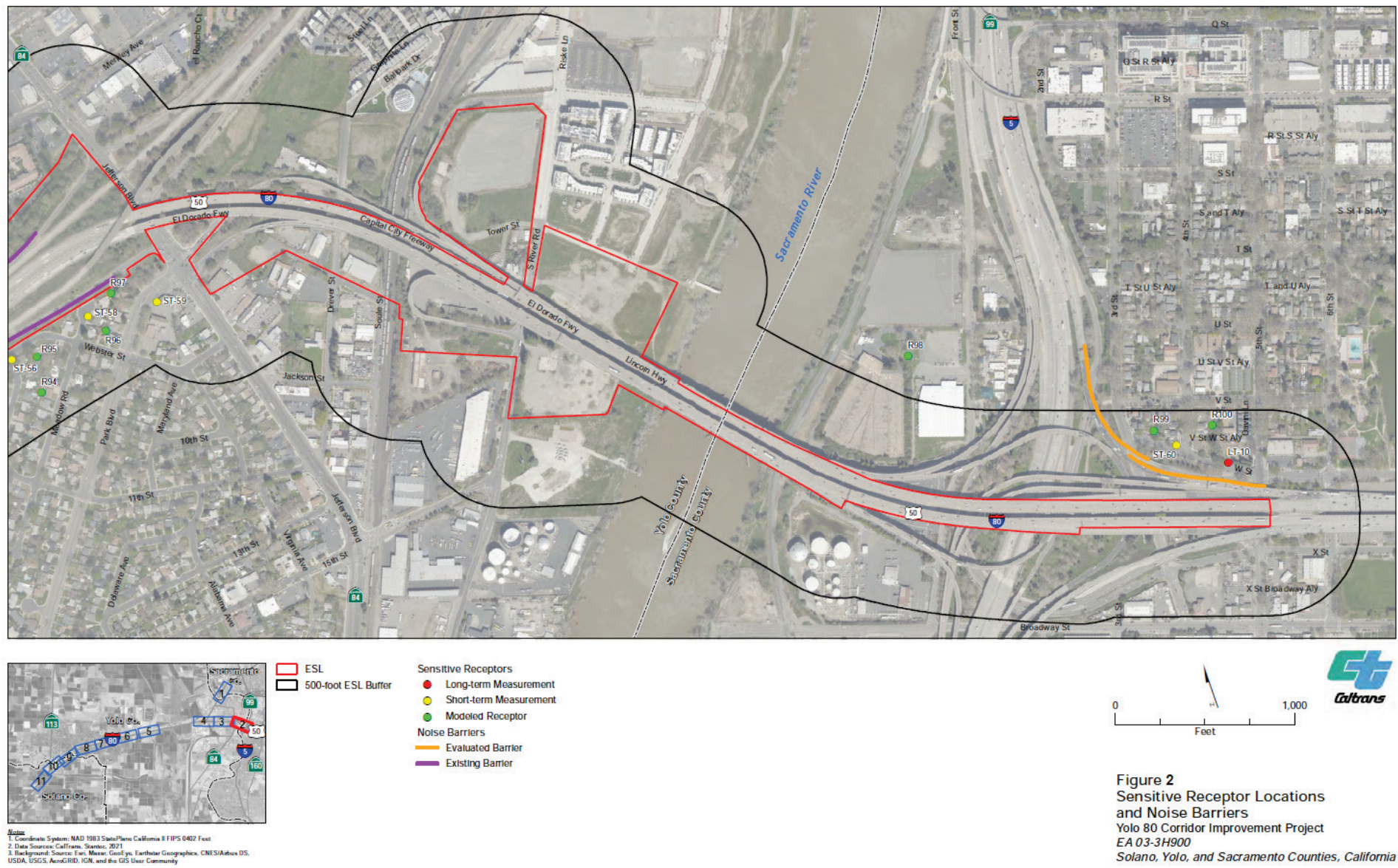
## **Appendix F** Sensitive Receptors Maps

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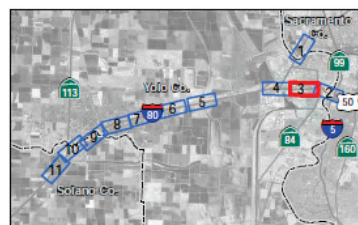
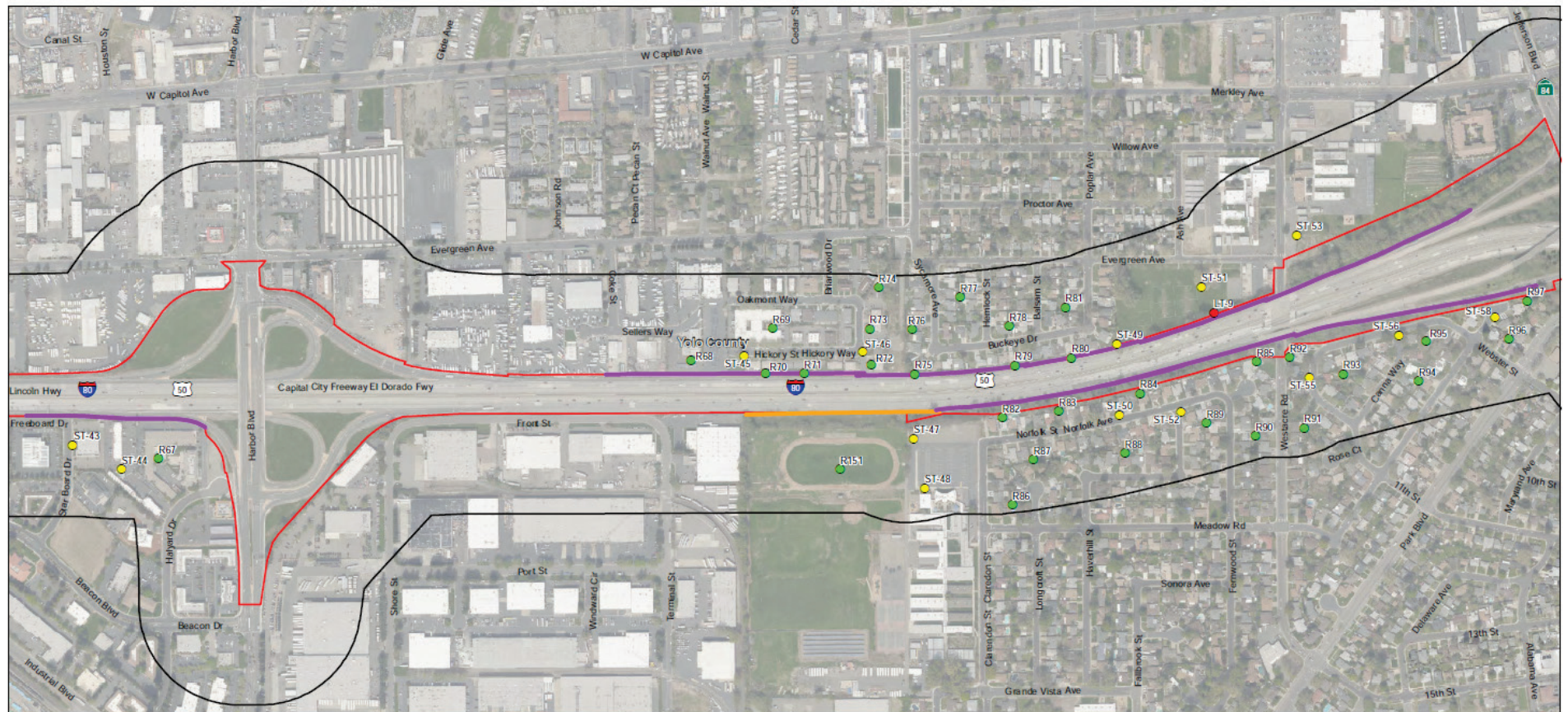






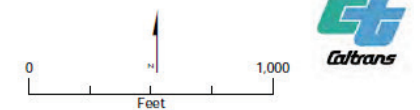


Yolo 80 Corridor Improvements Project  
Air Quality Report



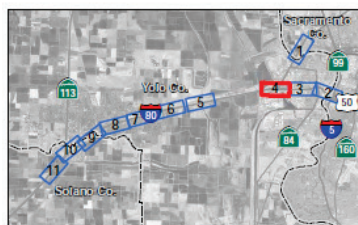
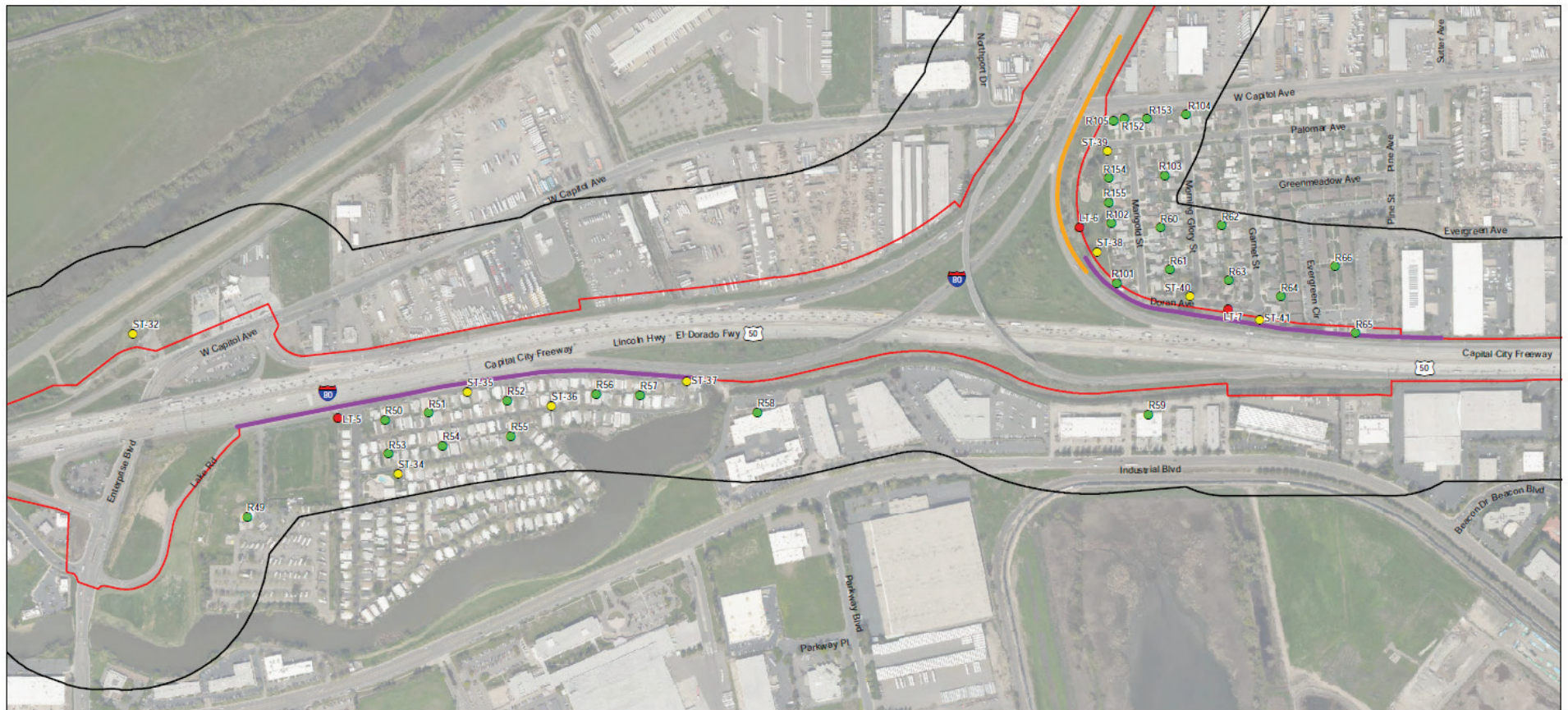
ESL  
500-foot ESL Buffer

Sensitive Receptors  
● Long-term Measurement  
● Short-term Measurement  
● Modeled Receptor  
Noise Barriers  
— Evaluated Barrier  
— Existing Barrier



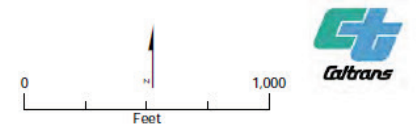
**Figure 3**  
Sensitive Receptor Locations  
and Noise Barriers  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California





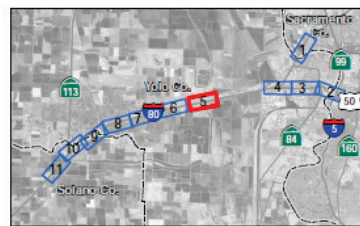
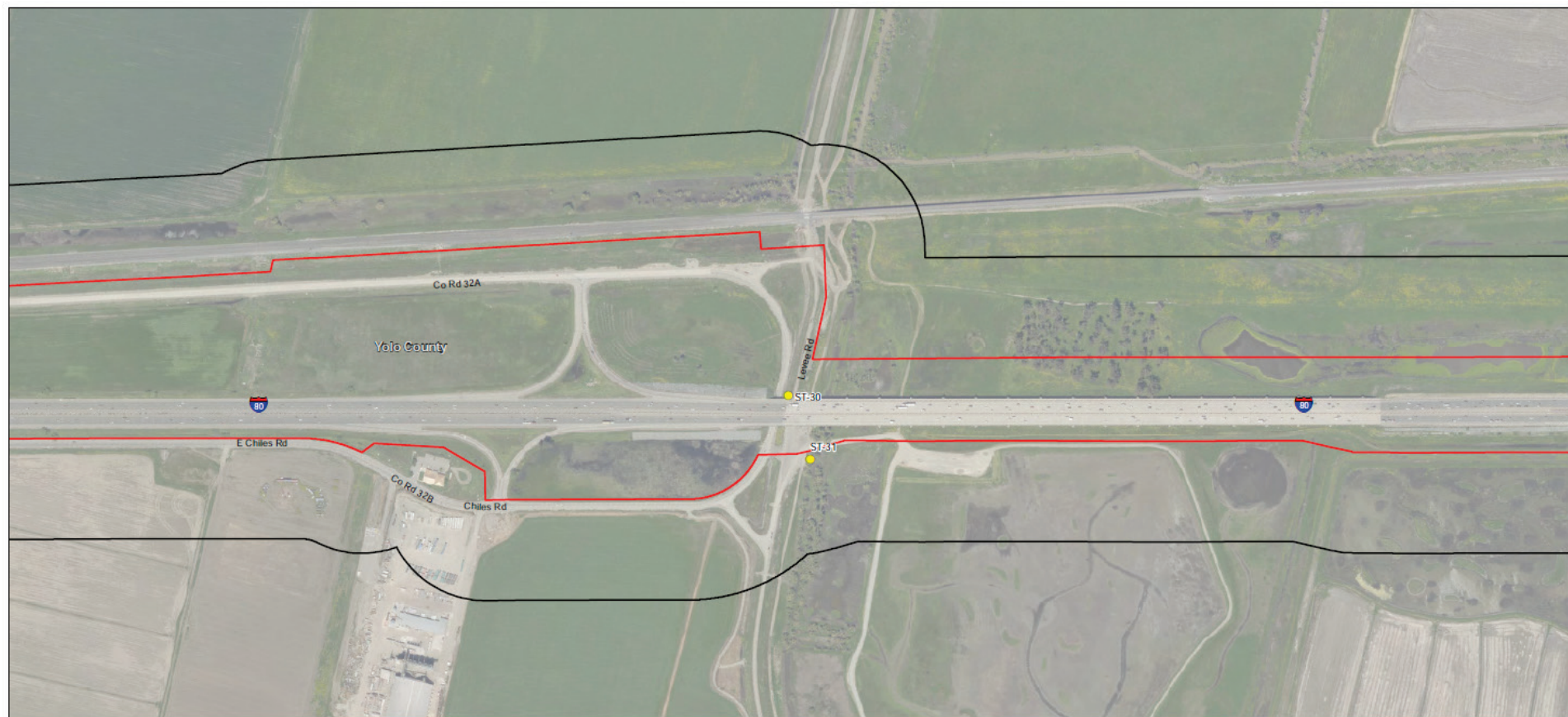
Notes:  
1. Coordinate System: NAD 1983 StatePlane California 3 FIPS 4602 Feet  
2. Data Sources: Caltrans, Sonoma, 2021  
3. Background: Sources: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- ESL
- 500-foot ESL Buffer
- Sensitive Receptors**
  - Long-term Measurement
  - Short-term Measurement
  - Modeled Receptor
- Noise Barriers**
  - Evaluated Barrier
  - Existing Barrier



**Figure 4**  
Sensitive Receptor Locations  
and Noise Barriers  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California





1. Coordinate System: NAD 1983 StatePlane California II FIPS 4002 Feet  
2. Data Source: Caltrans, Statistik, 2021  
3. Background Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- ESL
- 500-foot ESL Buffer
- Sensitive Receptors
  - Long-term Measurement
  - Short-term Measurement
  - Modeled Receptor
- Noise Barriers
  - Evaluated Barrier
  - Existing Barrier

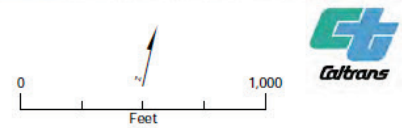


Figure 5  
Sensitive Receptor Locations  
and Noise Barriers  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California

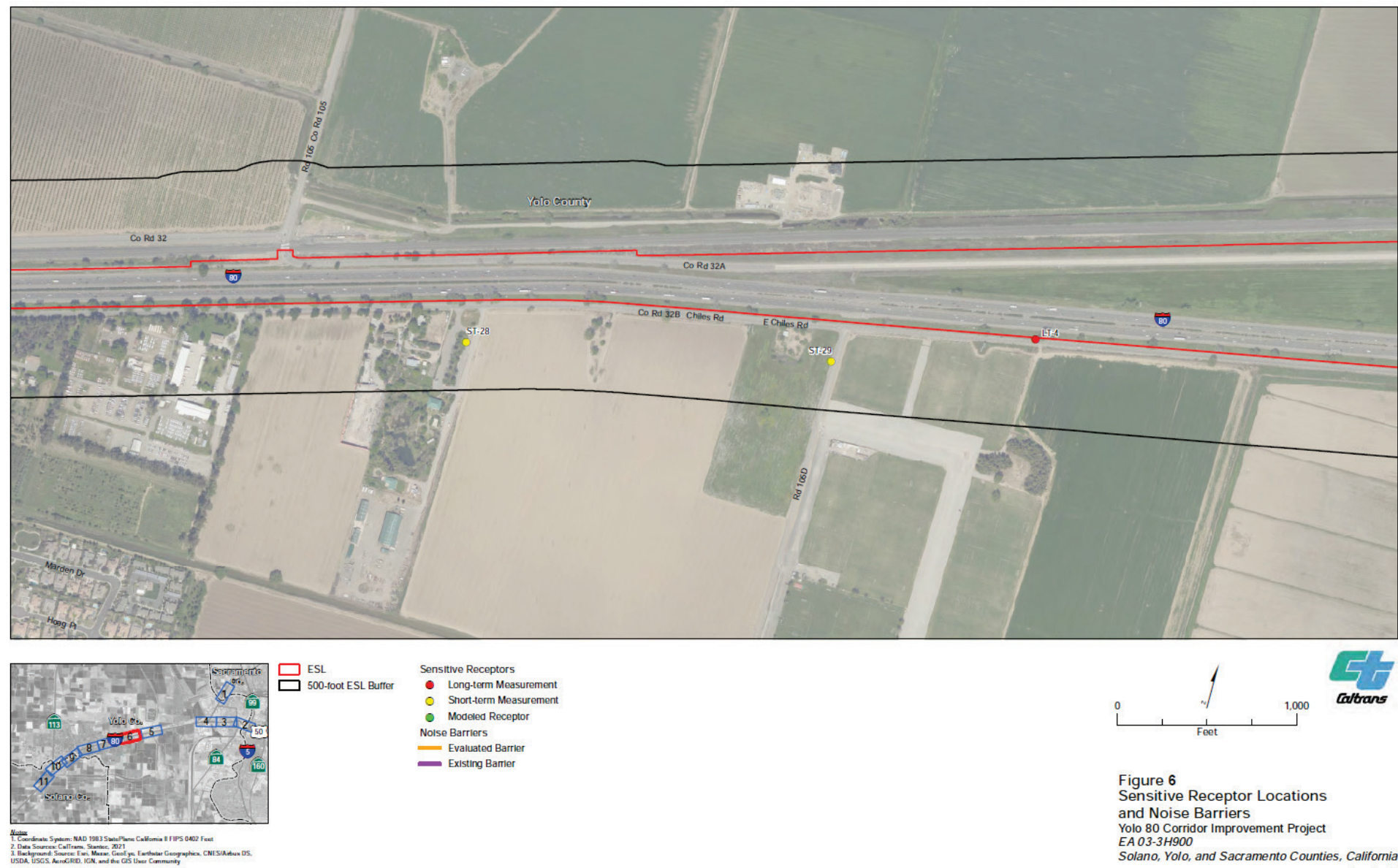
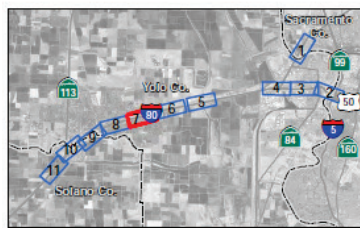


Figure 6  
Sensitive Receptor Locations  
and Noise Barriers  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California





1. Coordinate System: NAD 1983 StatePlane California 8 FIPS 0402 Feet  
2. Data Sources: Caltrans, Stantec, 2021  
3. Background Sources: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- ESL
- 500-foot ESL Buffer
- Sensitive Receptors
  - Long-term Measurement
  - Short-term Measurement
  - Modeled Receptor
- Noise Barriers
  - Evaluated Barrier
  - Existing Barrier

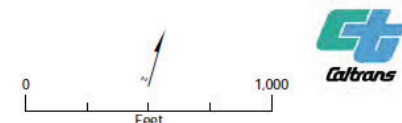
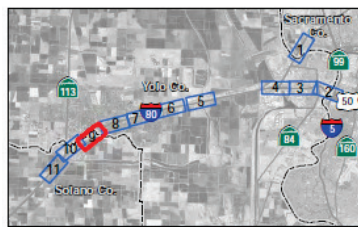


Figure 7  
Sensitive Receptor Locations  
and Noise Barriers  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California  
Sheet 7 of 11



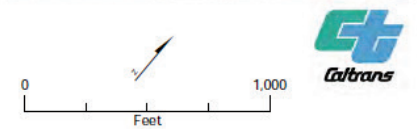






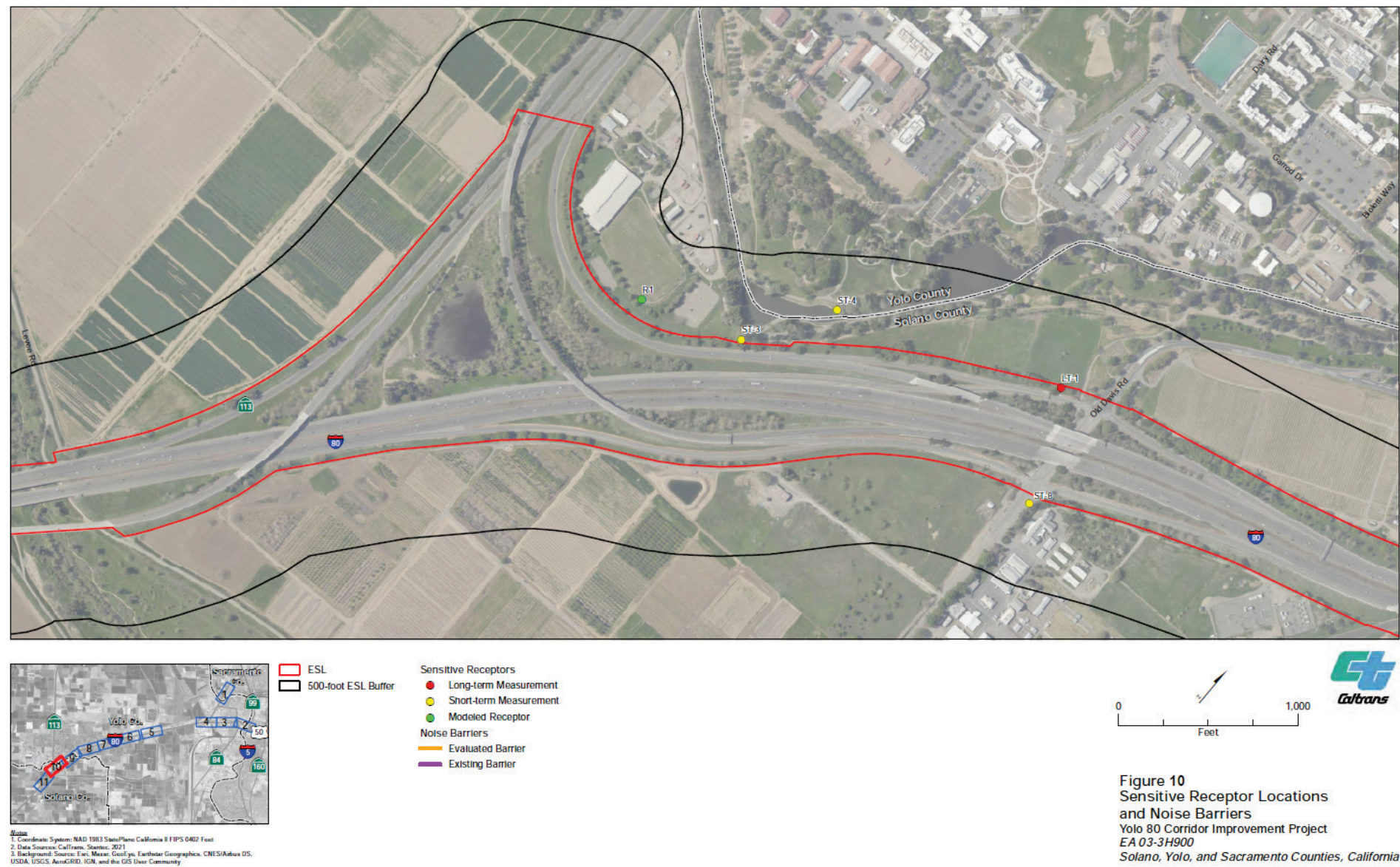
**Notes:**  
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2. Data Sources: Caltrans, 2021  
3. Background: Streets: Esri, Mapbox, Google, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- ESL
- 500-foot ESL Buffer
- Sensitive Receptors**
  - Long-term Measurement
  - Short-term Measurement
  - Modeled Receptor
- Noise Barriers**
  - Evaluated Barrier
  - Existing Barrier

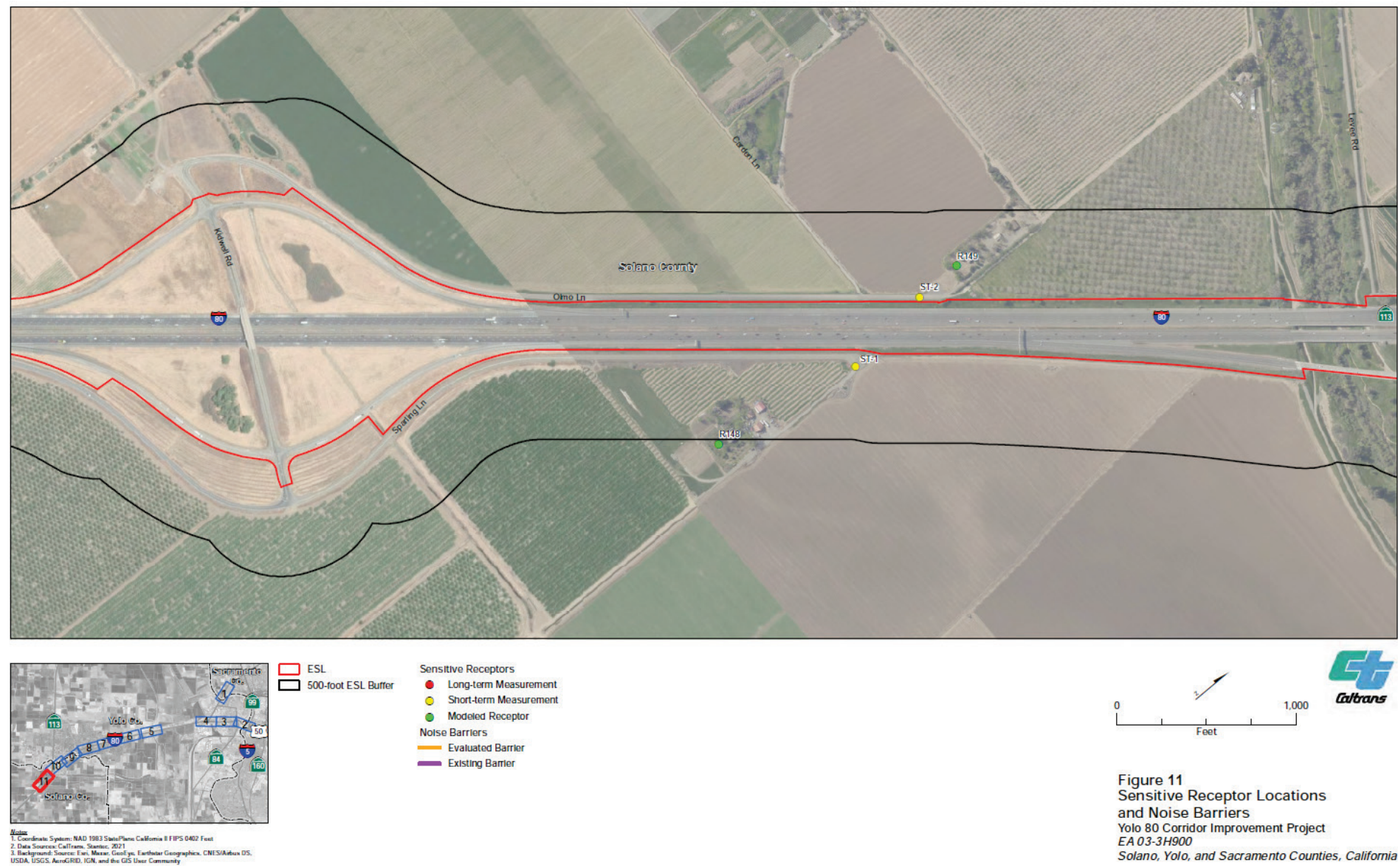


**Figure 9**  
Sensitive Receptor Locations  
and Noise Barriers  
Yolo 80 Corridor Improvement Project  
EA 03-3H900  
Solano, Yolo, and Sacramento Counties, California











**APPENDIX K**  
**STATE HISTORIC PRESERVATION**  
**OFFICER DETERMINATIONS OF**  
**ELIGIBILITY**





**DEPARTMENT OF PARKS AND RECREATION  
OFFICE OF HISTORIC PRESERVATION**

Armando Quintero, Director

Julianne Polanco, State Historic Preservation Officer

1725 23rd Street, Suite 100, Sacramento, CA 95816-7100

Telephone: (916) 445-7000

FAX: (916) 445-7053

calshpo.ohp@parks.ca.gov

[www.ohp.parks.ca.gov](http://www.ohp.parks.ca.gov)

January 12, 2022

VIA EMAIL

In reply refer to: FHWA\_2021\_0811\_001

David Price, Section 106 Coordinator  
Cultural Studies Office  
Division of Environmental Analysis  
1120 N Street, PO Box 942873, MS-27  
Sacramento, CA 94273-0001

Subject: Finding of Effect for the Proposed Sol, Yol, Sac 80-50, Yolo 80, Corridor Improvement Project in Solano, Yolo, and Sacramento Counties, CA

Dear Mr. Price:

Caltrans is initiating consultation regarding the above project in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer (SHPO), and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (106 PA). As part of your documentation, Caltrans submitted a Historic Property Survey Report (HPSR) and a Finding of Effect (FOE) for the proposed project.

Caltrans District 3 proposes a highway improvement project on the following segments in Sacramento, Solano, and Yolo Counties:

- Sacramento
  - 50 – 0.00 - 0.617 PM
  - 80 – 0.00 - 1.36 PM
- Solano
  - 80 – 40.7 - 44.7 PM
- Yolo
  - 50 – 0.00 - 3.16 PM
  - 80 – 0.00 - 11.72 PM

The Undertaking would widen the existing freeway and add managed lanes of lane conversion, restriping, shoulder widening, and median reconstruction with a

concrete barrier. A full project description can be found beginning on Page 2 of the FOE.

Identification and evaluation efforts for the undertaking have resulted in the documentation of one historic property within the Area of Potential Effects (APE): Reclamation District 900 (RD 900). Caltrans assumed RD 900 to be eligible for listing in the National Register under Criterion A for the purposes of this project only, pursuant to Stipulation VIII.C.4 of the Section 106 PA.

Caltrans, pursuant to Section 106 PA Stipulation X.B.2, found that there will be no adverse effect. The undertaking will not destroy or alter any contributing feature of RD 900 and will not affect the resource's integrity or ability to convey its historical significance.

Based on my review of the submitted documentation, I have no objections to the finding of no adverse effect for this undertaking.

If you have any questions, please contact Natalie Lindquist at [natalie.lindquist@parks.ca.gov](mailto:natalie.lindquist@parks.ca.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Julianne', with a long horizontal stroke extending to the right.

Julianne Polanco  
State Historic Preservation Officer



**DEPARTMENT OF PARKS AND RECREATION  
OFFICE OF HISTORIC PRESERVATION**

Armando Quintero, Director

Julianne Polanco, State Historic Preservation Officer

1725 23rd Street, Suite 100, Sacramento, CA 95816-7100

Telephone: (916) 445-7000

FAX: (916) 445-7053

calshpo.ohp@parks.ca.gov

[www.ohp.parks.ca.gov](http://www.ohp.parks.ca.gov)

September 30, 2021

VIA EMAIL

In reply refer to: FHWA\_2021\_0811\_001

Ms. Erin Dwyer, Branch Chief  
Cultural Resources South  
Caltrans North Region Environmental  
703 B Street  
Marysville, CA 95901

Subject: Determinations of Eligibility for the Proposed Sol, Yol, Sac-80/50, Yolo-80, Corridor Improvement Project in Solano, Yolo and Sacramento County, California

Dear Ms. Dwyer:

Caltrans is initiating consultation regarding the above project in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer (SHPO), and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). As part of your documentation, Caltrans submitted a Historic Property Survey Report (HPSR), an Archaeological Survey Report, two Extended Phase I Reports, and a Historic Resources Evaluation Report for the proposed project.

The proposed project involves the following elements:

- Adding managed lanes on I-80 by widening the existing roadway through a combination
- of lane conversion, restriping, shoulder widening, and median reconstruction with a
- concrete barrier.
- Widening or replacement of existing structures within the project area would be required.
- In addition, drainage modifications would be necessary due to median reconstruction in
- the locations where sheet flow currently drains.
- Vegetation trimming and removal would take place throughout the length of the project.
- Existing intelligent transportation systems (ITS) elements and infrastructure would be



- expanded and modified, including ramp meters, fiber-optic conduit and cables, and
- overhead signs.
- Staging areas would be located at the I-80/West El Camino Avenue interchange, South River Road, I-80/Richards Boulevard interchange, the I-80 and SR 113 interchange, and along Kidwell Road. These areas total approximately 53.3 acres and would be used for equipment storage and maintenance, storage of construction materials, fuels, lubricants, solvents, and other needed materials during construction.

Pursuant to Stipulation VIII.C.6 of the Section 106 PA, Caltrans requests concurrence that the following properties are not eligible for the National Register of Historic Places (NRHP):

- 3620 Chiles Road, Davis, CA
- 3702 Chiles Road, Davis, CA
- 3708 Chiles Road, Davis, CA
- 3714 Chiles Road, Davis, CA
- 3720 Chiles Road, Davis, CA
- 3726 Chiles Road, Davis, CA
- 3732 Chiles Road, Davis, CA

Caltrans is also assuming Reclamation District 900 to be eligible for the NRHP for the purposes of the undertaking.

Based on review of the submitted documentation, I concur.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at [natalie.lindquist@parks.ca.gov](mailto:natalie.lindquist@parks.ca.gov).

Sincerely,



State Historic Preservation Officer

**APPENDIX L**  
**ASSEMBLY BILL 52 CONSULTATION**



# **Appendix L**      **Assembly Bill 52 Consultation**

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## **L.1      Native American Correspondence**

The Native American Heritage Commission (NAHC) was requested to review the Sacred Lands Files for any Native American sacred site within the or adjacent to the project area. The results indicated that there was a positive Sacred Land File result in the section for the project area, and noted that the United Auburn Indian Community and the Lone Band of Miwuk Indians as the point of contact for that result (Appendix L2). A list of Native American groups and individuals that may have knowledge or concerns regarding cultural resources for the project area was also included by the NAHC.

Correspondence was sent June 4th, 2020 and was followed up by phone calls and/or emails, to the Native Americans who were identified as having an interest in projects within this area by the NAHC (See Consultation Log in Appendix L2 for more information).

## **L.2      Contacts**

- Rhonda Morningstar Pope, Chairperson, Buena Vista Rancheria of Me-Wuk Indians
- Clyde Prout, Chairman, Colfax-Todds Valley Consolidated Tribe
- Sara Dutschke Setchwaelo, Chairperson, Lone Band of Miwok Indians
- Cosme Valdez, Chairperson, Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- Regina Cuellar, Chairperson, Shingle Springs Band of Miwok Indians
- Grayson Coney, Cultural Director, Ts'i Akim Maidu
- Gene Whitehouse, Chairperson, United Auburn Indian Community of the Auburn Rancheria
- Raymond Hitchcock, Chairperson, Wilton Rancheria
- Anthony Roberts, Chairperson, Yocha Dehe Wintun Nation
- Charlie Wright, chairperson, Cortina Rancheria-Kletsel Dehe Band of Wintun Indians
- Marlene Sanchez, Chairperson, Guidiville Indian Rancheria

The Colfax-Todds Valley Consolidated Tribe noted that they would like to defer to a tribe more familiar with the project area. Buena Vista Rancheria of Me-Wuk Indians reviewed the project and did not request additional consultation but requested to be notified if any cultural resources are documented. Guidiville Indian Rancheria had no concerns and requested copies of the reports to add to their records.

Shingle Springs noted areas of concern in West Sacramento and asked for continued consultation. United Auburn Indian Community notes areas of concern in the Bryte Bend area and identified three specific locations of sensitivity. Ground disturbance is occurring at only one area of United Auburns concern and the Geotech bore at this location will be monitored in lieu of an Extended Phase I (XPI) trench at this location. The Yocha Dehe Wintun Nation noted areas of concern near Davis due to the proximity of known resources and requested to monitor testing. Wilton Rancheria also noted areas of concern in West Sacramento and a desire to continue consultation. A joint meeting was held with concern tribes were project details and areas of concern were discussed.

The Yocha Dehe Wintun Nation provided a monitor for the XPI trenching, and UAIC will monitor Geotech work at Bryte Bend bridge. The XPI was negative and the Geotech work is forthcoming.

The Hattie Weber Museum, Sacramento Historical Society, Sacramento History Museum, Solano County Historical Society, and Yolo County Historical Society were also contacted in June 2020. (Appendix L2). The letters were followed up by emails and/or phone messages. The Sacramento History Museum suggested contacting another individual, while the Yolo County Historical Society responded that they have no comments. Responses were not received from the other historical societies. Please see the consultation log and corresponding documentation for additional detail.

**Table L-1. Consultation Log**

(Log created 2/1/2021)

Date	Type	Name	Entity	Caltrans Rep	Comments
6/4/2020	Email	Sara Setchwaelo, Chairperson	Ione Band of Miwok Indians	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106/AB52 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Cosme Valdez, Chairperson	Nashville Enterprise Miwok-Maidu-Nishinam Tribe	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Regina Cuellar, Chairperson	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Clyde Prout, Chairperson	Colfax-Todds Valley Consolidated Tribe	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Grayson Coney, Cultural Director	Tsi Akim Maidu	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Gene Whitehouse, Chairperson	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106/AB52 consultation letter requesting questions, comments, concerns regarding proposed construction activities.

Date	Type	Name	Entity	Caltrans Rep	Comments
6/4/2020	Email	Anthony Roberts, Chairperson	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106/AB52 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Rhonda Morningstar Pope, Chairperson	Buena Vista Rancheria of Me Wuk Indians	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Raymond Hitchcock, Chairperson	Wilton Rancheria	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106/AB52 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Charlie Wright, Chairperson	Cortina Rancheria	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Merlene Sanchez, Chairperson; Meyo Marrufo EPA Director	Guidiville Indian Rancheria	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	From: Pamela Cubbler	Colfax-Todds Valley Consolidated Tribe	Lisa Bright, DNAC	Ms. Cubbler responded that she looked at the project and would like to defer to a tribe more familiar with the project area. However, if no responses are received, they are happy to step in.
6/4/2020	Email	To: Pamela Cubbler	Colfax-Todds Valley Consolidated Tribe	Lisa Bright, DNAC	Lisa responded thanking Pamela for her response and noting that if none of the other consulting tribes respond that we will contact her.

Date	Type	Name	Entity	Caltrans Rep	Comments
6/4/2020	Email	Bill George	Sacramento Historical Society	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Delta Mellow	Sacramento History Museum	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Alfonso Sanchez Vouchez, President	West Sacramento Historical Society	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Dennis Dingerhans, Director	Hattie Weber Museum	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	Kathy Harryman, President	Yolo County Historical Society	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/4/2020	Email	To whom it may concern	Solano County Historical Society	Lisa Bright, DNAC	Mailed project consultation package including location maps, proposed construction activities, and Section 106 consultation letter requesting questions, comments, concerns regarding proposed construction activities.
6/19/2020	Email	From: Katie Solorio	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Response to initial consultation letter asking for continued consultation. Request for prior reports/record searches. Appoints Kara Perry and asks to schedule a consultation.



Date	Type	Name	Entity	Caltrans Rep	Comments
6/22/2020	Email	To: Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Response to 6/19/20 email thanking them for the response and documenting request for continued consultation. Notes that studies and the record search are in progress. Asks if Kara would like to schedule a call or webex to further discuss the project.
6/19/2020	Phone Call (3:15 p.m.)	From: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Anna left a voicemail on Lisa's work line but followed up by calling her cell noting to ignore the voicemail. Noted that a formal letter re: consultation is forthcoming but that UAIC would like to consult on this project but will be internally coordinating with the Yocha Dehe. Discussed the possibility of joint meetings/updates moving forward.
6/23/2020	Email	From: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Email from Anna stating that UAIC would like to consult under this project. Notes they are aware of several culturally sensitive areas along this corridor. Notes we can discuss further at the proposed July meeting to discuss Sacramento area projects.
6/24/2020	Email	To: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa thanked Anna for the response and noted she has documented UAIC's request for continued consultation. Notes that if it is possible to provide a sensitivity map similar to what we discussed on 03-4F650 it would be appreciated. I will follow up to schedule the meeting.
6/24/2020	Email	From: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Anna asked for the shp file to prepare the sensitivity map.
7/1/2020	Email	From: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Anna asked again for the shp file.
7/1/2020	Email	To: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa responded apologies for the delay, she was waiting for the dgn files from design. Attached the shp files and noted that it is two separate shp files.

Date	Type	Name	Entity	Caltrans Rep	Comments
6/29/2020	Letter	From: Isaac Bojorquez	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Letter dated 6/29/20 stating desire for continued consultation and to set up a meeting.
7/14/2020	Email	To: Kristin Jensen	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa responded to the 6/29 letter noting that due to teleworking requirements the mail is checked infrequently. Provided dates available for a meeting.
7/15/2020	Email	From: Richard Hawkins	Buena Vista Rancheria of Me Wuk Indians	Lisa Bright, DNAC	Mr. Hawkins responded to the initial consultation letter that the THPO advisory board and Tribal Chairwoman have reviewed the information and will not seek additional consultation for the project. Request to be notified if discovery of cultural resources during earth moving activities.
7/15/2020	Email	To: Richard Hawkins	Buena Vista Rancheria of Me Wuk Indians	Lisa Bright, DNAC	Lisa responded thanking Mr. Hawkins for the response and noting that she has documented their request to be notified if there are inadvertent discoveries.
7/16/2020	Email	From: Kristin Jensen	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Kristin responded that July 27th would work for them and they would like to start with an individual meeting.
7/16/2020	Email	To: Kristin Jensen	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa responded that the 27th at 10am works for us. Just send us the Bluejeans invite to Lisa, Connor and Elizabeth.
7/16/2020	Email	From: Kristin Jensen	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Kristin thanked Lisa for her quick response and they will work on an agenda and have something soon.
7/22/2020	Email	To: Anna Starkey; Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Emailed Anna to see if the shp file worked and to schedule a meeting to discuss the project and UAICs concerns.
7/22/2020	Email	To: Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Follow up to 6/22 email asking if Kara had any questions, comments or concerns. Asked if she'd like to schedule a call to discuss.
7/22/2020	Email	To: Sara Setchwaelo	Ione Band of Miwok Indians	Lisa Bright, DNAC	Follow up to initial consultation email.
7/22/2020	Email	To: Raymond Hitchcock, Ralph Hatch	Wilton Rancheria	Lisa Bright, DNAC	Follow up to initial consultation email.

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7/22/2020	Email	To: Cosme Valdez	Nashville Enterprise Miwok-Maidu-Nishinam Tribe	Lisa Bright, DNAC	Follow up to initial consultation email.
7/22/2020	Email	To: Grayson Coney	Tsi Akim Maidu	Lisa Bright, DNAC	Follow up to initial consultation email.
7/22/2020	Email	To: Merlene Sanchez, Meyo Marrufo	Guidiville Indian Rancheria	Lisa Bright, DNAC	Follow up to initial consultation email.
7/22/2020	Email	To: Dennis Dingermans	Hattie Weber Museum	Lisa Bright, DNAC	Follow up to initial consultation email.
7/22/2020	Email	To: Bill George	Sacramento History Museum	Lisa Bright, DNAC	Follow up to initial consultation email.
7/22/2020	Email	To: Delta Mellow	Sacramento History Museum	Lisa Bright, DNAC	Follow up to initial consultation email.
7/22/2020	Email	To: Kathy Harryman	Yolo County Historical Society	Lisa Bright, DNAC	Follow up to initial consultation email.
7/22/2020	Email	To whom it may concern	Solano County Historical Society	Lisa Bright, DNAC	Follow up to initial consultation email.
7/22/20	Email	From: Delta Mellow	Sacramento History Museum	Lisa Bright, DNAC	Director Mellow responded to the 7/22 email suggesting that we contact the City's Historian and Director for the Center for Sacramento History - Marcia Eymann at <a href="mailto:meymann@cityofsacramento.org">meymann@cityofsacramento.org</a>
7/23/2020	Email	From: Kathy Harryman	Yolo County Historical Society	Lisa Bright, DNAC	Mr. Harryman responded that she has no comments and that improving infrastructure is critical to California highways.
7/22/2020	Email	From: Michael Derry	Guidiville Indian Rancheria	Lisa Bright, DNAC	Mr. Derry responded to the 7/22 email that Guidiville Rancheria has no concerns or contributing information. Request for copies of reports to add to their records by emailing <a href="mailto:historian@guidiville.net">historian@guidiville.net</a>
7/23/2020	Email	To: Michael Derry	Guidiville Indian Rancheria	Lisa Bright, DNAC	Lisa responded thanking Michael. Noted that we have added them to the list to receive the environmental documents once studies are completed.

Date	Type	Name	Entity	Caltrans Rep	Comments
7/23/2020	Phone Call	Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Mariah noted that Wilton Rancheria would like to consult on this project.
7/23/2020	Email	From: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Anna said her schedule is open but she's not sure if the mapping is done.
7/23/2020	Email	To: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa proposed next Tuesday at 9am. Notified UAIC of proposed geotechnical work for the HOV structure the week of 8/3, asked if the mapping isn't done if we can use the map they produced for 4F650 as it overlaps for our discussion on Tuesday. Provided kmz of boring locations.
7/23/2020	Email	To: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	While on a call for another project Mariah mentioned the 7/22/20 email for this project but thought they had responded in 2019. Lisa noted that is a separate project in the same are and forwarded the 7/22/20 email to Mariah again.
7/24/2020	Email	From: Herbert Griffin	Wilton Rancheria	Lisa Bright, DNAC	Mr. Griffin responded to the initial consultation letter noting that they project lies within the tribe's ancestral territory and that they have identified resources of significance to the tribe near the project area. Request to meet regarding avoidance and to allow the tribe to have a monitor present. Note to contact <a href="mailto:crd@wiltonrancheria-nsn.gov">crd@wiltonrancheria-nsn.gov</a>
7/27/2020	Email	To: Mariah Mayberry; CRD	Wilton Rancheria	Lisa Bright, DNAC	Responded to Mr. Griffin's email thanking him for the response. Provided potential meeting dates and asked for them to follow up with which works best.

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7/27/2020	Meeting	Laverne Bill, Isaac Bojorquez	Yocha Dehe Wintun Nation	Lisa Bright, DNAC; Connor Buitenhuis, Project Archaeologist, Elizabeth Trumen, Project Archaeologist	Discussed project scope and multiple alternatives. Laverne asked who was installing the fiber optic cable - Connor said this is likely internal but he will ask. Laverne said they are not concerned about widening in the median but work in the shoulder, especially west of Davis where there are known resources in the project limits. Lisa will provide ESL shp file. Discussed geotech boring and Lisa will provide KMZ with boring locations. Laverne would like to conduct cultural sensitivity training.
7/27/2020	Email	To: Laverne Bill, Isaac Bojorquez, Andrew Cherna	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa sent Andrew the project shp file and KMZ of geotech boring locations.
7/29/2020	Email	To: Anna Starkey; Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa sent a follow up to the 7/23 email asking to schedule a call to discuss this project.
8/13/2020	Email	To: Anna Starkey; Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa sent a follow up asking to schedule a meeting to discuss this project.
8/13/2020	Email	From: Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Melodi selected the 27th. Asked for the Yocha Dehe and any other consulting tribe to be included in the meeting.
8/13/2020	Phone (8:55 a.m.)	Laverne Bill	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa called Laverne to double check if he was ok having a joint meeting with UAIC. He indicated after speaking with them last week that he is fine with that.
8/13/2020	Email	To: Kristin Jensen	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa sent Kristin an email to see if Laverne has availability on the 27th for a meeting.
8/13/2020	Email	To: Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa responded to Melodi's email that she has contacted the Yocha Dehe to see if the 27th works. Noted that Wilton Rancheria is the only other response thus far and that Lisa will reach out to them to see if they'd also like a joint meeting.
8/13/2020	Email	To: Mariah Mayberry; CRD	Wilton Rancheria	Lisa Bright, DNAC	Sent follow up email to schedule meeting

Date	Type	Name	Entity	Caltrans Rep	Comments
8/13/2020	Email	To: Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Sent follow up email to schedule meeting
8/13/2020	Email	From: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Mariah responded that August 20th at 11am works for them.
8/13/2020	Email	To: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Lisa responded that 8/20 at 11 am works and she will send an outlook invite with the call in information. Asked if they would also like to participate in a joint meeting at UAIC's request.
8/13/2020	Email	From: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Mariah said yes to the joint meeting.
8/13/2020	Email	To: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Lisa provided Mariah with the date/time options on August 27th.
8/13/2020	Email	To: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Mariah says anytime on the 27th works.
8/13/2020	Email	To: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Lisa responded that once she hears back from the Yocha Dehe she'll let them know what time works for everyone.
8/13/2020	Email	From: Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Kara selected the 24th at 10am for a meeting.
8/13/2020	Email	To: Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Lisa responded asking if she would like a conference call or webex. Also mentioned group tribal meeting and asked if they would also like to participate in that
8/13/2020	Email	From: kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Kara would like a conference call and for James Sarmiento and Daniel Fonseca to also be invited.
8/13/2020	Email	To: Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Lisa responded that she will absolutely add them and will send an Outlook invite once the conference line has been booked.
8/17/2020	Email	From: Kristin Jensen	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Kristian responded that 1pm on the 27th works.
8/17/2020	Email	To: Kristin Jensen	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa responded that she will send an Outlook invite with the conference line call in information once it has been booked.

Date	Type	Name	Entity	Caltrans Rep	Comments
8/17/2020	Email	To: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Lisa emailed Mariah to let her know that 1pm on the 27th works for all four parties. She will send out an Outlook invite with the call in information once it has been reserved.
8/17/2020	Email	To: Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa sent Melodi an email letting her know that 1pm on the 27th works for the Yocha Dehe and Wilton. Also noted that Shingle Springs is consulting but has not responded regarding a group meeting. Will send Outlook invite once the conference line has
8/20/2020	Phone	Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC; Connor Buitenhuis, Project Archaeologist, Elizabeth Trumen, Project Archaeologist	Phone call with Mariah to discuss project. She asked if they can monitor the testing. Connor noted that they would need to identify a specific concern or area of concern. Connor will provide mapping of testing area and proposal once it is submitted. Mariah is going to prepare sensitivity maps and discuss with the director. Will get back to us.
8/24/2020	Phone	Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC; Connor Buitenhuis, Project Archaeologist, Elizabeth Trumen, Project Archaeologist	Phone call to discuss project. Kara noted sensitivity in the West Sacramento area as it is the ancestral home for members of the Shingle Springs. Also noted documented village/cemetery near the 50/Sac river area. Sensitivity over any area that crossed the Sacramento River. Lisa will provide more detail of activities in that area, report from geotech and report from 03-4F650 work. Forwarded invite to Thursdays joint meeting.
8/24/2020	Email	To: Laverne Bill, Isaac Bojorquez,	Yocha Dehe Wintun Nation	Connor Buitenhuis, Project Archaeologist	Connor provided the ESL depicting the area of proposed geotech testing. File had to be sent via FILR.
8/26/2020	Email	To: Anna Starkey; Melodi McAdams; Travis Young; Laverne Bill; Isaac Bojorquez; Mariah Mayberry; Kara Perry	United Auburn Indian Community of the Auburn Rancheria; Yocha Dehe Wintun Nation; Wilton Rancheria; Shingle Springs	Lisa Bright, DNAC	Lisa sent the agenda for the 8/27/20 joint call.



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8/27/2020	Phone Call (8:15 a.m..)	Laverne Bill	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Laverne called Lisa to let her know that due to the LNU Complex Fire they would not be able to attend the call.
8/27/2020	Phone Call	Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa left Melodi a voicemail regarding the meeting and if she would like to proceed without the Yocha Dehe
8/27/2020	Phone Call	Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Melodi called Lisa back and said they were fine either way but could proceed and focus the discussion on the Sacramento area.
8/27/2020	Email	To: Laverne Bill, Isaac Bojorquez,	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa sent Laverne an email stating that they would move forward with the meeting but focus on Sacramento. Will schedule a follow up with all the tribes.
8/27/2020	Email	From: Laverne Bill	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Laverne said thank you, looks forward to the future meeting.
8/27/2020	Phone Call	Melodi McAdams, Kara Perry, Param Sandhu	United Auburn Indian Community of the Auburn Rancheria; Wilton Rancheria; Shingle Springs	Lisa Bright, DNAC; Connor Buitenhuis, Project Archaeologist,	Phone call to discuss project. Melodi noted concern in the Sacramento County portion of the project, identified 3 TCRs. Melodi requested tribal participation in survey. Noted issues with Caltrans combining CEQA/106 and not including CEQA mitigation measures, which in this case would be avoidance. Noted no issue for staging if it is on a paved area. Kara and Param had no additional notes beyond what was discussed at previous meetings.
8/27/2020	Email	From: Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC; Connor Buitenhuis, Project Archaeologist,	Melodi provided mapping and details on the TCRs identified in the call: P-34-5225 Sacramento River Cultural Landscape, Sand Cove Site, Demba. Request that we identify these three sites within the inventory. Anna will follow up to supply mitigation measures and for post-review discoveries. Requested response with respect to the identification of these three sites.
8/27/2020	Email	To: Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Connor Buitenhuis, Project Archaeologist	Connor responded to Melodi's email asking for clarification that the purple polygon is Demba.

Date	Type	Name	Entity	Caltrans Rep	Comments
8/27/2020	Email	From: Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Connor Buitenhuys, Project Archaeologist	Melodi responded yes, there should be a call out on the map.
10/28/2020	Email	Melodi McAdams, Antonio Ruiz, Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Sent update re: soundwall and bike lane
10/28/2020	Email	Isaac Bojorquez, Laverne Bill	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Sent update re: soundwall and bike lane
10/28/2020	Email	Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Sent update re: soundwall and bike lane
10/28/2020	Email	Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Sent update re: soundwall and bike lane
11/18/2020	Email	Melodi McAdams, Antonio Ruiz, Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Sent update re: soundwall with additional locational and footing location.
12/3/2020	Email	To: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Lisa sent the XPI proposal and geotech results and asked for comments on the proposal by the end of December.
12/3/2020	Email	Laverne Bill, Isaac Bojoroquez	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa sent the XPI proposal and geotech results and asked for comments on the proposal by the end of December.
12/3/2020	Email	Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Lisa sent the XPI proposal and geotech results and asked for comments on the proposal by the end of December.
12/3/2020	Email	Melodi McAdams, Antonio Ruiz, Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa sent the XPI proposal and geotech results and asked for comments on the proposal by the end of December.
12/6/2020	Email	From: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Mariah responded to the 12/3 email and asked how the soils were monitored and what size screen was used.
12/7/2020	Email	To: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Lisa responded to Mariah's 12/6 email that the cores were monitored by an Archaeologists from Pacific Legacy and when cultural deposits were noted or suspected a 1/4" screen was to be used.

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12/15/2020	Email	From: Victoria Delgato	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Formal response to XPI proposal requesting to monitor due to proximity to known sites. Also requesting cultural sensitivity training for crews.
12/15/2020	Email	To: Victoria Delgato, Laverne Bill	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa responded to the letter thanking them for the response. Noted that Pacific Legacy will contact them after New Years but were looking to conduct this work at the beginning of January.
12/16/2020	Email	To: Laverne Bill	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Follow up from Lisa that after speaking with Pacific Legacy they would like to schedule this work the week of January 11th. Provided Laverne's contact information for scheduling and paperwork.
12/17/2020	Email	To: Laverne Bill, Isaac Bojorquez	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Sent update regarding new proposed geotech work.
12/17/2020	Email	To: Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Sent update regarding new proposed geotech work.
12/17/2020	Email	To: Mariah Mayberry	Wilton Rancheria	Lisa Bright, DNAC	Sent update regarding new proposed geotech work.
12/17/2020	Email	To: Melodi McAdams, Anna Starkey, Antonio Ruiz	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Sent update regarding new proposed geotech work.
12/18/2020	Email	From: Andrew Cherna	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Request for geotech shp files
12/21/2020	Email	To: Andrew Cherna	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa sent the shp file
1/8/2021	Email	From: Andrew Cherna	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Andrew requested the shp files for the geotech boring
1/11/2021	Email	To: Andrew Cherna	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Lisa responded that they were sent 12/21. Noted if there is an issue with the file or they need to be resent to please let her know.
1/12/2021	Email	To: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Followed up on 12/17/20 email asking for comment on the geotech work at Bryte Bend Bridge.

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1/13/2021	Email	From: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Anna responded to the 1/12/2021 email that she forwarded the request to Melodi and Travis as they handle monitoring. Hopefully Melodi will respond shortly. Anna notes no additional concerns for now but wonders if all the sensitive areas provided on the maps were addressed.
1/13/2021	Email	To: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa responded thanking Anna for her response. Notes that with regards to the mapping Melodi provided only the Bryte Bend bridge area has ground disturbance, just for the sound wall if that is approved. The other areas on the Sacramento side of the bridge are all re-striping. If anything changes with the project design, we will let you know.
2/1/2021	Email	To: Laverne Bill; Isaac Bojorquez	Yocha Dehe Wintun Nation	Lisa Bright, DNAC	Sent email with fieldwork completion letter, draft ASR, updated geotech monitoring locations, and geotech drilling plan.
2/1/2021	Email	To: Anna Starkey; Melodi McAdams	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Sent email with fieldwork completion letter, draft ASR, updated geotech monitoring locations, and geotech drilling plan.
2/1/2021	Email	To: Mariah Mayberry; CRD	Wilton Rancheria	Lisa Bright, DNAC	Sent email with fieldwork completion letter, draft ASR, updated geotech monitoring locations, and geotech drilling plan.
2/1/2021	Email	To: Kara Perry	Shingle Springs Band of Miwok	Lisa Bright, DNAC	Sent email with fieldwork completion letter, draft ASR, updated geotech monitoring locations, and geotech drilling plan.
2/1/2021	Email	From: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Anna responded thanking Lisa for the reports and was glad the results were negative. Asked if it's ok that if she has no response that means she has no comments.
2/1/2021	Email	To: Anna Starkey	United Auburn Indian Community of the Auburn Rancheria	Lisa Bright, DNAC	Lisa responded absolutely.

