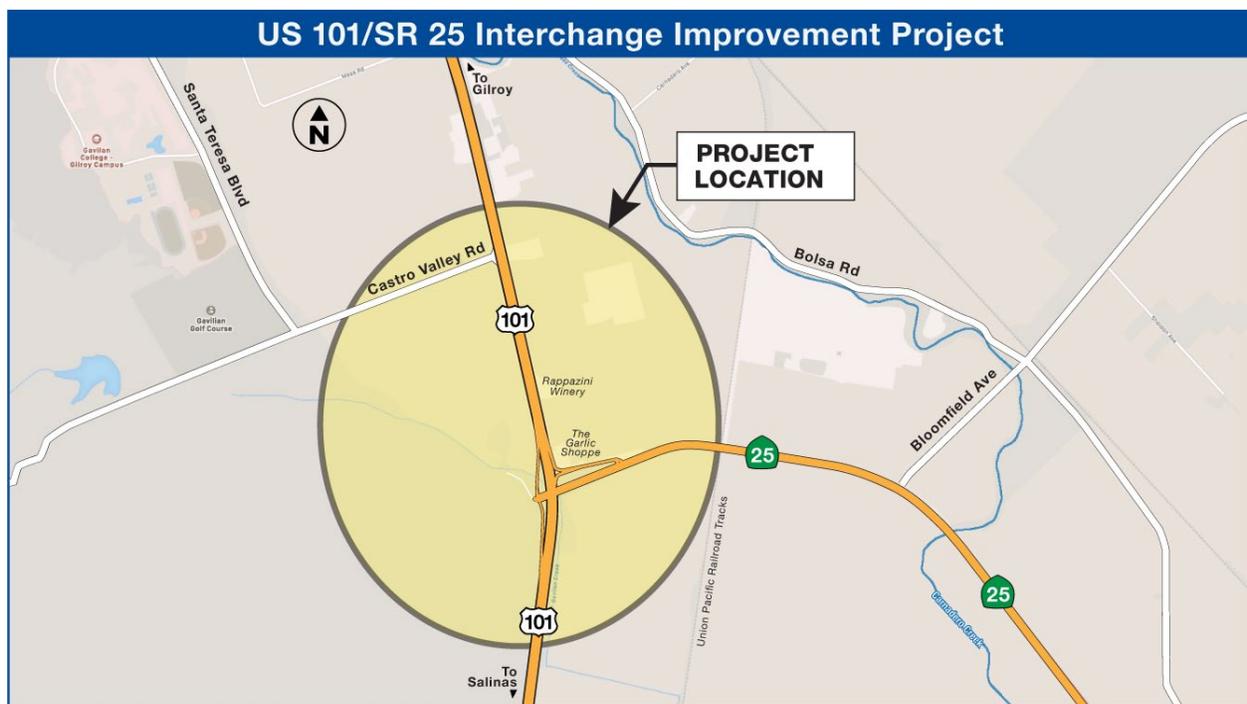


# US 101/SR 25 Improvement Project – Phase 1

## First Addendum

*to the*

## U.S. 101 Improvement Project between Monterey Street and State Route 129 Final Environmental Impact Report



Santa Clara Valley Transportation Authority

May 17, 2022

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## Appendix A

**US 101/SR 25 Improvements- Phase 1 Mitigation Monitoring & Reporting Program**

# 1. INTRODUCTION

## 1.1. BACKGROUND

The US 101 Improvement Project Between Monterey Street and State Route 129 (US 101 Improvement Project/ultimate project) is located south of the City of Gilroy in the southwestern portion of Santa Clara County. The Santa Clara Valley Transportation Authority (VTA) analyzed the Project in the *U.S. 101 Improvement Project Between Monterey Street and State Route 129 Final Environmental Impact Report* (May 2013) (State Clearinghouse #2007102141).<sup>1</sup> The analysis included one Build Alternative with two designs options for the US 101/State Route (SR) 25 Interchange (Design Option A and Design Option B) and two bike alternatives (Alternatives 1 and Alternative 2). The VTA Board of Directors certified the Final Environmental Impact Report (FEIR) and approved the Project with Design Option B and Bike Alternative 2 on June 6, 2013. A detailed project description is provided in Chapter 1 of the FEIR.

As noted in the FEIR, due to funding constraints, the US 101 Improvement Project will be constructed in phases as funding permits. VTA, in cooperation with the California Department of Transportation (Caltrans), are proposing the US 101/SR 25 Improvement Project – Phase 1 (Phase 1 Project/Project) of the larger US 101 Improvement Project. The Phase 1 Project is funded by VTA’s 2016 Measure B sales tax and Senate Bill 1, the Road Repair and Accountability Act of 2017.

## 1.2. PURPOSE OF THE ADDENDUM

The California Environmental Quality Act (CEQA) recognizes that between the date projects are approved and the date they are constructed one or more of the following changes may occur: (1) the scope of the project may change; (2) the environmental setting in which the project is located may change; (3) certain environmental laws, regulations, or policies may change; or (4) previously unknown information may be identified. CEQA requires that lead agencies evaluate any of these changes to determine whether or not they pose any significance relative to the approved project.

The mechanism for assessing the significance of these changes is found in CEQA Guidelines Sections 15162 to 15164. Under these Guidelines, a lead agency should prepare a subsequent or supplemental CEQA document if the triggering criteria set forth in CEQA Guidelines Section 15162 and 15163 are met. These criteria include a determination whether any changes to the project, or the circumstances under which the project will be undertaken, involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, a subsequent or supplemental CEQA document may be prepared if “new information” meeting certain standards under Guidelines Section 15162 is presented. If the changes do not meet these criteria, or if no “new information of substantial importance” is presented, then an Addendum per CEQA Guidelines Section 15164 is prepared to document any minor corrections to the Environmental Impact Report (EIR) or

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<sup>1</sup> The *U.S. 101 Improvement Project Between Monterey Street and State Route 129 Final Environmental Impact Report* (May 2013) is available at <https://www.vta.org/projects/us-101sr-25-interchange-phase-1>.

Initial Study/Mitigated Negative Declaration (IS/MND). CEQA does not require that an Addendum be circulated for public review.

As discussed in Section 3 of this document, the implementation of the design changes and changes to certain environmental laws described in Section 2 will not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, the preparation of a Supplemental EIR, as defined by CEQA, is not warranted and an Addendum is the appropriate environmental document.

This addendum is limited in scope to an evaluation of the Phase I Project, proposed design changes, and updates made to environmental laws since the approval of the Final Environmental Impact Report (FEIR) in 2013. This Addendum will also determine whether the Phase 1 Project will result in any substantial changes to the environmental setting, impacts, and mitigation measures as previously described in the approved FEIR.

### **1.3. PHASE 1 PROJECT DESCRIPTION**

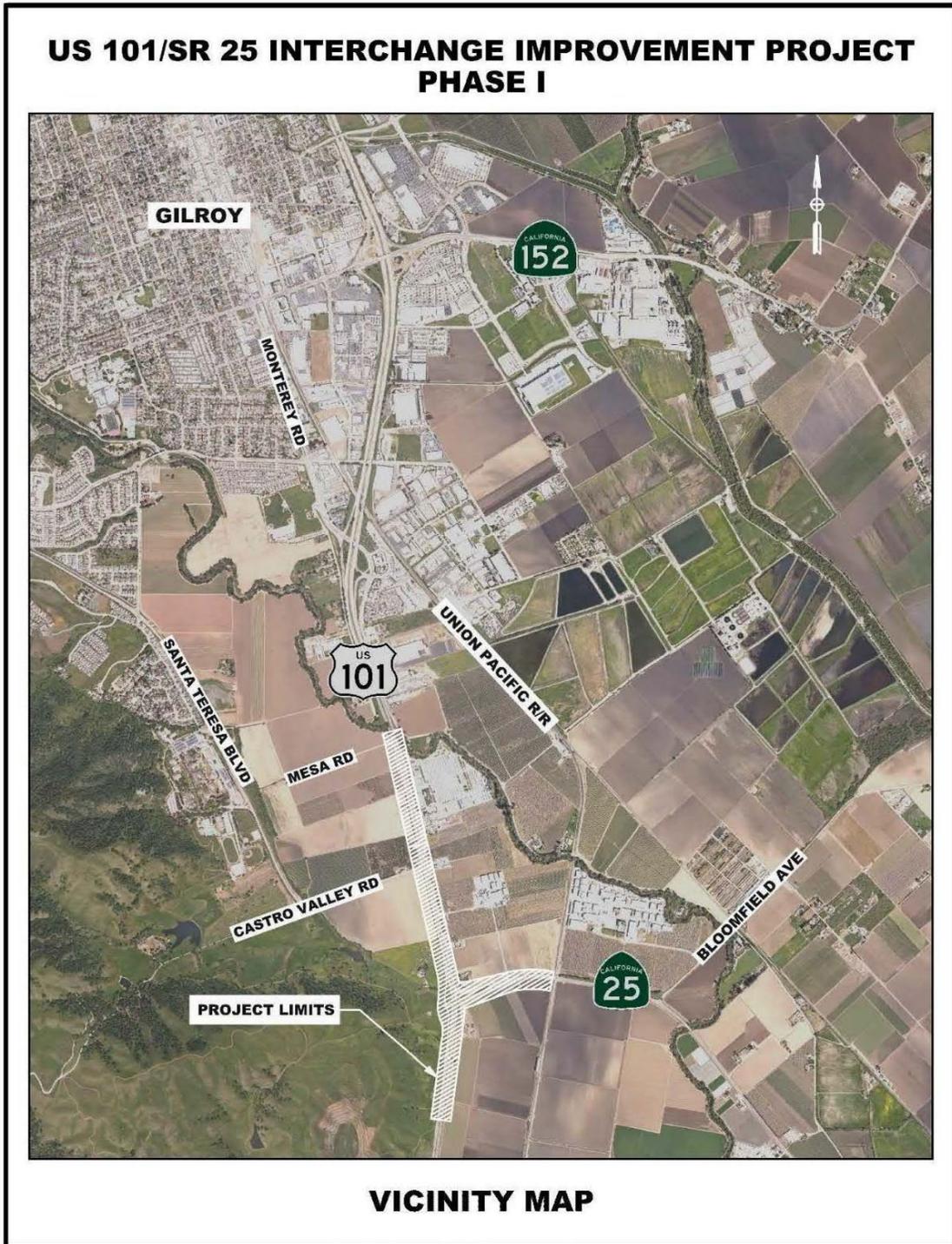
The existing US 101/SR 25 interchange is over 30 years old and no longer accommodates traffic demand due to rapid growth in commuter, commercial, and recreational traffic that passes through the interchange. These conditions, coupled with high travel speeds, have resulted in higher-than-average accident rates in the interchange area, and US 101 southbound traffic exiting to go eastbound on SR 25 backs up onto the US 101 mainline, creating a safety hazard.

To address these existing conditions and to accommodate future phases of the US 101 Improvement Project, the objectives of the Phase 1 Project include:

- Improve connectivity between US 101 and SR 25
- Improve traffic operations along US 101 and SR 25 with added ramp storage and signals
- Enhance safety within the interchange area by reducing ramp backups onto southbound US 101 and provide improved access for safer merges
- Support the overall future interchange reconfiguration, including a Santa Teresa Boulevard connection, US 101 and SR 25 widening, and SR 152 improvements between US 101 and SR 156

Along SR 25, the Phase 1 Project begins near post mile (PM) 2.1, just west of the Union Pacific Railroad (UPRR) crossing, and continues to PM 2.6, at the terminus of SR 25 at US 101. Along US 101, project improvements begin at PM 2.6, south of SR 25, and continue to PM 4.2, near Mesa Road (see Figure 1).

Figure 1: Phase 1 Project Location



To meet the objectives, the Phase 1 Project includes the following key elements within the project footprint:

- Construct a new SR 25 overcrossing above US 101, north of the existing SR 25 overcrossing. Demolish the existing SR 25 overcrossing.
- Construct new US 101/SR 25 interchange on-and off-ramps.
- Install new traffic signals at the US 101 ramp termini with SR 25.
- Realign northbound US 101 to the west toward the median.
- Realign SR 25 starting at the new overcrossing structure and conform with the existing alignment just west of the UPRR crossing.
- Remove access to southbound US 101 from Castro Valley Road and Mesa Road.
- Install a bike path adjacent to the southbound US 101 off-ramp between Castro Valley Road and SR 25.
- Modify access to the Wu property (Assessor's Parcel Number [APN] 810-35-008) by providing a new local roadway connection to the property from Castro Valley Road.
- Remove direct access to US 101 from private properties within the project footprint.
- Install ramp metering equipment at the southbound US 101 on-ramp and loop detectors for traffic counts on US 101 near the southbound and northbound on-ramps.

The Phase 1 Project is included in the Metropolitan Transportation Commission's (MTC's) Regional Transportation Plan, *Plan Bay Area 2050*, as ID 21-T06-028. The Phase 1 Project is also included in MTC's Transportation Improvement Program as Project Number SCL190013. The TIP was found to conform by FHWA and FTA in October 2021.

#### **1.4. US 101/SR 25 IMPROVEMENT PROJECT AND PHASE 1 PROJECT COMPARISON**

This section compares elements of the ultimate US 101 Improvement Project assessed in the FEIR and the Phase 1 Project, focusing on the interchange area only. The ultimate design and the Phase 1 Project are shown in Figures 2 and 3, respectively. As future phases are developed, the project elements described in the FEIR for the US 101 Improvement Project will be implemented.

##### US 101 Widening

The US 101 Improvement Project includes widening US 101 from a 4-lane expressway to a 6-lane freeway (an additional lane in each direction) between the Monterey Street interchange in Gilroy and the SR 129 interchange in northern San Benito County. For the Phase 1 Project, no additional lanes on US 101 will be constructed.

##### US 101/SR 25 Interchange Ramps

The US 101 southbound off-ramp to SR 25 begins north of Castro Valley Road under the US 101 Improvement Project. For the Phase 1 Project, the off-ramp will begin south of Castro Valley Road and is therefore shorter. The southbound on-ramp from SR 25 to US 101 is also shorter under the Phase 1 Project compared to the ultimate project. In addition, for the Phase 1 Project, the northbound on- and off-ramps will have a modified and more compact configuration compared to the ultimate project.

Figure 2: FEIR Ultimate US 101/SR 25 Improvement Project Design

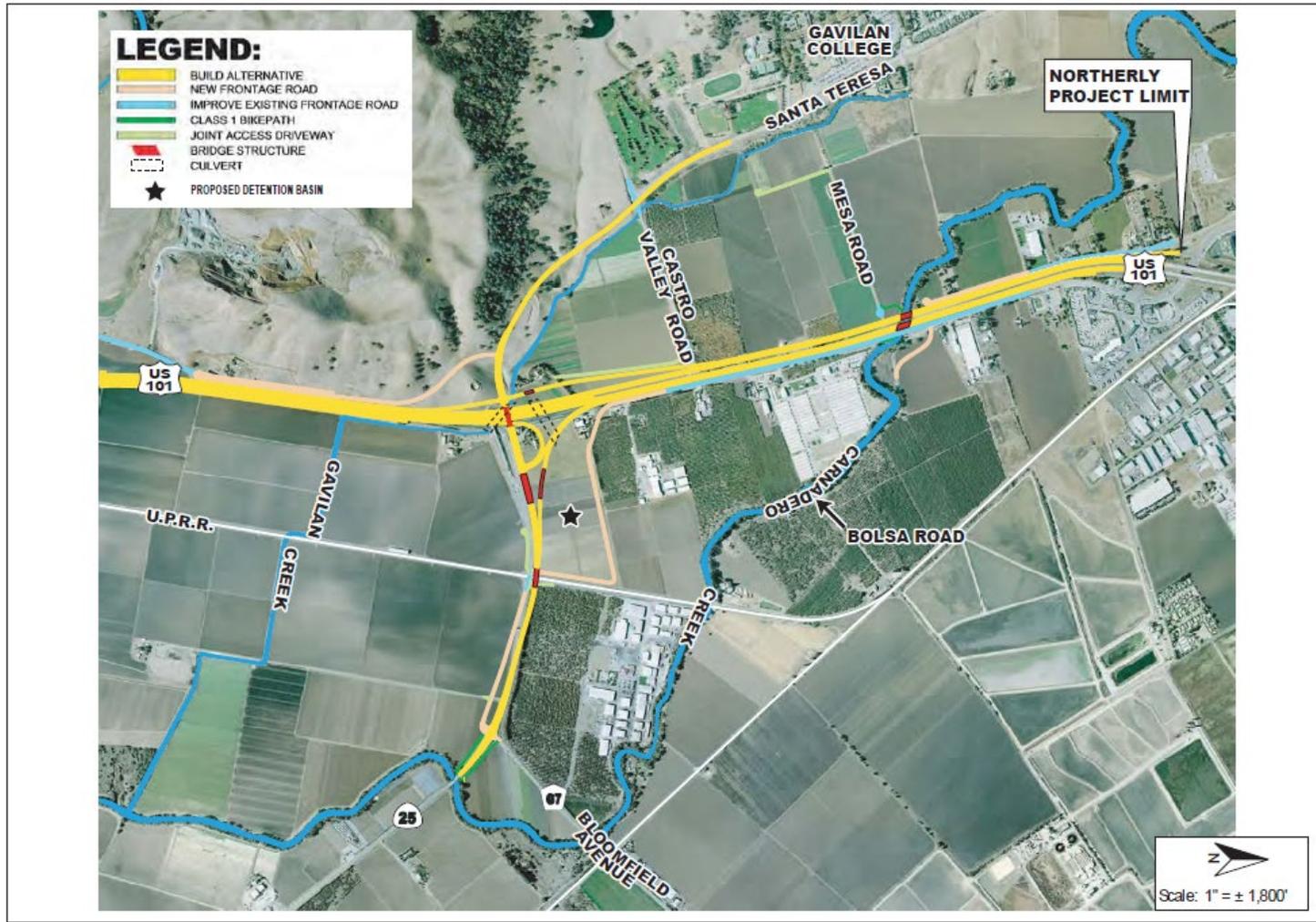
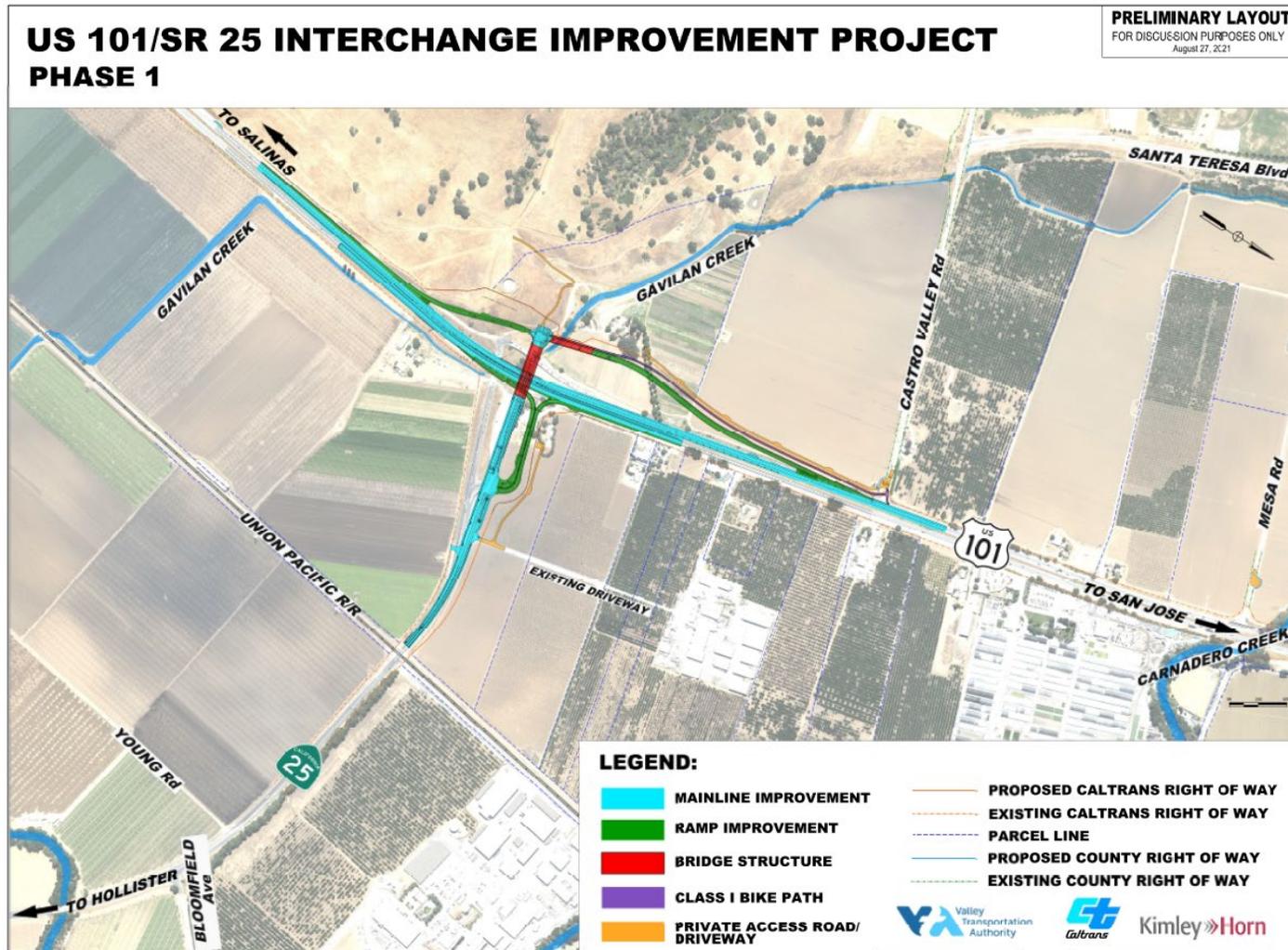


Figure 3: Phase 1 Project Design



### Bike Facilities

The US 101 Improvement Project includes new north-south bike paths and bike lanes along frontage roads from Santa Teresa Boulevard to San Juan Highway. In the Phase 1 Project, a new, two-way bike path will only be constructed adjacent to the southbound US 101 off-ramp between Castro Valley Road and SR 25.

### Gavilan Creek

The US 101 Improvement Project includes raising US 101 and constructing a series of culverts under the highway to accommodate flood flows from Gavilan Creek from the west side of US 101 to the east side. While the ultimate project includes a small bridge structure along the US 101 southbound off-ramp near Gavilan Creek, it also extends the existing 185-foot-long reinforced box culvert that contains Gavilan Creek to the west of US 101. The Phase 1 Project will not raise US 101 or construct a series of culverts under the highway but will instead construct a longer bridge (as part of the US 101 southbound off-ramp) that will extend over Gavilan Creek and not require an extension of the Gavilan Creek culvert. The longer Phase 1 bridge over Gavilan Creek will accommodate flood flows for the Phase 1 and ultimate project, while also avoiding impacts to Gavilan Creek.

### Monterey Road Frontage Road

The US 101 Improvement Project includes a frontage road from just south of the US 101/Monterey Road interchange extending south along the east side of US 101. The frontage road runs through the northeast quadrant of the US 101/SR 25 interchange, then parallel to the UPRR tracks, then east across the UPRR tracks utilizing the existing SR 25 at-grade crossing to terminate at the SR 25/Bloomfield Avenue intersection. The Phase 1 Project will not include this frontage road.

### Santa Teresa Boulevard Extension

The US 101 Improvement Project extends Santa Teresa Boulevard approximately 0.5 mile from Castro Valley Road to the new US 101/SR 25 interchange. The Phase 1 Project will not include the extension of Santa Teresa Boulevard.

### UPRR Crossing

The US 101 Improvement Project includes grade separating SR 25 above the UPRR tracks. Under the Phase 1 Project, a bridge over UPRR will not be constructed; SR 25 will remain at-grade with the railroad tracks.

### Right-of-Way Impacts

The right-of-way impacts associated with the Phase 1 Project are shown in Table 1, which includes additional detail compared to the FEIR as to the type of acquisitions needed for the Phase 1 Project. Specially, the FEIR did not call out various easements or abutter rights. In the FEIR, the Rapazzini Winery buildings were to be acquired with residual agricultural uses to remain. Under the Phase 1 Project, a full acquisition of this property is required due to access restrictions.

VTA's Relocation Assistance Program is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended), Title 49 Code of Federal Regulations (CFR) Part 24, and the California Relocation Act. The purpose of Relocation Assistance Program is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000d, et seq.).

**Table 1: Right-of-Way Requirements for the Phase 1 Project**

APN	Owner	Contact Address	Right-of-Way Required (acres) <sup>1</sup>	Other Right-of-Way Requirements
808-22-009	Clara Ljepava	13065 Regan Ln, Saratoga, CA 95070	0	Street easement (county), temporary construction easement, abutter right acquisition
808-23-002	Milias Nike and Mitchell J	5015 Monterey Rd, Gilroy, CA 95020	0	Abutter right acquisition
808-23-005	Borello and Sons Inc S G	55 Castro Valley Rd, Gilroy, CA 95020	0	Abutter right acquisition
810-35-008	Wu Aiguo	4355 Monterey Rd, Gilroy, CA 95020	9.86	Partial acquisition for highway improvements, temporary construction easement, utility easement, abutter right acquisition, renew existing flowage easement
810-82-001	Castro Valley Props LLC	Santa Teresa Blvd, #2, Gilroy, CA 95020	2.62	Partial acquisition for highway improvements, street easement (County), temporary construction easement, utility easement, ingress/egress easement, abutter right acquisition
810-82-002	Castro Valley Props LLC	3401 Monterey Rd, Gilroy, CA 95020	0.72	Partial acquisition for highway improvements, temporary construction easement, ingress/egress easement,
841-32-010	Two Youths LLC (Rapazzini Winery)	4350 Monterey Highway, Gilroy, CA, 95020	0.58	Full acquisition for highway improvements
841-32-011	Salvador and Maria Luz Torres	4340 Monterey Highway, Gilroy, CA 95020	0	Ingress/egress easement, abutter right acquisition
841-32-013	Filice Estate Vineyards	Monterey Rd, Gilroy, CA, 95020	3.35	Partial acquisition for highway improvements, temporary construction easement, ingress/egress easement, abutter right acquisition
841-32-014	Filice Estate Vineyards (Garlic Shoppe)	4310 Monterey Highway, Gilroy, CA 95020	1.16	Partial acquisition including buildings for highway improvements, temporary construction easement
841-34-002	Bloomfield Ranch LLC	3405-A Monterey Rd, Gilroy, CA 95020	0	Temporary construction easement, utility easement
<b>Total Permanent Acquisition</b>			<b>18.29</b>	
Notes:				
<sup>1</sup> Right-of-way required (acres) is applicable to permanent acquisitions due to construction and operation of the project improvements.				

## **1.5. PHASE 1 PROJECT SCHEDULE**

The Phase 1 Project will be constructed in stages over approximately 24 to 36 months and will be open to traffic in early 2027. The Project's milestones are summarized below:

- US 101 Improvement Project (Ultimate Project) Final Environmental Impact Report – May 2013
- Phase 1 Project CEQA Addendum Approved – Anticipated June 2022
- Final Design – Anticipated October 2022
- Right-of-Way Certification – Anticipated March 2024
- Award Construction Contract – Anticipated June 2024
- Construction Complete/Open to Traffic - Anticipated early 2027

## **1.6. OUTREACH FOR THE PHASE 1 PROJECT**

VTA conducted a Virtual Open House and Community Meeting on June 9, 2021, from 6 p.m. to 8 p.m. via Zoom to update the community on the status of the Phase 1 Project. Elected officials present at the meeting included City of Gilroy Mayor Marie Blankley and City of Hollister Mayor Ignacio Velazquez, along with an additional 42 attendees. The meeting was held in English with Spanish interpreters providing simultaneous translations via a Zoom audio channel. The meeting was advertised through a mailer that was translated into Spanish and mailed to addresses within two miles of the project area. A Factsheet was posted on the VTA project webpage and translated into Spanish, Chinese, Vietnamese, and Tagalog.

The meeting consisted of a PowerPoint presentation and discussion facilitated by VTA staff and project consultants. During the meeting, VTA and consultant staff provided a summary of the US 101 Improvement Project and the objectives of the Phase 1 Project. Displays detailing the proposed design for the Phase 1 Project, improvements to multi-modal facilities, and access modifications were presented. Meeting attendees posed questions regarding the project design and schedule, which were answered during the meeting by VTA staff. A recording of the Zoom meeting was posted on the VTA YouTube Channel.

## **2. CHANGES TO ENVIRONMENTAL LAWS**

This section describes the changes to environmental laws since approval of the FEIR in 2013.

### **2.1. AIR QUALITY**

The governing regulatory guidance for conducting the US 101 Improvement Project air quality analysis was the Clean Air Act Amendments of 1990. The US Environmental Protection Agency (EPA) reviews the most up-to-date scientific information and the existing ambient standards for each pollutant every five years and obtains advice from the Clean Air Scientific Advisory Committee (CASAC) on each review. Based on recommendations from the CASAC, EPA considers revisions to the National Ambient Air

Quality Standards (NAAQS). The changes and adjustments to the NAAQS, especially those that occurred since approval of the FEIR, include the following:

- The 8-hour ozone (O<sub>3</sub>) standard of 0.075 parts per million (ppm) was established in 2008. On March 12, 2008, EPA promulgated attainment designations based on the 8-hour O<sub>3</sub> standard. On October 1, 2015, EPA strengthened the 8-hour O<sub>3</sub> NAAQS based on new scientific evidence regarding the effects of ground-level O<sub>3</sub> on public health and the environment. The new 8-hour O<sub>3</sub> NAAQS standard (primary and secondary) is 0.070 ppm. The area designation/classification based on the new standard passed Final rule on March 1, 2018. The California Air Resources Board (CARB) will be considering regional State implementation Plans (SIPs) for this standard in 2022. The 2022 State SIP Strategy will include measures and commitments to reduce emissions from State-regulated sources to support attainment of the 0.070 ppm standard in all nonattainment areas across California.

The EPA revised the air quality standards for particle pollution in 2012. The new revisions became effective on January 15, 2015, and include the following:

- The annual particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) standard, for primary and secondary, was strengthened from the 2006 level of 15 micrograms per cubic meter (µg/m<sup>3</sup>) to 12.0 µg/m<sup>3</sup> (primary) and 15.0 µg/m<sup>3</sup> (secondary); the 24-hour standard of 35 µg/m<sup>3</sup> was retained.
- The 24-hour particulate matter less than 10 microns in diameter (PM<sub>10</sub>) standard of 150 µg/m<sup>3</sup> was retained.

## 2.2. NOISE

Changes and adjustments to Caltrans mobile traffic noise standards and analysis procedures since approval of the FEIR include the following:

1. The Caltrans base cost allowance for noise abatement reasonableness and feasibility range from \$45,000 to \$57,000 was included in the *US 101 Improvement Project Between Monterey Street and State Route 129 Noise Study Report* (July 2010) and FEIR. The 2019 base cost analysis is now \$107,000 per benefited receptor.

The Caltrans Traffic Noise Analysis Protocol (Protocol) (2006) and Technical Noise Supplement (TeNS) (2009) were utilized for the *US 101 Improvement Project Between Monterey Street and State Route 129 Noise Study Report* (NSR) for the ultimate project. The current versions of the Protocol and TeNS are dated April 2020 and September 2013, respectively. The most notable change to the current Protocol and TeNS is that a noise barrier must achieve a minimum noise reduction of 5 dBA and accomplish Caltrans' 7-dBA noise reduction design goal at one or more benefited receptor. The NSR analyzed acoustic feasibility for noise barriers based solely on achieving a 5-dBA noise reduction.

## 3. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

### 3.1. AIR QUALITY

This section evaluates the potential for air quality impacts based on the findings of the *US 101/SR 25 Interchange Improvement Project – Phase 1, Air Quality and Greenhouse Gas Addendum* (September 2020).

The Phase 1 Project is located within the San Francisco Bay Area Air Basin. The air pollutants of greatest concern in this area are ozone, particulate matter less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>), particulate matter less than or equal to 10 microns in diameter (PM<sub>10</sub>), and carbon monoxide (CO). Motor vehicles are the dominant source of these pollutants.

#### *Short-term Construction Emissions*

The Phase 1 Project will be constructed in phases over approximately 24 to 36 months and is anticipated to be open to traffic in early 2027. Temporary construction emissions will result from grubbing/land clearing, grading/excavation, drainage/subgrade construction, and paving. Pollutant emissions will vary daily, depending on the level of activity, specific operations, and prevailing weather.

Construction emissions for the Phase 1 Project were calculated using the Roadway Construction Emissions Model (Version 9.0.0) (RCEM). Emissions include particulate matter (airborne dust) generated by activities such as excavation, grading, and hauling. Exhaust from construction equipment includes reactive organic gases (ROG), CO, nitrogen oxides (NO<sub>x</sub>), directly emitted particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and toxic air contaminants such as diesel exhaust particulate matter.

As shown in Table 2, construction emissions will not exceed the Bay Area Air Quality Management District (BAAQMD) thresholds and will not cause significant degradation of local air quality. Mitigation measures MM-Con-4.1 to address dust control and MM-Con-4.2 to address PM<sub>10</sub> from the FEIR will be implemented during construction of the Phase 1 Project to ensure a less than significant impact.

#### *Long-Term Operational Emissions*

The Phase 1 Project will not increase traffic volumes compared to the US 101 Improvement Project. Further, EPA and CARB emissions standards, which are becoming increasingly more stringent, will help reduce the long-term vehicle emissions associated with the Phase 1 Project. Therefore, the Phase 1 Project will not result in an increase in long-term operational emissions compared to those identified for the US 101 Improvement Project in the FEIR.

**Table 2: Estimated Daily Construction Emissions**

Construction Phase	Pollutant (pounds/day) <sup>1</sup>				
	ROG	CO	NO <sub>x</sub>	PM <sub>10</sub> <sup>2, 3</sup>	PM <sub>2.5</sub> <sup>2, 3</sup>
Land Clearing/ Grubbing	1.20	10.99	11.54	50.50	10.84
Grading/Excavation	5.04	40.94	53.12	52.23	12.38
Drainage/ Utilities/Sub-Grade	3.90	35.34	38.08	51.58	11.82
Paving	1.18	15.10	18.44	0.76	0.55
Maximum	5.04	40.94	53.12	52.23	12.38
BAAQMD Threshold	54	None	54	82	54
Exceed Threshold?	No	No	No	No	No
ROG = reactive organic gases; NO <sub>x</sub> = nitrogen oxides; CO = carbon monoxide; PM <sub>10</sub> = particulate matter up to 10 microns; PM <sub>2.5</sub> = particulate matter up to 2.5 microns Notes: 1. Emissions were calculated using the Roadway Construction Emissions Model (RCEM) (Version 9.0) developed by the Sacramento Metropolitan Air Quality Management District (SMAQMD). 2. PM <sub>10</sub> and PM <sub>2.5</sub> estimates assume control of fugitive dust from watering and associated dust control measures. 3. Emissions include the sum of exhaust and fugitive dust.					

**Conclusion. Implementation of the Phase 1 Project is not anticipated to involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to air quality. Mitigation measures MM-Con-4.1 and MM-Con-4.2 from the FEIR will be implemented for the Phase 1 Project to ensure a less than significant impact to air quality.**

### 3.2. GREENHOUSE GAS EMISSIONS

This section evaluates the potential for climate change impacts based on the findings of the *US 101/SR 25 Interchange Improvement Project – Phase 1, Air Quality and Greenhouse Gas Addendum* (September 2020).

Construction of the Phase 1 Project will generate approximately 27,444 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e)<sup>2</sup> over a two-year period. Construction GHG emissions are typically summed and amortized over the lifetime of a project (assumed to be 30 years), then added to the operational emissions. The amortized construction emissions for the Phase 1 Project will be 30 metric tons of CO<sub>2</sub>e per year. Once construction is complete, the generation of these GHG emissions will cease. The BAAQMD does not have an adopted threshold for construction-related GHG emissions.

The Phase 1 Project will improve traffic operational efficiency within the US 101/SR 25 interchange area by signaling the ramp intersections, improving interchange geometry, and reducing backups onto the mainline of US 101. The project is not a capacity increasing project, as the number of input/output lanes surrounding the new interchange will be the same as the existing interchange and will therefore have negligible impact on vehicle miles traveled (VMT). The Project will also allow for better bicycle

<sup>2</sup> GHG pollutants include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). All GHGs are reported as carbon dioxide equivalent (CO<sub>2</sub>e). In order to obtain the CO<sub>2</sub>e, an individual GHG is multiplied by its global warming potential.

connectivity through the area by providing a separated bike path between Castro Valley Road and the US 101/ SR 25 interchange, thereby eliminating the need for bicyclists to travel on the shoulder of US 101 as they do today due to a lack of alternative routes. As a result, the Project will have an overall negligible effect on greenhouse gas emissions. In addition, as noted in the FEIR, future mobile emissions (including GHG emissions) are expected to decline throughout California due to more stringent regulations by EPA and CARB.

Construction of the Phase 1 Project is not anticipated to result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects from hazardous materials and will not require additional avoidance, minimization, and/or mitigation measures compared to those identified in the FEIR.

***Conclusion. The FEIR did not identify any impacts or mitigation measures related to greenhouse gas emissions. Implementation of the Phase 1 Project is not anticipated to involve new significant environmental effects related to greenhouse gas emissions.***

### **3.3. BIOLOGICAL RESOURCES**

This section evaluates the potential for biological resources impacts based on the findings of the *US 101/State Route 25 Interchange Improvement Project – Phase 1 Biological Resources Technical Memorandum* (October 2021) and the *Southern Santa Cruz Mountains Wildlife Connectivity Study US-101 Gavilan Creek Culvert Monitoring Report: August 2019-July 2020* (May 2021).

To update the information in the FEIR, ecologists reviewed background information on biological resources known to be present, or potentially present, on the Phase 1 Project site and in its vicinity (study area) including, but not limited to, data from the California Natural Diversity Database, the California Department of Fish and Wildlife (CDFW) Special Animals List, California Species of Special Concern lists prepared by CDFW, notices on species listings from CDFW, US Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS), and critical habitat designations from USFWS and NMFS. Field surveys were also conducted by plant/wetlands and wildlife ecologists to assess land cover types and habitat conditions. Land cover types were updated from the FEIR to align with nomenclature in the Santa Clara Valley Habitat Plan (VHP), as the Phase 1 Project is a “Covered Activity” under this plan. The ecologists further assessed the suitability of the project site to support special-status plants and animals, as well as non-special-status nesting birds and roosting bats.

#### *Land Cover Types*

The land cover types and acres for the Phase 1 Project study area are shown in Table 3. The only substantive changes in classification and extent of land cover types that have occurred since the FEIR involved the wetland habitats associated with Gavilan Creek west of US 101. For the FEIR, these features were mapped as very narrow seasonal wetlands. However, surveys for the Phase 1 Project determined that these wetlands were somewhat broader than they had been previously mapped, and that the plant association in a portion of these wetlands better matches the coastal and valley freshwater marsh land cover type, rather than the seasonal wetland type.

**Table 3: Land Cover Types and Acreages within the Phase 1 Project Study Area**

Land Cover Type (per VHP Nomenclature)	Acres
Grain, row-crop, hay and pasture, disked/short-term fallowed	29.33
California annual grassland	23.97
Urban-suburban	23.72
Ornamental woodland	1.85
Rural residential	1.85
Mixed riparian forest and woodland	0.82
Coastal and valley freshwater marsh	0.29
Seasonal wetland	0.19
Riverine	0.16
<b>Total</b>	<b>82.18</b>

Table 4 summarizes impacts on these land cover types in three categories: temporary impacts in areas where earth-moving, staging, or access will result in short-term impacts to habitat for a period of no more than one year and where habitat conditions will be restored to pre-project conditions within one year following completion of physical disturbance; permanent impacts resulting from physical replacement of one land cover type with another (e.g., replacement of vegetated habitats with developed areas); and permanent shading impacts, in which the land cover type may change as a result of shading of vegetation from the new southbound US 101 off-ramp and SR 25 overpass, in areas where no permanent physical impacts are proposed. Note that the impact areas represent a subset of the study area, and therefore the sum of the impact acreages is less than those in the study area, as shown above in Table 3.

**Table 4: Phase 1 Project Impacts on Land Cover Types**

Land Cover Type (per VHP Nomenclature)	Impacts (Acres)		
	Temporary	Permanent	Permanent (Shading Only)
Grain, row-crop, hay and pasture, disked/short-term fallowed	8.4	11.3	-
California annual grassland	6.4	11.2	0.2
Urban-suburban	12.1	8.0	-
Ornamental woodland	0.5	0.5	-
Rural residential	-	0.2	-
Mixed riparian forest and woodland	0.01	-	0.04
Coastal and valley freshwater marsh	0.02	0.002	0.10
Seasonal wetland	-	-	-
Riverine	-	-	-
<b>Total (rounded)</b>	<b>27.43</b>	<b>31.2</b>	<b>0.34</b>

As described in the FEIR, mitigation measures MM-NATCOM-1.1 and MM-WET-1.1 include the payment of fees to the Santa Clara Valley Habitat Agency for impacts to riparian and wetland habitats, respectively. Payment of fees for general land cover types are also required for impacts to ranchlands/natural lands and agricultural/valley floor lands. Fees are calculated for both permanent

and temporary impacts on these land cover types and are paid prior to construction.<sup>3</sup> If MM-NATCOM-1.1 and MM-WET-1.1 are deemed infeasible, MM-NATCOM-1.2 and MM-WET-1.2 will be implemented. See additional information in the Regulatory Agency Permits section below. In addition, for temporary impacts to wetland habitat at the project site due to construction, MM- MM-WET-1.3 will be implemented to restore this habitat on site. See Appendix A for mitigation measures related to permanent and temporary impacts to these sensitive habitats.

### *Special Status Plant Species*

The field surveys of the Phase 1 Project study area determined that there have been no changes in habitat conditions with respect to potentially occurring special-status plants that were assessed previously in the FEIR. Due to disturbance from agricultural activities and grazing; shading from the existing interchange overpass; severe infestation of yellow flag (*Iris pseudacorus*) within the Gavilan Creek channel, infestations by other non-native plant species outside the channel; and a lack of suitable edaphic conditions such as the presence of serpentine or other rare soil types, the Phase 1 Project site has no potential to support any of the special-status plant species that were analyzed in the FEIR or any plant species that have become listed as special-status since the FEIR including Howell's onion (*Allium howellii* var. *howellii*) and California alkali grass (*Puccinellia simplex*).

### *Special Status Animal Species*

The Phase 1 Project area lacks habitat to support several special status animal species. For example, several fish and riparian-associated animals are absent from the Phase 1 Project area because Gavilan Creek does not provide sufficient flow (either depth or duration) or sufficient riparian habitat to support those species. For these reasons, special-status fish, western pond turtle (*Actinemys marmorata*), least Bell's vireo (*Vireo bellii pusillus*), and yellow-breasted chat (*Icteria virens*) are not expected to occur in the Phase 1 Project area. Several bird species, such as the yellow warbler (*Setophaga petechia*), grasshopper sparrow (*Ammodramus savannarum*), and northern harrier (*Circus hudsonius*) are considered California species of special concern only when nesting. Nonbreeding individuals (e.g., migrants or wintering birds) may occasionally forage in the project area, but these species are not anticipated to nest in or immediately adjacent to the Phase 1 Project area due to a lack of suitable nesting habitat.

Special status animal species that were analyzed in the FEIR and remain applicable to the Phase 1 Project include the western burrowing owl (*Athene cunicularia hypugaea*), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), American badger (*Taxidea taxus*), California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), as well as nesting birds and roosting bats. Mitigation measures from the FEIR, as shown in Appendix A, will be implemented for the Phase 1 Project to reduce any potential impacts to these species to a less than significant level. These measures include:

- Burrowing owls (MM-ANIMAL-6.1 to 6.4)
- San Francisco dusky-footed woodrats (MM-ANIMAL-8.1 and 8.2)

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<sup>3</sup> The Santa Clara Valley Habitat Agency's current fee schedule for land cover types may be accessed at <https://scv-habitatagency.org/206/Habitat-Agency-Fee-Schedule>. The fee schedule is updated annually.

- Roosting bats (MM-ANIMAL-9.1 to 9.6)
- American badgers (MM-ANIMAL-11.1)
- Nesting birds (MM-ANIMAL-12.1 and 12.2)
- California red-legged frogs (MM-T&E-2.1, 2.2, and 2.4 to 2.15)
- California tiger salamanders (MM-T&E-3.1, 3.2, and 3.4)

Animals that were not considered as special status species at the time the FEIR was prepared but are now considered as special-status species include the mountain lion (*Puma concolor*), which is a candidate for listing under the California Endangered Species Act (CESA); western bumble bee (*Bombus occidentalis*) and Crotch bumble bee (*Bombus crotchii*), which CDFW has considered candidates for listing under CESA; and monarch butterfly (*Danaus plexippus*), which is a candidate for listing under the Federal Endangered Species Act. The two bumble bee species historically occurred in the project region but have apparently been extirpated regionwide and are therefore not expected to be impacted by the Phase 1 Project. The mountain lion and monarch have occurred or could potentially occur in the Phase 1 Project area and are discussed below.

#### Mountain Lion

Mountain lions are known to occur in the Santa Cruz Mountains to the west of the Phase 1 Project area, and individuals may occasionally disperse through the Phase 1 Project area. However, due to the scarcity of vegetative cover in most of the project area, and because lands on the valley floor east of US 101 are not suitable for residency by mountain lions due to the high level of human activity and land disturbance, mountain lions are expected to occur on the project site very infrequently. They are not expected to den (e.g., breed) at the project site due to the proximity to US 101 and SR 25, as well as the disturbance associated with agricultural activities. Although permanent impacts on grassland habitat will result in the loss of some potential dispersal habitat, the amount of habitat lost will be extremely low relative to the regional abundance of this species' habitat, and habitat impacted by the Phase 1 Project is not of high quality for, or regularly used by, mountain lions.

Mountain lions are expected to use the Gavilan Creek culvert under US 101 and the SR 25 overpass very rarely, if at all, during dispersal across US 101 due to the absence of suitable cover in the extensive cultivated fields on the east side of the culvert and the presence of much higher-quality crossings under US 101 not far to the south (e.g., at Tar Creek and the Pajaro River). Furthermore, the Phase 1 Project will not lengthen or otherwise modify the Gavilan Creek culvert and therefore will not impede the continued use of this culvert, if it is used at all, by mountain lions. For all these reasons, project impacts on mountain lions will be less than significant. Although no mitigation is necessary to reduce impacts on this species, the VHP impact fees to be paid for land cover impacts will contribute to the VHP's regional conservation program, which will benefit numerous species (including non-VHP-covered species such as the mountain lion) through habitat preservation, enhancement, and management.

#### Monarch Butterfly

Monarch butterflies occur on the Phase 1 Project site during migration, primarily flying through the area but also likely stopping to nectar at flowers within the project site. However, no milkweeds (the species' larval host plant) were observed on the project site during surveys conducted for the biological resources update, and monarchs are therefore not expected to breed on the site. The Phase 1 Project will reduce foraging habitat for adult monarch butterflies. However, foraging habitat is regionally abundant, and the Phase 1 Project's impacts on nectar sources and foraging habitat will have no

substantive impact on regionally available habitat, or on monarch populations. The Phase 1 Project will also not impede this species' continued movements through the area, either locally or regionally, during migration. Therefore, impacts on monarch butterflies will be less than significant. Although no mitigation is necessary to reduce impacts on this species, it is worth noting that the impact fees to be paid to the Santa Clara Valley Habitat Agency for land cover impacts will contribute to the VHP's regional conservation program, which will benefit numerous species (including non-VHP-covered species such as the monarch butterfly) through habitat preservation, enhancement, and management.

### *Potential Lighting Impacts on Sensitive Habitats and Special-Status Species*

Potential impacts of lighting on sensitive habitats and species were considered for the larger US 101 Improvement Project and for the Phase 1 Project. No lights will be directed into Gavilan Creek or other sensitive habitats directly. Roadway lights will be shielded to minimize spillover of light into sensitive habitats, with the specific location of shielding (e.g., on the front or side) being tailored to the location of each light relative to sensitive habitats. As such, impacts of lighting on sensitive habitats and the special-status species inhabiting them will be minimized, and no further measures related to lighting are necessary.

### *Wildlife Movement*

The FEIR contained an intensive evaluation of wildlife movement pathways and landscape connectivity in the US 101 Improvement Project area. As part of that study, cameras were placed at a number of culverts and bridge undercrossings to evaluate wildlife use of those features for crossing under US 101. That assessment determined that the Gavilan Creek culvert and the SR 25 overpass were unlikely to be used heavily by wildlife moving across US 101, largely because the land uses east of US 101 in the vicinity of SR 25 provide little cover for dispersing wildlife and relatively low-quality habitat for resident wildlife.

Since the FEIR, a number of organizations have been investigating regional wildlife movements further as part of the Southern Santa Cruz Mountains Wildlife Connectivity Study. As part of this study, field cameras were installed in 2019 on both sides of the Gavilan Creek culvert under US 101, specifically to provide information for the Phase 1 Project on the degree to which this culvert is used by animals for movement under the highway. Through "camera trapping" it was determined that the majority of wildlife recorded through the Gavilan Creek culvert consisted of raccoon (*Procyon lotor*) and striped skunk (*Mephitis mephitis*). These two species are regionally abundant and widespread (i.e., not species for which this culvert represents a regionally important movement pathway), and the rate of passage by these species through the culvert was low compared with these species' rates of passages at other nearby monitoring sites with similar sized culverts. A pair of domestic dogs (*Canis lupus familiaris*) comprised the highest number detections using the Gavilan Creek culvert, with domestic cats (*Felis silvestris catus*) the second highest number of detections.

The wildlife movement study by Pathways for Wildlife supported the conclusions of the FEIR with respect to the limited importance of the Gavilan Creek culvert for wildlife movement, particularly with respect to regional wildlife movements and movement by rarer species, such as mountain lion.

As discussed in the FEIR, for the project segment north of Tar Creek, the approach to allowing wildlife movement will be to maintain the ability of wildlife to access the highway surface, and to cross the median, that currently exists. For human safety reasons, wildlife access to US 101 will not be enhanced, but to maintain habitat connectivity, the existing fencing and median designs will generally remain in

place, per MM-NATCOM-3.1 (see Appendix A). For example, between Tar Creek and SR 25, standard fencing will be used along the highway, and a thrie-beam median barrier will be used with a small section of concrete barrier. North of SR 25, where wildlife movement is not very important to regional connectivity, the thrie-beam median barrier transitions to a continuous concrete median barrier (which is currently present from SR 25 to Carnadero Creek).

### *Regulatory Agency Permits*

The Phase 1 Project is considered a “Covered Activity” under the VHP. As a result, the Project will comply with all applicable VHP conditions, and the VHP will provide incidental take coverage for the Project’s impacts to VHP-covered species that are listed under the state and federal Endangered Species Acts.

Payment of VHP impact fees for impacts to coastal and valley freshwater marsh within Gavilan Creek, which is regulated by the US Army Corps of Engineers (USACE), Central Coast Regional Water Quality Control Board (RWQCB), and CDFW, as well as for impacts to mixed riparian forest and woodland regulated by the RWQCB and CDFW, will provide compensatory mitigation for those impacts to satisfy CEQA mitigation measures, VHP conditions, and conditions of the regulatory permits that will be needed from those agencies including a Clean Water Act Section 404 permit from USACE, Section 401 Water Quality Certification from the RWQCB, and a Lake and Streambed Alteration Agreement from CDFW. Temporary impacts will be covered by temporary impact fees, and temporarily impacted coastal and valley freshwater marsh within Gavilan Creek will be restored in situ. To help ensure that payment of those fees will satisfy resource agency permit requirements, the Santa Clara Valley Habitat Agency has agreed to allocate the wetland and riparian impact fees paid for this Project to a portion of the wetland and riparian habitat restoration and creation that will occur on their Pacheco Reserve restoration site. The Pacheco Reserve is located along Pacheco Creek approximately 12.5 miles northeast of the Project site. The habitat restoration at the Pacheco Reserve, coupled with the monitoring and reporting on the success of the restoration to be performed by the Santa Clara Valley Habitat Agency, will satisfy the regulatory agency monitoring and reporting requirements.

***Conclusion. Implementation of the Phase 1 Project is not anticipated to involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to biological resources. Mitigation measures MM-NATCOM-1.1-1.2, and 3.1, MM-WET-1.1-1.3, MM-ANIMAL-6.1-6.4, 8.1-8.2, 9.1-9.6, 11.1, 12.1-12.2, and MM-T&E-2.1-2.2, 2.4-15, 3.1-3.2, and 3.4 from the FEIR will be implemented for the Phase 1 Project to ensure a less than significant impact to biological resources.***

## **3.4. CULTURAL RESOURCES**

This section evaluates the potential for cultural resources impacts based on the findings of Phase 1 Project *Historical Resources Compliance Report* (May 2022).

The FEIR assessed impacts expected to result from the US 101 Improvement Project, which included the US 101/SR 25 interchange, and prescribed measures to reduce impacts on cultural resources to less-than-significant levels pursuant to CEQA. The current Phase I Project Area Limits (PAL) is much smaller (the intersection of US 101/SR 25, generally) than the Area of Potential Effects (APE) delineated in 2010 for the FEIR assessment. The current PAL predominantly follows the right-of-way of US 101 and SR 25 in the Phase 1 Project area and now effectively excludes all but one of the cultural resources included and described in the 2010 APE.

There were 12 locations within the 2010 APE where archaeological resources were found; however, none of these resources are within the PAL for the current Phase I Project and no new resources were identified through the updated record search or through Native American consultation.

The FEIR concluded that the impacts to the previously recorded archaeological resources had not yet been fully determined and, as such, mitigation measure MM-CUL-1.1 included the development an Archaeological Treatment Plan (ATP). However, an ATP is not necessary for the Phase I Project because the 12 previously recorded archaeological resources are outside of the PAL. The ATP previously described in MM-CUL-1.1 included phased identification in the form of archaeological test excavations for parcels that were not accessible at the time; however, these parcels are no longer part of the current PAL, and the Phase I Project has far less ground disturbance. Therefore, it not necessary to implement the phased identification portion of MM-CUL-1.1. However, because there is potential for previously unrecorded archaeological resources to be present below the ground surface, particularly near Uvas Creek, MM-CUL-1.2 remains valid, and if cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find (see Appendix A).

The only resource located within the limits of the PAL is the Bloomfield Ranch (P-43-003845, APN #841-34-002, Main Complex). It is considered a historical resource for the purposes of CEQA. The Bloomfield Ranch was (previous to the FEIR) found to meet the criteria for listing in both the California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP) in 2003. In March 2007, the State Historic Preservation Officer (SHPO) concurred that the property was eligible as a discontinuous historic district under NRHP/CRHR Criteria A/1 and NRHP/CRHR B/2 at the state level of significance, and NRH/CRHR Criterion C/3 at the local level of significance. Under NRHP/CRHR Criterion A/1 the ranch is significant as the headquarters of the Miller & Lux Company cattle ranching empire, and under NRHP/CRHR Criterion B/2 for its association with cattle baron Henry Miller. Lastly, the Bloomfield Ranch is eligible under NRH/CRHR Criterion C/3 because it embodies distinctive characteristics of ranches of similar time period and significance. The discontinuous historic district's boundary is bounded on the west by US 101, on the north by SR 25, on the east by the UPRR tracks, and on the south by a historic grant line boundary. The Miller Reservoir, located on the west side of US 101, across from the main building complex (and a 30-foot-wide buffer area surrounding the circular reservoir), complete the boundary of this discontinuous historic district. When it received SHPO concurrence, the contributing features included Miller's Original Office, Miller Station, Miller's Second Office, Stone Masonry Culvert, Miller Reservoir, and non-contributing elements included the Mount Madonna Summer Home, warehouse and three silos. Its period of significance is between 1859 and 1916.

The character-defining features of the Bloomfield Ranch include the ranch's flat, open cropland to the east and south, and the rolling hills to the west; relationship between each contributing building/structure; size and massing of the contributing buildings/structures; and the utilitarian construction of the reservoir and stone culvert.

The FEIR noted that changes from the reconstruction of the US 101/SR 25 interchange will not result in substantial adverse change to the Bloomfield Ranch discontinuous historic district because the project generally avoids crossing into the established boundaries of the district with one exception that is the newly proposed 20-foot-wide temporary construction easement (TCE) required for utility placement on the south side of SR 25 eastbound ramp that abuts the current boundary of parcel. This TCE will take place at the north boundary of the ranch and is over 400 feet from any of the individual contributing buildings. Installation of subsurface utilities will occur within an area that was defined as the district

boundary based on modern parcels created following the construction of the existing US 101/SR 25 interchange. Thus, any subsurface changes within this modern and approximate boundary area will not change the overall ranch setting beyond previously analyzed impacts for the US 101 Improvement Project. The current addition of the TCE at this northern boundary location next to the interchange does not constitute substantial adverse change to the Bloomfield Ranch historical resource and, therefore, there is no change to the impact identified in the FEIR. The historic-era archaeological component of the Bloomfield Ranch historical resource is outside of the PAL, and thus will not be impacted by the Phase I Project.

In 2001, P-43-003800 (4260 Monterey Road/4620 Monterey Road) was recommended as not eligible for the NRHP/CRHR. SHPO concurred with that finding in 2007. At the time of evaluation, the buildings on APN #: 841-32-010 were not 45 years old, did not meet the standards for exceptional significance and therefore were not evaluated. They still do not require evaluation because of their age and the lack of potential to meet the exceptional significance criteria of the NRHP/CRHR. Therefore, the property is not considered a historical resource for the purposes of CEQA.

### *Native American Consultation*

VTA requested an updated records search through the Northwest Information Center at Sonoma State University on April 5, 2021. The search did not result in the identification of any recent or additional previously unrecorded resources that were not already identified in the FEIR. VTA then contacted the Native American Heritage Commission (NAHC) on April 15, 2021 to request a search of their Sacred Lands File (SLF) for the Phase 1 Project and a list of Native Americans who may have knowledge of the project site and vicinity. The NAHC responded on April 29, 2021 indicating that cultural materials or sacred sites may be present in the project area. The NAHC also provided a list of Native American communities and individuals who had an affiliation with the area and who may have knowledge of the area's cultural resources. On June 10, 2021, VTA sent letters to seven members of the Native American community, as provided by the NAHC, that included with a written project description, a map of known cultural resources within the PAL, and a request for cultural information. Individuals contacted included:

- Amah Mutsun Tribal Band (Valentin Lopez, Chairperson)
- Amah Mutsun Tribal Band of Mission San Juan Bautista (Irene Zwierlein, Chairperson)
- Indian Canyon Mutsun Band of Costanoan (Ann Marie Sayers, Chairperson)
- Indian Canyon Mutsun Band of Costanoan (Kanyon Sayers-Roods, Most Likely Descendant [MLD] contact)
- The Ohlone Indian Tribe (Andrew Galvan)
- Wuksache Indian Tribe/Eshom Valley Band (Kenneth Woodrow, Chairperson)
- Rumsen Am:a Tur:ataj Ohlone (Dee Ybarra, Chairperson)

VTA received one response to the letters – Amah Mutsun Tribal Band Chairperson Valentin Lopez requested a field visit to the Phase 1 Project site, which occurred on February 16, 2022. As a result of the field visit, Chairperson Lopez requested that any ground disturbing activities within 400 feet of natural water sources, such as Uvas Creek, be conducted while monitored by a professional archaeologist and Native American tribal representative. VTA will continue to consult with the Amah Mutsun Tribal Band as the Phase 1 Project is further designed and constructed.

**Conclusion. Implementation of the Phase 1 Project is not anticipated to involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to cultural resources. Mitigation measures MM-CUL-1.2 from the FEIR will be implemented for the Phase 1 Project to ensure a less than significant impact to cultural resources.**

### **3.5. FARMLANDS**

The FEIR included the following mitigation measure to offset impacts to farmland due to the ultimate US 101 Improvement Project:

*“MM-FARM-1.1: Farmland conservation easements will be acquired at a 1:1 mitigation-to-impact ratio. As shown in Table 9 [in the FEIR], the acreage of farmland directly impacted by the project will be 157 acres under Design Option A or 122 acres under Design Option B.*

*The purchase of the farmland conservation easements (or similar instruments) will be undertaken by the OSA, with the costs of the easements to be borne by the U.S. 101 Improvement Project. The acquisition area for the conservation easements will be within Santa Clara County.”*

The Phase 1 Project will impact approximately 17.1 acres of prime farmland, as shown in Table 5. The opportunity to fulfill the mitigation requirement in advance of the Phase 1 Project was discussed between VTA and the Santa Clara Valley Open Space Authority (OSA) on July 24, 2020, December 16, 2020, and February 5, 2021. In these discussions with OSA, it was determined that the preferred method to conserve farmland was through fee title, not conservation easement, as many landowners are not interested in encumbering their land with an easement but are willing sellers.

OSA prepared a Funding and Acquisition Agreement that identified VTA’s contribution to the purchase of 17.7 acres of required mitigation in advance of the Phase 1 Project.<sup>4</sup> VTA paid OSA directly with an agreement that the funds were to be designated for the purchase of property in Santa Clara County, per the mitigation measure. OSA agreed to manage the land with no additional funding required from VTA. The Funding and Acquisition Agreement also included language to ensure the property remains protected for agricultural uses to meet the mitigation requirement of the Phase 1 Project.

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<sup>4</sup> The 17.7 acres were based on the design at the time the Funding and Acquisition Agreement was executed. After further design refinement, the impact acreage was reduced to 17.1 acres.

**Table 5: Farmland Impacts due to the Phase 1 Project**

APN	Owner	Contact Address	Acreage of Farmland (square feet and acreage)
808-22-009	Clara Ljepava	13065 Regan Ln, Saratoga, CA 95070	4,309 square feet / 0.1 acres
808-23-002	Milias Nike and Mitchell J	5015 Monterey Rd, Gilroy, CA 95020	
808-23-005	Borello and Sons Inc S G	55 Castro Valley Rd, Gilroy, CA 95020	
810-35-008	Wu Aiguo	4355 Monterey Rd, Gilroy, CA 95020	357,130 square feet 8.2 acres
810-82-001	Castro Valley Props LLC	Santa Teresa Blvd, #2, Gilroy, CA 95020	167,282 square feet 3.85 acres
810-82-002	Castro Valley Props LLC	3401 Monterey Rd, Gilroy, CA 95020	
841-32-010	Two Youths LLC (Rapazzini Winery)	4350 Monterey Highway, Gilroy, CA 95020	
841-32-011	Salvador and Maria Luz Torres	4340 Monterey Highway, Gilroy, CA 95020	
841-32-013	Filice Estate Vineyards	Monterey Rd, Gilroy, CA, 95020	196,653 square feet 4.52 acres
841-32-014	Filice Estate Vineyards (Garlic Shoppe)	4310 Monterey Highway, Gilroy, CA 95020	18,282 square feet 0.42 acres
841-34-002	Bloomfield Ranch LLC	3405-A Monterey Rd, Gilroy, CA 95020	
<b>Total</b>			<b>743,656 square feet 17.1 acres</b>

**Conclusion. Implementation of the Phase 1 Project is not anticipated to involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to farmlands. Mitigation measure MM-FARM-1.1 from the FEIR has been implemented for the Phase 1 Project to ensure a less than significant impact to farmlands.**

### **3.6. HAZARDOUS MATERIALS**

This section evaluates the potential to encounter hazardous materials during construction of the Phase 1 Project based on the *Initial Site Assessment Memorandum* (December 2020) (ISA memo), which updates the original Initial Site Assessment (ISA) performed for the FEIR, and *Preliminary Site Investigation* (May 2021) (PSI), which was conducted per the ISA memo and in compliance with mitigation measures MM-HAZ-1.2 to 1.6 in the FEIR, as shown in Appendix A.

The ISA memo evaluated the Phase 1 Project area for the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the property or into the ground, groundwater, or surface water of the property that may present a threat to human health or the environment. The ISA identified the following potential recognized environmental conditions (REC):

- Potential aeri-ally-deposited lead (ADL) along exposed soil in the Project area from auto emissions before leaded fuel was banned;
- Potential organochlorine and organophosphorus pesticides, heavy metals, and petroleum hydrocarbons (diesel and motor oil) from agricultural field operations;
- Polychlorinated biphenyls (PCB) from transformers on utility poles and a PG&E substation located near the project area;
- Potential arsenic, copper, chromium, creosote, and pentachlorophenol from utility poles (treated wood) along both sides of US 101; and
- Potential for metals, semi-volatile organic compounds (SVOC), polynuclear aromatic hydrocarbons (PAH), and PCBs in soil adjacent to the railroad tracks (SR 25 east of the US 101).

Given the identified RECs, the ISA memo recommended that a PSI be conducted in areas where soil disturbance will occur during construction of the Phase 1 Project and for structures that may be removed or altered during construction. The PSI was completed in May 2021 to verify the presence/absence of RECs, to evaluate the available options for soil disposal or reuse, and to provide specific guidance for waste management and worker safety during construction. A summary of the PSI findings and recommended actions is shown in Table 6.

The Phase 1 Project requires right-of-way from two properties that include buildings to be demolished as part of the project. These include the Garlic Shoppe and Rapazzini Winery. As part of the PSI, structural elements sampling was performed at the Garlic Shoppe to evaluate the presence of lead-based paint and asbestos-containing material in order to assess safe work practices and waste disposal. Structural elements sampling has not been conducted for the Rapazzini Winery; however, it will be completed prior to project construction in compliance with MM-HAZ-1.5-1.6 (See Appendix A) with implementation of recommended actions noted in Table 6.

**Table 6: Summary of PSI Findings and Recommendations**

Materials	Description	Recommended Action
Asphalt and concrete (AC) waste	Asphalt (and some concrete) will be removed during the Phase I Project. These materials will be reclaimed and recycled for use within the project area and/or for other facilities to the maximum extent feasible.	All AC materials should be recycled per the Caltrans directive for reclaimed AC, in accordance with the January 27, 1993 Memorandum on “Department of Fish and Game Agreement on AC Grindings, Chunks and Pieces.”  <i>Comply with Caltrans Asphalt-Concrete and Portland Cement Concrete Grindings Reuse Guidance.</i>

Materials	Description	Recommended Action
Aerial deposited lead in shallow soil	Detectable lead concentrations in shallow soil within the Phase 1 Project indicated that the soil is pre-classified as non-hazardous.	<p>The soil should be managed per:</p> <p><i>2016 Department of Toxic Substances Control -Caltrans Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils.</i></p> <p>Caltrans Standard Specification 14-11.08-Regulated Material Containing Aerially Deposited Lead</p> <p>Caltrans Standard Specification 14-11.09-Minimal Disturbance of Regulated Material Containing Aerially Deposited Lead.</p>
Arsenic and chromium in shallow soil	<p>Detectable arsenic concentrations in shallow soil within the Project area can be pre-classified as non-hazardous. However, the arsenic concentrations in soil exceeded all the Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESL) for residential, construction worker, and commercial/industrial exposure.</p> <p>Detectable chromium (Cr) concentrations in shallow soil within the Project area is also pre-classified as non-hazardous (with respect to chromium). However, results exceeded the RWQCB ESLs for residential, commercial/industrial, and construction worker exposure limits (Cr VI -cancer risk); however, the concentrations are below ESLs for Cr III and VI – non-cancer hazard (no values for total Cr).</p>	<p>Worker safety training must cover potential exposure to arsenic and chromium in soil (above RWQCB ESL levels).</p> <p>Dispose of excavated soils as non-hazardous waste at Class II unit or Class III landfill depending on facility acceptance standard.</p>
Asbestos containing materials (non-fibrous)	Asbestos containing materials (ACM) may be located in Garlic Shop Building roof caulking along the lower roof on the south side of the building. The roof caulking contained 10% chrysotile (asbestos). This material is subject to National Emission Standard for Hazardous Air Pollutants per the US Environmental Protection Agency.	ACM waste must be sealed in a leak-tight container while wet, labeled, and disposed of properly in a landfill qualified to receive asbestos waste. Double-bag asbestos waste into 6-mil thick (or greater) plastic bags. Seal individual bags with duct tape. Label each double bag boldly with “Asbestos Containing Material” Each bag may not weigh more than 50 pounds.
Lead-based paint	Any level of lead in paint is considered to be a potential exposure hazard for construction workers. Lead in paint content was found to be non-detect in 4 out of 7 samples collected and analyzed.	Implement local city and county lead abatement protocol.

**Conclusion. Implementation of the Phase 1 Project is not anticipated to involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to hazardous materials. Mitigation measures HM-HAZ-1.2 to 1.6 from the FEIR will continue to be implemented as applicable for the Phase 1 Project to ensure a less than significant impact due to hazardous materials.**

### 3.7. HYDROLOGY AND FLOODPLAINS

This section evaluates the potential of the Phase 1 Project to affect existing flooding hazards and is based on the findings in the *Addendum to the Location Hydraulics Study Report to Augment for: US 101/SR 25 Interchange Improvement Project – Phase 1* (May 2022).

#### *Flooding*

As noted in the FEIR, the US 101 Improvement Project is located within the Pajaro River watershed and is surrounded by open space, rangeland, agricultural uses, commercial uses, and native and non-native vegetation. These land uses continue to be applicable for the Phase 1 Project. Also noted in the FEIR, mitigation measure MM-HYDRO-1.5 includes a design requirement for the southbound US 101 off-ramp to SR 25 to convey flood flows. This measure is applicable for Phase 1 (see Appendix A).

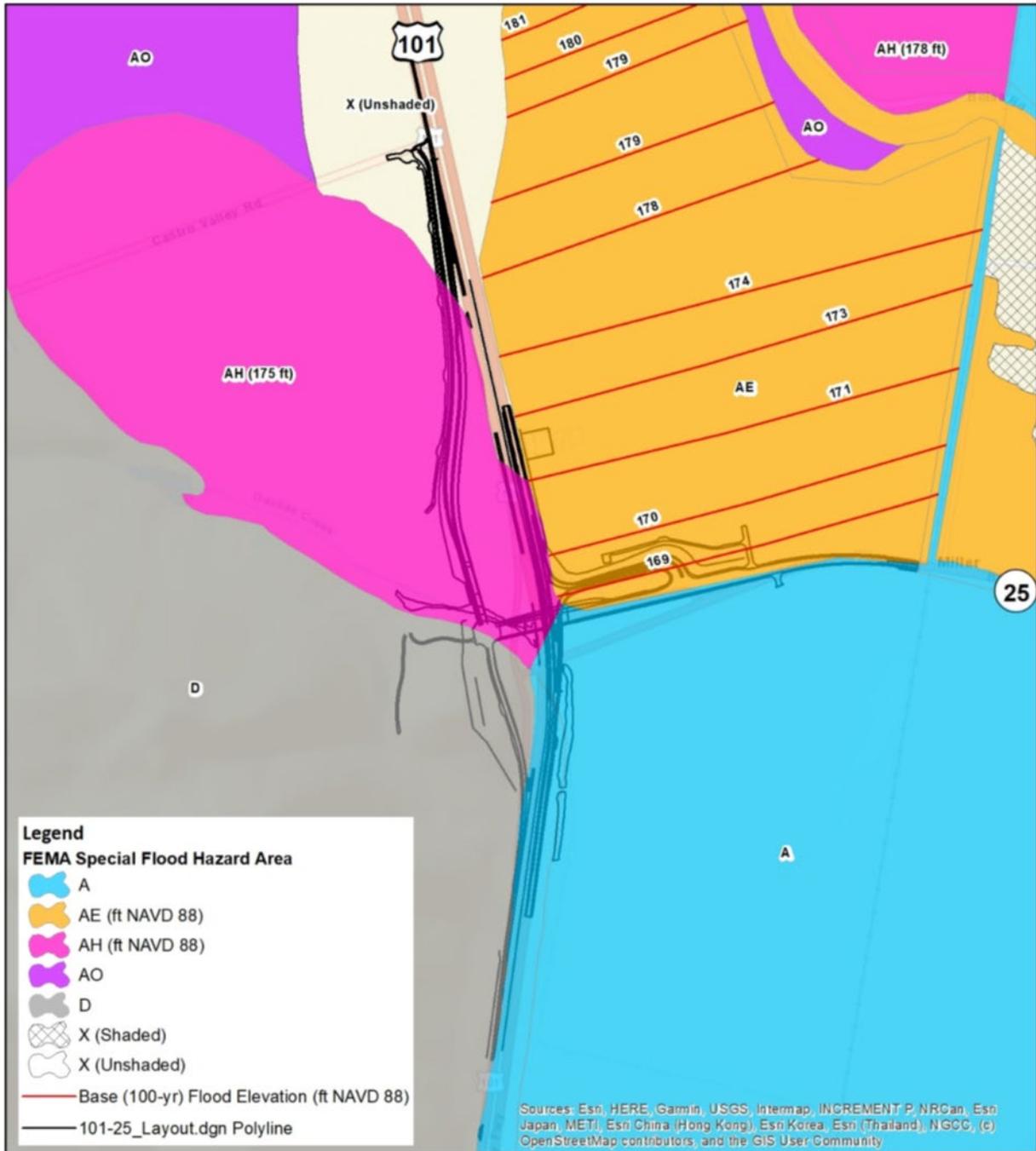
Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), the Phase 1 Project is in the existing 100-year floodplain both west and east of US 101 in the vicinity of the Carnadero Creek and Gavilan Creek crossings. The 100-year floodplain is the land that is predicted to flood during a 100-year storm event or 100-year flood, which has a 1% chance of occurring in any given year or, in other words, has a 1 in 100 chance of being equaled or exceeded in any 1 year (1%-annual-chance flood event), and has an average recurrence interval of 100 years. The 100-year floodplain is also referred to as the base flood.

The FEMA FIRMs for the Phase 1 Project area include the following FEMA special flood hazard areas, and are shown in Figure 4:

- Zone A represents areas subject to inundation by the 1%-annual-chance flood event generally determined using approximate methodologies. No base flood elevations (BFE) or flood depths are shown because detailed hydraulic analyses have not been performed. US 101 south of the existing SR 25 interchange and SR 25 are in Zone A.
- Zone AE represents areas within a base floodplain where BFEs are provided from detailed hydraulic analysis. The overbank flood flow from Uvas-Carnadero Creek between US 101 and the UPRR, labeled as “Uvas Creek – South Spill”, is in Zone AE. Zone AE and the “Uvas Creek – South Spill” is further discussed in this section.
- Zone AH represents areas subject to inundation by the 1%-annual-chance shallow flooding (usually areas of ponding) and are determined from detailed hydraulic analyses. The combined 100-year flood flow of Gavilan Creek and overbank flood flows of Uvas-Carnadero Creek west of US 101 is in Zone AH. For the Phase 1 Project, US 101 north of the US 101/SR 25 interchange, the US 101 southbound off-ramp to SR 25, and the new access road to the Wu property are in Zone AH.
- Zone D represents areas with undetermined flood hazards, as flood hazard analysis has not been conducted. The US 101 southbound on-ramp from SR 25 is within Zone D.

Zone X (unshaded) represents areas of minimal flood hazard. The existing US 101 mainline north of the areas inundated by Zone AH are classified as Zone X (unshaded).

**Figure 4: FEMA Special Flood Hazard Area at the Project Location, Phase 1**



Five hydraulic analyses of the Uvas Creek – South Spill were performed for the existing and future conditions (with the Phase 1 Project constructed) using modeling software from USACE and Valley Water and along several cross sections in project area. Based on the hydraulic analyses, the change to the base flood elevation would be insignificant. The comparison of the pre- and post-Project conditions showed the 100-year base flood elevation of Uvas Creek - South Spill would increase at the project site by a maximum of 0.22 ft in some locations, which is considered less than significant.

#### *Change in Impervious Surface Area*

The Phase 1 Project would result in an increase in impervious surface within the Uvas Creek watershed, which includes the Gavilan Creek watershed. However, considering the watershed area of Gavilan Creek at the project site, the added impervious area from the Phase 1 Project and resulting increases in the peak 100-year runoff due to the Project would not result in increases to the peak flood flow of Gavilan Creek at the project location and Uvas Creek at the outfall to Pajaro River.

***Conclusion. Implementation of the Phase 1 Project is not anticipated to involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to hydrology and floodplains. Mitigation measures MM-HYDRO-1.5 from the FEIR will continue to be implemented as applicable for the Phase 1 Project to ensure a less than significant impact due to hydrology and floodplains.***

### **3.8. NOISE**

This section evaluates the potential for short- and long-term construction and operational noise and vibration impacts based on the findings of the *US 101/SR 25 Interchange Improvement Project – Phase 1, Noise Technical Memo* (November 2020).

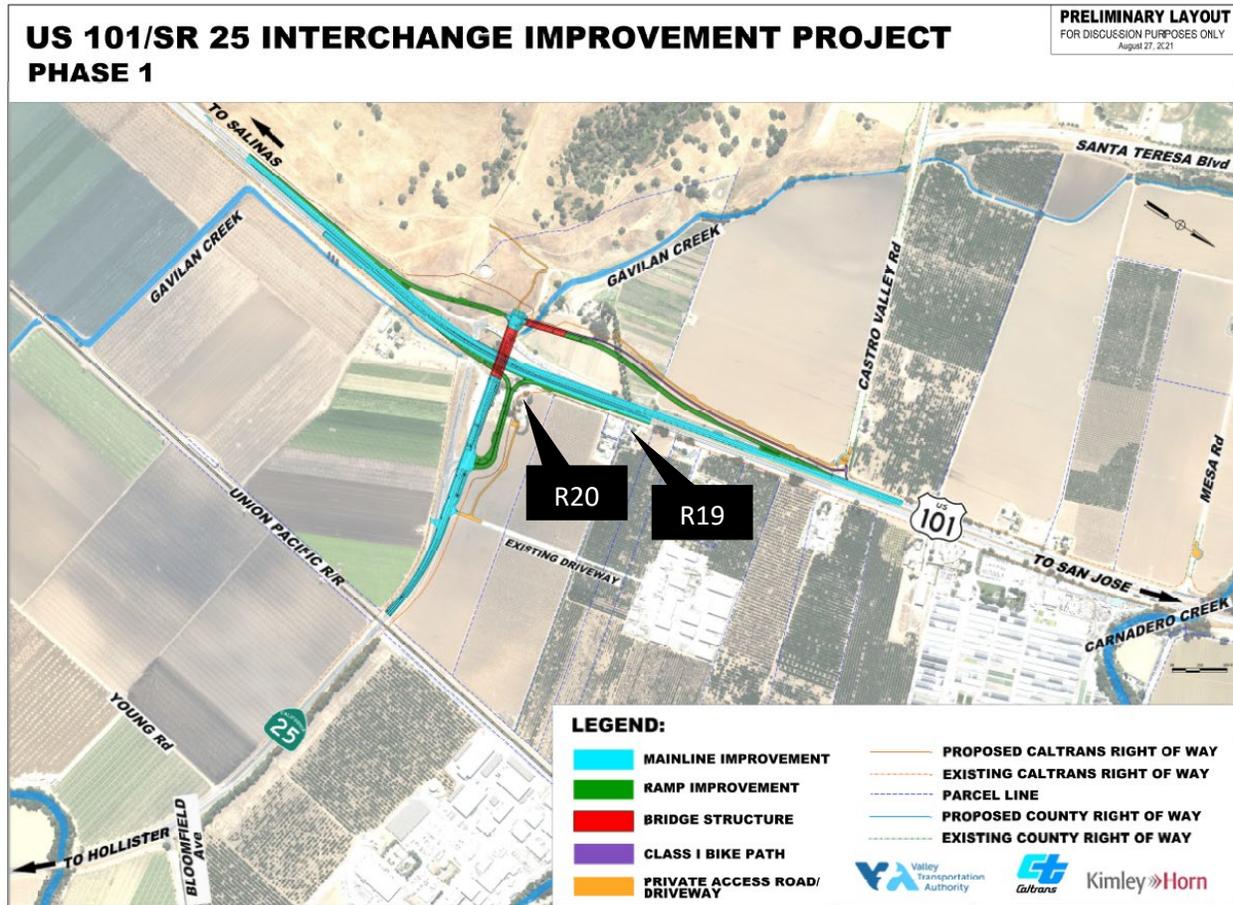
#### *Short-term Construction Noise and Vibration*

The construction equipment and construction activities required for the Phase 1 Project are the same as the US 101 Improvement Project, although at a lesser scale, and the construction noise and vibration levels and impacts provided in the FEIR remain applicable. The FEIR concluded that short-term construction noise and groundborne vibration impacts will be less than significant with implementation of mitigation measures MM-CON-5.1 to MM-CON-5.6 (see Appendix A). As such, the Phase 1 Project will also be required to comply with these mitigation measures to reduce short-term construction noise and vibration impacts. It is noted that construction hours will adhere to all local noise ordinances to reduce construction noise to the extent feasible.

#### *Long-term Operational Noise*

Existing peak-hour noise levels were measured and quantified for noise sensitive receptors for the US 101 Improvement Project with the results presented in the FEIR. However, for the ultimate project, receptors R19 and R20 (multi-family and single-family residential, respectively), as shown in Figure 5, were to be removed to accommodate the US 101 Improvement Project and were therefore not analyzed in the FEIR.

Figure 5: Added Noise Sensitive Receptor Locations for the Phase 1 Project



For the Phase 1 Project, the US 101/SR 25 on- and off-ramps were realigned and, as a result, receptors R19 and R20 will not be removed. Since these receptors will remain for the Phase 1 Project, they were evaluated for traffic noise impacts using the FHWA Traffic Noise Model (TNM) and in compliance with the current versions of the Caltrans Traffic Noise Analysis Protocol (Protocol) and Technical Noise Supplement (TeNS) (See Section 2.2 above). Table 7 shows the modeled Phase 1 Project traffic noise levels at these receptors for Year 2035 for consistency with the analysis in the FEIR.

Table 7: Phase 1 Project Traffic Noise Levels

Receptor	Land Use	NAC Impact Criteria (dBA)	Modeled Traffic Noise Level (dBA) – Phase 1 Project (2035)	Exceed NAC Impact Criteria?
R19	Multi-family Residential	67	76	Yes
R20	Single-Family Residential	67	73	Yes

An evaluation of feasible noise abatement is required when traffic noise levels exceed the applicable Noise Abatement Criteria (NAC) of 67 dBA or result in an increase of 12 dBA or higher compared to baseline conditions. As indicated in Table 7, traffic noise levels under the Phase 1 Project at receptors R19 and R20 will exceed the applicable NAC of 67 dBA. Therefore, a noise barrier analysis was prepared to evaluate noise abatement for receptors R19 and R20.

Under the current versions of the Protocol and TeNS, a noise barrier must provide a minimum noise reduction of 5-dBA and accomplish Caltrans' 7 dBA noise reduction design goal at one or more benefited receptors to be considered feasible. Furthermore, the noise barrier must be considered financially reasonable to construct. The Caltrans base cost allowance for noise abatement reasonableness is \$107,000 per benefited receptor. To determine whether a proposed noise barrier is reasonable, the total reasonable allowance must be greater than or equal to the cost of the barrier.

Two noise barriers (B1 and B2) were modeled to determine the height required to achieve Caltrans' minimum 5-dBA reduction and 7-dBA noise reduction design goal at receptors R19 and R20 to be considered feasible. Noise barriers ranging from 6 to 16 feet in height were modeled in compliance with the Caltrans Protocol, TeNS, and Highway Design Manual (2019). Table 8 presents the results for barriers B1 and B2.

**Table 8: Noise Barrier Results**

Noise Barrier	Benefitted Receptor	Barrier Height (feet)	No Barrier Traffic Noise Level (dBA) <sup>1</sup>	With Barrier Traffic Noise Level (dBA) <sup>1</sup>	Insertion Loss (dBA)	Meets Caltrans' 5-dBA Noise Reduction Requirement?	Achieves Caltrans' 7-dBA Noise Reduction Goal?
B1	R19	6	76	74	2	No	No
		8	76	72	4	No	No
		10	76	71	6	Yes	No
		12	76	70	6	Yes	No
		14	76	70	6	Yes	No
		16	76	70	7	Yes	Yes
B2	R20	6	73	71	2	No	No
		8	73	71	3	No	No
		10	73	70	4	No	No
		12	73	70	4	No	No
		14	73	69	4	No	No
		16	73	69	4	No	No

As indicated in Table 8, barrier B2 would reduce traffic noise levels by 4 dBA at receptor R20 at a maximum height of 16 feet. As such, barrier B2 would not reduce traffic noise levels by a minimum of 5 dBA at receptor R20 and would not achieve Caltrans' noise reduction goal of 7 dBA at one or more benefited receptors. Therefore, barrier B2 is not feasible per Caltrans' standards and further evaluation is not necessary.

Barrier B1 would achieve a 7-dBA reduction at receptor R19 at a maximum height of 16 feet. Therefore, barrier B1 would be considered feasible since it would reduce noise levels by 5 dBA at receptor R19 and would achieve Caltrans’ noise reduction goal of 7 dBA at one or more benefited receptors. As a result, barrier B1 is considered for financial reasonableness. As indicated in Table 9, barrier B1 would cost approximately \$137,664 to construct, which is above the allowance of \$107,000 per benefited receptor. Thus, barrier B1 is not financially reasonable, and further evaluation is not necessary.

**Table 9: Barrier B1 Reasonableness**

Noise Barrier	Barrier Height (feet)	Barrier Length (feet)	Estimated Barrier Cost <sup>1</sup>	Reasonable Allowance Per Benefited Receptor	Number of Benefited Receptors	Total Reasonable Allowance	Barrier Cost Reasonable?
B1	16	470	\$137,664	\$107,000	1	\$107,000	No

<sup>1</sup>Barrier fee estimate calculated based on an average cost of \$27/square-foot for a block wall according to FHWA’s Noise Barrier Construction Material Average Unit Cost by Height.

Although the predicted traffic noise levels from the Phase 1 Project will exceed the applicable NAC at receptors R19 and R20, barrier B1 is not financially reasonable; and barrier B2 does not meet Caltrans’ standards for noise reduction. Therefore, these noise barriers will not be constructed as part of the Phase 1 Project.

***Conclusion. Implementation of the Phase 1 Project is not anticipated to involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to noise and vibration. Mitigation measures MM-CON-5.1 to MM-CON-5.6 from the FEIR will be implemented for the Phase 1 Project to ensure a less than significant impact due to noise and vibration.***

### 3.9. TRANSPORTATION

This section evaluates the potential for transportation impacts based on the findings of the Traffic Operations Analysis Report – US 101/SR 25 Interchange Improvement Project – Phase 1 (October 2021).

The Phase 1 Project does not add throughput capacity to US 101 or SR 25. Rather, it is intended to serve as the first phase of the US 101 Improvement Project while offering safety benefits and more efficient traffic flow. Phase 1 will provide for more orderly management of traffic at the US 101 ramp intersections with SR 25. In addition, the extra storage capacity on the new southbound US 101 ramp to SR 25 will help prevent potential backups to the US 101 mainline, which will also improve safety. Phase 1 will also generally reduce travel time for routes between SR 25 and US 101.

The Phase 1 Project will improve safety along US 101 by eliminating intersections and driveways. Phase 1 will also potentially improve safety at the ramp intersections by providing a protected signal phase for movements crossing the predominant flow of traffic. In addition, Phase 1 will improve bicycle facilities in the study area, providing a means for cyclists to reach SR 25 from Castro Valley Road more safely.

### *Vehicle Miles Traveled*

Caltrans has released the *Transportation Analysis under CEQA* guidance document covering the requirements for analysis of vehicle miles traveled (VMT) impacts on the state highway system. Per the Caltrans guidance, projects that increase capacity will generally require an analysis of induced VMT. Project types likely to lead to a measurable and substantial increase in vehicle travel include through lanes on existing highways and lanes through grade separated interchanges. Project types that are not likely to lead to a measurable and substantial increase in vehicle travel include replacement projects, addition of bicycle facilities, and addition of vehicle storage to a ramp.

The Phase 1 Project is not required to perform a VMT analysis due to the following reasons:

- The Phase 1 Project is not capacity increasing. The Phase 1 Project will improve the operational efficiency of the existing, antiquated US 101/SR 25 interchange for all traffic movements with reconfigured ramps and new traffic signals. The Phase 1 Project is designed to enhance safety within the interchange area by reducing ramp backups, particularly on southbound US 101 to SR 25, and provide improved geometry for safer exit ramp deceleration and entrance ramp merges compared to the existing hook ramps and secondary intersection configuration.
- The Phase 1 Project does not include any additional through-lanes on US 101 (i.e., no new general-purpose lanes, HOV lanes, peak period lanes, auxiliary lanes, nor lanes through grade-separated interchanges).
- The Phase 1 Project replaces the existing US 101/SR 25 interchange with a new interchange slightly to the north. The number of input/output lanes surrounding the new interchange will be the same as the existing interchange (i.e., southbound off-ramp is still a single lane exit, southbound on-ramp is single lane entrance, all northbound ramps are single lanes, and SR 25 is single lane each direction just east of the interchange). Installation of new traffic signals at the ramp intersections require an added lane in each direction of SR 25 at the interchange itself, currently served by stop signs, to accommodate vehicle queuing when the signal is red.

***Conclusion. The FEIR did not identify any impacts or mitigation measures related to transportation. Implementation of the Phase 1 Project is not anticipated to involve new significant environmental effects related to transportation.***

### **3.10. WATER QUALITY**

This section evaluates the potential for water quality, including stormwater runoff, impacts based on the findings of the *Stormwater Data Report* (May 2022). The Project is under the jurisdiction of the Central Coast RWQCB and will require a Section 401 Water Quality Certification (also see Section 3.3 under the subheading “Regulatory Agency Permits”). The Project’s receiving water bodies are Gavilan Creek and Uvas-Carnadero Creek, and to a lesser extent Tick Creek.

#### *Short-term Construction Water Quality Effects*

As noted in the FEIR, construction involves excavation, grading, and other activities that have the potential to degrade water quality in the form of sedimentation, erosion, and pollutants from equipment. In the Phase 1 Project area, the water quality of Uvas-Carnadero Creek and Gavilan Creek could be affected by construction activities. To address water quality during construction, MM-Con-6.1 to 6.5 will be implemented to ensure a less than significant impact to receiving waters (see Appendix A).

*Long-term Operational Water Quality Effects*

The Project is within the Central Coast Regional Water Quality Control Board (RWQCB). The disturbed soil area (DSA) was estimated from the proposed grading area, added impervious area, replaced impervious surface (RIS) area, and removed impervious area. The net new impervious (NNI) area consists of the newly created impervious area (added plus replaced impervious areas) minus the removed impervious area. The new impervious surface (NIS) area is the sum of the NNI and the RIS. Table 10 summarizes the disturbed soil area and impervious areas within the Caltrans and Santa Clara County right-of-way for the Phase 1 Project.

**Table 10: Disturbed Surface Area and Impervious Surface Improvements**

Right-of-Way	DSA acres	Pre-Project Impervious acres	Post-Project Impervious acres	NNI acres	RIS acres	NIS acres
Caltrans	37.70	22.52	25.36	2.85	3.58	6.43
County of Santa Clara	5.56	0.92	1.33	0.41	0.21	0.62
<b>Total</b>	<b>43.26</b>	<b>23.44</b>	<b>26.69</b>	<b>3.26</b>	<b>3.79</b>	<b>7.05</b>

The Phase 1 Project NIS area will increase the volume and velocity of stormwater runoff and have the potential to increase erosion and cause other adverse effects in local receiving waters. To address these effects, the Phase 1 Project will incorporate permanent best management practices (BMPs) to address water quality and stormwater runoff. These BMPs consist of biofiltration swales that are designed to retain and infiltrate stormwater for the Phase 1 Project in accordance with MM-WQ-1.1 from the FEIR (see Appendix A).

***Conclusion. Implementation of the Phase 1 Project is not anticipated to involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to water quality. Mitigation measures MM-CON-6.1 to MM-CON-6.5 and MM-WQ-1.1 from the FEIR to address short-term construction and long term operational impacts will be implemented for the Phase 1 Project to ensure a less than significant impact to water quality.***

**3.11. RESOURCES THAT DID NOT REQUIRE RE-EVALUATION**

The following key topical areas were also assessed in the FEIR; however, it was determined that design changes for the Phase 1 Project will not require additional re-evaluation.

*Aesthetics*

The Phase 1 Project is designed to be incorporated into the ultimate US 101 Improvement Project, Design Option B, as described in the FEIR (see Section 1.1 above). For this design option, mitigation was required along the Santa Teresa Boulevard extension. This extension is not part of the Phase 1 Project. The Phase 1 Project will incorporate aesthetic treatments such as earth-toned stain/coloring and/or a complimentary earthen texture to vertical surfaces (structures, retaining walls, abutments, etc.) to soften the structures.

### *Geology and Soils*

The Phase 1 Project will not expose people to significant geologic hazards or risks. The project will implement standard engineering practices mandated by the California Building Code and Caltrans Design Standards to ensure that geotechnical and soil hazards do not result from construction or operation of the project.

### *Land Use*

Phase 1 Project will not physically divide an established community and will continue to be consistent with relevant regional and local plans and policies.

### *Paleontology*

The FEIR included MM-PALEO-1.1 and 1.2 to address any potential impacts to paleontological resources during construction including the development of a “Paleontological Mitigation Plan” by a qualified principal paleontologist prior to the start of construction (see Appendix A).

The *Paleontological Mitigation Plan for the U.S. 101/S.R. 25 Interchange: Phase 1 Project, Santa Clara County, California* (May 2022) has been completed for the Phase 1 Project and specifies procedures to address any paleontological resources encountered as a result of ground disturbing activities during construction. The PMP outlines paleontological tasks to be completed for the Phase 1 Project including construction worker training, construction monitoring, fossil and data collection, laboratory procedures, museum curation, and reporting, as applicable. The requirements outlined in the plan will be implemented prior to and during construction of the Phase 1 Project.

### *Utilities and Emergency Services*

The Phase 1 Project will not result in the disruption of utility services. The Project will not hinder emergency vehicle response times or sever or alter any emergency evacuation routes.

## **3.12. RESOURCES ADDED TO CEQA CHECKLIST AFTER FEIR APPROVAL**

The 2022 CEQA Guidelines Appendix G checklist includes additional environmental resources not addressed in the 2013 version of the checklist. The current checklist provides thresholds for energy, tribal cultural resources, and wildfire the impacts related to which were not previously assessed in the FEIR. The following discussion analyzes the proposed Project’s potential impacts on these resources.

### *Energy*

Construction activities for the Phase 1 Project will include asphalt and concrete removal, grubbing, cut-and-fill activities, and grading. Construction energy consumption will result primarily from transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-duty construction equipment, and construction workers traveling to and from the project site. Project construction will be performed by professional contractors and is not anticipated to result in inefficient or unnecessary consumption of fuel resources. While construction may occur during nighttime hours, electricity consumption for construction lighting is not anticipated to have an adverse impact on available electricity supplies and infrastructure. Therefore, no impacts on electricity supply and infrastructure associated with short-term construction activities will occur. Natural gas is not anticipated to be consumed in any substantial quantities during construction of the Phase 1 Project. Therefore, project impacts on energy and gas associated with construction activities will be less than significant.

Operation of Phase 1 will not result in changes to the existing land use (e.g., transportation facility) within the project limits and is not anticipated to increase the demand for electricity or natural resources. Therefore, operational impacts on energy and gas would be less than significant.

The Phase 1 Project is a transportation project that will improve an existing interchange. The implementation of the Phase 1 Project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

At the time the FEIR was approved, the CEQA checklist did not include an energy section. Consequently, the FEIR did not provide a conclusion for potential impacts on energy resources. This Addendum has concluded that the Phase 1 Project will not result in an inefficient, wasteful, or unnecessary consumption of energy resources.

#### *Tribal Cultural Resources*

At the time the FEIR was approved, the CEQA checklist did not include a tribal cultural resources section pursuant to Assembly Bill 52, which requires public agencies to consult with Native American tribes during the CEQA process. The assessment of potential impacts to tribal cultural resources is described above in Section 3.4. That section also includes a summary of the Native American Consultation for the Phase 1 Project.

The Phase 1 Project will not result in impacts to tribal cultural resources, as no new resources were identified through the updated record search or through Native American consultation.

#### *Wildfire*

The Phase 1 Project area is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones (California State Board of Forestry and Fire Protection, 2022b). No mitigation related to wildfires is required for the Phase 1 Project.

## **4. CONCLUSION**

Based on the evaluation of the Phase 1 Project, it has been determined that no new or significant environmental effects or a substantial increase in the severity of any previously identified impacts would occur and the Phase 1 Project will not require additional avoidance, minimization, and/or mitigation measures compared to those identified in the FEIR. Therefore, an Addendum to the FEIR is the appropriate environmental document.

## **5. REFERENCES**

References are cited within the body of this Addendum. All technical reports and other documentation are available upon request by calling VTA's Community Outreach at (408) 321-7575, (TTY) 408-321-2330, or emailing [community.outreach@vta.org](mailto:community.outreach@vta.org).

# Appendix A

## US 101/SR 25 Improvements- Phase 1 Mitigation Monitoring & Reporting Program

The following table is a summary of the mitigation measures in the *U.S. 101 Improvement Project Between Monterey Street and State Route 129 Final Environmental Impact Report* (FEIR) that are applicable to the US 101/SR 25 Improvement Project – Phase 1 (Phase1 Project/Project). For additional details and context related to these mitigation measures, please refer to the FEIR.

MITIGATION TOPIC AND FEIR MEASURE #	MITIGATION MEASURE	UPDATE FOR THE PHASE 1 PROJECT
<p><b>Farmlands</b> <b>MM-FARM-1.1</b></p>	<p>Farmland conservation easements will be acquired at a 1:1 mitigation-to-impact ratio. The purchase of the farmland conservation easements (or similar instruments) will be undertaken by the OSA, with the costs of the easements to be borne by the U.S. 101 Improvement Project. The acquisition area for the conservation easements will be within Santa Clara County.</p> <p>The conservation easements will comply with the following:</p> <ul style="list-style-type: none"> <li>a) Properties on which the conservation easement are obtained will be those designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.</li> <li>b) All owners of the agricultural mitigation land will execute the document encumbering the land.</li> <li>c) The document will be recordable and contain an accurate legal description of the agricultural mitigation land.</li> <li>d) The document will prohibit any activity which substantially impairs or diminishes the agricultural productivity of the land.</li> <li>e) The document will protect any existing water rights necessary to maintain agricultural uses on the land covered by the document, and retain such water rights for ongoing use on the agricultural mitigation land.</li> <li>f) The easement will be held by the OSA or by an entity acceptable to the OSA in perpetuity. The entity will not sell, lease, or convey any interest in</li> </ul>	<p>VTA opted to purchase agricultural land in partnership with the Santa Clara Valley Open Space Authority as advanced mitigation to fulfill the requirements of Measure MM-FARM-1.1 applicable to the Phase 1 Project (see Section 3.5 in the Addendum).</p>

MITIGATION TOPIC AND FEIR MEASURE #	MITIGATION MEASURE	UPDATE FOR THE PHASE 1 PROJECT
	<p>agricultural mitigation land which it will acquire without the prior written approval of the OSA.</p> <p>g) If the OSA or other qualifying entity owning an interest in agricultural mitigation land ceases to exist, the duty to hold, administer, monitor and enforce the interest will be transferred to another entity acceptable to the OSA.</p>	
<b>Cultural Resources</b> <b>MM-CUL-1.2</b>	If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.	Applicable during construction.
<b>Hydrology &amp; Floodplains</b> <b>MM-HYDRO-1.5</b> <b>(Carnadero Creek Floodplain)</b>	The project will construct a bridge (approximately 39-feet x 176-feet) on the southbound U.S. 101 off-ramp to SR 25 to convey flood flows under the ramp.	The southbound off-ramp bridge is approximately 51' wide by 300' long, which is longer than the original conceptual design included in the FEIR. The longer bridge clears the floodplain and span Gavilan Creek.
<b>Water Quality &amp; Stormwater Runoff</b> <b>MM-WQ-1.1</b>	The project will create approximately 32.4 acres of biofiltration strips and swales along U.S. 101 within the project limits. The strips/swales will be located along the edges of the roadways and interchange ramps. Consistent with the requirements of Caltrans' NPDES permit, this acreage represents the maximum practicable extent of treatment for this project within the constraints of the site. This acreage is based upon preliminary design and will be updated during final design.	Biofiltration swales will be included in the Phase 1 Project and sized accordingly.
<b>Paleontology</b> <b>MM-PALEO-1.1</b>	A nonstandard special provision for paleontology mitigation will be included in the construction contract special provisions section to advise the construction contractor of the requirement to cooperate with the paleontological salvage.	Language will be included in the construction contract specifications.
<b>Paleontology</b> <b>MM-PALEO-1.2.a</b>	A qualified principal paleontologist (M.S. or PhD in paleontology or geology familiar with paleontological procedures and techniques) will be retained to prepare a detailed Paleontological Mitigation Plan (PMP) prior to the start of construction.	The Paleontological Mitigation Plan has been developed for the Phase 1 Project.
<b>Paleontology</b> <b>MM-PALEO-1.2.b</b>	<p>The PMP will include the following elements and stipulations:</p> <p>a) Areas where preconstruction survey and salvage are needed will be identified. This will apply to any areas where paleontologically sensitive strata are exposed at the surface and will be disturbed by project construction,</p> <p>b) monitoring plan that will identify all areas where excavation will disturb in</p>	The Paleontological Mitigation Plan has been developed for the Phase 1 Project.

MITIGATION TOPIC AND FEIR MEASURE #	MITIGATION MEASURE	UPDATE FOR THE PHASE 1 PROJECT
	<p>situ surface exposures of strata assigned to geologic units identified as highly sensitive for paleontological resources. Monitoring will be required for all disturbance of highly sensitive units. Monitoring will not be needed for shallow (less than about three feet deep) disturbance in areas mapped as underlain by units of low paleontological sensitivity, or where disturbance would be entirely confined (in three dimensions) within existing artificial fill. However, monitoring will be required where disturbance more than three feet deep, including drilling for cast-in-place foundation piers or pilings, will be required in areas where highly sensitive strata are present in the subsurface beneath a veneer of low-sensitivity material,</p> <p>c) All geologic work will be performed under the supervision of a California Professional Geologist,</p> <p>d) The qualified principal paleontologist will be present at pre-grading meetings to consult with grading and excavation contractors,</p> <p>e) Before excavation begins, a training session in employee environmental awareness and fossil identification will be conducted by the principal paleontologist for all personnel involved in earthmoving for the project,</p>	
<p><b>Paleontology</b> <b>MM-PALEO-1.2.b</b> <b>(continued)</b></p>	<p>[CONTINUE]</p> <p>The PMP will include the following elements and stipulations:</p> <p>f) A paleontological monitor, approved by the qualified principal paleontologist, will be on-site to inspect cuts for fossils at all times during original grading involving sensitive geologic formations,</p> <p>g) When fossils are discovered, the paleontologist (or paleontological monitor) will be called to recover them. Construction work in these areas will be halted or diverted to allow recovery of fossil remains in a timely manner,</p> <p>h) Bulk sediment samples will be recovered from fossiliferous horizons and processed for microvertebrate remains as determined necessary by the principal paleontologist,</p> <p>i) Fossil remains collected during the monitoring and salvage portion of the mitigation program will be cleaned, repaired, sorted, and cataloged,</p> <p>j) Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will then be deposited in a scientific institution with paleontological collections. The repository institution should be identified in advance of construction (typically as part of PMP development), and the PMP should include info on the repository agreement,</p>	<p>The Paleontological Mitigation Plan has been developed for the Phase 1 Project.</p>

MITIGATION TOPIC AND FEIR MEASURE #	MITIGATION MEASURE	UPDATE FOR THE PHASE 1 PROJECT
	<p>k) A final report will be completed that outlines the results of the mitigation program and will be signed by the Principal Paleontologist and Professional Geologist. Copies of the final report will be sent appropriate institutions so that the documentation will be available to the scientific community going forward.</p>	
<p><b>Hazardous Waste/Materials</b> <b>MM-HAZ-1.2</b></p>	<p>Prior to project development, a soil investigation will be conducted to determine whether aerially deposited lead (ADL) has affected soils that will be excavated as part of the proposed project. This applies to locations where such testing has not already been completed. The investigation for ADL will be performed in accordance with Caltrans' Lead Testing Guidance Procedure. The analytical results will be compared against applicable hazardous waste criteria. Based on analytical results, the investigation will provide recommendations regarding management and disposal of affected soils in the project area including the reuse potential of ADL-affected soil during project development. The provisions of a variance granted to Caltrans by the California Department of Toxic Substances Control on September 22, 2000 (or any subsequent variance in effect when the project is constructed) regarding aerially-deposited lead will be followed.</p>	<p>A PSI was conducted. See Section 3.7, <i>Hazardous Materials</i>, in the Addendum.</p>
<p><b>Hazardous Waste/Materials</b> <b>MM-HAZ-1.3</b></p>	<p>If contaminated soil is encountered (based on physical observation) during trenching activities along the alignment, the soil will be stockpiled and analyzed for potential contaminants. If the soil cannot be reused on-site, the analyses will be sent to a permitted landfill for profiling and waste characterization prior to transport to the landfill. In addition, if contaminated groundwater is encountered during construction, similar steps should be taken to characterize and dispose of the groundwater as was discussed in MM-HAZ-1.2.</p>	<p>Applicable during construction.</p>
<p><b>Hazardous Waste/Materials</b> <b>MM-HAZ-1.4</b></p>	<p>Herbicides and pesticides will be analyzed in the shallow soil within the project limits in site areas located adjacent to or on agricultural land. Shallow soil samples will be collected and analyzed for metals, total petroleum hydrocarbons, volatile organic compounds, polycyclic aromatic hydrocarbons, herbicides, and pesticides from areas adjacent to railroad tracks or within railroad crossings. If soil is impacted with any of the compounds discussed above, it will be stockpiled and sampled for reuse or disposal options.</p>	<p>A PSI was conducted. See Section 3.7, <i>Hazardous Materials</i>, in the Addendum.</p>

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<b>Hazardous Waste/Materials</b> <b>MM-HAZ-1.5</b>	Testing for the presence of lead-based paint will be undertaken on the existing bridge structures, in pavement markings, and within the existing buildings to be demolished. If this substance is found to be present, applicable regulations pertaining to its removal and disposal will be followed.	A PSI was conducted. See Section 3.7, <i>Hazardous Materials</i> , in the Addendum.
<b>Hazardous Waste/Materials</b> <b>MM-HAZ-1.6</b>	Testing for the presence of asbestos-containing materials on the existing bridge structures, and within the existing buildings to be demolished, will occur. If asbestos is found to be present, applicable regulations pertaining to its removal and disposal will be followed.	A PSI was conducted. See Section 3.7, <i>Hazardous Materials</i> , in the Addendum.
<b>Natural Communities</b> <b>MM-NATCOM-1.1</b>	The project will pay development fees to the Santa Clara Valley HCP/NCCP for impacts to riparian habitat.	Once the plans are at 100% complete and prior to construction, VTA will complete the Santa Clara Valley Habitat Agency Reporting Form for Public Projects and pay applicable fees.
<b>Natural Communities</b> <b>MM-NATCOM-1.2</b>	<p>If MM-NATCOM-1.1 turns out to be infeasible for some or all of the project, permanent impacts to riparian habitat will be mitigated by creating/restoring riparian habitat at a 3:1 ratio, on an acreage basis; temporary impacts will be mitigated at a 2:1 ratio, on an acreage basis; and SRA impacts will be mitigated at a 2:1 basis ratio, on a linear footage basis. These ratios are higher than those given in the HCP/NCCP as they are for restoration/creation only; there is no preservation component. See Section 2.17.5 for details. As a potential alternative to the project creating/restoring riparian habitat at a nearby location, this measure could be satisfied, in whole or part, through the purchase of riparian mitigation credits from an approved mitigation bank.</p> <p>However, at the time this document was prepared, there were no approved mitigation banks offering riparian mitigation credits for projects located in the southern Santa Clara County/northern San Benito County area. If such banks become available and the project decides to purchase credits, the mitigation ratios given above for the creation/restoration of riparian habitat will apply.</p> <p><i>[Note: MM-NATCOM-1.2 will be implemented only if MM-NATCOM-1.1 is determined to be partially or completely infeasible.]</i></p>	To be determine in consultation with regulatory agencies during the permitting phase.
<b>Natural Communities</b> <b>MM-NATCOM-3.1</b>	North of Tar Creek, the project will maintain the existing standard fencing and thrie-beam median barrier.	For the Phase 1 Project between Tar Creek and SR 25, standard fencing will be used along the highway, and a thrie-beam median barrier will be used with a small section of concrete

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		barrier. North of SR 25, where wildlife movement is not very important to regional connectivity, the thrie-beam median barrier transitions to a continuous concrete median barrier (which is currently present from SR 25 to Carnadero Creek).
<b>Wetlands</b> <b>MM-WET-1.1</b>	The project will pay development fees to the Santa Clara Valley HCP/NCCP for impacts to wetlands and aquatic habitat.	Once the plans are 100% complete and prior to construction, VTA will complete the Santa Clara Valley Habitat Agency Reporting Form for Public Projects and pay applicable fees.
<b>Wetlands</b> <b>MM-WET-1.2</b>	If MM-WET-1.1 turns out to be infeasible for some or all of the project, permanent impacts to wetlands and aquatic habitat will be mitigated by the purchase of credits from the Pajaro River Mitigation Bank that services both Santa Clara and San Benito Counties. If credits are no longer available at this bank, and if there are no other approved mitigation banks whose service area includes the project area, then mitigation will occur through on-site or off-site creation of wetland and aquatic habitat at a 2:1 ratio, on an acreage basis. <i>[Note: MM-WET-1.2 will be implemented only if MM-WET-1.1 is determined to be partially or completely infeasible.]</i>	To be determine in consultation with regulatory agencies during the permitting phase.
<b>Wetlands</b> <b>MM-WET-1.3</b>	The temporary wetland and aquatic habitat impacts will be mitigated at a 1:1 acreage ratio within the impact footprint through the restoration of pre-construction grades, hydrology, and soil conditions in situ to any wetland and aquatic areas temporarily disturbed during construction. Wetland vegetation, structure, and function are expected to regenerate naturally following the restoration of grades, hydrology, and soils.	To be determine in consultation with regulatory agencies during the permitting phase.
<b>Animal Species (Burrowing Owl)</b> <b>MM-ANIMAL-6.1</b>	Pre-construction surveys will be undertaken to determine if owls utilize the habitat to be impacted by the project.	Applicable just prior to construction.
<b>Animal Species (Burrowing Owl)</b> <b>MM-ANIMAL-6.2</b>	Prior to construction, during the non-nesting season (September 2 - February 14), any owls occupying burrows within construction zones will be passively relocated under the authorization of the CDFW. Passive relocation is an intensive process that involves the installation of one-way doors in all ground squirrel burrows occurring on the site; such doors allow owls to leave their	Applicable just prior to construction.

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	burrows but do not allow them to return, thereby forcing owls to move to a different area. The doors will be monitored by a qualified biologist daily for a period of no less than three days and after that period, burrows will be destroyed to preclude owls from returning to the burrows, and grading of these areas will commence within seven days. The passive relocation will be repeated if owls move back to the construction areas.	
<b>Animal Species (Burrowing Owl)</b> <b>MM-ANIMAL-6.3</b>	Burrows within the construction zone that are occupied by owls will not be disturbed during the nesting season (February 15 through September 1) unless a qualified biologist verifies that either the owls have not begun laying and incubating eggs, or that juvenile owls have fledged and are able to live independently of their parents. If construction will occur during the nesting season, the project will establish and maintain a minimum of a 250-foot buffer around any active nest.	Applicable just prior to construction.
<b>Animal Species (Burrowing Owl)</b> <b>MM-ANIMAL-6.4</b>	If, based on pre-construction surveys, it is determined that owls utilize habitat that will be impacted by the project, mitigation for the loss of such habitat will take the form of the payment of development fees to the Santa Clara Valley HCP/NCCP.	Applicable just prior to construction.
<b>Animal Species (Woodrats)</b> <b>MM-ANIMAL-8.1</b>	Prior to any clearing of - or work within - riparian, oak woodland, or coyote brush scrub habitat, or the removal of any oak trees located outside these habitats, a qualified biologist will conduct a survey for San Francisco dusky-footed woodrat nests.	Applicable just prior to construction.
<b>Animal Species (Woodrats)</b> <b>MM-ANIMAL-8.2a</b>	Where nests are found, and if feasible, the project will maintain a buffer of at least several feet (preferably as much as 10 feet) around these nests. The purpose of the buffer is to avoid moving or bumping the nests or logs or branches on which the nests rest.	Applicable just prior to construction.
<b>Animal Species (Woodrats)</b> <b>MM-ANIMAL-8.2b</b>	If avoidance of nests is not feasible, the nests will be dismantled and the nesting material moved to a new location outside the project's impact area. Prior to dismantling, understory vegetation will be cleared within the project site or in the area immediately surrounding the nest. Then, each active nest will be disturbed by a qualified wildlife biologist to the degree that the woodrats leave the nest and seek refuge out of the impact area. Whether the nest is on the ground or in a tree, the nest would be nudged to cause the woodrats to flee, and then dismantled. For tree nests, a tarp will be placed	Applicable just prior to construction.

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	below the nest and the nest dismantled using hand tools (either from the ground or from a lift).	
<b>Animal Species (Woodrats)</b> <b>MM-ANIMAL-8.2c</b>	<p>Nesting material will be located outside the project’s impact area in a way that it can be used by woodrats to construct new nests. The nest material will be piled at the base of a nearby hardwood tree (preferably an oak, willow, or other appropriate tree species, with refuge sites among the tree roots). If nearby habitat outside the impact area lacks suitable structure, logs (e.g., 4 feet long and 6 inches in diameter) will be placed in undisturbed riparian or oak woodland habitat nearby and the sticks from the dismantled nests will be placed among these logs. Ideally, the spacing distance between the newly placed piles of sticks should not be less than 100 feet, unless a qualified wildlife biologist has determined that a specific habitat can support higher densities of nests.</p>	<p>Applicable just prior to construction.</p>
<b>Animal Species (Roosting Bats)</b> <b>MM-ANIMAL-9.1</b>	<p>A pre-construction/pre-demolition survey for roosting bats will be conducted prior to any construction on the U.S. 101 southbound span over Tar Creek, which is the only bridge with day roosting by bats. Such a survey will also be conducted in any trees and buildings within or immediately adjacent to the project impact area that are identified by a qualified bat biologist (i.e., a biologist holding a CDFW collection permit allowing the biologist to handle and collect bats) as being high-potential roost sites. If suitable roost sites are found but a visual survey is not adequate to determine presence or absence of bats, acoustical equipment will be used to determine occupancy. This survey will be conducted prior to the beginning of the breeding season (i.e., prior to March 1) in the year in which construction or demolition in a given area is scheduled to occur so that adequate measures can be implemented, if feasible, to evict the bats during the non-breeding season.</p>	<p>The U.S. 101 southbound span over Tar Creek is not within the Phase1 Project area; however, pre-construction surveys for bats will be conducted for the Phase 1 Project including the US 101/SR 25 overcrossing, trees, and buildings scheduled for demolition.</p>
<b>Animal Species (Roosting Bats)</b> <b>MM-ANIMAL-9.2</b>	<p>Because the aforementioned survey will be conducted prior to the breeding season, several months may pass between that survey and the initiation of construction or demolition in a given area. Therefore, a second preconstruction/ pre-demolition survey for roosting bats, following the methods described above, will be conducted within 15 days prior to the commencement of these activities in a given area to determine whether bats have occupied a roost in or near the project’s impact areas. This survey</p>	<p>Applicable just prior to construction.</p>

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	should be facilitated considerably by information (e.g., on potential roost trees) gathered during the previous survey.	
<b>Animal Species (Roosting Bats)</b> <b>MM-ANIMAL-9.3</b>	If a maternity roost of any bat species is present, the bat biologist will determine the extent of a construction-free buffer around the active roost that will be maintained. This buffer will be maintained from April 1 until the young are flying, typically after August 31.	Applicable just prior to construction.
<b>Animal Species (Roosting Bats)</b> <b>MM-ANIMAL-9.4a</b>	If a day roost is found on a bridge, in a building, or in a tree that is to be completely removed or replaced, individual bats will be safely evicted under the direction of a qualified bat biologist. Eviction of bats will occur at night, so that bats will have less potential for predation compared to daytime roost abandonment. Eviction will occur between September 1st and March 31st, outside the maternity season, but will not occur during long periods of inclement or cold weather (as determined by the bat biologist) when prey are not available or bats are in torpor. No day roosts are currently known to occur in crevices on bridges in the BSA, but if such a roost is found during preconstruction surveys, one-way doors will be inserted into the crevices to allow bats to exit, but not re-enter, the crevices. These one-way doors will be inspected regularly until demolition commences and will be removed the morning of demolition.	Applicable just prior to construction.
<b>Animal Species (Roosting Bats)</b> <b>MM-ANIMAL-9.4b</b>	If a day roost is found within a building, eviction will occur by opening the roosting area to allow airflow through the cavity. Demolition should then follow no sooner than the following day (i.e., there should be no less than one night between initial disturbance for airflow and the demolition). This action should allow bats to leave during dark hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight.	Applicable just prior to construction.
<b>Animal Species (Roosting Bats)</b> <b>MM-ANIMAL-9.4c</b>	If feasible, one-way doors will also be used to evict bats from tree roosts. If use of a one-way door is not feasible, or the exact location of the roost entrance in a tree is not known, the trees with roosts that need to be removed should first be disturbed by removal of some of the trees' limbs not containing the bats. Such disturbance will occur at dusk to allow bats to escape during the darker hours. These trees would then be removed the following day. All of these activities will be performed under the supervision of the bat biologist.	Applicable just prior to construction.

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<b>Animal Species (Roosting Bats)</b> <b>MM-ANIMAL-9.5</b>	<p>If a day roost will be impacted, an alternative bat roost structure will be provided. The design and placement of this structure will be determined by a bat biologist, in consultation with the CDFW, based on the species of bat to be displaced, the location of the original roost, and the habitat conditions in the vicinity. The roost structure will be built to specifications as determined by a bat biologist and CDFW, or it may be purchased from an appropriate vendor. The structure will be placed as close to the impacted roost site as feasible, which may include placement within trees, on bridge structures, or other locations as determined by a bat biologist and CDFW. This bat structure will be erected at least one month (and preferably a year or more) prior to removal of the original roost structure. A bat biologist will monitor this structure during the breeding season for up to three years following completion of the project, or until it is found to be occupied by bats, to provide information for future projects regarding the effectiveness of such structures in minimizing impacts to bats.</p>	<p>Applicable just prior to construction.</p>
<b>Animal Species (Roosting Bats)</b> <b>MM-ANIMAL-9.6a</b>	<p>In some circumstances, it may be beneficial to allow roosting bats to continue using a roost while construction is occurring on or near the roost site. For example, if a bridge found to contain a day roost is being widened but is not being demolished, and if pile-driving, jack-hammering, or other sources of “extreme” disturbance will not occur, a qualified bat biologist (in consultation with the CDFW) will determine whether the bats should be evicted or whether they should remain in place. If it is determined that the risks to bats from eviction (e.g., increased predation or exposure, or competition for roost sites) are greater than the risk of colony abandonment, then the bats will not be evicted. In the case of non-maternity colonies, no alternative roost structures will need to be provided, and no monitoring of the colony during construction will be necessary.</p>	<p>Applicable just prior to construction.</p>
<b>Animal Species (Roosting Bats)</b> <b>MM-ANIMAL-9.6b</b>	<p>However, if a maternity colony is maintained in place while construction on or immediately adjacent to the colony takes place, some minimal information on the increase in disturbance to which bats are subjected during construction and on the bats’ response to that disturbance will be collected. This information will help to inform the impact assessment of, and the development of impact minimization measures for, similar projects in the future. Baseline data on the vibration and sound levels at the bridge site will also be collected for a minimum of 2 days within 5 days of construction</p>	<p>Applicable just prior to construction.</p>

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	<p>commencement. Following this pre-construction, baseline monitoring, the colony will then be monitored every night during construction using acoustic surveying methods, such as Anabat equipment, to determine the status of the colony (i.e., to determine if the colony abandons the roost). Monitoring equipment will also be used to sample construction-related increases in noise and vibration.</p> <p>Project implementation will not have to be modified based on the findings of this monitoring, even if the bats abandon the roost. However, these data will allow for a determination of whether or not the bats remained at the bridge during construction and/or changed their activity patterns in relation to varying levels of noise and vibration.</p>	
<p><b>Animal Species (American Badger) MM-ANIMAL-11.1</b></p>	<p>A qualified mammalogist will conduct preconstruction surveys for badger dens on and within 300 feet of the site (as access permits), within two weeks prior to groundbreaking in any given area occupied by grassland or ruderal habitat. If the mammalogist identifies any dens that appear suitable for this species (based on size, shape, or other features), such “potential dens” will be monitored via tracking media or camera for a period of at least three days to determine occupancy, then excavated if no evidence of occupancy is detected. If an active maternity badger den is located, the mammalogist will determine the measures (e.g., buffers) that will be taken to avoid impacts to the den during the pupping season (i.e., February 15 through July 1, or as otherwise determined through surveys and monitoring of the den), in consultation with the CDFW. After the pupping season, if a den is located in the project impact area, the badgers will be evicted by excavation of the den using hand tools under the supervision of a qualified mammalogist, in consultation with the CDFW.</p>	<p>Applicable just prior to construction.</p>
<p><b>Animal Species (Nesting Birds) MM-ANIMAL-12.1</b></p>	<p>Vegetation that will be impacted by the project will be removed during the non-breeding season (i.e., September 1 to February 1), if feasible, to help preclude nesting. If it is not feasible to schedule vegetation removal during the non-breeding season, then pre-construction surveys for nesting birds will be conducted by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. This survey will be conducted no more than two days prior to the initiation of construction activities. During this survey, the ornithologist will inspect trees, shrubs, and other potential</p>	<p>Applicable just prior to construction.</p>

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	<p>nesting habitats in and immediately adjacent to the project impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist, in consultation with CDFW, will determine the extent of a buffer zone to be established around the nest, which can range from 100 to 300 feet or more depending on the sensitivity of the nest and/or species.</p>	
<p><b>Animal Species (Nesting Birds)</b> <b>MM-ANIMAL-12.2</b></p>	<p>At bridges, to avoid impacts to nesting swallows and black phoebes, old nests will be removed prior to February 15, or after February 15 if a qualified ornithologist determines that the nests are not active. Maintaining bridges free from nesting birds may require the placement of netting or other structures over the underside of the bridges to prevent swallows and other birds from accessing suitable nesting substrate. Alternatively, nest starts may be removed on a regular basis (e.g., every other day) to prevent active nests from becoming established. Because both roosting bats and nesting swallows occur on at least one bridge (the southbound U.S. 101 span over the UPRR/Tar Creek), coordination of exclusion efforts may be necessary. Thus, if exclusion devices such as netting will be installed prior to February 15 to prevent swallows from nesting, and if measures are taken to exclude roosting bats, all these measures will need to be implemented prior to February 15.</p>	<p>Applicable just prior to construction.</p>
<p><b>Threatened &amp; Endangered (T&amp;E) Species (California Red-legged Frog)</b> <b>MM-T&amp;E-2.1</b></p>	<p>MM-T&amp;E-2.1: The project will fully mitigate for impacts to riparian habitat and aquatic/wetland habitat, the two habitat types of greatest value to red-legged frogs.</p>	
<p><b>T&amp;E Species (California Red-legged Frog)</b> <b>MM-T&amp;E-2.2</b></p>	<p>The project will pay development fees to the Santa Clara Valley HCP/NCCP for impacts to upland non-breeding red-legged habitat.</p>	<p>Once the plans are at 100% complete and prior to construction, VTA will complete the Santa Clara Valley Habitat Agency Reporting Form for Public Projects and pay applicable fees.</p>
<p><b>T&amp;E Species (California Red-legged Frog)</b> <b>MM-T&amp;E-2.4</b></p>	<p>Prior to any ground disturbance, pre-construction surveys shall be conducted by a USFWS-approved biologist for the California red-legged frog. These surveys shall consist of walking surveys of the project limits and adjacent areas accessible to the public to determine presence of the species. All aquatic, wetland, and riparian habitats within construction areas will be</p>	<p>Applicable just prior to construction.</p>

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	<p>surveyed by the qualified biologist for the presence of larval and adult California red-legged frogs prior to construction activities. If any red-legged frogs are detected within construction areas, they will be relocated to predetermined sites outside the project area (with the approval of the USFWS). Only USFWS-approved biologist(s) who are familiar with the biology and ecology of the California red-legged frog shall capture or handle this listed species. Generally, if an individual needs to be relocated, it will be moved outside the project area and placed in appropriate habitat providing adequate cover.</p>	
<p><b>T&amp;E Species (California Red-legged Frog) MM-T&amp;E-2.5</b></p>	<p>An employee education program will take place before groundbreaking for the project, and a USFWS-approved biologist will explain to construction workers how best to avoid the accidental take of California red-legged frogs. The approved biologist will train construction workers on recognition of this species, their potential for occurrence in the project area, measures to avoid take, and penalties for take. The program will consist of a brief presentation by the on-site biologist to explain endangered species concerns to all contractors, their employees, and agency personnel involved in the project. The program should include a description of the California red-legged frog and its habitat needs; an explanation of the status of this species and its protection under the Endangered Species Act; and a description of the measures being taken to reduce effects to this species during project construction and implementation. Documentation of the training, including individual signed affidavits, will be kept on file.</p>	<p>Applicable just prior to construction.</p>
<p><b>T&amp;E Species (California Red-legged Frog) MM-T&amp;E-2.6</b></p>	<p>Prior to the start of work each day, dedicated construction personnel will inspect trenches and pits that were left open overnight. If a California red-legged frog (or any amphibian that construction personnel think may be of this species) is encountered, the following protocol will be implemented: 1) All work that could result in direct injury, disturbance, or harassment of the individual animal will immediately cease; 2) the resident engineer or inspector will be immediately notified; 3) the resident engineer or inspector will immediately notify the appropriate Construction Environmental Coordinator, or similar responsible party, who in turn will immediately notify the USFWS and CDFW; and 4) a qualified biologist approved by the USFWS to handle the individual frog will be contacted to remove the individual to a safe location nearby.</p>	<p>Applicable during construction.</p>

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<b>T&amp;E Species (California Red-legged Frog)</b> <b>MM-T&amp;E-2.7</b>	Permanent and temporary disturbances and other types of project-related disturbance to the habitats of the California red-legged frog shall be minimized to the maximum extent practicable. To minimize temporary disturbances, all project-related vehicle traffic shall be restricted to established roads, construction areas, and other designated areas. These areas will also be included in pre-construction surveys and, to the maximum extent possible, should be established in locations disturbed by previous activities to prevent further adverse effects.	Applicable during construction.
<b>T&amp;E Species (California Red-legged Frog)</b> <b>MM-T&amp;E-2.8a</b>	Project-related vehicles shall observe a 15-mph speed limit within construction areas, except on established public roadways; this is particularly important at night when the California red-legged frog is most active.	Applicable during construction.
<b>T&amp;E Species (California Red-legged Frog)</b> <b>MM-T&amp;E-2.8b</b>	To the maximum extent possible, nighttime construction should be minimized.	Applicable during construction.
<b>T&amp;E Species (California Red-legged Frog)</b> <b>MM-T&amp;E-2.8c</b>	Off-road traffic outside of designated project areas shall be prohibited.	Applicable during construction.
<b>T&amp;E Species (California Red-legged Frog)</b> <b>MM-T&amp;E-2.9</b>	To prevent inadvertent entrapment of red-legged frogs during construction, all excavated, steep-walled holes or trenches more than two feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they will be inspected for trapped animals. If at any time a trapped listed animal is discovered, the procedure described in MM-T&E-2.6 will be followed.	Applicable during construction.
<b>T&amp;E Species (California Red-legged Frog)</b> <b>MM-T&amp;E-2.10</b>	To eliminate an attraction to predators of the California red-legged frog, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed at least once every week.	Applicable during construction.

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<b>T&amp;E Species</b> <b>(California Red-legged Frog)</b> <b>MM-T&amp;E-2.11</b>	To avoid harassment, injury, or mortality of California red-legged frogs by dogs or cats, no canine or feline pets shall be permitted in the project area.	Applicable during construction.
<b>T&amp;E Species</b> <b>(California Red-legged Frog)</b> <b>MM-T&amp;E-2.12</b>	Plastic monofilament netting (erosion control matting) or similar material shall not be used at the project site because California red-legged frogs may become entangled or trapped in it. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.	Plastic monofilament netting (erosion control matting) or similar material is not proposed for use. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
<b>T&amp;E Species</b> <b>(California Red-legged Frog)</b> <b>MM-T&amp;E-2.13</b>	A qualified biologist(s) shall be on-site during activities that may result in the take of the California red-legged frog. The qualifications of the biologist(s) must be presented to the USFWS for review and written approval prior to groundbreaking at the project site. The biologist(s) shall be given the authority to stop any work that may result in take of frogs. If the biologist(s) exercises this authority, the USFWS and the CDFW shall be notified by telephone and electronic mail within one working day. The need for the monitor may be determined at the discretion of the environmental coordinator. The biologist should be on-site during initial clearing and grubbing and during rainy periods when frogs are most likely to be dispersing.	Applicable during construction.
<b>T&amp;E Species</b> <b>(California Red-legged Frog)</b> <b>MM-T&amp;E-2.14</b>	Injured California red-legged frogs will be cared for by a licensed veterinarian or other qualified person; dead red-legged frogs will be preserved according to standard museum techniques and held in a secure location. The USFWS and the CDFW will be notified within one working day of the discovery of death or injury to a California red-legged frog that occurs due to project-related activities or is observed at the project site. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal clearly indicated on a USGS 7.5-minute quadrangle and other maps at a finer scale, as requested by the USFWS, and any other pertinent information.	Applicable during construction.
<b>T&amp;E Species</b> <b>(California Red-legged Frog)</b> <b>MM-T&amp;E-2.15</b>	Environmentally sensitive area (ESA) fencing will be installed around sensitive habitat features used by the red-legged frog, such as wetlands and riparian and aquatic habitats, which are to be avoided during project construction. The ESA fencing will be installed at a minimum distance from the edge of the resource as determined through coordination with the CDFW and USFWS. The construction specifications will contain clear language stating that	Environmentally sensitive area (ESA) fencing is incorporated into the Phase 1 Project plans.

MITIGATION TOPIC AND FEIR MEASURE #	MITIGATION MEASURE	UPDATE FOR THE PHASE 1 PROJECT
	construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities are prohibited within the fenced ESA.	
<b>&amp;E Species (California Tiger Salamander)</b> <b>MM-T&amp;E-3.1</b>	MM-T&E-3.1: The project will fully mitigate for impacts to aquatic/wetland habitat, the habitat type of greatest value to tiger salamanders.	Once the plans are at 100% complete and prior to construction, VTA will complete the Santa Clara Valley Habitat Agency Reporting Form for Public Projects and pay applicable fees.
<b>T&amp;E Species (California Tiger Salamander)</b> <b>MM-T&amp;E-3.2</b>	The project will pay development fees to the Santa Clara Valley HCP/NCCP for impacts to upland non-breeding tiger salamander habitat.	Once the plans are at 100% complete and prior to construction, VTA will complete the Santa Clara Valley Habitat Agency Reporting Form for Public Projects and pay applicable fees. Applicable during construction.
<b>T&amp;E Species (California Tiger Salamander)</b> <b>MM-T&amp;E-3.4</b>	The mitigation measures listed above (i.e., MM-T&E-2.4 to MM-T&E-2.15) that are designed to prevent harm to individual California red-legged frogs will also serve to prevent harm to individual California tiger salamanders.	See measures for California red-legged frogs.
<b>Construction Impacts Air Quality</b> <b>MM-CON-4.1</b>	During construction, the project will follow Caltrans' Standard Specification 14-8.02, Standard Specification 10, and Standard Specification 18, which address the requirements of BAAQMD and dust control and dust palliative application, respectively.	Applicable during construction.
<b>Construction Impacts – Air Quality</b> <b>MM-CON-4.2</b>	The project will implement all feasible PM10 construction emissions control measures required by the BAAQMD.	This measure is being updated in the CEQA addendum, as the BAAQMD construction emissions control measures have been updated since publication of the FEIR. Applicable during construction. Applicable during construction.
<b>Construction Impacts Noise</b> <b>MM-CON-5.1</b>	All internal combustion engine driven equipment will be equipped with intake and exhaust mufflers that are in good condition and appropriate for the equipment.	Applicable during construction.
<b>Construction Impacts Noise</b> <b>MM-CON-5.2</b>	Unnecessary idling of internal combustion engines within 100 feet of residences will be strictly prohibited.	Applicable during construction.

MITIGATION TOPIC AND FEIR MEASURE #	MITIGATION MEASURE	UPDATE FOR THE PHASE 1 PROJECT
<b>Construction Impacts Noise MM-CON-5.3</b>	Staging of construction equipment within 200 feet of residences will be avoided. All stationary noise-generating construction equipment, such as air compressors and portable power generators, will be located as far as practical from residences.	Applicable during construction.
<b>Construction Impacts Noise MM-CON-5.4</b>	All construction equipment will be required to conform to Section 14-8.02 - Sound Control Requirements of the latest Standard Specifications.	Applicable during construction.
<b>Construction Impacts Noise MM-CON-5.5</b>	Nighttime construction work within 450 feet of residential land uses will be avoided where feasible.	Applicable during construction.
<b>Construction Impacts Noise MM-CON-5.6</b>	Demolition and pile driving activities will be limited to daytime hours to the greatest extent possible. If nighttime demolition or pile driving is required, a construction noise monitoring program will be implemented to provide additional mitigation as necessary (in the form of noise control blankets or other temporary noise barriers, etc.) for affected receivers.	Applicable during construction.
<b>Construction Impacts Water Quality MM-CON-6.1</b>	Active paved construction areas will be swept as needed.	Applicable during construction.
<b>Construction Impacts Water Quality MM-CON-6.2</b>	Silt fencing or straw wattles will be used to retain sediment on the project site.	Plastic monofilament netting (erosion control matting) or similar material is not proposed for use. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
<b>Construction Impacts Water Quality MM-CON-6.3</b>	Temporary cover of disturbed surfaces or temporary slope protection measures will be provided per regulatory requirements and Caltrans' guidelines to help control erosion. Permanent cover/revegetation will be provided to stabilize the disturbed surfaces after construction has been completed.	Applicable during construction.
<b>Construction Impacts Water Quality MM-CON-6.4</b>	No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products, or other organic or earthen material will be allowed to enter into or be placed where it may be washed by rainfall or runoff into any waterways.	Applicable during construction.

MITIGATION TOPIC AND FEIR MEASURE #	MITIGATION MEASURE	UPDATE FOR THE PHASE 1 PROJECT
<b>Construction Impacts</b> <b>Water Quality</b> <b>MM-CON-6.5</b>	Best Management Practices (BMPs) will be utilized by the contractor(s) during construction. The BMPs will be incorporated into a Stormwater Pollution Prevention Plan for the project, as required by Caltrans' NPDES permit.	Applicable during construction.