



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**

Bay Area Metro Center  
375 Beale Street, Suite 800  
San Francisco, CA 94105  
415.778.6700  
[www.mtc.ca.gov](http://www.mtc.ca.gov)

## **Air Quality Conformity Task Force**

Metropolitan Transportation Commission  
Bay Area Metro Center

### **Mount Hamilton Conference Room**

375 Beale Street, Suite 800

(Note: Visitors must check in with the receptionist on the 7th floor)  
San Francisco, CA

Conference Call Number: 888-273-3658 (Access Code: 9427202)

**Thursday, April 27, 2017**

**9:30 a.m. –11:00 a.m.**

## **AGENDA**

1. Welcome and Introductions
2. PM<sub>2.5</sub> Project Conformity Interagency Consultations
  - a. Consultation to Determine Project of Air Quality Concern Status
    - i. Maude Avenue Bikeway and Streetscape Project
    - ii. Route 84 Widening, Pigeon Pass to I-680 Project
  - b. Confirm Projects Are Exempt from PM<sub>2.5</sub> Conformity
    - i. Projects Exempt Under 40 CFR 93.126 – Not of Air Quality Concern
3. Consent Calendar
  - a. March 23, 2017 Air Quality Conformity Task Force Meeting Summary
4. Other Items – NEPA Delegation/Assignment Discussion Follow-up

Next Meeting: May 25, 2017

MTC Staff Liaison: Harold Brazil [hbrazil@mtc.ca.gov](mailto:hbrazil@mtc.ca.gov)



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## *Memorandum*

TO: Air Quality Conformity Task Force

DATE: April 14, 2016

FR: Harold Brazil

W. I.

RE: PM<sub>2.5</sub> Project Conformity Interagency Consultation

Project sponsors representing four projects, seek interagency consultation from the Air Quality Conformity Task Force (AQCTF) at today's meeting and the projects are as follows:

No.	Project Sponsor	Project Title
1	City of Sunnyvale	Maude Avenue Bikeway and Streetscape Project
2	Alameda County Transportation Commission (ACTC)	Route 84 Widening, Pigeon Pass to I-680 Project

**2ai\_Maude\_Avenue\_Bikeway\_and\_Streetscape\_Project\_Assessment\_Form.pdf** (for the Maude Avenue Bikeway and Streetscape project)

**2aii\_Route\_84\_Widening\_Pigeon\_Pass\_to\_I-680\_Project\_Assessment\_Form.pdf** (for the Route 84 widening, Pigeon Pass to I-680 project)

MTC also requests the review and concurrence from the Task Force on projects that project sponsors have identified as exempt and likely not to be a POAQC. **2b\_Exempt List 041417.pdf** lists exempt projects under 40 CFR 93.126

## Application of Criteria for a Project of Air Quality Concern

### Project Title: City of Sunnyvale - Maude Avenue Bikeways and Streetscape Project

### Project Summary for Air Quality Conformity Task Force Meeting: (April 27, 2017)

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#### Description

- Project limits on Maude Avenue between Mathilda Avenue and North Fair Oaks Avenue.
- Project will improve the Maude Avenue & Sunnyvale Avenue intersection.
- Project will reconstruct or install curb ramps to meet the Americans with Disabilities Act (ADA) requirements at eight intersections along Maude Avenue.
- Project will install buffered bicycle lanes.
- Project will upgrade existing In-Roadway Warning Light (IRWL) crossing.
- The project does not generate new person trips or vehicle trips, so there will be no increase in traffic volumes.

#### Background

- In 2014, the City of Sunnyvale conducted a corridor study along Maude Avenue between Mathilda Avenue and North Fair Oaks Avenue to determine feasible alternatives to implement bicycle lanes on the project corridor.
- The addition of bicycle lanes on Maude Avenue has been identified as part of the City's transportation plan and was included in the adopted 2006 Sunnyvale Bicycle Plan.
- In addition to the bicycle lanes, the proposed project includes pedestrian improvements (ADA-compliant curb ramps, enhanced crosswalks, removal of free-right turns, etc.). New landscaping is also included at the Maude Avenue & Sunnyvale Avenue intersection where the existing free-right lanes and porkchop islands are to be removed.
- In 2015, the City presented the alternatives developed during the Maude Avenue Roadway Allocation Study to the community at two meetings, a public meeting at Bishop Elementary School and at the Bicycle and Pedestrian Advisory Commission (BPAC).
- Based on the recommendations of the City of Sunnyvale staff, the project was approved by the Sunnyvale City Council on May 17, 2016 to proceed to the design and environmental stage.

#### Not a Project of Air Quality Concern (40 CFR 93.123(b)(1))

*(i) New or expanded highway projects with significant number/increase in diesel vehicles?*

- Not a new or expanded highway project

*(ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?*

- Diesel vehicles represent 2.5% of intersection traffic volume.
- No project-related changes to land use that would affect diesel traffic percentage.
- Project will not change traffic volumes.

*(iii) New bus and rail terminals and transfer points?*

- Not applicable.

*(iv) Expanded bus and rail terminals and transfer points?*

- Not applicable.

*(v) Affects areas identified in PM10 or PM2.5 implementation plan as site of violation?*

- The implementation of this project would not result in any changes in land uses or transportation circulation in the project area that could result in a change in the number of diesel vehicles in traffic in the project area.

**RTIP ID#:** 240744

**TIP ID#:** SCL 130030

**Air Quality Conformity Task Force Consideration Date:** April 27, 2017

**Project Description** (*clearly describe project*):

The City of Sunnyvale proposes to provide the following improvements:

- Improve the Maude Avenue/Sunnyvale Avenue intersection:
  - Remove the 'free-right' turns to improve pedestrian crossing safety.
  - Modify the signals and relocate, as necessary, signal poles and boxes:
  - Remove and replace landscaping. Provide new landscaping, including trees where possible, in accordance with Caltrans/Santa Clara County C.3 Measures, using low lying and drought tolerant plants.
- Reconstruct or install curb ramps to meet the Americans with Disabilities Act (ADA) requirements at the following intersections along Maude Avenue:
  - San Angelo Avenue
  - Stowell Avenue
  - North Murphy Avenue
  - Borregas Avenue
  - North Bayview Avenue
  - Morse Avenue
  - Roosevelt Avenue
  - Worley Avenue
- Remove the existing In-Roadway Warning Light (IRWL) enhanced crossing and install an updated IRWL.
- Rehabilitate the pavement through slurry seal.
- Improve signing and striping between Mathilda Avenue and North Fair Oaks Avenue to include one-lane in each direction, a center TWLTL, and buffered bicycle lanes that would result in removal of on-street parking.
- Install new underground conduit.
- Adjust existing utilities to the finished grades, including water valve and meter covers, and pull boxes.
- Relocate one fire hydrant at the intersection of Maude Ave and Sunnyvale Ave.
- Modify storm drain inlets to accommodate the roadway improvements.
- Install storm drain pipe and structures at the intersection of Maude Ave and Sunnyvale Ave.

**Type of Project:**

Bicycle and Pedestrian Improvement Project

**County:**  
Santa Clara

**Narrative Location/Route & Postmile:** Maude Avenue is an east-west collector roadway between Logue Ave (west of SR-237) and Wolfe Road. The proposed project consists of improvements to Maude Avenue between Mathilda Avenue and North Fair Oaks Avenue. Maude Avenue is two lanes with a center two-way-left-turn-lane (TWLTL) and on-street parking within the project limits from Mathilda Avenue to North Fair Oaks Avenue.

**Lead Agency:** City of Sunnyvale

**Contact Person:**  
Elizabeth Racca-Johnson

**Phone#**  
408/730-7428

**Fax#**  
408/736-7619

**Email:** eraccajohnson@sunnyvale.ca.gov

<b>Federal Action for which Project-Level PM Conformity is Needed</b> <i>(check appropriate box)</i>					
<b>X</b>	<i>Categorical Exclusion (NEPA)</i>	<b>EA or Draft EIS</b>	<b>FONSI or Final EIS</b>	<b>PS&amp;E or Construction</b>	<i>Other</i>
<b>Scheduled Date of Federal Action:</b>					
<b>NEPA Delegation – Project Type</b> <i>(check appropriate box)</i>					
	<b>X</b>	<b>Section 326 – Categorical Exclusion</b>	<b>Section 327 – Non-Categorical Exclusion</b>		
<b>Current Programming Dates</b> <i>(as appropriate)</i>					
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>	
<b>Start</b>	FY 2016/2017		n/a	2017	
<b>End</b>	FY 2016/2017		n/a	2017	
<b>Project Purpose and Need (Summary):</b> <i>(please be brief)</i>					
<p>The purpose of the project is to:</p> <ul style="list-style-type: none"> <li>• Remove the free right turns to improve pedestrian safety.</li> <li>• Reconstruct existing or install new curb ramps to meet the Americans with Disabilities Act (ADA) standards at several locations with an estimated number of 23 curb ramp improvements.</li> <li>• Upgrade an In-Roadway Warning Light (IRWL).</li> <li>• Install buffered bicycle lanes that would result in the removal of on-street parking.</li> </ul> <p>The need for the project is to:</p> <ul style="list-style-type: none"> <li>• Improve pedestrian safety.</li> <li>• Improve bicyclist safety.</li> <li>• Comply with the ADA.</li> </ul>					
<b>Surrounding Land Use/Traffic Generators</b> <i>(especially effect on diesel traffic)</i>					
Adjacent land uses along Maude Avenue include commercial, single-family residential, and medium/high-density residential. Bishop Elementary School is located within the project limits.					

**Brief summary of assumptions and methodology used for conducting analysis**

- Delay and LOS calculated using Highway Capacity Manual (HCM) 2000 methodology and Traffix software.
- Delay reported in seconds/vehicle.
- For side-street stop-controlled (SSSC) intersections, the controlling approach LOS and delay are presented.
- Default values and the Default Traffix file were used in accordance with the VTA Congestion Management Program (CMP) guidelines.

**Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility**

**Opening Year Build and No Build Conditions**

#	Intersection	Intersection Control	AM Peak		PM Peak	
			LOS	Delay	LOS	Delay
1	N. Mathilda Ave / Maude Ave	Signal	E	77.9	F	105.5
2	San Angelo Ave / Maude Ave	SSSC	C	22.8	C	24.8
3	Stowell Ave / Maude Ave	SSSC	C	17.4	C	23.8
4	N. Murphy Ave / Maude Ave	SSSC	C	21.9	C	24.5
5	Borregas Ave / Maude Ave	Signal	B	17.0	B	13.7
6	N. Sunnyvale Ave / Maude Ave	Signal	B	16.4	B	13.5
7	N. Bayview Ave / Maude Ave	SSSC	D	30.9	D	28.7
8	Morse Ave (South) / Maude Ave	SSSC	C	15.1	C	17.6
9	Morse Ave (North) / Maude Ave	SSSC	D	29.7	C	17.0
10	Roosevelt Ave / Maude Ave	SSSC	C	16.3	C	16.5
11	Worley Ave / Maude Ave	SSSC	B	13.5	B	14.5
12	N. Fair Oaks Ave / Maude Ave	Signal	C	34.0	D	39.2

There would be no change in LOS with and without the project. Therefore, the above table applies to both the Build and No Build conditions.

**AADT and Truck #/% (Opening Year)**

	AADT	Truck %	Truck # (Daily)
Build	12,280	2.5%	307
No Build	12,280	2.5%	307

**RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility**

There would be no change in LOS before and after the project. Future year LOS analysis was not performed.

**AADT and Truck #/% (Horizon Year)**

	AADT	Truck %	Truck # (Daily)
Build	17,818	2.5%	445
No Build	17,818	2.5%	445

**Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

n/a

**RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

n/a

**Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses**

n/a

**RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses**

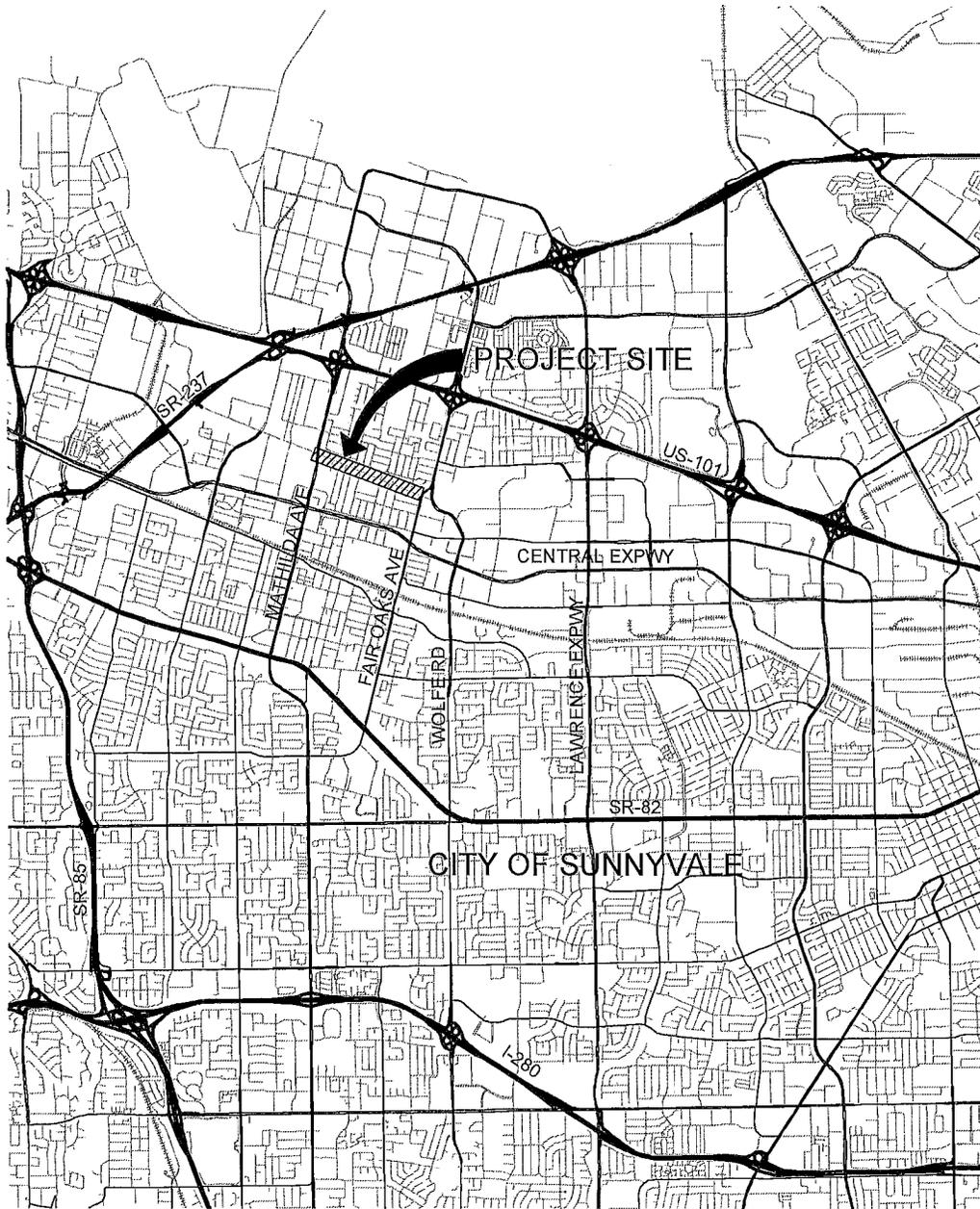
n/a

**Describe potential traffic redistribution effects of congestion relief (*impact on other facilities*)**

There is no anticipated impact on other facilities.

**Comments/Explanation/Details (please be brief)**

Attached are figures showing the project site and project components.

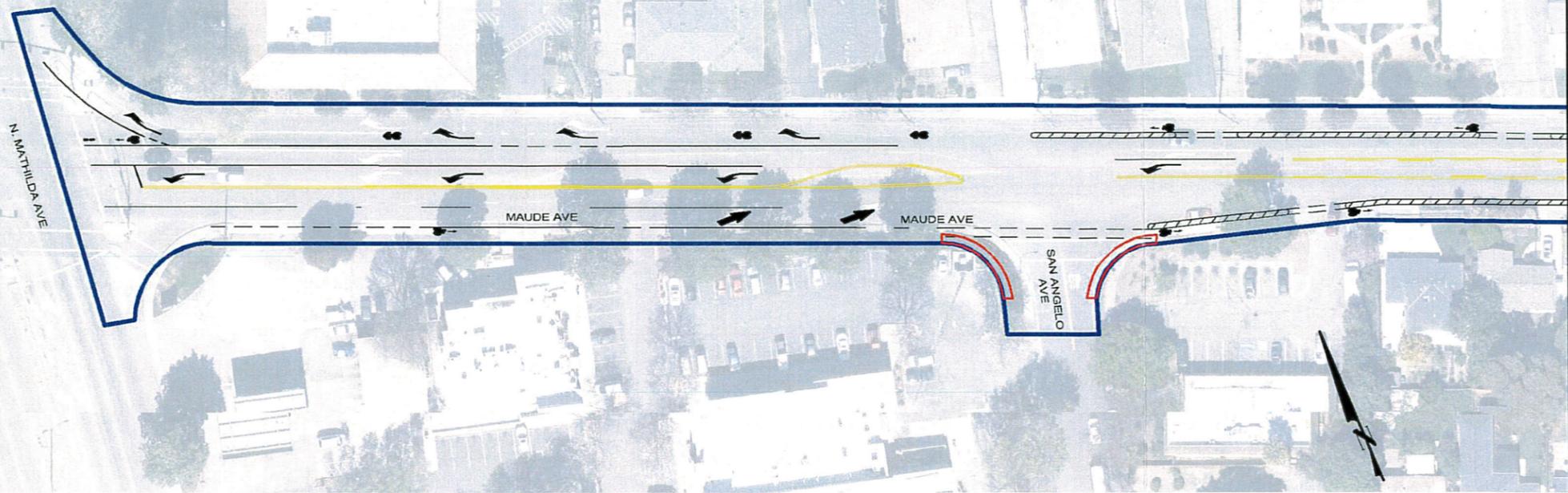


City of Sunnyvale  
Maude Avenue Bikeways & Streetscape Project  
Vicinity Map

**AREA OF POTENTIAL EFFECTS MAP**

MAUDE AVE BIKEWAYS & STREETSCAPE PROJECT  
 Project No. 15/03-17  
 City of Sunnyvale, Santa Clara County, California

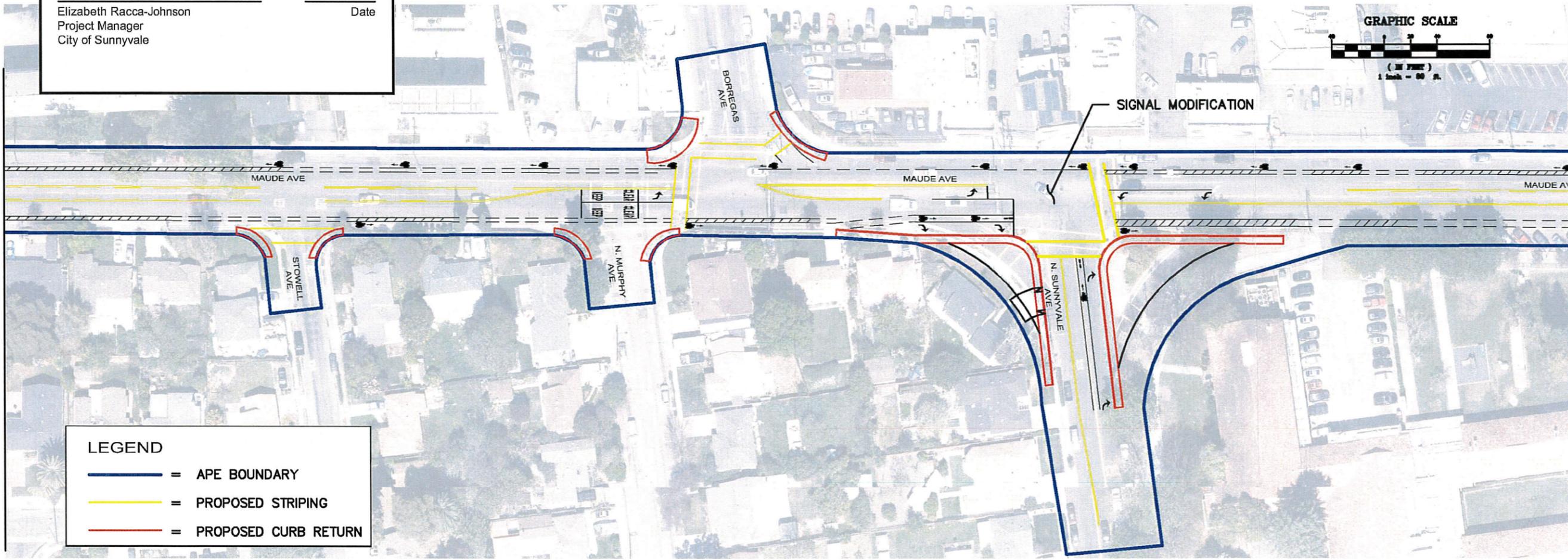
_____	_____
Karen Reichardt	Date
Caltrans PQS	
_____	_____
Alan Wong	Date
Local Assistance Engineer	
Caltrans District 4	
_____	_____
Elizabeth Racca-Johnson	Date
Project Manager	
City of Sunnyvale	



MATCH LINE - SEE BELOW



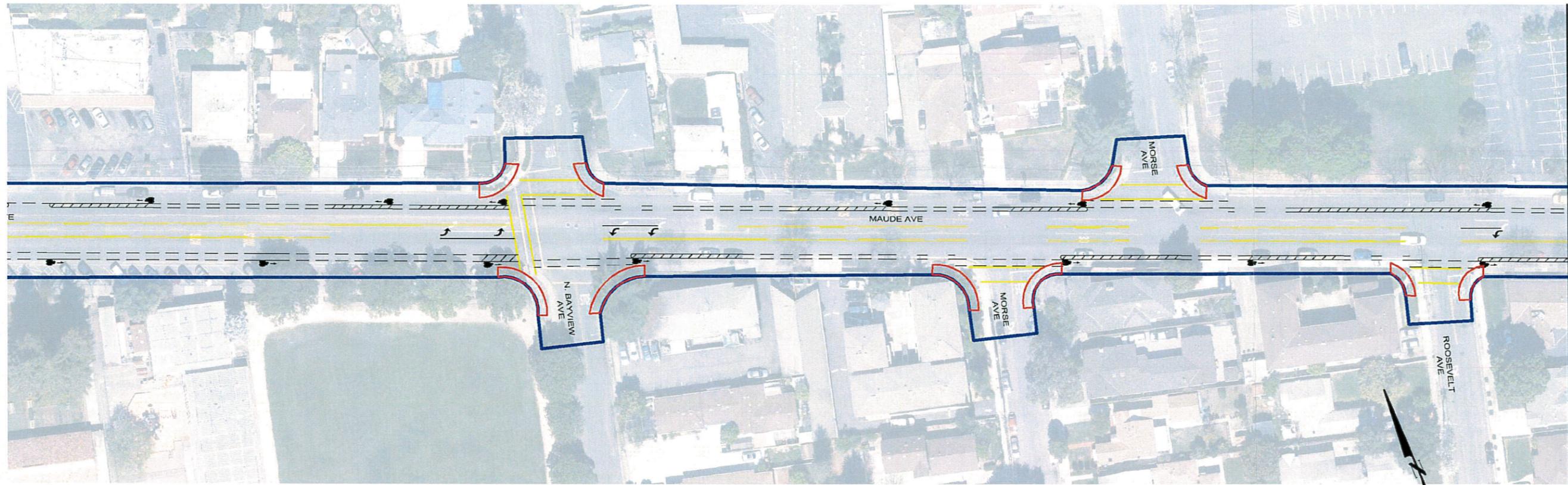
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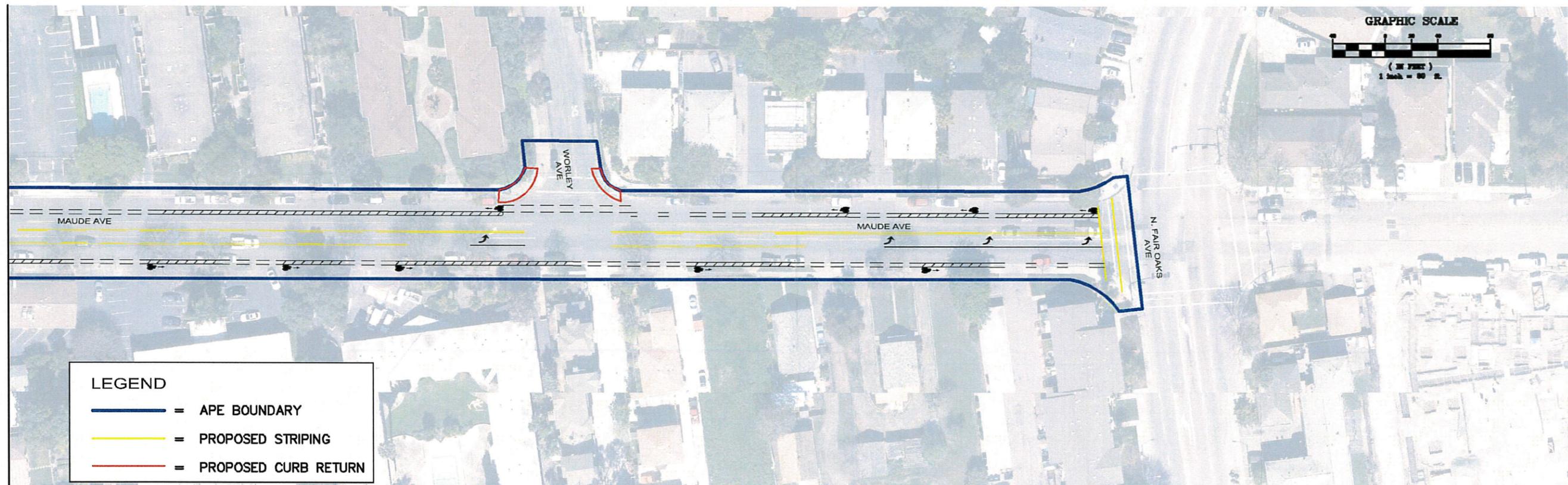
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**LEGEND**

- = APE BOUNDARY
- = PROPOSED STRIPING
- = PROPOSED CURB RETURN



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MATCH LINE - SEE ABOVE

MATCH LINE - SEE NEXT SHEET

LEGEND	
	= APE BOUNDARY
	= PROPOSED STRIPING
	= PROPOSED CURB RETURN

## Application of Criteria for a Project of Air Quality Concern

### Project Title: SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project Project Summary for Air Quality Conformity Task Force Meeting: April 27, 2017

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#### Description

- The project will widen and conform SR 84 to expressway standards between south of Ruby Hill Drive and the I-680 interchange in Alameda County, improve SR 84/I-680 interchange ramps, and extend the existing southbound I-680 High Occupancy Vehicle/express lane (HOV/express lane) northward by approximately 2 miles.
- The purpose of the project is to alleviate existing and projected traffic congestion to improve SR 84 as a regional connection between I-680 and I-580, consistent with other local and regional planning and programmed projects; improve traffic circulation between SR 84 and I-680, and in the vicinity of the SR 84/I-680 interchange; improve safety for motorists and cyclists on this segment of SR 84; and complete the statutory designation of this segment of SR 84 as an expressway facility.
- The additional capacity would alleviate congestion in the project area, which is expected to attract additional vehicles to SR 84 that currently use local roadways such as Stanley Boulevard and Bernal Avenue to connect with I-680.
- The project would not change regional travel demand compared to the No Build condition.

#### Background

- Technical studies are in preparation to support NEPA process for Environmental Impact Report/Environmental Assessment (EIR/EA).
- Public review is scheduled for October and November 2017.
- Seeking project-level air quality conformity determination by May 2017.

#### Not a Project of Air Quality Concern (40 CFR 93.123(b)(1))

##### *(i) New or expanded highway projects with significant number/increase in diesel vehicles?*

- The project would allow for a route shift from I-680 to SR 84, consistent with the project purpose and local planning. Trucks would comprise 4 percent of traffic with and without the project.
- The project would not add capacity for diesel vehicles on I-680.
- The project would improve travel speeds and reduce the rate of PM<sub>2.5</sub> emissions from diesel trucks compared with the No Build condition.

##### *(ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?*

- In the 2025, five intersections would operate at LOS D, E, or F with the No Build condition, compared with one intersection with the Build condition.
- In the 2045, eight intersections would operate at LOS D, E, or F with the No Build condition, compared with three intersections with the Build condition.

##### *(iii) New bus and rail terminals and transfer points?—Not Applicable*

##### *(iv) Expanded bus and rail terminals and transfer points?—Not Applicable*

##### *(v) Affects areas identified in PM<sub>10</sub> or PM<sub>2.5</sub> implementation plan as site of violation?*

- No state implementation plan for PM<sub>2.5</sub>
- Project area is not identified as impacted in Bay Area Air Quality Management District (BAAQMD) Community Air Risk Evaluation Program

**RTIP ID#** *(required)*

240062

**TIP ID#** *(required)*

ALA150001

**Air Quality Conformity Task Force Consideration Date**

April 27, 2017

**Project Description** *(clearly describe project)*

The proposed project would widen and conform SR 84<sup>1</sup> to expressway standards between south of Ruby Hill Drive and the I-680 interchange. The project would also improve SR 84/I-680 interchange ramps and extend the existing HOV/express lane on southbound I-680 northward to approximately 0.8 mile north of Koopman Road, north of the SR 84/I-680 interchange. The project location is shown in Figure 1, and the proposed project changes are shown in Figure 2.

**SR 84.** The proposed project would widen SR 84 from two to four lanes (two in each direction) and overlay and restripe the roadway. A Class II bikeway would be provided in each direction. Concrete barriers would be placed in the median to enhance user safety.

As part of conforming SR 84 to expressway standards, access would be limited to controlled intersections to improve traffic flow and safety. The project would consolidate existing vehicle access openings to private driveways and rural roads at new frontage roads. The proposed frontage roads would connect to a new signal intersection at Vallecitos Atomic Laboratory Road. The new intersection and frontage roads would provide access to Little Valley Road on the north side of SR 84 and private driveways and rural roads on the south side of SR 84.

**SR 84/I-680 Interchange and Auxiliary Lanes.** The project would make several modifications at the SR 84/I-680 interchange. On southbound I-680, the project would construct an approximately 1,000-foot-long auxiliary lane to the south of Calaveras Road/Paloma Way, and realign the on-ramp from Paloma Way to southbound I-680. On northbound I-680, the project would reconstruct the existing two-lane off-ramp to northbound SR 84, and extend the existing auxiliary lane by approximately 1,500 feet from south of Calaveras Road to the northbound I-680/northbound SR 84 split. The project would remove the existing on-ramp from Calaveras Road to northbound I-680, construct a new flyover ramp from Calaveras Road to northbound I-680, and construct a new slip on-ramp from Calaveras Road to northbound SR 84. In addition, the project would realign the southbound SR 84 to northbound I-680 connector to merge with the northbound on-ramp to I-680 from Calaveras Road, and add an HOV preferential lane to the existing two-lane southbound SR 84 to southbound I-680 on-ramp.

A new Class I bikeway would be provided through the interchange area to connect the southbound SR 84 Class II bikeway with Paloma Way. A new Class II bikeway would be provided along the northbound I-680 on-ramp from Calaveras Road to connect with the northbound SR 84 Class II bikeway.

**I-680.** On southbound I-680, the project would extend the existing HOV/express lane northward from its current entry point at approximately Calaveras Road to approximately 0.8 mile north of Koopman Road, a distance of approximately 2 miles. The pavement in the center median of southbound I-680 would be widened to accommodate the HOV/express lane. Approximately six overhead signs and toll readers for FasTrak transponders would be installed in the median of I-680. The northernmost overhead sign would be approximately 1.8 miles north of Koopman Road (at PM 14.2). Proposed project activities between the northernmost overhead sign and the I-680/Sunol Boulevard interchange would be limited to the placement of temporary construction signage.

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<sup>1</sup> In the study area, Paloma Way, Calaveras Road, Vallecitos Road, and Isabel Avenue are all designated as SR 84 at various points.

<b>Type of Project:</b> Expressway widening, interchange improvements, HOV/express lane extension				
<b>County</b> Alameda	<i>Narrative Location/Route &amp; Postmiles.</i> On SR 84 between south of Ruby Hill Drive and the I-680 interchange (04-ALA-84 PM 17.9/22.9), and on I-680 between north of Andrade Road and the Sunol Boulevard interchange (04-ALA-680 PM 10.3/15.3).  <b>Caltrans Projects – EA#</b> 04-297630			
<b>Lead Agency:</b> Alameda County Transportation Commission				
<i>Contact Person</i> Gary Sidhu	<i>Phone#</i> 510-208-7414	<i>Fax#</i>	<i>Email</i> gsidhu@alamedactc.org	
<b>Federal Action for which Project-Level PM Conformity is Needed</b> ( <i>check appropriate box</i> )				
<i>Categorical Exclusion (NEPA)</i>	<input checked="" type="checkbox"/> <b>EA or Draft EIS</b>	<input type="checkbox"/> <b>FONSI or Final EIS</b>	<input type="checkbox"/> <b>PS&amp;E or Construction</b>	<input type="checkbox"/> <i>Other</i>
<b>Scheduled Date of Federal Action:</b> April 2018				
<b>NEPA Delegation – Project Type</b> ( <i>check appropriate box</i> )				
<input checked="" type="checkbox"/>	<b>Not an exempt project</b>	<input type="checkbox"/> <b>Section 326 – Categorical Exclusion</b>	<input type="checkbox"/> <b>Section 327 – Non-Categorical Exclusion</b>	
<b>Current Programming Dates</b> ( <i>as appropriate</i> )				
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>
<b>Start</b>	2015	2018	2018	2021
<b>End</b>	2018	2020	2020	2023
<b>Project Purpose and Need (Summary):</b> ( <i>please be brief</i> )				
<p>The purpose of the project is to:</p> <ul style="list-style-type: none"> <li>• Alleviate existing and projected traffic congestion to improve SR 84 as a regional connection between I-680 and I-580, consistent with other local and regional planning and programmed projects;</li> <li>• Improve traffic circulation between SR 84 and I-680, and in the vicinity of the SR 84/I-680 interchange;</li> <li>• Improve safety for motorists and cyclists on this segment of SR 84; and</li> <li>• Complete the statutory designation of this segment of SR 84 as an expressway facility.</li> </ul> <p>SR 84 has one to two lanes in each direction within the project area. High transportation demand leads to congestion and reduced vehicle speeds for approximately 9 hours each weekday. During the afternoon/evening peak commute period, congestion on northbound SR 84 also contributes to a bottleneck at the weaving area on northbound I-680 between the Calaveras Road/SR 84 on-ramp and northbound SR 84 off-ramp. Motorists use local roadways and the I-580/I-680 interchange to avoid the limited capacity and congestion along SR 84, which further congests these routes.</p>				

## ***Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)***

### **Overview**

No schools, hospitals, or senior facilities are in the project vicinity. The majority of residential developments in the project vicinity are rural single-family residences on large tracts of land, fewer than five of which are within 500 feet of SR 84. Along SR 84, the closest residential development is located about 230 feet west of the east terminus of the project. No other residential developments are located within 1,000 feet of SR 84. Along I-680, the closest residential development is located about 200 feet east of the northern terminus of the project. No other residential developments are located within 1,000 feet of I-680.

### **Land Use**

Most of the project area is in unincorporated Alameda County. Existing land use types adjacent to the project area in unincorporated Alameda County include large parcel agricultural, resource management, water management, mixed use, and rural density residential (maximum 1 unit per 5 acres), as shown in Figure 3. The parcels within the project area are zoned for agricultural uses (including grazing), planned development (allowing for agricultural uses and products, wholesale, and retail nursery), and manufacturing (specifically, the GE-Hitachi Vallecitos Nuclear Center on SR 84).

The Little Valley Specific Plan area is directly north of SR 84 in the project area. Little Valley is a 310-acre area bordered by SR 84 to the south and the GE-Hitachi Vallecitos Nuclear Center to the west. The Little Valley Specific Plan specifies minimum parcel sizes of 2 acres allowing one dwelling unit per each full 4.5 acre- parcel. Approximately 30 residences and one commercial horse stable are within the plan area, all accessed via Little Valley Road.

The western boundary of the project area along I-680 is mostly surrounded by lands designated as water management, resource management, and large parcel agriculture.

Two parts of the project area are within the Pleasanton urban growth boundary. Along I-680 between Happy Valley Road and Sunol Boulevard, land uses adjacent to the project area include retail/highway/service commercial/business and professional offices, and residential low density. At the easternmost end of the project on SR 84, adjacent to the Ruby Hill development, land use is also residential low density.

The project would not result in changes to land use that would affect diesel truck traffic in the area.

### **Truck Routes**

SR 84 in the project area is a designated truck route. SR 84 is part of the Surface Transportation Assistance Act (STAA) Terminal Access network<sup>2</sup> from I-680 to Vallecitos Atomic Laboratory Road. From Vallecitos Atomic Laboratory Road to Vineyard Avenue (east of the project limits), SR 84 is part of the 65-foot California Legal route network. SR 84 in the project area is also identified as a through truck route in the City of Pleasanton and City of Livermore general plans. Additionally, the City of Livermore suggests that Vallecitos Road east of Isabel Avenue (SR 84) be used for local deliveries in Livermore.

I-680 is part of the STAA National Network.

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<sup>2</sup> The STAA defines national highway policies that govern allowable truck and bus size and weight.

## Brief summary of assumptions and methodology used for conducting analysis

### Methodology

Data collection efforts were undertaken in May 2015 while local schools and community colleges were in session to determine existing AM and PM peak period traffic volumes, peak hour pedestrian and bicycle volumes, truck volumes and percentages, freeway bottleneck locations and queues, and queues on key local roadways within the study area. The study area for the traffic analysis is located within southeastern Alameda County, and traverses the communities of Pleasanton, Livermore and Sunol. The study area is shown in Figure 4. The geographic area considered in this analysis extends beyond the project limits to capture the effects of the proposed project on the surrounding transportation system as well as the effects of traffic in the surrounding area on the proposed project.

Fehr & Peers obtained ramp and mainline volume data based on traffic counts collected from the following data sources:

- Ramp counts from May 2015 using pneumatic tubes
- Ramp counts from the Caltrans Census database (2013) for a reasonability check of the ramp tube counts
- Ramp volumes from the *I-680 Northbound Express Lanes Project Traffic Operations Analysis Report* (Fehr & Peers, October 2013)
- Mainline counts from the Performance Measurement System (PeMS) database (2015)

Future traffic conditions were evaluated for an opening year of 2025 and a horizon year of 2045.

The project area was divided into the following segments for purposes of presenting annual average daily traffic (AADT) for the PM<sub>2.5</sub> evaluation:

- "SR 84 mainline from east of I-680 to Vineyard Avenue" – to represent SR 84 in the project limits
- "Northbound I-680 to northbound SR 84 connector" and "Southbound SR 84 to southbound I-680 connector" – to represent the major SR 84/I-680 interchange area ramps<sup>3</sup>
- "I-680 mainline from after Andrade Road (Alameda Creek Bridge) to Calaveras Road" – to represent I-680 south of SR 84 in the project limits
- "I-680 mainline from Koopman Road undercrossing to Sunol Boulevard Interchange" – to represent I-680 north of SR 84 in the project limits

For the mainline segments, the AADT presented below represent both directions of SR 84 and I-680. For the ramps, AADT is presented for the direction of each ramp.

### Assumptions

Trucks represent approximately 4.5% of all traffic in the AM peak period and approximately 2.5% of all traffic in the PM peak period in the study area. Fehr & Peers amalgamated the AM and PM peak period truck percentages with traffic count data to arrive at a total daily truck percentage of 4%. The following truck mix was assumed based on field counts:

- 2-axle/3-axle: 38%
- 4-axle: 42%
- 5+ axle: 20%

As noted above under "Surrounding Land Use/Traffic Generators," the project would not result in changes to land use that would affect diesel truck traffic in the area. Therefore, the daily truck percentage is expected to be same with and without the project.

### Source

Fehr & Peers. 2017. Draft SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project Traffic Operations Analysis Report (TOAR). Prepared for Alameda CTC and Caltrans. March.

<sup>3</sup> This represents two of the three long, highway-to-highway connector ramps at the interchange. The third ramp (southbound SR 84 to northbound I-680) carries about 10 trips in the peak hours; this ramp is uncongested under all scenarios and would not see an increase in volume with the project.

**Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility – See Tables 1 and 2.**

**Table 1. Opening Year (2025) Levels of Service**

	Intersection	Peak Period	Control	No Build		Build	
				Average Delay (seconds) <sup>1</sup>	LOS	Average Delay (seconds) <sup>1</sup>	LOS
1	Isabel Avenue (SR 84)/ Vineyard Avenue	AM	Signalized	>180	F	19	B
		PM		33	C	23	C
2	Isabel Avenue (SR 84)/ Vallecitos Road	AM	Signalized	>180	F	14	B
		PM		8	A	12	B
3	Vallecitos Road (SR 84)/ Drive-Kalthoff Common	AM	Signalized	137	F	8	A
		PM		9	A	9	A
4	Vallecitos Road (SR 84)/ Vallecitos Atomic Laboratory Road	AM	Side-Street Stop-Control <sup>2</sup> / Signalized <sup>3</sup>	4 (26)	A (D)	11	B
		PM		2 (31)	A (D)	11	B
5	Vallecitos Road (SR 84)/ Little Valley Road	AM	Side-Street Stop-Control	13 (>180)	A (F)	<i>Consolidated with Intersection #4</i>	
		PM		3 (151)	A (F)		
6	Paloma Way (SR 84)/ I-680 Southbound Ramps	AM	Side-Street Stop-Control	6 (9)	A (A)	4 (6)	A (A)
		PM		>180 (>180)	F (F)	3 (4)	A (A)
7	Calaveras Road (SR 84)/ I-680 Northbound Ramps	AM	Side-Street Stop-Control	8 (13)	A (B)	7 (9)	A (A)
		PM		14 (79)	B (F)	6 (6)	A (A)
8	Pleasanton-Sunol Road/ Koopman Road	AM	Side-Street Stop-Control	1 (18)	A (C)	1 (18)	A (C)
		PM		16 (41)	C (E)	10 (26)	A (D)
9	Koopman Road/ Southbound I-680 Off-ramp	AM	Uncontrolled	3 (9)	A (A)	3 (9)	A (A)
		PM		6 (11)	A (B)	5 (10)	A (B)
10	Koopman Road/ Northbound I-680 On-ramp	AM	Side-Street Stop-Control	7 (8)	A (A)	7 (8)	A (A)
		PM		7 (8)	A (A)	7 (8)	A (A)
11	Niles Canyon Road-Paloma Way (SR 84)/ Pleasanton-Sunol Road <sup>4</sup>	AM	Signalized	75	E	75	E
		PM		54	D	69	E

Notes:

1. Weighted average control delay presented for signalized intersections. Delay for side-street stop-controlled intersections presented as Whole-Intersection Average Delay (Worst Approach Delay)
2. Side-street stop control under No Project Conditions
3. Signalized under Plus Project Conditions
4. The project would modify traffic operations at this intersection by shifting the highest volumes from the southbound approach to the intersection on Pleasanton-Sunol Road (as it is under existing conditions and projected 2025 and 2045 No Project conditions) to the westbound approach (from Paloma Way [SR 84]). However, the total traffic volume at the intersection would be the same with and without the project.

**Table 2. Opening Year (2025) AADT, % Trucks, and Truck AADT**

Segment	AADT				Truck volume change
	No Build		Build		
	Total	Trucks (4%)	Total	Trucks (4%)	
SR 84 mainline from east of I-680 to Vineyard Avenue	43,959	1,758	52,206	2,089	331
<i>Northbound I-680 to northbound SR 84 ramp</i>	<i>20,806</i>	<i>832</i>	<i>24,564</i>	<i>983</i>	<i>151</i>
<i>Southbound SR 84 to southbound I-680 ramp</i>	<i>19,898</i>	<i>796</i>	<i>23,575</i>	<i>943</i>	<i>147</i>
I-680 mainline from after Andrade Road (Alameda Creek Bridge) to Calaveras Road	191,349	7,654	191,349	7,654	0
I-680 mainline from Koopman Road undercrossing to Sunol Boulevard Interchange	158,459	6,339	151,835	6,073	-266

The Measures of Effectiveness (MOEs) provided in Table 3 summarize how traffic operations will change with the project.

**Table 3. Opening Year (2025) Measures of Effectiveness**

Measure	No Build Conditions		Build Conditions	
	AM Peak Period <sup>1</sup>	PM Peak Period <sup>2</sup>	AM Peak Period <sup>1</sup>	PM Peak Period <sup>2</sup>
<b>All Origin-Destination Pairs<sup>3</sup></b>				
Volume Served	69,760	78,560	72,730	82,510
Vehicle Miles of Travel (VMT)	1,450,000	1,100,000	1,477,000	1,136,000
Vehicle Hours of Delay (VHD) in hours	19,600	16,100	12,300	5,200
<b>Travel Through the Corridor (Southbound I-680)<sup>4</sup></b>				
Average Travel Time (minutes)	7.8	6.4	7.6	6.2
Average Travel Speed (mph)	50	61	51	62
Maximum Individual Vehicle Delay (minutes)	4	0.9	2.3	0.9
<b>Travel Through the Corridor (Northbound I-680)<sup>5</sup></b>				
Average Travel Time (minutes)	14.6	45.5	14.6	22
Average Travel Speed (mph)	67	22	67	45
Maximum Individual Vehicle Delay (minutes)	0.2	49.4	0.2	18.1
<b>Travel Through the Corridor (Southbound SR 84)<sup>6</sup></b>				
Average Travel Time (minutes)	40.2	7.3	8.4	7.3
Average Travel Speed (mph)	10	53	46	53
Maximum Individual Vehicle Delay (minutes)	44.9	0.9	3.6	0.8
<b>Travel Through the Corridor (Northbound SR 84)<sup>7</sup></b>				
Average Travel Time (minutes)	7.7	11.7	7.6	8
Average Travel Speed (mph)	50	33	51	48
Maximum Individual Vehicle Delay (minutes)	0.8	4.8	0.8	1.2

Delay is calculated relative to the posted speed limits of 65 mph on I-680 and 50 mph on SR 84.

1. AM Peak Period represents five hours between 5:00 AM to 10:00 AM
2. PM Peak Period represents five hours between 3:00 PM to 8:00 PM
3. Combined statistics of all origin-destination pairs i.e., mainlines, entry and exit points, all on- and off-ramps, and intersections in the study network.
4. Travel through the corridor extends from the Sunol Boulevard on-ramp gore to the Sheridan Road on-ramp gore.
5. Travel through the corridor extends from the edge of the network (capturing the back of queue for the bottleneck between Washington Boulevard and Mission Boulevard/SR 238) to the Sunol Boulevard off-ramp gore.
6. Travel through the corridor extends from the Vineyard Avenue intersection exit to the northbound I-680 off-ramp gore.
7. Travel through the corridor extends from the northbound I-680 to SR 84 north off-ramp gore to the Vineyard Avenue stop bar (the line behind which vehicles must stop).

**RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility**

**Table 4. Design Year (2045) Levels of Service**

	Intersection	Peak Period	Control	No Build		Build	
				Average Delay (seconds) <sup>1</sup>	LOS	Average Delay (seconds) <sup>1</sup>	LOS
1	Isabel Avenue (SR 84)/ Vineyard Avenue	AM	Signalized	>180	F	26	C
		PM		28	C	48	D
2	Isabel Avenue (SR 84)/ Vallecitos Road	AM	Signalized	>180	F	108	F
		PM		10	A	49	D
3	Vallecitos Road (SR 84)/ Drive-Kalthoff Common	AM	Signalized	113	F	20	B
		PM		10	B	17	B
4	Vallecitos Road (SR 84)/ Vallecitos Atomic Laboratory Road	AM	Side-Street Stop-Control <sup>2</sup> / Signalized <sup>3</sup>	6 (36)	A (E)	29	C
		PM		3 (58)	A (F)	15	B
5	Vallecitos Road (SR 84)/ Little Valley Road	AM	Side-Street Stop-Control	30 (>180)	D (F)	<i>Consolidated with Intersection #4</i>	
		PM		17 (>180)	C (F)		
6	Paloma Way (SR 84)/ I-680 Southbound Ramps	AM	Side-Street Stop-Control	16 (71)	C (F)	12 (29)	B (D)
		PM		>180 (>180)	F (F)	12 (22)	B (C)
7	Calaveras Road (SR 84)/ I-680 Northbound Ramps	AM	Side-Street Stop-Control	8 (14)	A (B)	8 (10)	A (A)
		PM		98 (122)	F (F)	9 (10)	A (C)
8	Pleasanton-Sunol Road/ Koopman Road	AM	Side-Street Stop-Control	3 (30)	A (D)	2 (25)	A (D)
		PM		98 (>180)	F (F)	10 (31)	B (D)
9	Koopman Road/ Southbound I-680 Off-ramp	AM	Uncontrolled	4 (10)	A (A)	4 (10)	A (A)
		PM		9 (14)	A (B)	5 (10)	A (B)
10	Koopman Road/ Northbound I-680 On-ramp	AM	Side-Street Stop-Control	7 (8)	A (A)	7 (8)	A (A)
		PM		8 (8)	A (A)	8 (8)	A (A)
11	Niles Canyon Road-Paloma Way (SR 84)/ Pleasanton-Sunol Road <sup>4</sup>	AM	Signalized	178	F	>180	F
		PM		120	F	>180	F

**Notes:**

1. Weighted average control delay presented for signalized intersections. Delay for side-street stop-controlled intersections presented as Whole-Intersection Average Delay (Worst Approach Delay)
2. Side-street stop control under No Project Conditions
3. Signalized under Plus Project Conditions
4. The project would modify traffic operations at this intersection by shifting the highest volumes from the southbound approach to the intersection on Pleasanton-Sunol Road (as it is under existing conditions and projected 2025 and 2045 No Project conditions) to the westbound approach (from Paloma Way [SR 84]). However, the total traffic volume at the intersection would be the same with and without the project.

**Table 5. Design Year (2045) AADT, % Trucks, and Truck AADT**

Segment	AADT				Truck volume change
	No Build		Build		
	Total	Trucks (4%)	Total	Trucks (4%)	
SR 84 mainline from east of I-680 to Vineyard Avenue	55,906	2,237	81,026	3,241	1,004
Northbound I-680 to northbound SR 84 ramp	26,266	1,051	37,911	1,516	465
Southbound SR 84 to southbound I-680 ramp	24,689	988	35,697	1,428	440
I-680 mainline from after Andrade Road (Alameda Creek Bridge) to Calaveras Road	250,052	10,002	250,052	10,002	0
I-680 mainline from Koopman Road undercrossing to Sunol Boulevard Interchange	208,231	8,330	187,724	7,509	-821

The MOEs provided in Table 6 summarize how traffic operations will change with the project.

**Table 6. Design Year (2045) Measures of Effectiveness**

Measure	No Build Conditions		Build Conditions	
	AM Peak Period <sup>1</sup>	PM Peak Period <sup>2</sup>	AM Peak Period <sup>1</sup>	PM Peak Period <sup>2</sup>
<b>All Origin-Destination Pairs<sup>3</sup></b>				
Volume Served	75,230	90,390	79,260	98,490
Vehicle Miles of Travel (VMT)	2,237,000	1,203,000	2,361,000	1,293,000
Vehicle Hours of Delay (VHD) in hours	36,500	20,300	33,300	15,600
<b>Travel Through the Corridor (Southbound I-680)<sup>4</sup></b>				
Average Travel Time (minutes)	8.4	6.6	8.3	6.2
Average Travel Speed (mph)	47	59	58	64
Maximum Individual Vehicle Delay (minutes)	4.7	0.9	3.7	0.8
<b>Travel Through the Corridor (Northbound I-680)<sup>5</sup></b>				
Average Travel Time (minutes)	15.9	43.6	15.2	34.1
Average Travel Speed (mph)	62	23	65	29
Maximum Individual Vehicle Delay (minutes)	3.6	53.9	0.8	29.7
<b>Travel Through the Corridor (Southbound SR 84)<sup>6</sup></b>				
Average Travel Time (minutes)	52.4	8.5	43.5	7.8
Average Travel Speed (mph)	7	45	9	50
Maximum Individual Vehicle Delay (minutes)	74.9	4.7	62	1.5
<b>Travel Through the Corridor (Northbound SR 84)<sup>7</sup></b>				
Average Travel Time (minutes)	7.8	11.8	7.8	8.6
Average Travel Speed (mph)	49	32	49	45
Maximum Individual Vehicle Delay (minutes)	1.2	4.9	1.2	1.9

Delay is calculated relative to the posted speed limits of 65 mph on I-680 and 50 mph on SR 84.

1. AM Peak Period represents five hours between 5:00 AM to 10:00 AM
2. PM Peak Period represents five hours between 3:00 PM to 8:00 PM
3. Combined statistics of all origin-destination pairs i.e., mainlines, entry and exit points, all on- and off-ramps, and intersections in the study network.
4. Travel through the corridor extends from the Sunol Boulevard on-ramp gore to the Sheridan Road on-ramp gore.
5. Travel through the corridor extends from the edge of the network (capturing the back of queue for the bottleneck between Washington Boulevard and Mission Boulevard/SR 238) to the Sunol Boulevard off-ramp gore.
6. Travel through the corridor extends from the Vineyard Avenue intersection exit to the northbound I-680 off-ramp gore.
7. Travel through the corridor extends from the northbound I-680 to SR 84 north off-ramp gore to the Vineyard Avenue stop bar (the line behind which vehicles must stop).

**Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

See above.

**RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

See above.

**Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses**

Not applicable.

**RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses**  
Not applicable.

**Describe potential traffic redistribution effects of congestion relief (*impact on other facilities*)**

The project proposes to widen SR 84 to four lanes within the project area, improve the existing SR 84/I-680 interchange, and extend the existing southbound I-680 HOV/express lane northward from its current entry point at approximately Calaveras Road to approximately 0.8 mile north of Koopman Road, a distance of approximately 2 miles. The additional capacity would alleviate congestion in the project area, which is expected to attract additional vehicles to SR 84. However, the traffic analysis shows that the additional vehicles would shift from using I-680 and local roadways in the study area, such as Stanley Boulevard and Bernal Avenue, to SR 84. This shift is evident from Tables 2 and 5, which show that the project would result in an increase in truck volumes on SR 84 and a similar decrease in truck volumes on I-680 to the north of the SR 84 interchange, compared with the No Build condition.

The effect of the capacity increase would remain localized because the project would not increase the capacity of I-680 over the Sunol Grade or SR 84 west of I-680, including SR 84 in Sunol and through Niles Canyon. Although the project would result in localized changes to origin-destination patterns, it would not change regional travel demand compared to the No Build condition.

Adding capacity on SR 84 is meant to attract traffic currently using local streets to the SR 84 corridor, which would reduce traffic redistribution impacts on other local facilities consistent with the City of Livermore and City of Pleasanton general plans.

**Comments/Explanation/Details (please be brief)**

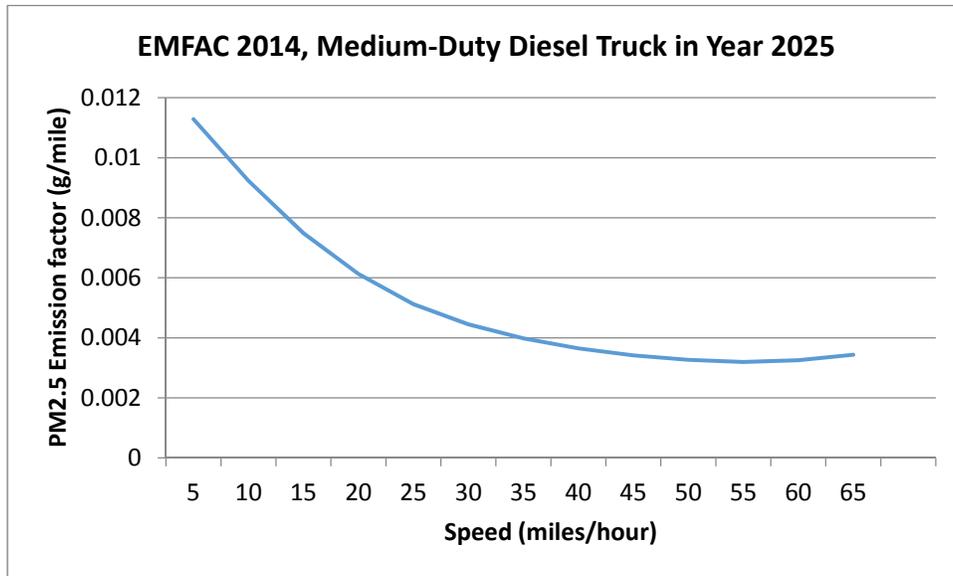
Under 40 CFR 93.123(b)(1), the following criteria are utilized to determine the potential for a proposed project to qualify as a Project of Air Quality Concern.

- (i) *New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;*

The project would add one lane in each direction to SR 84 within the project limits, increasing vehicle capacity. Trucks would comprise 4 percent of traffic with and without the project. In both 2025 and 2045, the increase in truck AADT on SR 84 is very close to the corresponding decrease in truck AADT on I-680 within the study area. After allowing for the route shift from I-680 to SR 84, the total net increase<sup>4</sup> in truck AADT on SR 84 is estimated to be 65 in 2025 and 183 in 2045 (see Tables 2 and 5).

The project would not add capacity for diesel vehicles on I-680. The majority of diesel trucks are restricted from using either HOV or express lanes, even for passing, by California Vehicle Code Section 21655(b). By increasing the efficiency of unused HOV lane capacity on I-680, the project would improve congestion and reduce idling in the mixed-flow lanes that the trucks use.

Although the project would increase truck AADT along SR 84, the rate of PM<sub>2.5</sub> emissions from diesel trucks would be lower due to reduced traffic congestion. In 2025, the project would increase the average vehicle speed on SR 84 by as much as 36 miles per hour during peak periods compared to No Build (Table 3). In 2045, the project would increase the average vehicle speed on SR 84 by as much as 13 miles per hour during peak periods compared to No Build (Table 6). As shown below, the PM<sub>2.5</sub> emission factors for a typical diesel truck decrease as travel speed increases. Therefore, the project's improvement in travel speeds would reduce the rate of PM<sub>2.5</sub> emissions from diesel trucks compared with the No Build condition.



As stated above under “Surrounding Land Use/Traffic Generators,” the majority of residential developments in the project vicinity are rural single-family residences on large tracts of land, fewer than five of which are within 500 feet of SR 84. According to California Air Resources Board (<https://www.arb.ca.gov/ch/handbook.pdf>), particulate matter concentrations from vehicle exhaust are reduced by about 70% at 500 feet away from the highway. Moreover, with full implementation of the California Statewide Truck and Bus Rule in 2023, no truck or bus more than 13 years old

<sup>4</sup> That is, the difference between the truck AADT on SR 84 and I-680.

will be allowed to operate in California without particulate matter controls, which is expected to reduce diesel PM emissions by 68% (<https://www.arb.ca.gov/newsrel/nr121208.htm>).

Based on the project's relatively low net increase in truck AADT after allowing for the route shift from I-680 to SR 84, the lack of additional truck capacity on I-680, the decrease in PM<sub>2.5</sub> emissions from diesel trucks due to improved traffic flow, and the low numbers of sensitive receptors within 500 feet of SR 84, the project's increase in diesel vehicles would not be considered significant, and the project would not be considered a Project of Air Quality Concern.

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

As discussed under item (i) above, the project would not result in a significant increase in diesel vehicles. Overall, the project would generally improve or maintain the LOS at intersections in the project vicinity compared to the No Build condition.

- In the 2025 No Build condition, five intersections would operate at LOS D, E, or F during the AM and/or PM peak period. In the 2025 Build condition, one intersection would operate at LOS D, E, or F (see Table 1).
- In the 2045 No Build condition, eight intersections would operate at LOS D, E, or F during the AM and/or PM peak period. In the 2045 Build condition, three intersections would operate at LOS D, E, or F (see Table 4).

Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

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

The proposed project would not implement a new bus or retail terminal or transfer point. Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

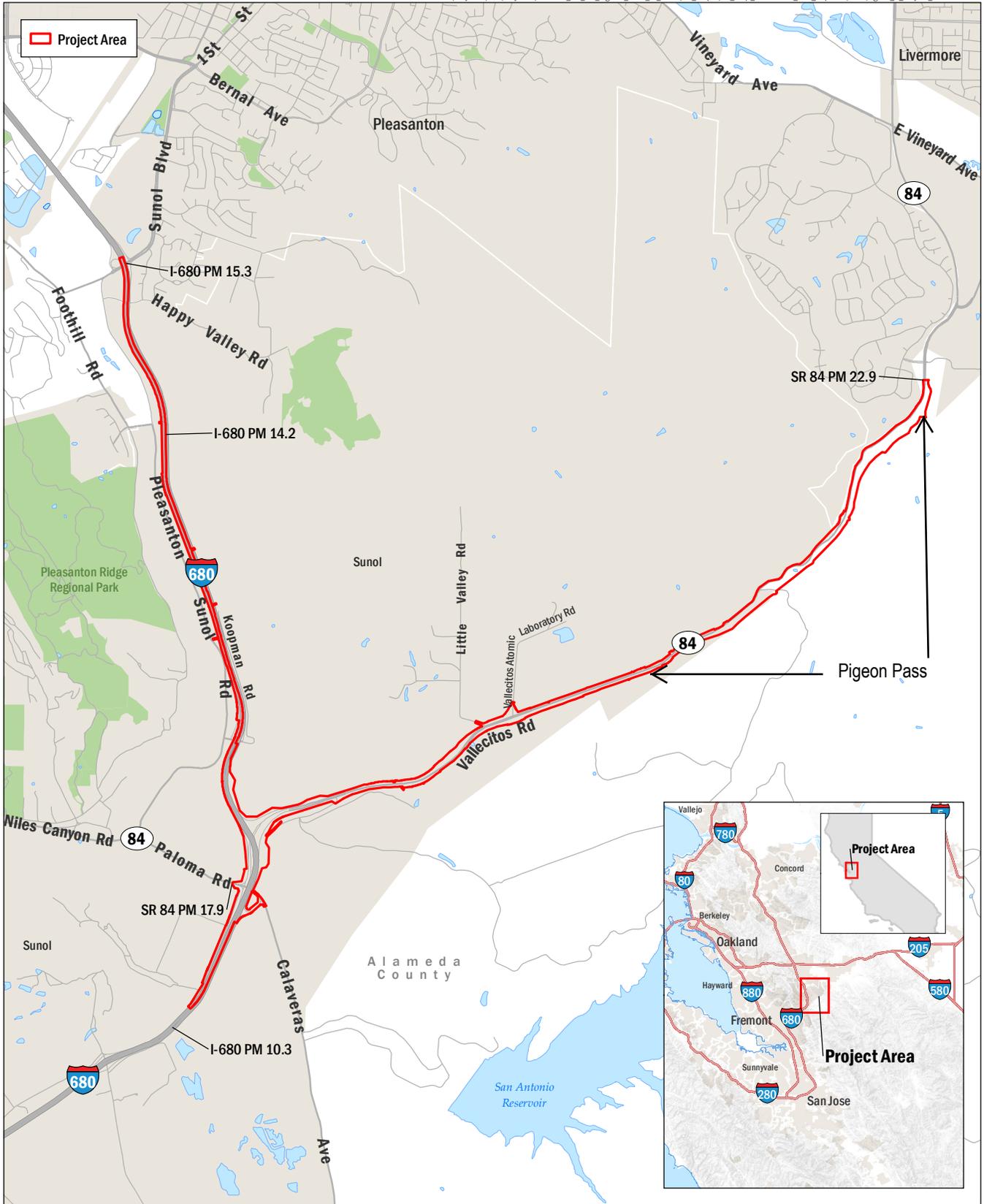
- (iv) *Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and*

The proposed project does not involve expansion of a bus or rail terminal or transfer point. Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

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

There is no state implementation plan for PM<sub>2.5</sub>, and the proposed project is not in or affecting a site of a PM<sub>10</sub> or PM<sub>2.5</sub> air quality standard violation. Furthermore, according to the Bay Area Air Quality Management District's Community Air Risk Evaluation (CARE) program, the project is not mapped in a community that is disproportionately impacted by emissions from existing transportation and stationary sources. Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

## Figures



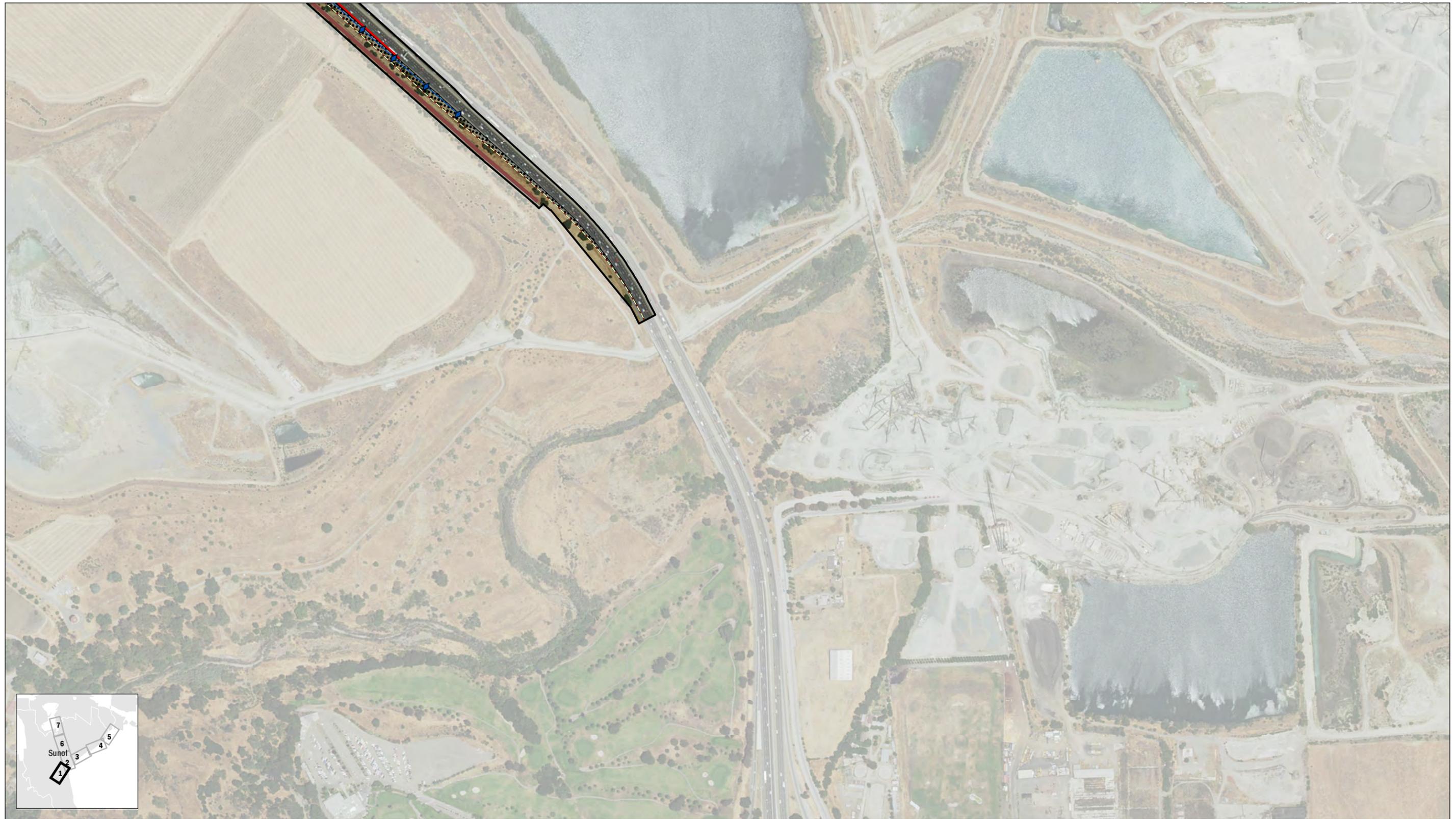
DATA SOURCE  
 ESRI, 2016; US  
 Department of  
 Agriculture (USDA), 2016

MAP PREPARED BY:  
 AECOM Otto Alvarez,  
 12/29/2016

PROJECTION  
 NAD 1983 HARN  
 StatePlane California III  
 FIPS 0403 Feet

SR 84 Expressway Widening  
 and SR 84/I-680 Interchange Improvements Project  
 Alameda County

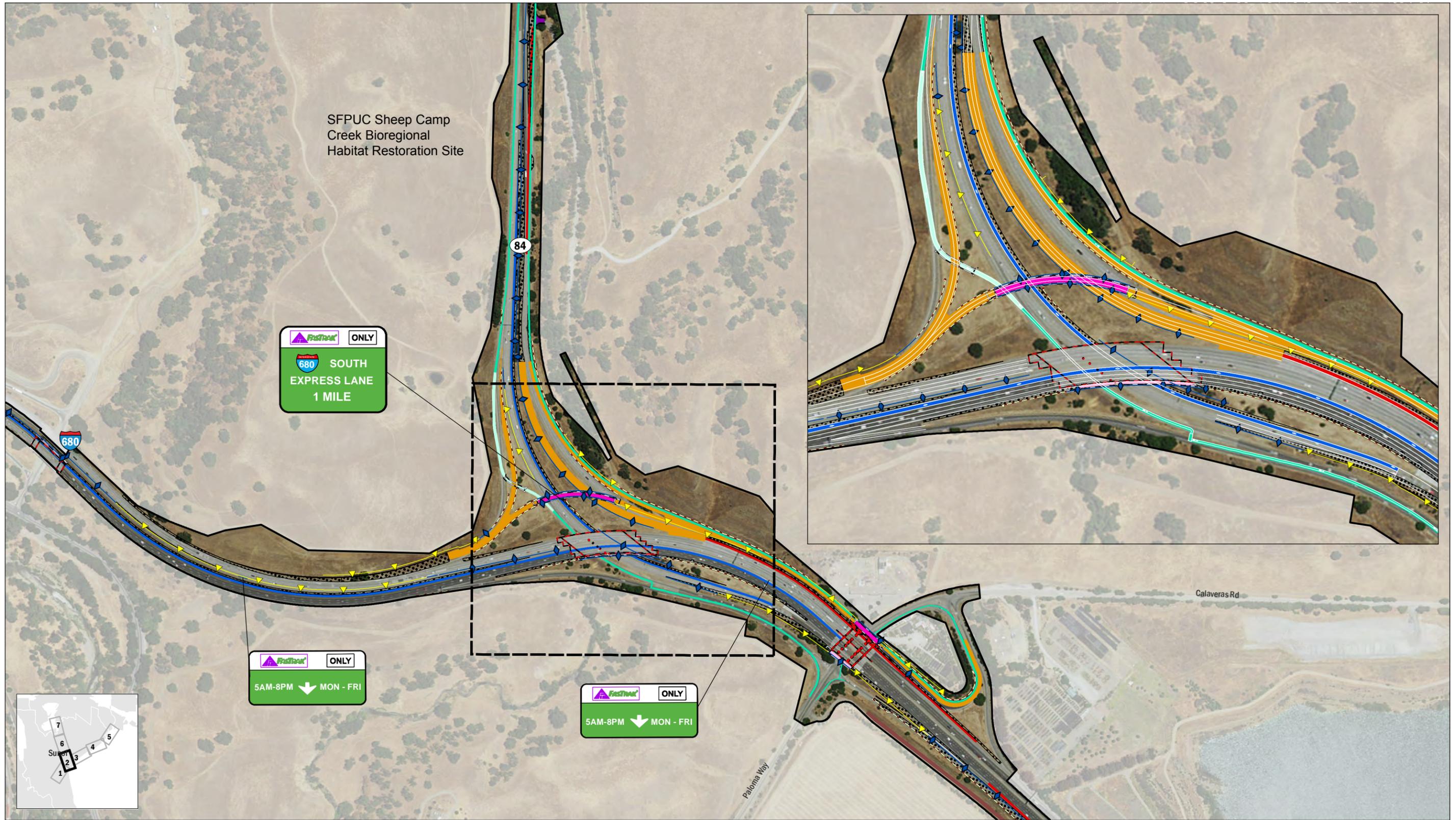
**FIGURE 1**  
 Project Vicinity



0 500 Feet  
 1 inch = 500 feet  
 1:6,000

- Project Area
- Concrete Barrier
- Metal Beam Guard Rail
- Proposed Access Road
- Proposed Auxiliary Lane
- Proposed Pavement Widening

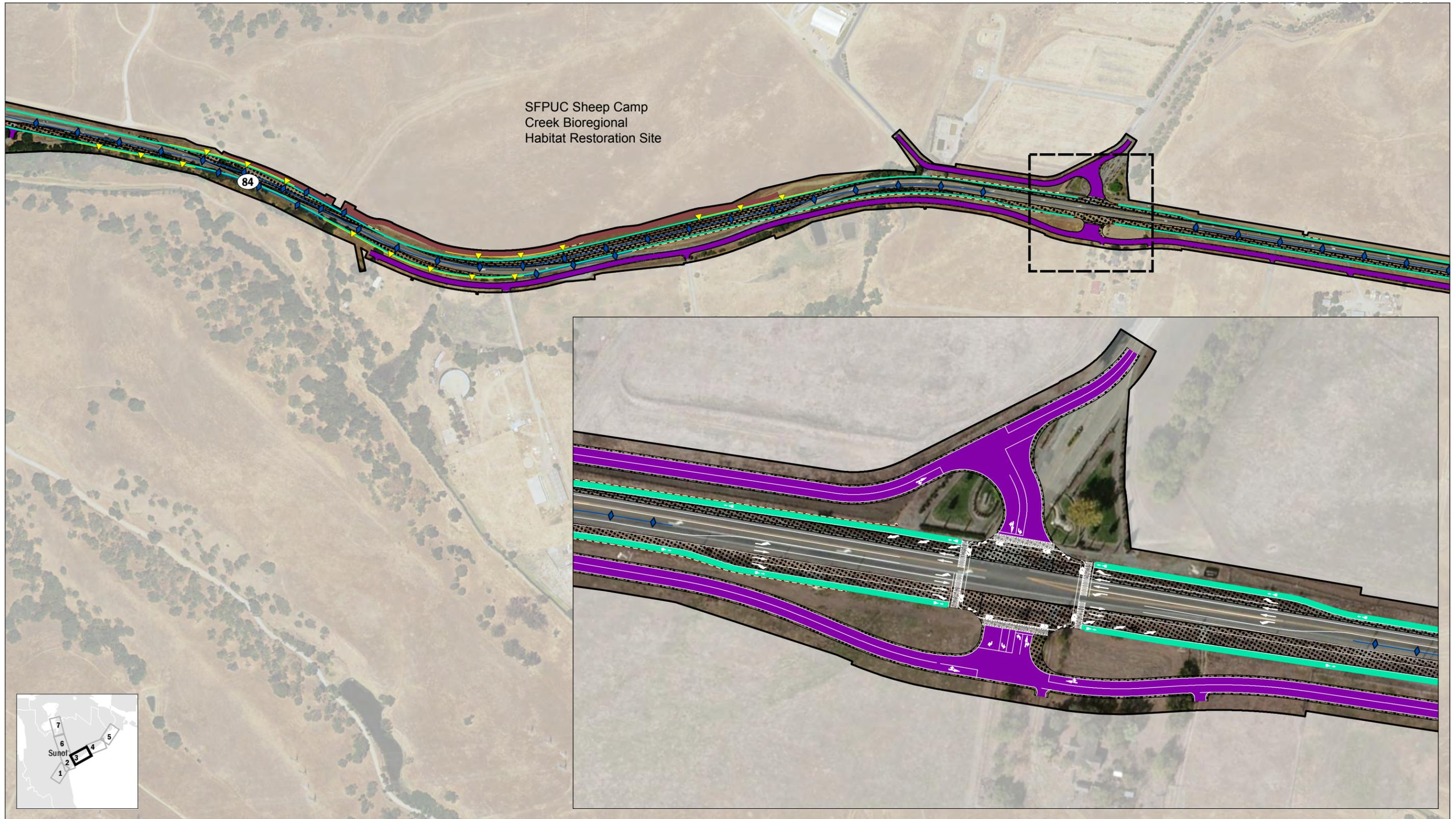
DATA SOURCE  
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 MAP PREPARED BY:  
 AECOM Otto Alvarez,  
 12/19/2016



0 500 Feet  
 1 inch = 500 feet  
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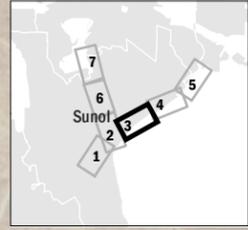
- |                      |                       |                           |                            |                             |
|----------------------|-----------------------|---------------------------|----------------------------|-----------------------------|
| Project Area         | Existing Bridge       | Proposed Class I Bikeway  | Proposed HOV/Express Lane  | Proposed Reconstruction     |
| Concrete Barrier     | Metal Beam Guard Rail | Proposed Class II Bikeway | Proposed Pavement Widening | Proposed Structure Widening |
| Bridge Widening      | Retaining Wall        | Proposed Auxiliary Lane   | Proposed Frontage Road     | Proposed Structure          |
| Proposed Access Road |                       |                           |                            |                             |

DATA SOURCE  
 ESRI, 2016  
 MAP PREPARED BY:  
 AECOM Otto Alvarez,  
 12/19/2016



SFPUC Sheep Camp  
Creek Bioregional  
Habitat Restoration Site

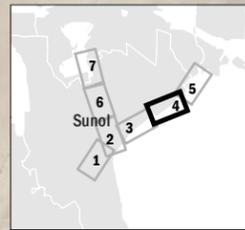
84



0 500 Feet  
1 inch = 500 feet  
1:6,000

- Project Area
- ◆ Concrete Barrier
- Metal Beam Guard Rail
- ▼ Retaining Wall
- Proposed Access Road
- Proposed Class II Bikeway
- Proposed Auxiliary Lane
- Proposed Frontage Road
- Proposed Pavement Widening

DATA SOURCE  
ESRI, 2016  
MAP PREPARED BY:  
AECOM Otto Alvarez,  
12/19/2016



0 500 Feet  
 1 inch = 500 feet  
 1:6,000

- Project Area
- ◆ Concrete Barrier
- Metal Beam Guard Rail
- ▼ Retaining Wall
- Proposed Class II Bikeway
- Proposed Frontage Road
- Proposed Pavement Widening

DATA SOURCE  
 ESRI, 2016  
 MAP PREPARED BY:  
 AECOM Otto Alvarez,  
 12/19/2016



0 500 Feet  
 1 inch = 500 feet  
 1:6,000

- Project Area
- Concrete Barrier
- Metal Beam Guard Rail
- ▼ Retaining Wall
- Proposed Class II Bikeway
- XXXX Proposed Pavement Widening

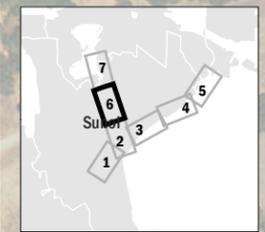
DATA SOURCE  
 ESRI, 2016  
 MAP PREPARED BY:  
 AECOM Otto Alvarez,  
 12/19/2016



**LEFT**  
 OR HOV 2+ ONLY  
**EXPRESS LANE ENTRANCE**  
 1/2 MILE

**EXPRESS LANE**  
 TOLL TO  
 Mission \$X.XX  
 \$X.XX  
 HOV 2+ NO TOLL

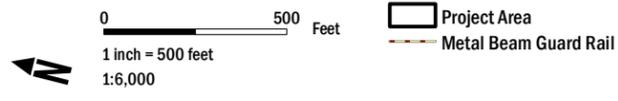
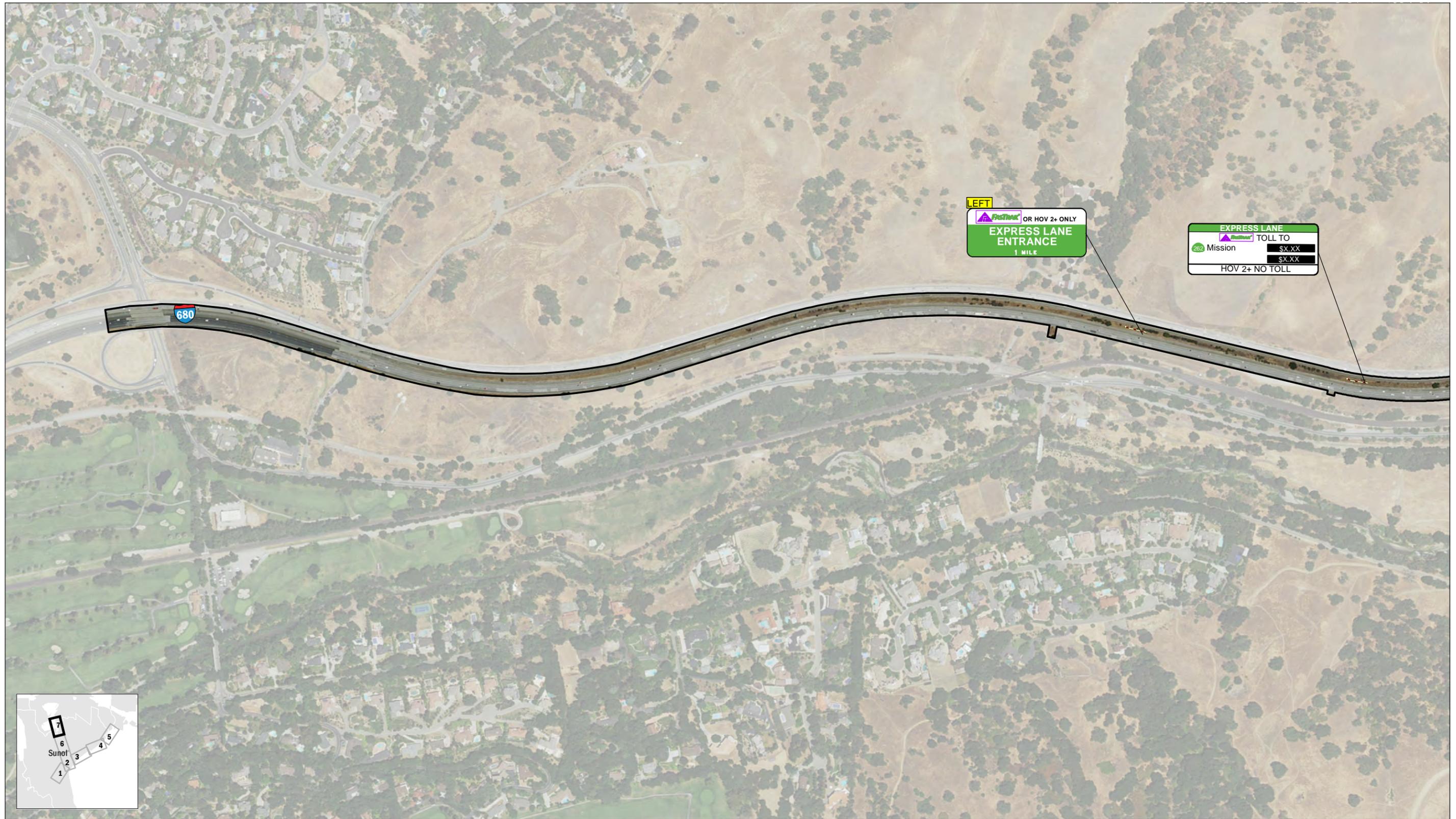
**ONLY**  
 5AM-8PM ↓ MON - FRI



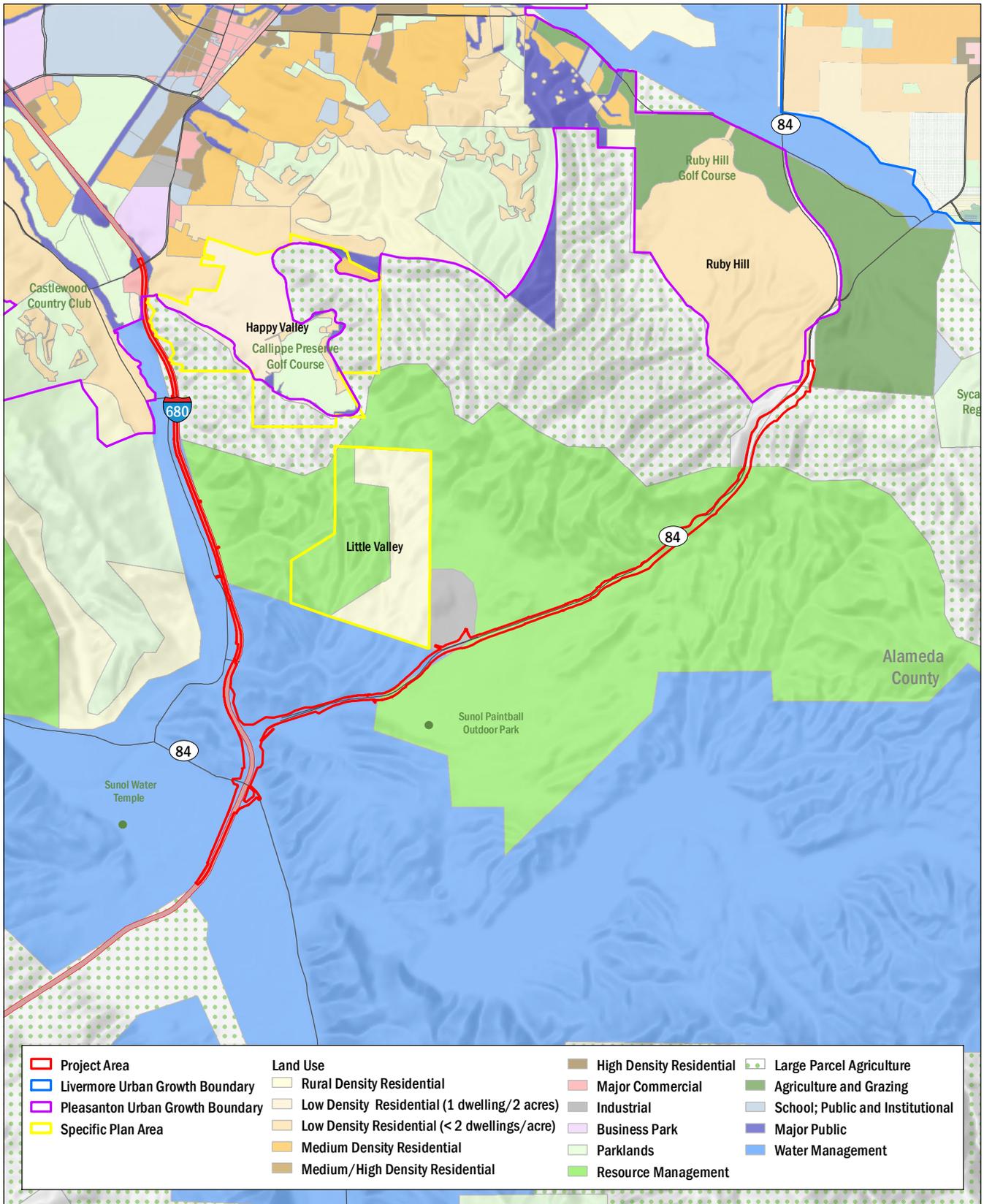
0 500 Feet  
 1 inch = 500 feet  
 1:6,000

- Project Area
- Concrete Barrier
- Existing Bridge
- Metal Beam Guard Rail
- Proposed HOV/Express Lane
- Proposed Pavement Widening

DATA SOURCE  
 ESRI, 2016  
 MAP PREPARED BY:  
 AECOM Otto Alvarez,  
 12/19/2016



DATA SOURCE  
ESRI, 2016  
MAP PREPARED BY:  
AECOM Otto Alvarez,  
12/19/2016



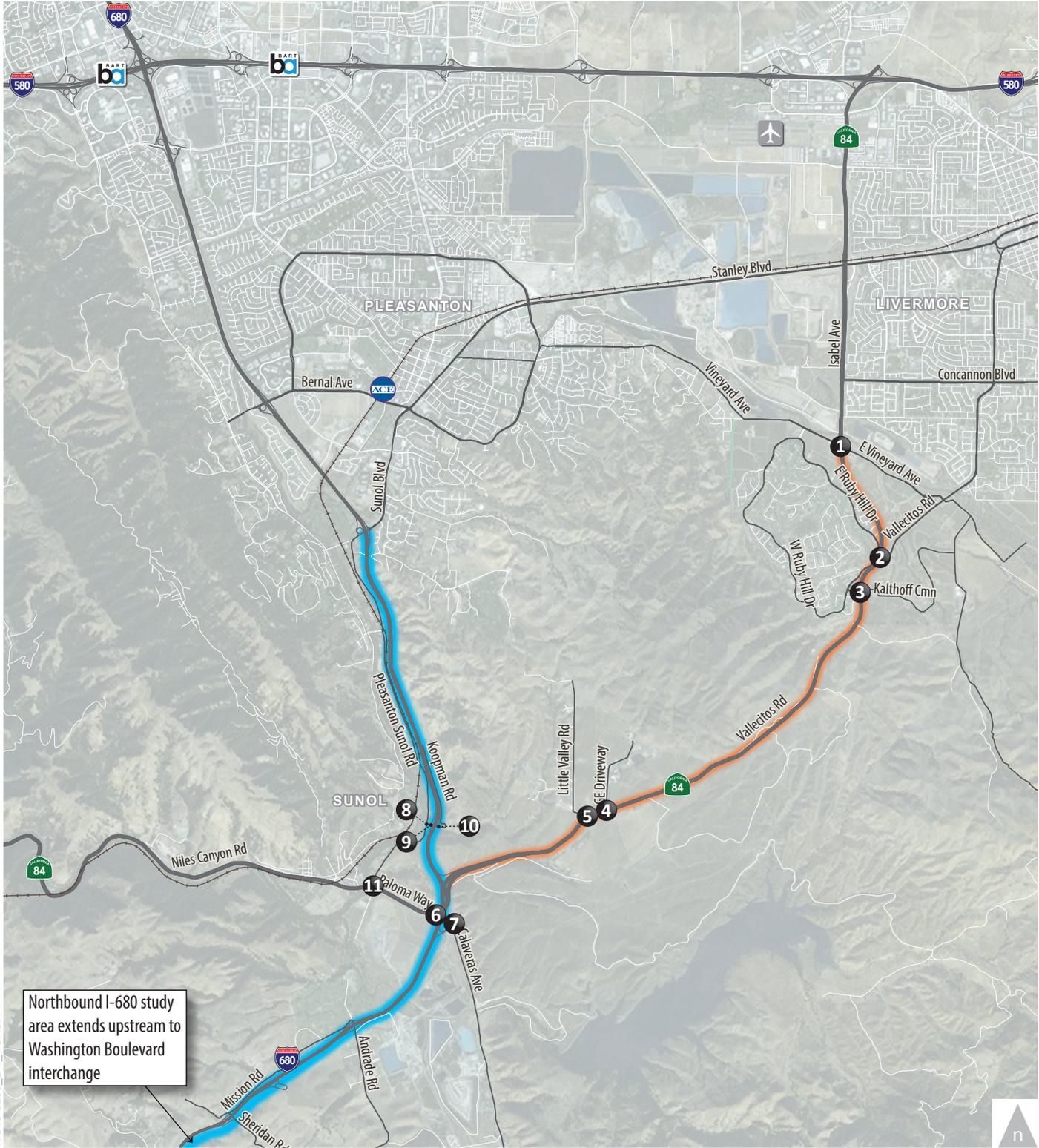
LAND USE DATA SOURCE  
 Livermore (City of Livermore, 2014)  
 Pleasanton (City of Pleasanton, 2012)  
 Alameda County (ACPD, 2002)

MAP PREPARED BY:  
 AECOM  
 Alex Remar,  
 1/11/2017

PROJECTION  
 NAD 1983 HARN StatePlane  
 California III FIPS 0403 Feet

SR 84 Expressway Widening  
 and SR 84/I-680 Interchange Improvements Project  
 Alameda County

**FIGURE 3**  
 Land Use



Northbound I-680 study area extends upstream to Washington Boulevard interchange

**LEGEND**

- # Study Intersection
- ▬ I-680 Operations Analysis Study Area
- ▬ State Route 84 Operations Analysis Study Area
- Livermore Municipal Airport
- Pleasanton Train Station
- BART Station

**SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project**  
 Alameda County  
 Source: Fehr & Peers 2017

**FIGURE 4**  
*Study Intersections*

40 CFR 93.126 Exempt Projects List

County	TIP ID	Sponsor	Project Name	Project Description	Expanded Description	Project Type under 40 CFR 93.126
SCL	SCL170014	San Jose	Senter Road Improvement Project H8-04-021	H8-04-021: In San Jose: On Senter Road between Story Road/Keyes Street and Singleton Road; Implement Safety elements.	H8-04-021: In San Jose: On Senter Road between Story Road/Keyes Street and Singleton Road; Install improvements such as buffered bike lanes, a raised median island, fill in missing sidewalk and/or other safety improvements.	Safety - Adding medians
SCL	SCL170015	San Jose	White Road Improvement Project H8-04-022	HSIP8-04-022: San Jose: On White Road between Penitencia Creek Rd and Rose Ave.; implement safety elements.	HSIP8-04-022: San Jose: On White Road between Penitencia Creek Rd and Rose Ave; install buffered bike lanes, enhanced crosswalks, flashing beacons, additional streetlights and/or other safety improvements.	Safety - Safety improvement program
SM	SM-170008	SamTrans	El Camino Real Traffic Signal Priority Project	San Mateo County: On El Camino Real (State Route 82) from the Palo Alto Caltrain Station to the Daly City BART Station: Install Traffic Signal Priority system	Installation of traffic signal priority (TSP) on El Camino real (State Route 82) to improve transit speed along the corridor by either giving buses early green lights or extending green lights at traffic intersections.	Other - Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)
SON	SON170007	Santa Rosa	Flashing Yellow Arrow Signal Conversion H8-04-026	H8-04-026: Retrofit and upgrade thirty-eight (38) Protected/Permissive signalized intersections with Flashing Yellow Left Turn Arrow displays to meet the current MUTCD/CAMUTCD Standards.	Retrofit and upgrade Protected/Permissive signalized intersections with Flashing Yellow Arrow on seven (7) arterial corridors (Sonoma Avenue, Montgomery Drive, Summerfield Road, Petaluma Hill Road, Santa Rosa Avenue, Mendocino Avenue and Maple Avenue) and at various isolated signals located throughout the City.	Safety - Safety improvement program

**Air Quality Conformity Task Force  
Summary Meeting Notes  
March 23, 2017**

Participants:

Andrea Gordon – BAAQMD	Ginger Vagenas – EPA
Chwen Siripocanont – Alameda County Transportation Commission (Alameda CTC)	Rodney Tavitas – Caltrans
Mike Brady – ICF	Cecilia Crenshaw-Godfrey – FHWA
Shannon Hatcher – ICF	Stew Sonnenberg – FHWA
Dick Fahey – Caltrans	Adam Crenshaw – MTC
	Harold Brazil – MTC

**1. Welcome and Self Introductions:** Harold Brazil (MTC) called the meeting to order at 9:35 am.

**2. PM<sub>2.5</sub> Project Conformity Interagency Consultations**

**a. Confirm Projects Are Exempt from PM<sub>2.5</sub> Conformity**

**i. Confirmation of the list of exempt projects from PM<sub>2.5</sub> conformity  
(2b\_Exempt List 031017.pdf)**

Harold Brazil (MTC) heard no comments from the Task Force on the **2b\_Exempt List 031017.pdf** list of projects.

***Final Determination:*** With email input from FTA and FHWA and input from the other members, the Task Force agreed the projects on the exempt list (**2b\_Exempt List 031017.pdf**) were exempt from PM<sub>2.5</sub> project level analysis.

**3. Projects with Regional Air Quality Conformity Concerns**

**a. Review of the Regional Conformity Status for New and Revised Projects**

Projects Staff Proposing to Include in the 2017 TIP

Adam Crenshaw (MTC) stated that MTC staff had received requests from sponsors to revise one existing project, add one previously archived individually listed project back into the 2017 TIP, and add four new individually listed and 11 new group listed projects to the 2017 TIP. Mr. Crenshaw went on to say that the existing project (the East Bay Greenway project, TIP ID: ALA150008) is being revised to include road diet elements that may not be treated as exempt from regional conformity under 40 CFR 93.126 or 40 CFR 93.127 and that (however) staff believes that the addition of these elements to the 2017 TIP would not require an update to the air quality conformity analysis for Plan Bay Area and the 2017 TIP. Mr. Crenshaw explained that two road diet segments are included in the East Bay Greenway project, from 47th Ave. to Seminary Ave. in Oakland and from Broadmoor Blvd. to Peralta Ave. in San Leandro, and intersections will be modified at various locations for enhanced bicycle and pedestrian safety.

Mr. Crenshaw noted that road diet projects are not treated as exempt from regional conformity, but in the case of the East Bay Greenway project – both road diet segments have an estimated AADT of approximately 16,000 vehicles. As such, Mr. Crenshaw stated that MTC staff requested the Task Force’s concurrence that the addition of this scope to the 2017 TIP will not require an update to the air quality conformity analysis.

Ginger Vagenas (EPA) asked if low traffic volume road diet projects are included in MTC’s travel demand modeling network and Adam Crenshaw (MTC) replied that low traffic volume road diet projects are not included in the travel modeling. Cecilia Crenshaw-Godfrey (FHWA) asked if the East Bay Greenway project was included in a prior MTC TIP or conformity analysis modeling and Mr. Crenshaw indicated that the project previously had been included in a prior TIP as a bicycle and pedestrian (with no road diet component) and was considered exempt under 40 CFR 93.126.

Andrea Gordon (BAAQMD) asked for a specific description of what potential construction might be done as part of the East Bay Greenway project. Mike Brady (ICF) responded by saying:

- A complete package of intersection improvements has not been completed yet
- About a half dozen intersections might need to be modified
- 2 road diet segments with the project area are being evaluated
- Changes to the channelization could include adjusting alignments and (possibly removing left/right turn lanes

***Final Determination:*** With email input from FTA and FHWA and input from the other members, the Task Force’s concurred that the addition of the scope to the East Bay Greenway project (TIP ID: ALA150008) in the 2017 TIP will not require an update to the air quality conformity analysis.

#### **4. Approach to the Conformity Analysis for the Amended 2017 Transportation Improvement Program (TIP) and Plan Bay Area 2040**

- a. Review of the proposed approach to conform Plan Bay Area 2040 and the Amended 2017 TIP Projects** (information agenda item, no action needed from the Task Force at this time)

Harold Brazil (MTC) stated that MTC staff is preparing its Regional Transportation Plan (called Plan Bay Area 2040) and the amended 2017 Transportation Improvement Program (TIP) conformity analysis. Mr. Brazil went on to say that MTC staff seeks the Task Force’s review of the proposed approach to conform Plan Bay Area 2040 and the amended 2017 TIP in accordance with federal conformity regulations. Mr. Brazil mentioned that MTC is scheduled to release the Draft Conformity Analysis for Plan Bay Area 2040 and the Amended 2017 TIP on May 1, 2017. The Task Force members had no questions or comments on this agenda item.

#### **5. Consent Calendar**

- a. February 23, 2017 Air Quality Conformity Task Force Meeting Summary**

***Final Determination:*** With input from all members, the Task Force concluded that the consent calendar was approved.