

DIST-CO-RTE: 4-ALA-84, 4-ALA-680

PM/PM: ALA-84 17.9/22.9, ALA-680 10.3/15.3

EA or Fed-Aid Project No.: 04-297631

Other Project No. (specify): 0415000040

Project Title: SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project

Environmental Approval Type: Environmental Impact Report/Environmental Assessment with Finding of No Significant Impact

Date Approved: May 30, 2018

Reason for Consultation (23 CFR 771.129), check one:

- □ Project proceeding to next major federal approval
- ☑ Change in scope, setting, effects, mitigation measures, requirements
- \Box 3-year timeline (EIS only)
- □ **N/A** (Re-Validation for CEQA only)

Description of Changed Conditions:

The SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project has been modified from the original design. A detailed description of changed conditions is included in the continuation sheets and a revised ECR is attached.

NEPA CONCLUSION - VALIDITY

Based on an examination of the changed conditions and supporting information:

- ☐ The original environmental document or CE remains valid. No further documentation will be prepared.
- ☑ The original environmental document or CE is in need of updating; further documentation has been prepared and □ is included on the continuation sheet(s) or
 ☑ is attached. With this additional documentation, the original ED or CE remains valid.

Additional public review is warranted (23 CFR 771.111(h)(3)) \Box Yes \Box No

□ The original document or CE is no longer valid.

Additional public review is warranted (23 CFR 771.111(h)(3)) □ Yes □ No Supplemental environmental document is needed. □ Yes □ No New environmental document is needed. □ Yes □ No (If "Yes," specify type:

CONCURRENCE WITH NEPA CONCLUSION

I concur with the NEPA conclusion above.	
Calquin	7/13/2020
Signature: Environmental Branch Chief	Date
min	7/13/2020
Signature: Project Manager/DLAE	Date

)

<u>CEQA CONCLUSION</u> (Only mandated for projects on the State Highway System.)

Based on an examination of the changed conditions and supporting information, the following conclusion has been reached regarding appropriate CEQA documentation: (*Check ONE of the five statements below, indicating whether any additional documentation will be prepared, and if so, what kind. If additional documentation is prepared, attach a copy of this signed form and any continuation sheets.*)

- □ Original document remains valid. No further documentation is necessary.
- ☑ Only minor technical changes or additions to the previous document are necessary.
 ☑ An addendum has been or will be prepared and is ☑ included on the continuation sheets or □ will be attached. It need not be circulated for public review. (CEQA Guidelines, §15164)
- □ Changes are substantial, but only minor additions or changes are necessary to make the previous document adequate. A Supplemental environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15163)
- Changes are substantial, and major revisions to the current document are necessary.
 A Subsequent environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15162)

(Specify type of subsequent document, e.g., Subsequent FEIR):

 \Box The CE is no longer valid. New CE is needed. \Box Yes \Box No

CONCURRENCE WITH CEQA CONCLUSION

I concur with the CEGA conclusion above. Signature: Environmental Branch Chief

7/13/2020 Date

7/13/2020 Date

Signature: Project Manager/DLAE

CONTINUATION SHEET(S)

Address only changes or new information since approval of the original document and only those areas that are applicable. Use the list below as section headings as they apply to the project change(s). Use as much or as little space as needed to adequately address the project change(s) and the associated impacts, minimization, avoidance and/or mitigation measures, if any.

Changes in project design, e.g., scope change; a new alternative; change in project alignment.

The following are changes in the project design and project description since the Environmental Impact Report/Environmental Assessment with Finding of No Significant Impact (EIR/FONSI) was issued. None of these changes represent a substantial scope change, new alternative, or change in the project alignment; however, they are included because they either fall outside of the area studied for the EIR/FONSI or affect the assumptions used to identify impacts or avoidance, minimization, and/or mitigation discussed in the EIR/FONSI.

The following project changes are described in the same order as the discussion of project elements in EIR/FONSI Section 1.4. New project elements are discussed at the end of this section.

I-680

As described in EIR/FONSI Section 1.4.2, the project will construct an approximately 1,000foot-long auxiliary lane on southbound Interstate 680 (I-680), to the south of Calaveras Road/Paloma Way. The project will require acquisition along the frontage of a San Francisco Public Utilities Commission (SFPUC) property, located west of I-680 between Alameda Creek and Paloma Way, to accommodate widening along southbound I-680. The property is under a long-term mining lease (Surface Mining Permit No. 32 [SMP-32]) and currently used for agriculture. To accommodate the project, an existing dirt private access road will be realigned approximately 30 feet to the west of its current location. The realigned private access road will be constructed with aggregate base material placed on compacted native soil. The realigned private access road and all project modifications to the west of the road will remain on SFPUC property; project right-of-way (R/W) acquisition is limited to the area between the current R/W and a narrow buffer area parallel to, and to the east of, the new access road.

The pavement widening and relocated access road were shown in EIR/FONSI Figure 1.4-1 (pages 1 and 2, "Proposed access road"). The associated property acquisition and mineral resources ramifications were addressed in EIR/FONSI Sections 2.1.7.3 and 2.2.3.3, respectively.

As required by SMP-32 conditions of approval, trees were planted to the west of the existing private access road in the mid-1990s to screen views of SMP-32 mining activities from the highway. Approximately 100 non-native (ornamental) and native trees adjacent to the existing private access road will be removed and nine native coast live oak trees will be relocated to accommodate the realigned private access road, water lines, and utility poles. The project has been modified to include creation of a tree replanting area parallel to, and a minimum of 10

feet west of, the realigned private access road. This area is outside of the original project study area. Sheets PP-2 through PP-4 of the roadway plans show the proposed modifications.

The replanting area of approximately 2.47 acres (which is currently disked) will have a combination of existing trees to remain, healthy coast live oaks that will be relocated, and 290 new coast live oak trees in 15-gallon containers that will be grown at SFPUC's nursery from acorns. Other trees to be removed will either be chipped as mulch for on-site use or disposed off-site. Surface irrigation will be provided using the water supply installed to serve the existing tree screen. Tree removal and relocation will be done as part of an advance contract between October 2020 and February 2021. New trees will be planted by the highway contract in Fall 2021 when they have grown in the SFPUC nursery to a sufficient size for planting.

Project Construction

Construction Closures and Detours

A 30-day closure of the westbound SR 84 to northbound I-680 connector ramp is required to construct a new retaining wall. The ramp has a weekday peak hour volume of 34 vehicles per hour. Traffic will be detoured from westbound SR 84 to Paloma Way/Pleasanton-Sunol Road/Koopman Road to enter northbound I-680. The detour is expected to add less than 15 minutes to vehicle travel time. This project change would not present any economic impact to the community or local businesses. This project change would not change the findings of the EIR/FONSI.

Right-of-Way Requirements

EIR/FONSI Section 1.4.4 identified the need for partial property acquisitions, temporary construction easements (TCEs), and utility and maintenance easement locations. Changes in right-of-way needs since EIR/FONSI approval are described further below in "Changes to Environmental Impacts of the Project."

Structures

As described in EIR/FONSI Section 1.4.4, structure work would include 12 feet of southbound widening along the western edge of the Scott's Corner Separation (Bridge No. 33-0352L) and approximately 13 feet of southbound widening along the eastern edge of the Koopman Road Undercrossing (Bridge No. 33-0386L). To accommodate the future I-680 Express Lanes from SR 84 to Alcosta Boulevard Project (EA 04-0Q300), the design has been modified to include additional widening of the same structures:

- Scott's Corner Separation bridge to the outside in the northbound direction (approximately 13.5 feet); and
- Koopman Road Undercrossing bridge on the inside in the northbound direction (between approximately 12 and 15 feet).

The appearance, foundations, and construction methods assumed for the southbound widening of these structures would be generally the same as for the northbound widening. The additional bridge widening is within the project footprint described in the EIR/FONSI.

As described in EIR/FONSI Section 1.4.2, the project would also reconstruct the existing twolane connector ramp from northbound I-680 to northbound SR 84. A retaining wall was included to support the ramp, as shown in EIR/FONSI Figure 1.4-1 (page 2). During PS&E, a short single-span bridge structure (Vallecitos Creek Bridge [N680-E84], Bridge No. 33-0765G) was added to the ramp to avoid excess structural loading to the double 8-foot by 7-foot reinforced concrete box culvert that conveys Vallecitos Creek under I-680. The bridge structure is within the project footprint described in the EIR/FONSI and will replace a section of the previously proposed retaining wall. The bridge location is shown in Attachment A.

The bridge will be 150 feet long and 38 feet wide and have a cast-in-place prestressed concrete box girder deck. Bridge abutments will be supported on spread footing foundations with driven steel piles (Class 90 and 200, Alt "W"). Construction access will be from the south along an existing SFPUC dirt access road to the south of Vallecitos Creek, or directly from the existing northbound I-680 to northbound SR 84 connector ramp. During construction, all equipment and materials will be stored at temporary staging areas within the project footprint.

Retaining Walls and Barriers

EIR/FONSI Table 1.4.4-2 in Section 1.4.4 listed proposed 18 retaining walls. During PS&E, two additional retaining walls were added:

- Retaining Wall 19 is a 650-foot-long soil nail wall on the east side of the Calaveras Road on-ramp to eastbound SR 84. The wall will be on cut along the R2 line and have a maximum height of 15 feet. Retaining Wall 19 is directly across from Retaining Wall 5, which will be on the west side of the same ramp.
- Retaining Wall 20 is a 675-foot-long mechanically stabilized embankment (MSE wall) with precast panels along the north side of the northbound I-680 on-ramp to eastbound SR 84. The wall will be on fill along the R4 line and have a maximum height of approximately 12.5 feet. Retaining Wall 20 follows approximately the same arc in the same locations as Retaining Walls 6 and 15.

The new retaining wall locations are shown in Attachment A.

EIR/FONSI Section 1.4.4 stated that concrete safety barriers would be constructed in the median of SR 84 throughout most of the project limits except at the proposed Little Valley Road/Vallecitos Atomic Laboratory Road intersection. The height of median barriers was not identified; however, descriptions of median barriers in Section 2.1.10 (Visual/Aesthetics) stated the heights would be 36 inches. The current project design includes a number of concrete median barrier types, which would be 36 inches, 42 inches, and 56 inches in height. All concrete barriers are within project footprint described in the EIR/FONSI.

Utilities and Drainage

EIR/FONSI Section 1.4.4 stated that the project would require relocating some utilities to outside of the right-of-way, and within the project footprint. During PS&E, coordination with SPFUC and PG&E required adjustment to the project footprint analyzed in the EIR/FONSI to account for proposed water line and gas line relocations.

EIR/FONSI Section 2.1.8.2 stated that the project would require relocation of several wooden utility poles for overhead electric and telephone lines. Approximately 24 of the new pole locations are outside of the original project footprint, parallel to and south of the alignment assumed during the Project Approval and Environmental Document phase.

The project will relocate approximately 1,280 feet of a 24-inch PG&E gas transmission line along the south side of SR 84, utilizing the cut and cover method in trenches of up to 6 to 8 feet in depth. All but approximately 10 feet of the gas line relocation is within the original project footprint.

The project will relocate two existing 12-inch SFPUC water lines (approximately 2,320 feet of a 12-inch raw water line, and approximately 1,215 feet of a 12-inch potable water line) that cross I-680 to the south of Calaveras Road. The existing water lines will be abandoned in place by backfilling with sand or slurry cement. Ground disturbance will be needed in several locations to cut into the pipe and remove any valves connected to the abandoned line. The new pipes will be encased within the State right-of-way. The relocated water lines will be installed using jack-and-bore construction, with jacking pits to extend lines across I-680. Both the locations of the pipelines to be abandoned and the new pipeline location are outside of the original project footprint.

The project will also relocate the following utilities that are within the original project footprint:

- Approximately 170 feet of a 4-inch PG&E gas distribution line across SR 84 that serves the General Electric/Hitachi Vallecitos Nuclear Center property, utilizing the cut and cover method in trenches of up to 6 to 8 feet in depth.
- Approximately 1,500 feet of a 4-inch SFPUC water line on the SMP 32 site, utilizing the cut and cover method in trenches of up to 6 feet in depth.
- Approximately 205 feet of a 14-inch water line across SR 84 that serves the General Electric/Hitachi Vallecitos Nuclear Center property, utilizing the cut and cover method in trenches of up to 6 to 8 feet in depth.

Temporary Diversion Systems [New]

As described in EIR/FONSI Section 1.4.4, the project would widen SR 84 and construct a concrete barrier along the southern roadway shoulder directly adjacent to the open section of Vallecitos Creek. Erosion control measures such as soldier piles were anticipated to be implemented to prevent creek scour from undermining the concrete barrier foundation. During PS&E, scour analyses indicated that proposed retaining wall and concrete barrier footings at three locations along Vallecitos Creek would be subject to scour from the creek. Geotechnical conditions do not allow for the use of footing types (e.g., soldier piles or sheet piles) that provide adequate scour protection. Rock slope protection (RSP) will be needed along the south (creek) side of these retaining walls and concrete barrier. Temporary cofferdams will be needed in three sections of Vallecitos Creek to allow for placement of RSP.

The diversions will be installed prior to the start of construction at each location. Dewatering for all three locations will occur between April 15 and October 15. The diversions will be constructed from the upstream end first, moving downstream and in such a way as to direct flow to the downstream end of the channel. All temporary creek diversion systems will be

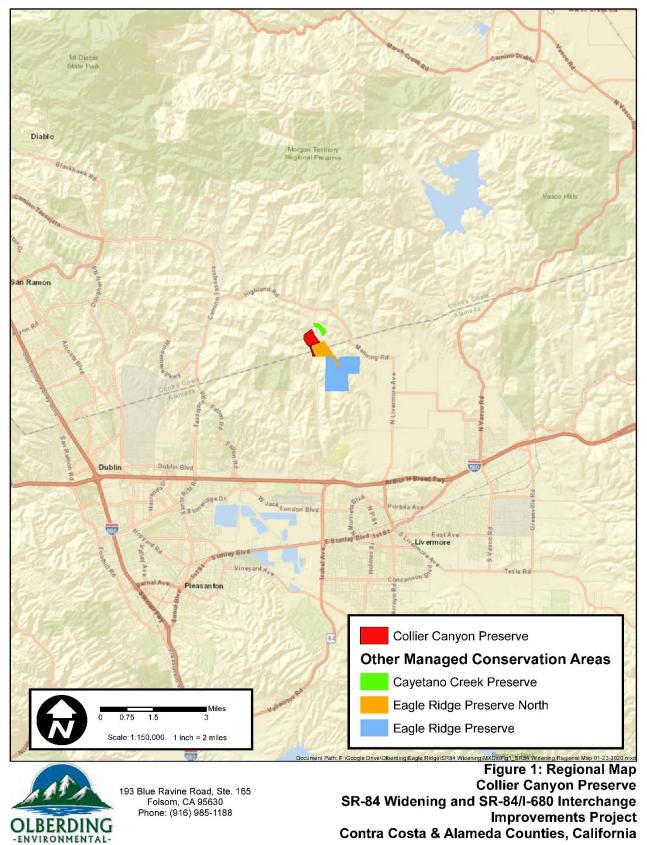
removed, and creek flows will be restored at the end of the seasonal work window. Dewatering infrastructure removal will occur within 48 hours after construction work ends for the season and no later than October 15. One construction season is anticipated to complete the channel work at each location.

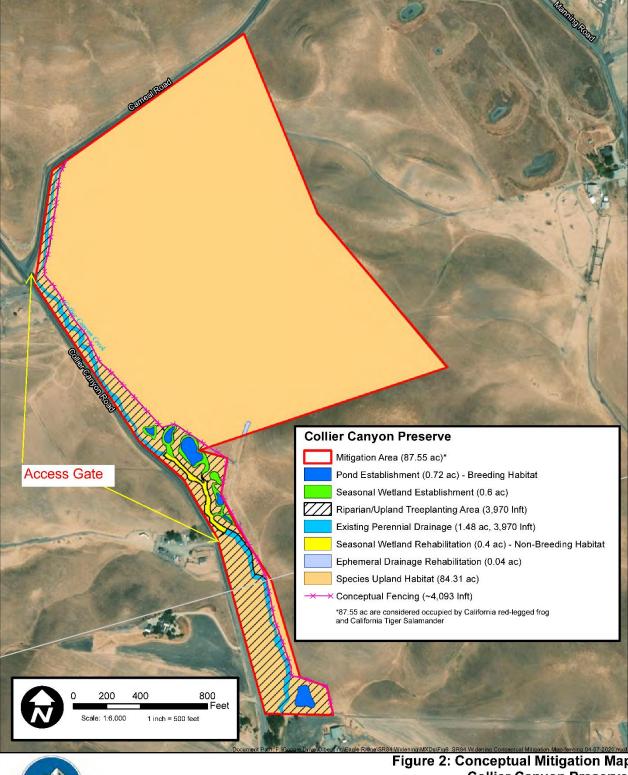
Cofferdams will be constructed using an impermeable membrane (e.g., visqueen) and clean gravel-filled bags or an inflatable bladder dam. Cofferdams will vary in length from 50 to 150 feet. Prior to placement of each cofferdam, vegetation, sharp objects, boulders, and cobbles will be removed to create a smooth streambed and prevent water passing beneath the dam after it is built. Any water encountered within the cofferdam will be pumped to a baker tank or water tender. All pumps will be screened with ¼-inch mesh to prevent wildlife entering the pump. Cofferdams along SR 84 will be installed from existing paved or unpaved access roads.

Mitigation Project [New]

The EIR/FONSI stated that compensatory mitigation for impacts to biological resources would be provided through purchase of credits at Collier Canyon Mitigation and Conservation Bank (which was still in review), or arrangements would be made to purchase credits at a nearby facility such as Oursan Ridge Conservation Bank. This approach was proposed in EIR/FONSI Sections 2.3.1.3 (Vegetation Communities: Measure BIO-2), 2.3.2.5 (Measure BIO-7), and 2.3.5.4 (California Tiger Salamander: Measure BIO-17 and Alameda Whipsnake: Measure BIO-18).

Approval of Collier Canyon Mitigation and Conservation Bank is still pending; as a result, the project team coordinated with the facility owners to develop a permittee-responsible mitigation project (Mitigation Project) at a subset of the bank property, which has since been removed from the bank boundary. The Mitigation Project consists of the same activities in the same areas as originally proposed for the mitigation bank. Figures 1 and 2 show the Mitigation Project area and proposed enhancement activities.







193 Blue Ravine Road, Ste. 165 Folsom, CA 95630 Phone: (916) 985-1188 Figure 2: Conceptual Mitigation Map Collier Canyon Preserve SR-84 Widening and SR-84 / I-680 Interchange Improvements Project Contra Costa & Alameda Counties, California Map Revision Date: 4/9/2020

Caltrans proposes to complete the following habitat enhancement activities within the 87.55acre habitat compensation area:

- Grading to create seasonal wetland and pond habitat as potential breeding, foraging, and cover for California tiger salamander and California red-legged frog;
- Increasing hydrologic function and habitat management to rehabilitate seasonal wetland and ephemeral drainage areas;
- Planting of riparian trees; and
- Habitat management to rehabilitate annual grassland to improve ecological functions for California tiger salamander and California red-legged frog.

Construction of the mitigation habitat is planned for late Summer/Fall 2020. If it is necessary to complete construction activities outside this work window, activity will be limited to dry weather based on forecasts and ground conditions. Plant installation will likely be completed within 1 week and is planned for late fall/winter following the wetland and pond creation. There will be no nighttime ground disturbance activities.

The following describes the proposed actions for the Mitigation Project.

Access and Staging

All construction access will be from Carneal Road, near its intersection with Collier Canyon Road. A stabilized construction entrance/exit pad will be installed and will include a 20-footlength minimum asphalt area per Contra Costa County specifications. The construction access point has been sited to avoid adversely impacting existing wetland habitat. Primary and secondary access routes will be located along the existing ranch roads.

Construction staging will be in an upland grassland area to the east of the wetland grading limits and will be bordered on three sides and at the base of slopes by straw wattles. Following construction, the staging area will be reseeded.

All access and staging areas will be staked and contained within the temporary work footprint.

Seasonal Wetland and Pond Creation

Site preparation will involve the use of excavation equipment and front-end loaders to excavate upland areas down to the elevation required for wetland habitat development. The wetland establishment sites will first be mowed close to the ground or disked and the upper 4 to 6 inches of soil will be excavated and stockpiled at designated upland locations. This soil will subsequently be spread on the new wetlands to provide organic matter and potentially wetland plant seed material and/or be used for upland mound development.

The seasonal wetlands will be mass-graded/excavated using a rubber-tired backhoe, front-end loader, and/or earth mover to form bottom microtopography and side slopes. Excavated material will be temporarily stockpiled onsite and either re-applied as mounds or off-loaded to an appropriate off-site location.

Finish grading will involve grading along the edges of an excavated area to tie into existing topography and grading the bottom of the created wetland area to provide the appropriate flat topographic relief (<1-2 percent slope) for wetland hydrology, soil, and plant development and the deeper ponds. Inlet and outlet elevations will be checked and precisely graded. Grading activities will be monitored by a grade checker using a hand level to ensure that the constructed wetlands meet the design criteria.

The wetland complex to be constructed for creation/establishment will outlet water to existing drainage channels at three primary points within the Preserve. These inlet/outlet locations, where water enters and exits a created seasonal wetland depression, will be stabilized with construction techniques and erosion control fabric installation. The following key components will achieve stable inlets/outlets as follows:

- Grading will maintain a buffer of at least 2 feet from the edge of any jurisdictional wetlands/waters.
- Biodegradable erosion control blanket (e.g. jute netting) will be placed on the ground surface immediately following seeding but immediately prior to hydromulch application so that seed has good soil contact but is also protected by the fabric and hydromulch top dressing.
- Erosion control blanket will be keyed in on all sides as shown on the design typical.
- Biodegradable silt fence and/or straw wattles will be placed between the constructed wetland and the adjacent jurisdictional wetland feature to protect the wetland/water from un-permitted fill and or sedimentation during construction. The silt fence will be removed at the end of construction; however, straw wattle may remain post-construction to degrade insitu.

Each created wetland will be seeded with a native seed mix to enhance wetland vegetation growth. During finish grading, the previously stockpiled grubbed material will be hauled to wetland creation locations and applied to the graded areas to a depth of 3 to 4 inches. This seedbearing material should also facilitate wetland vegetation growth. Following placement of approximately 3 inches of organic-rich topsoil removed prior to mass grading, the established seasonal wetlands will be seeded with a native seed mix to enhance wetland vegetation growth as specified in the Preserve Mitigation and Monitoring Plan.

Upland Annual Grassland and Ephemeral Drainage Rehabilitation

Thatch (excessive dead plant material) levels will be primarily managed with planned and scheduled livestock grazing to attain the best thatch levels and soil conditions for grass and wildflower plant community development. In areas where grazing is not feasible, alternative methods such as mowing, string trimming, or hand grubbing will be deployed. Burning is not proposed.

The majority of upland grassland is undisturbed and not currently dominated by nuisance plant species. If nuisance plants are found in the course of regular monitoring included in the Preserve mitigation and monitoring plan, immediate action will be taken to control the particular pest species. Nuisance plant control options include manual methods (e.g., hand pull),

mechanical methods (e.g., mow, string-trim), and chemical application (e.g., herbicides); however, herbicide use will be limited as described in the mitigation and monitoring plan.

Passive strategies such as maintaining open water, providing adequate cover opportunities, and fencing may be used to control native wildlife pest species. All ponds will be visually inspected for signs of aquatic pest activity. Any ponds with aquatic pests that do not drain normally during the summer will be subject to draining with a pump during the appropriate time of year to avoid impacts to special-status or other desirable species.

Restoration

All temporary ground disturbances and excavated materials storage areas will be revegetated with an appropriate assemblage of native riparian wetland and upland vegetation to promote restoration of the area to pre-project conditions.

Upon completion of habitat construction, access routes will be restored to original grade by filling in ruts and disking the route to loosen surface soils. Appropriate erosion control measures will be employed where exposed soil occurs. If erosion subsequently occurs, the area affected will be re-contoured and protected from further erosion until the area becomes revegetated.

Changes in environmental setting, e.g., new development affecting traffic or air quality.

None

Changes in environmental circumstances, e.g., a new law or regulation; change in the status of a listed species.

Since EIR/FONSI approval, the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) began requiring analysis of project lighting. A lighting analysis was conducted as part of project permitting. The impacts are described below in "Changes to Environmental Impacts of the Project."

Changes to environmental impacts of the project, e.g., a new type of impact, or a change in the magnitude of an existing impact.

Farmlands

Minor changes to the project design along SR 84 have resulted in modifications to the acquisition and easement acreages from the six parcels under Williamson Act contracts described in EIR/FONSI Section 2.1.5.3 and shown in Table 2.1.5-1. All parcels are considered nonprime agricultural land under California Government Code Section 51201(c). No additional parcels would be affected. Revisions to Table 2.1.5-1 are shown below, with deletions in strikeout and additions in bold text.

Assessor's Parcel Number ¹	Total Parcel Size	Partial Acquisition (Acres)	Temporary Construction Easement (Acres)	Utility Easement (Acres)
096-0365-002-05	100.77 98	1.37 2.7	-	<0.01 0.2
096-0365-007-01	399.99 393	0.14 0.02	-	-
096-0365-004-02	99.84 100	3.55 4.6	-	0.05
096-0360-001- 06 08	552.78 549	2.19 3.4	-	1.18 1.1
096-0350-001-02	602.84 395	0.04 0.01	-	-
096-0350-003- 04 06	260.89 250	0.23 0.2	0.03	-
Total		7.52 10.93	0.03 0.0	1.23 1.3

Table 2.1.5-1 [Revised]: Williamson Act Property Acquisition

The project would not nullify or require changes to the Williamson Act contracts on the remaining portions of the properties listed in Table 2.1.5-1. Notification of the proposed conversion of lands under Williamson Act contracts was sent on April 13, 2020, to the Department of Conservation in accordance with California Government Code Section 51291. The Department of Conservation acknowledged receipt of the notification on May 28, 2020, and had no comments.

Relocations and Real Property Acquisition

EIR/FONSI Section 2.1.7 identified potentially affected properties in Table 2.1.7-1 and Figure 2.1.7-1, and noted that the actual impacts to properties will be determined during detailed project design. During PS&E, the amounts and precise locations of partial property acquisitions, temporary construction easements (TCEs), maintenance easements, and utility easements have been adjusted based on project design needs and coordination with property owners. In addition, the western and eastern ends of the new frontage road to the south of SR 84 have been modified to accommodate turning of emergency service vehicles, based on coordination with Alameda County (sheets L-9 and L-13 of the roadway plans). Revisions to Table 2.1.7-1 are shown below, with deletions in strikeout and additions in bold text.



Parcel (see Figure 2.1.7-1)	Page (see Figure 2.1.7-1)	Assessor's Parcel Number	Partial Acquisition (Acres)	TCE (Acres)	Permanent Maintenance Easement (Acres or Linear Feet) ¹	Permanent Utility Easement (Acres) ²
1	1, 2	096-0375-012-02	0.78 1.66	2.57 2.33	1.42 acres	0.63
2	2	096-0335-002-08	0.02 0.03	-	-	0.06 0.03
3	2	096-0335-002-09	0.22 0.28	-	-	0.27 0.11
4	2, 3	096-0375-007-03	0.19 0.25	-	609.78 linear feet (LF) (access)	0.73 1 .2 1
5	2	096-0375-XXX-XX See #6	0.05	-	-	0.31
6	2, 3	096-0375-006-08	0.30 0.31	-	-	-
7	2, 3, 6	096-0375-006-11	3.85 3.81	3.21 2.30	1.58 acres 274.75 LF (access)	-
8	3	096-0365-001-04	0.82 1.04	-	0.03	0.25 0.34
9	3	096-0365-002-05	1.37 2.68	-	-	<0.01 0.26
10	3	096-0365-003-02	2.94 4.20	-	-	0.07
11	3, 4	096-0350-001-07	6.57 9.12	0.64 0.61	325.64 LF (access)	0.01 0.39
12	3	096-0365-007-01	0.14 0.22	-	-	-
13	3, 4	096-0365-004-02	3.55 4.58	-	-	0.05
14	3, 4	096-0360-001-06	2.19 3.39	-	363.06 LF (access)	1.18 1.09
15	4	096-0350-001-02 See #11	0.04	-	-	-
16	4, 5	096-0350-003-04	0.23 0.25	0.03	-	-
17	6	096-0320-002-04	-	0.02	-	-
18	7	946-3102-003-02	-	0.01	-	<0.01
19	3	N/A-8, N/A-9 See #11	0.23	-	-	-
20	2	N/A-14 See #1	-	0.03	-	-
21	4 , 5	096-360-003-02 See #14	0.37	-	-	-
22	5	950-0007-005-11 See #14	0.07	-	-	-
		Total	23.93 31.82	6.51 5.30	0.05 3.00 acres; 1,573.23 LF	2.93 4.07

Table 2.1.7-1 [Revised]: Identification of Proposed Property Acquisitions and Easements

Includes access, retaining wall, and drainage easements. Access easements are reported in linear feet.
 Includes utility, electric, and gas line easements.



The description of impacts in EIR/FONSI Section 2.1.7.3—including that the Build Alternative would not require any full property acquisitions, relocate any residences or businesses, result in the conversion of any parcels to a new land use, or otherwise interfere with the continued use of parcels for their existing purpose—remains applicable. No additional property impacts will occur.

Utilities/Emergency Services

EIR/FONSI Section 2.1.8.2 discussed utility relocation impacts and potential effects of road closures during construction on emergency service providers, and Section 2.1.8.3 stated that Measure TR-1 in Section 2.1.6.4 (Transportation Management Plan [TMP]) would minimize temporary, short-term effects to emergency service providers. The refined utility relocations and detour information described under "Changes in Project Design" above, including the 30-day closure of the westbound SR 84 to northbound I-680 ramp, would not result in substantial additional impacts to utility services and emergency access. Measure TR-1 remains sufficient to address short-term, temporary impacts during project construction.

Visual/Aesthetics

I-680

As noted in "Changes in Project Design" for I-680 above, the project will shift an existing SPFUC access road that is parallel to and west of I-680 and south of Paloma Way, remove approximately 100 trees, and create a new replanting area that will have a combination of existing trees to remain, nine healthy coast live oak trees that will be relocated, and 290 new coast live oak trees.

This work was not explicitly addressed in the EIR/FONSI, although Section 2.1.10.3 ("Other Visual Impacts") stated that the Build Alternative would result in tree removal as well as earthmoving and landscaping activities. The section of SMP-32 where trees will be removed and replanted is not being used for mining activities; instead, the area is being used for agriculture, as shown in the image below.



Source: Google Street View from I-680 mainline just south of Paloma Way overcrossing, imagery date 8/2019

In addition to the tree removals along the access road, trees would be removed between southbound I-680 and the existing access road to accommodate roadside stormwater

treatment areas (bioswales). Tree removals in this area are shown in sheets PR-1 through PR-3 of the PS&E plans. The areas where trees will be removed to accommodate stormwater treatment facilities will be hydroseeded with native grasses and legumes.

Tree removals along southbound I-680 will result in noticeable changes for motorists on I-680, an Officially Designated State Scenic Highway, and short intermittent sections of Paloma Way where views of the tree removal area are not blocked by existing trees that will remain. Paloma Way, which is signed as SR 84 in that area, is not recognized as a scenic highway by either the state or the county; however, the City of Livermore General Plan, Community Character Element, identifies SR 84 as a scenic route. No residential properties are near this area, so resident views will not be affected.

From the perspective of motorists on I-680, the mature trees along southbound I-680 would be removed from foreground views, providing greater exposure to views of agricultural fields with hay/grain crops beyond the trees to the west. The fields are flat and typically green in the winter and spring and golden in the summer and fall. Although the 290 new coast live oak trees that will be planted to provide replacement shielding will take several years to reach the height of the existing trees to be removed, views of the agricultural fields provide a pleasing contrast to the tree-studded hills that surround this valley in each direction. In addition, these native oak trees will replace many non-native ornamentals, some of which are considered invasive species. For eastbound travelers on Paloma Way, the I-680 corridor would be somewhat more visible in mid-range views toward the east-southeast, but the thin gray line of the freeway would not be prominent in comparison to mature trees in the foreground along Paloma Way, the agricultural fields beyond them, and the tree-studded hills in each direction of longer-range views.

In summary, tree removal along southbound I-680 would change views for motorists on I-680 and Paloma Way, but the change would not adversely affect the quality of the views. When the trees in the replanted area mature, they will form a native oak woodland, and views will be similar to existing conditions. As stated in EIR/FONSI Section 2.1.10.3, "The project ... would not degrade the vividness of existing views [on I-680] because the height and magnitude of the mountains and peaks in the distance would still be visible and appreciated in much the same way as in the existing view." Visual impacts from the perspective of northbound and southbound I-680 motorists would remain from moderate-low to low.

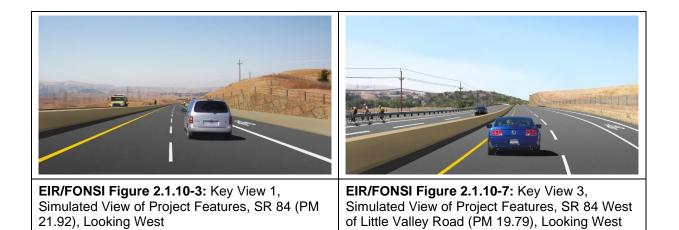
This project change would not have an adverse effect on the Officially Designated State Scenic Highway designation in this area because it would not increase the intensity of development, introduce outdoor advertising, or add structures or highly visible equipment. The project change reflects detailed site planning (consistent with SFPUC's objectives for the property) and careful attention to landscaping.

This section of I-680 is not a Classified Landscaped Freeway; therefore, no landscaped freeway designation would be affected.

Barriers

Impacts on Key Views. The PS&E project design includes a number of concrete median barrier types, which would be 36 inches, 42 inches, and 56 inches in height. The EIR/FONSI addressed the addition of concrete median barriers on SR 84 but only identified the barrier heights in two places, in EIR/FONSI Section 2.1.10. As shown in Figure 2.1.10-3 (Key View 1,

Proposed Condition, SR 84 [PM 21.92], Looking West), the project would add a 36-inch-tall concrete barrier in the median that would block views of ground-level terrain from the vantage point of motorists in the westbound outside lane. Motorists in the inside lane next to the barrier would be able to see over it, assuming an average window height of 36 inches in midsized sedan-style cars. A 36-inch concrete median barrier was also identified in the description of Figure 2.1.10-7 (Key View 3, Proposed Condition, SR 84 West of Little Valley Road [PM 19.79], Looking West). Figures 2.1.10-3 and 2.1.10-7 are included below for reference.



In the areas of Key Views 1 and 3, along with the majority of SR 84, the median barrier height would be increased from 36 to 42 inches (barrier types 60M and MS). A median barrier height increase of 6 inches in this area would result in minimal change to the simulated views shown in Figures 2.1.10-3 and 2.1.10-7 and the descriptions of impacts. The majority of motorists in the inside lane next to the barrier would still be able to see over it, assuming an average window height of 36 inches in midsized sedan-style cars. The constructed features within SR 84 would still be balanced with the natural features that are beyond the highway.

For Key View 1, the taller median barrier height would not change the EIR/FONSI conclusions that the project would maintain a moderate-high level of visual quality, the addition of constructed features would reduce the intactness of the view from moderate to moderate-low, unity would remain moderate-low, overall visual quality would remain moderate, and visual impacts would be low.

For Key View 3, the taller median barrier height would not change the EIR/FONSI conclusions that the memorability of the view would remain moderate-high, intactness would diminish from moderate to moderate-low, balance would remain moderate, overall visual quality would remain moderate, and visual impacts would be moderate.

Other impacts. A 0.54-mile section of SR 84 farther to the eastern limits of the project (Layout sheets L-21 through L-24; "SR84" Sta 285+33 to 314+88) would have a 56-inch-tall Type 60MG concrete median barrier. The need for the taller median barrier is required by Caltrans design standards due to limited shoulder width (less than 10 feet) and the need to reduce headlight glare from the opposite direction of traffic. This section is to the east of the area depicted in Key View 1.

This part of SR 84 winds through hills that rise steeply on both sides of the roadway, blocking long-range views to the east and west of the Pigeon Pass area. In this area, the primary views are of the hills on either side of the roadway, with periodic utility towers and poles and a single residential property high on a hill to the south of SR 84. Due to bends in the alignment, views of the area ahead are limited to a maximum of 0.25 to 0.30 mile in length.

EIR/FONSI Section 2.1.10.3 stated that a concrete median barrier would be added to SR 84. Assuming a median barrier height of 36 inches along SR 84 (which was not stated except for Key Views 1 and 3), a 56-inch barrier would result in a moderate visual change for travelers on SR 84 in this area. The taller barrier would obstruct ground-level views and views of most vehicles on the other side of the barrier. Views from taller vehicles such as buses and large trucks will not be affected by the increased median barrier height. Views of the hills surrounding SR 84—which are at a much higher elevation than the median barrier—would continue to dominate the viewshed. In addition, the bends in the roadway alignment that block long-range views and the short duration of travel through this section of SR 84 would prevent prolonged exposure to the higher median barrier.

Highway travelers with impacted views are anticipated to have moderate sensitivity to this visual change, resulting in a moderate visual impact. In accordance with EIR/FONSI Measure VIS-5, aesthetic treatment (in the form of integral color concrete) will be incorporated into the taller barrier, which would reduce this impact to moderate-low.

Other Project Changes

The additional widening of the Scott's Corner Separation and Koopman Road Undercrossing bridges, the new bridge over the Vallecitos Creek box culvert, and new Retaining Walls 19 and 20 would not introduce impacts beyond those described in Section 2.1.10.3 (Other Visual Impacts, Project Roadwork, Earthwork, and Structures, I-680). The remaining changes to the project since EIR/FONSI approval are within the range of activities and impacts described in Section 2.1.10. Retaining Walls 19 and 20 will receive architectural treatments consistent with other retaining walls in this part of the I-680 corridor.

Cultural Resources

Changes to the maximum project footprint were compared to the approved APEs for archaeology and architectural history to identify any proposed activities outside of the APE. Each location outside of the APEs, the mapped archaeological sensitivity, and proposed project work in each area was identified. Project activities that were not previously identified within the approved APEs were also reviewed. The project changes would not result in additional cultural resources impacts or require additional consultation. The Finding of No Adverse Effect without Standard Conditions is still appropriate for this project.

Mitigation Project

In 2018, the USACE initiated Section 106 consultation for development of the Collier Canyon Mitigation Bank. The State Historic Preservation Officer concurred with the USACE's finding of No Historic Properties Affected on June 26, 2018.

The proposed permittee-responsible Mitigation Project area is within the APE evaluated for the Collier Canyon Mitigation Bank, which in 2019 was split into separate areas for the Mitigation

Project and the mitigation bank due to delays in the bank approval process. The Mitigation Project includes the same activities as proposed for the former mitigation bank. No further analysis is required.

Administrative note. EIR/FONSI Section 2.1.11.3 stated that the cultural resources finding for this project is "No Adverse Effect *with Non-Standard* Conditions." The finding should have been identified as "No Adverse Effect *without Standard* Conditions." The substance of the finding is unchanged.

Paleontology

EIR/FONSI Section 2.2.4.3 stated that bridge widening and ground-disturbing activities along the Scott's Corner Separation bridge and the Koopman Road Undercrossing bridge could encounter paleontologically sensitive geologic units. The northbound widening of the Scott's Corner Separation bridge and the Koopman Road Undercrossing bridge, added to the project during PS&E, is anticipated to have the same potential.

The new bridge over the I-680 Vallecitos Creek box culvert is in the same geologic unit as the Scott's Corner Separation bridge (Quaternary alluvium dating to the Holocene-Late Pleistocene); therefore, bridge construction is also expected to have the potential to encounter paleontologically sensitive geologic units.

New Retaining Wall 19, a wall on cut, straddles Quaternary alluvium and the Livermore Gravels. New Retaining Wall 20, which will be on fill, appears to fall entirely within Quaternary alluvium. Both walls are in the same vicinity as the additional bridge widenings and new bridge described above, and therefore are anticipated to have the potential to encounter paleontologically sensitive geologic units.

Caltrans Standard Specification 14-7.03 and Measure PAL-1 would address the potential for impacts from the new project components, and no further avoidance, minimization, or mitigation is needed.

Biological Resources

The current project footprint was compared to the biological study area (BSA) considered in the EIR/FONSI to identify any proposed activities outside of the BSA, changes in impact type (temporary vs. permanent), or change in classification of a biological resource. Most changes are the result of design refinements to a variety of project elements that were developed as part of the detailed design process, including but not limited to work along southbound I-680 to the south of Paloma Way, additional right-of-way requirements, additional structures work including the new bridge, utility relocations, and the need for RSP and temporary diversions in Vallecitos Creek.

The results are detailed by resource below.

Natural Communities

Vegetation Communities

EIR/FONSI Section 2.3.1.2, Table 2.3.1-1 indicated that the project would have 41.49 acres of permanent and 33.08 acres of temporary impacts to vegetation communities. Based on the *Template Revised May 2020* Page **19** of **27**

100 percent design, the project would have 43.28 acres of permanent and 40.15 acres of temporary impacts to vegetation communities.

The EIR/FONSI did not report a total acreage for temporary/permanent riparian impacts. As part of the permitting process, 2,166 linear feet of impacts to riparian areas and removal of 159 native riparian trees were identified.

Trees

Work on the bridge section of the northbound I-680 to eastbound SR off-ramp; retaining wall, concrete barrier, and RSP construction along the south side of SR 84; and the other project activities discussed above are anticipated to result in different permanent and temporary impacts to trees than identified in Table 2.3.1.2 in EIR/FONSI Section 2.3.1. The current tree impacts are described in the *Vegetation Restoration Plan* (AECOM, March 2020). The table below shows the differences.

As noted above, nine coast live oak trees would be replanted on the SFPUC SMP-32 property; those trees are not included in this table.

Species	PA&ED Permanent Impacts ¹	PA&ED Temporary Impacts ²	PA&ED Total in Project Footprint	PS&E Permanent Impacts ¹	PS&E Temporary <u>or No</u> Impacts ²	PS&E Total in Project Footprint
Acacia	0	1	1	1	0	1
Aleppo pine (<i>Pinus halepensis</i>)	-	-	-	8	6	14
Arroyo willow	2	16	18	12	6	18
Black walnut (Northern California)	38	50	88	58	21	79
Blue oak	-	-	-	7	0	7
California buckeye	0	1	1	0	1	1
California pepper tree (Schinus mole)	5	72	77	70	16	86
Canary Island date palm	0	2	2	2	0	2
Coast live oak	141	357	498	296	193	489
Coast redwood	4	7	11	10	10	20
Coulter pine (<i>Pinus coulteri</i>)	-	-	-	14	7	21
Elm (non-native)	1	0	1	1	0	1
European olive	0	2	2	1	1	2
Fan palm	0	4	4	4	0	4
Fremont cottonwood	35	14	49	33	10	43
Italian cypress	3	15	18	18	0	18
Maple (non-native)	0	1	1	1	0	1
Pine (non-native)	1	16	17	2	6	8
Red willow	32	63	95	138	82	220
Valley oak	68	148	216	1	0	1
Victorian box	1	0	1	51	44	95
Western sycamore	12	17	29	17	12	29
Total Trees Impacted	343	786	1,129	745	415	1,160

Table 2.3.1-2 [Revised]: Potential P	Permanent and Temporary	y Impacts to Individual Trees
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Source: AECOM field surveys 2016, 2019, 2020

Notes:

1. Permanent impacts include removal of trees, compaction of a significant portion of the root zone, or removal of over 30 percent of the canopy.

2. Temporary impacts to trees include pruning of less than 30 percent of the canopy, removal of less than 25 percent of the roots (within the drip line of the tree), or soil compaction to less than 30 percent of the critical root zone. The standard critical root zone of a tree is the area corresponding to the drip line of the tree, or a distance from the tree trunk outwards calculated as 12 times the DBH of the tree, whichever is greater.

Wetlands and Other Waters of the United States

Work on retaining walls, concrete barrier, and RSP construction along Vallecitos Creek; relocation of approximately 1,280 feet of a 24-inch PG&E gas transmission line along the south side of SR 84; and the other project activities discussed in EIR/FONSI Section 1.4 will result in different impacts to wetlands and other waters of the U.S. than identified in Table 2.3.2-1 in Section 2.3.2. The current impacts to wetlands and other waters of the U.S. are described in the Vegetation Restoration Plan, SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project (AECOM, March 2020). The differences are shown in the table below.

	Acres ¹										
Jurisdictional Water Type	dictional Water Total in BSA		PA&ED Temporary Impacts ³	PA&ED Total Impact	PS&E Permanent Impacts ²	PS&E Temporary Impacts ³	PS&E Total Impacts				
Wetlands											
Freshwater marsh wetlands ³	3.71	0.04	0.09	0.13	0.07	0.30	0.37				
Seasonal wetlands ⁴	0.92				0.00	0.00	0.00				
Forest and shrub wetlands ⁴	0.23	0.14	0.09	0.23	23 0.13 0.05		0.18				
Wetlands subtotal	4.86	0.18	0.18	0.36	0.20	0.36	0.55				
Waters of the U.S.											
Vallecitos Creek (perennial channel)	1.24				0.00	<0.01	<0.01				
Ephemeral channels	0.40	0.03	0.02	0.05	0.04	<0.01	0.05				
Intermittent channels	0.33	<0.01	<0.01	<0.01	0.00	0.00	0.00				
Open water (pond)	0.08				0.00	0.00	0.00				
Other Waters of the U.S. subtotal	2.04	0.04	0.02	0.06	0.04	<0.01	0.05				
Total ²	6.90	0.22	0.20	0.41	0.24	0.36	0.60				

Table 2.3.2-1 [Revised]: Wetlands and Other Waters of the U.S. in BSA and	Impacts
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Notes:

1. Acreages rounded to the nearest hundredth, so values shown for each wetland type in table may not add up to total acreage shown.

2. Permanent impact areas are associated with conversion of natural communities to a built environment as a result of project features and construction activities. Temporary impact areas involve damage to the natural community, which may be preserved depending on the specific activity occurring near them, such as construction staging or the siting of a construction access road that could disrupt habitat and/or damage natural communities and can be restored to their original natural community type.

3. This total includes wetlands within waters, including freshwater marsh mapped within the Ordinary High Water Mark (OHWM) of Vallecitos Creek.

4. The three seasonal wetlands were classified as pale spike rush marsh vegetation communities based on dominant plant species.

Further changes to impact quantities listed in EIR/FONSI Section 2.3.2 based on the 100 percent design are as follows:

- The project will permanently impact 471 linear feet (0.02 acre) and temporarily impact 15 linear feet (<0.01 acre) of culverted waters of the United States.
- Impacts to riparian habitat (Other Waters of the State, that are not also U.S. jurisdictional waters) are 0.62 acre (temporary) and 0.43 acre (permanent).
- The project will have approximately 6,031 linear feet of temporary impacts and 17,165 linear feet of permanent impacts to unlined drainage ditches along SR 84 and I-680 and at the SR 84/I-680 interchange. Proposed offset unlined ditches equal approximately 28,217 linear feet.

The proposed Mitigation Project will result in permanent impacts to <0.01 acre of other waters of the U.S. (ephemeral drainage) and temporary impacts to 0.43 acre of other waters of the U.S. (0.41 acre of perennial drainage, and 0.02 acre of ephemeral drainage).

Threatened and Endangered Species

Work on retaining walls, concrete barrier, and RSP construction along Vallecitos Creek; relocation of approximately 1,280 feet of a 24-inch PG&E gas transmission line along the south side of SR 84; the Mitigation Project; and the other project activities discussed in EIR/FONSI Section 1.4 will result in different impacts to California tiger salamander, California red-legged frog, and Alameda whipsnake than identified in Section 2.3.5.2. The revised impacts are documented in the USFWS *Reinitiation of Formal Consultation on the State Route 84 Expressway Widening and State Route 84/680 Interchange Improvement Projects, Alameda County, California (Caltrans EA 04-297630),* File 08ESMF00- 2017-F-3304-R001-1, April 22, 2020 (Biological Opinion Amendment) and *State of California Department of Fish and Wildlife Application for Incidental Take of Listed Species, SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project 04-29763 (AECOM, March 2020 [ITP Application])*

The following revisions to EIR/FONSI Table 2.3.5-2 show modifications to impacts and proposed mitigation for California tiger salamander and California red-legged frog.

	Acres ²									
Habitat Type ¹	Permaner	nt Impact	Impact Temporary		Mitigation for Permanent Impacts (3:1 Ratio)		Mitigation for Temporary Impacts (1:1 Ratio)		Total Mitigation for Project Impacts	
	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E
		Uplan	d Dispersal /	Foragin	g / Refugia	Habitat				
Grasslands	22.83	21.20	19.71	23.87	68.49	63.6	19.71	23.87	88.20	87.47
Forests and Woodlands	2.61	3.40	2.67	2.93	7.83	10.2	2.67	2.93	10.50	13.13
Scrubland	0.17	0.14	0.05	0.34	0.51	0.42	0.05	0.34	0.56	0.76
Disturbed Vegetation (ruderal, landscaped, and agriculture/pasture)	12.96	15.35	8.43	10.91	38.88	46.05	8.43	10.91	47.31	56.96
Subtotal	38.57	40.09	30.86	38.05	115.71	120.27	30.86	38.05	146.57	158.32
		Aquatic I	Non-Breeding	g Dispers	sal / Foragi	ing Habit	at			
Baltic and Mexican rush marshes, pale spike rush marshes, ephemeral & intermittent channels	0.03	0.07	0.10	0.16	0.09	0.21	0.10	0.16	0.19	0.37
		F	Potential Aqu	atic Bree	eding Habi	tat	-	-	-	_
Hardstem bulrush marsh and wetland in Fremont cottonwood marsh	0.15	0.17	0.08	0.21	0.45	0.51	0.08	0.21	0.53	0.72
Total	38.75	40.33	31.04	38.42	116.25	120.99	31.04	38.42	147.29 ³	1 59.4 1 ³

Table 2.3.5-2 [Revised]: Proposed Compensatory Mitigation for Impacts to California Tiger Salamander					
and California Red-legged Frog Habitat					

Notes:

1. Vegetation communities mapped based on their dominant species. Some seasonal wetlands were identified within woodland communities.

2. Acreages rounded to the nearest hundredth, so values shown for each vegetation type in table may not add up to total acreage shown.

3. Approximately 38.42 acres of the total mitigation will be completed through on-site restoration.

Construction of the proposed Mitigation Project will result in additional impacts to habitat for both species. The mitigation work will permanently impact 1.32 acres of annual grassland that

provides upland dispersal, foraging, and refugia habitat and <0.01 acre of perennial drainage that provides aquatic non-breeding dispersal and foraging habitat. Construction access, staging and storage, and other temporary ground disturbance will result in temporary impacts to 2.63 acres of annual grassland, 0.41 acre of perennial drainage, and 0.02 acre of ephemeral drainage (also aquatic non-breeding dispersal and foraging habitat).

The following revisions to EIR/FONSI Table 2.3.5-3 show modifications to impacts and proposed mitigation for Alameda whipsnake.

Table 2.3.5-3 [Revised]: Proposed Compensatory Mitigation for Impacts to Alameda Whipsnake Habitat

	Acres ²									
Habitat Type ¹	Permanent Impact		Temporary Impact		Mitigation for Permanent Impacts (3:1 Ratio)		Mitigation for Temporary Impacts (1:1 Ratio)		Total Mitigation for Project Impacts	
	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E
Grasslands	8.69	6.36	11.52	9.95	26.07	19.08	11.52	9.95	37.59	29.03
Forests and Woodlands	1.82	2.62	2.13	2.32	5.46	7.86	2.13	2.32	7.59	10.18
Scrubland		0		0.26		0		0.26		0.26
Disturbed Vegetation (ruderal, landscaped, and agriculture/pasture)	6.15	7.38	4.71	7.57	18.45	22.14	4.71	7.57	23.16	29.71
Marsh Vegetation Communities	<0.01	0.02	0.07	0.22	<0.01	0.06	0.07	0.22	0.07	0.28
Total	16.67	16.38	18.42	20.32	50.01	49.14	18.42	20.32	68.43 ³	69.46

Notes:

1. Vegetation communities mapped based on their dominant species.

2. Acreages rounded to the nearest hundredth, so values shown for each vegetation type in table may not add up to total acreage shown.

3. Approximately 20.32 acres of the total mitigation will be completed through on-site restoration.

Construction of the proposed Mitigation Project will not impact the Alameda whipsnake, as the facility lacks suitable habitat for the species.

Lighting impacts. EIR/FONSI Section 1.4.4 (Safety Features) stated that additional lighting would be added to improve roadway visibility. Since then, as noted above, USFWS and CDFW began requiring analysis of species habitat impacts from projects that add lighting. The following table summarizes habitat impacts to California tiger salamander and California red-legged frog from new project lighting.

Vegetated Areas with Suitable Habitat for California Tiger Salamander and California Red-Legged Frog Projected to Receive 0.01 Lux or Greater

Habitat type for California tiger salamander and California red-legged	Lighting without back-side	Lighting with back-side
frog	shielding (acres)	shielding (acres)
Aquatic breeding	0.84	0.07
Aquatic non-breeding	0.11	0.07
Upland foraging	33.35	18.19
Total	34.29	18.33

Project lighting is not anticipated to affect Alameda whipsnake.

Administrative note. EIR/FONSI Section 2.3.5.3, Table 2.3.5-1 identified the effect finding for critical habitat for California red-legged frog and Alameda whipsnake as No Adverse Modification, as opposed to No Effect or Not Likely to Adversely Effect. The term 'No Adverse Modification' is consistent with the U.S. Fish and Wildlife Service and National Marine Fisheries Service 1998 *Endangered Species Consultation Handbook* and the project's Biological Opinion, dated December 5, 2017 (No. 08ESMF00-2017-F-3304-1; see EIR/FONSI Appendix C).

Changes to avoidance, minimization, and/or mitigation measures since the environmental document was approved.

Biological Resources

Natural Communities

Vegetation Communities

Measure BIO-2 in EIR/FONSI Section 2.3.1.3 stated that compensatory mitigation for temporary impacts to sensitive vegetation communities or natural communities of concern, including valley oak woodland, red willow thickets, Fremont cottonwood forests, and riparian scrub and forest, would be provided through on-site and off-site replanting, depending on space available.

To compensate for the loss of sensitive vegetation communities (specifically riparian vegetation), the on-site replanting plan includes on-site restoration/establishment of 4,581 linear feet of riparian habitat (1,658 linear feet of trees and 2,055 linear feet of shrubs). Compensatory mitigation for individual riparian trees is described below. This approach is consistent with Measure BIO-2.

Trees

Measure BIO-4 in EIR/FONSI Section 2.3.1.3 stated that tree removal would be mitigated through planting at a 3:1 ratio for all native species within riparian areas, and for coast live oaks and valley oaks in oak woodlands (including uplands); and at a minimum 1:1 ratio for other trees. The performance criteria for replacement tree plantings was stated as 70 percent survival of all plantings at the end of the monitoring period (3 to 10 years).

As described in the Vegetation Restoration Plan, SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project (AECOM, March 2020), tree replacement is proposed to be mitigated as follows:

- Native riparian trees as well as coast live oaks, valley oaks, and blue oaks in uplands will be replaced at a 3:1 ratio. This also applies to the tree replanting area on SFPUC property along I-680.
- All other native upland trees will be replaced at a minimum 1:1 ratio.

• To account for mortality, twice as many trees will be initially established for riparian California native trees, and a 3:1 replacement ratio will be applied for all upland trees.

Replacement trees will be provided both on-site and off-site as follows, in accordance with the Vegetation Restoration Plan, SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project (AECOM, March 2020):

- On-site replacement planting of 262 native riparian trees along creek corridors (the maximum that space allows).
- Off-site planting (riparian woodland enhancement) of remaining 215 of required 477 replacement trees as part of turn-key project at Collier Canyon Preserve.
- On-site restoration of temporarily impacted areas.

These ratios will provide a greater number overall of replacement trees than those proposed in Measure BIO-4.

Migratory Corridors

Measure BIO-5 in EIR/FONSI Section 2.3.1.3 stated that new project lighting would use bulbs no greater than 235 watt LED with a color temperature no greater than 4,000 Kelvins (K). In accordance with the Biological Opinion Amendment, the bulbs used in new fixtures will be no greater than 150 watt LED with a color temperature no greater than 2,700 K.

Wetlands and Other Waters of the United States

Measure BIO-7 in EIR/FONSI Section 2.3.2.5 stated that permanent impacts to USACE jurisdictional wetlands would be mitigated at a minimum 3:1 ratio, and temporary impacts at a minimum 1:1 ratio; stormwater features that are waters of the State would be replaced on-site at a minimum 1:1 ratio; and impacts to riparian habitat would be mitigated through a combination of on-site enhancement of existing habitat and restoration of land within riparian corridors, through the planting of native riparian tree, shrub, and forb species.

Measure BIO-7 also stated that proposed compensation for wetland impacts included purchase of credits at a local mitigation bank, on-site restoration of existing wetlands and waters within the Caltrans right-of-way, and on-site restoration in temporarily impacted areas. If mitigation credits were not available at the Collier Canyon facility, mitigation would be provided at another mitigation bank facility, or through a combination of on- and off-site mitigation. Due to approval delays Collier Canyon Mitigation and Conservation Bank, off-site compensatory mitigation will be provided by the Mitigation Project (see "Changes in Project Design," above).

Compensatory mitigation for USACE jurisdictional wetlands will be provided at a 3:1 ratio for permanent impacts (0.6 acre of seasonal wetland establishment by the Mitigation Project) and 1:1 ratio for temporary impacts (on-site restoration). Compensatory mitigation for USACE jurisdictional other waters of the U.S. will be provided at a 1:1 ratio for both permanent (0.04 acre of ephemeral drainage rehabilitation by the Mitigation Project) and temporary impacts (on-site restoration).

For unlined drainage ditches (waters of the State), permanent impacts will be offset by on-site creation at a minimum 1:1 ratio (approximately 28,217 linear feet), and temporary impacts will be restored on-site at a 1:1 ratio (6,170 linear feet). See "Natural Communities" above for mitigation of riparian impacts.

For impacts to other waters of the U.S. from the Mitigation Project, compensation through revegetation with an appropriate assemblage of native riparian wetland and upland vegetation is proposed to promote restoration of the area to pre-project conditions.

Threatened and Endangered Species

Changes in compensatory mitigation acreages for California red-legged frog and California tiger salamander are shown in Table 2.3.5-2 [Revised], above. Changes in compensatory mitigation for Alameda whipsnake are shown in Table 2.3.5-3 [Revised], above.

EIR/FONSI Section 2.3.5.4 stated that compensatory mitigation for impacts to biological resources would be provided through purchase of credits at Collier Canyon Mitigation and Conservation Bank (which was still in review), or arrangements would be made to purchase credits at a nearby facility such as Oursan Ridge Conservation Bank or another off-site mitigation arrangement would be made. This approach was proposed in Measures BIO-17 and BIO-18. Due to approval delays Collier Canyon Mitigation and Conservation Bank, off-site compensatory mitigation will be provided as follows:

- Purchase of 70 acres of multi-species credits for California tiger salamander, California redlegged frog, and Alameda whipsnake upland habitat at Ohlone West Conservation Bank.
- Purchase of mitigation values at Collier Canyon Preserve for 78.86 acres of upland grassland habitat, 0.19 acres of seasonal wetland rehabilitation (aquatic nonbreeding habitat), and 0.53 acres of seasonal pond establishment (aquatic breeding habitat) for California tiger salamander and California red-legged frog (included in the Mitigation Project).

Additional compensatory mitigation for impacts to California tiger salamander and California red-legged frog from the Mitigation Project are not proposed. The Mitigation Project would support population growth through the protection of an existing self-sustaining population and by enhancing and creating breeding and upland habitat that is contiguous to, and accessible from, occupied breeding habitat. The construction of 0.72 acre of seasonal pond for California tiger salamander and California red-legged frog breeding habitat, combined with the other proposed mitigation actions from the Mitigation Project, will provide long-term ecological benefits that offset the associated impacts. With implementation of the proposed conservation measures, no additional compensatory mitigation is proposed.

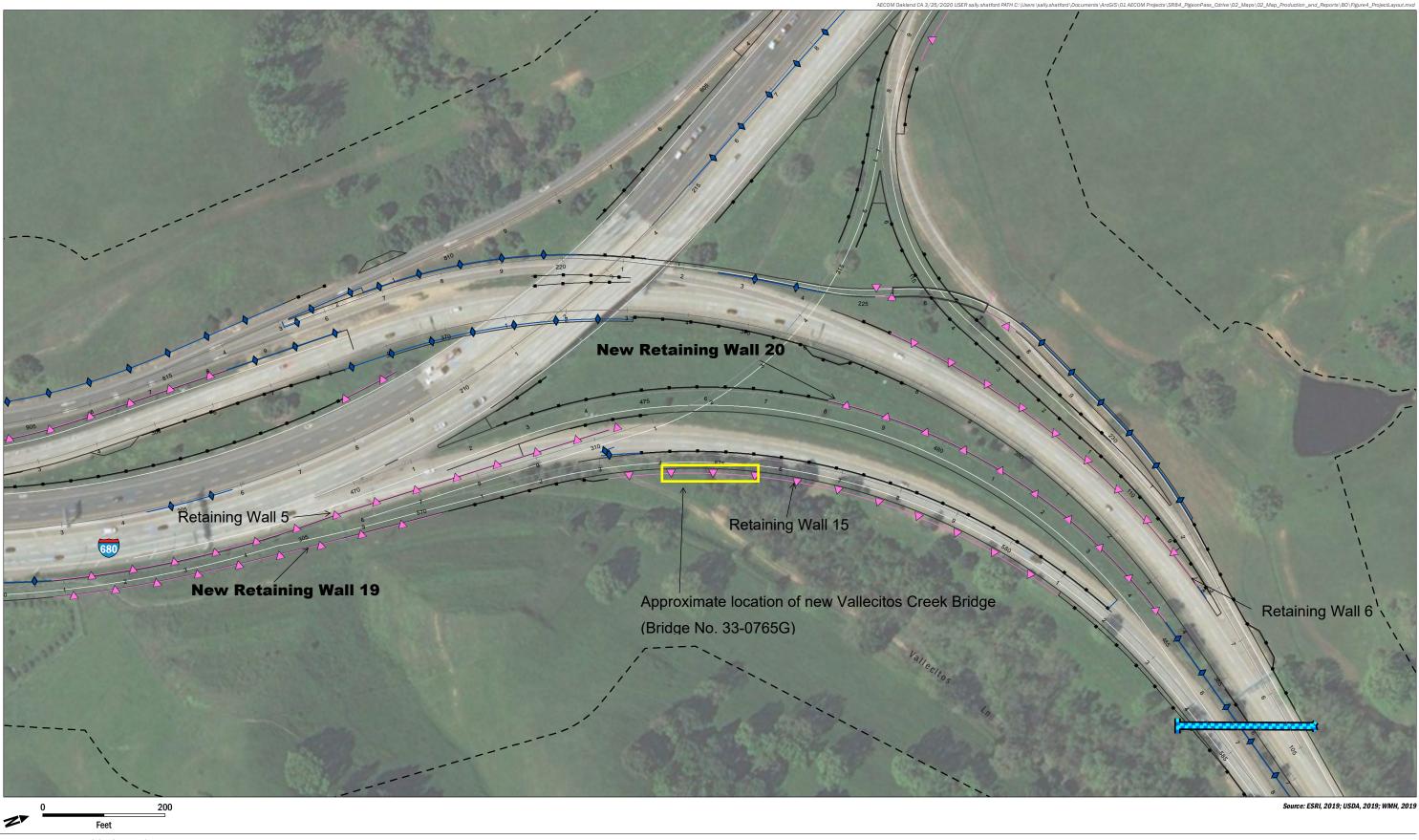
All temporarily disturbed habitats will be restored on-site following guidelines and plans incorporated in the Mitigation Project's Vegetation Restoration Plan, which includes detailed specifications for restoring all temporarily disturbed areas, such as seed mixes, application methods, plantings, erosion control, and schedule.

Changes to environmental commitments since the environmental document was approved, e.g., the addition of new conditions in permits or approvals. When this applies, append a revised Environmental Commitments Record (ECR) as one of the Continuation Sheets.

The revised ECR is included in Attachment B.

Attachments

- A. New Bridge and Retaining Wall Locations
- B. Environmental Commitments Record



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

___ Action Area V Retaining Wall **Construction Feature** - Pavement Edge Concrete Barrier Lane Line ■----- Guardrail Wildlife Crossing Culverts

ATTACHMENT A New Bridge and Retaining Wall Locations

SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project	EP: Ellen Doudna	510-847-3804
ALA-84-17.9/22.9, ALA-680-10.3/15.3	CL:	
Project Phase: 1	RE:	

Permits

Permit	Agency	Date Submitted	Date Received	Expiration	Requirements Completed Name Date	Comments
401	Regional Water Quality Control Board	10/17/19	6/24/20			WDID#: 2 CW435077
404 Nationwide Permit 14	U.S. Army Corps of Engineers	10/1/19	6/10/20	3/18/22		SPN-2017-00226S
1602	California Department of Fish & Wildlife	10/22/19				
Incidental Take Permit	California Department of Fish & Wildlife	11/21/19				
BO	U.S. Fish & Wildlife Service		12/5/17			No. 08ESMF00-2017-F-3304-1
BO Amendment	U.S. Fish & Wildlife Service	11/26/19	4/22/20			No. 08ESMF00- 2017-F-3304-R001-1

Task and Description	Source	SSP/NSSP	SSP Responsible Party	Task Completed		Action to	Remarks/
				Name	Date	Comply	Due Date
Community Character and Cohesion, Utilities/Emergency Services, Traffic and	Transportation/Peo	destrian and Bi	cycle Facilities				
Prepare Transportation Management Plan. During the final design phase for the Build Alternative, a Transportation Management Plan (TMP) will be prepared in accordance with Caltrans requirements and guidelines to minimize the construction-related delays and inconvenience for travelers in the project area. Visual/Aesthetics	EIR/FONSI Section 2.1.6.4	SSP	Caltrans Design			Completed TMP for 100% PS&E	
Avoid Extraneous Structures. Attach all electronic toll readers to sign gantries, to the extent feasible.	EIR/FONSI Section 2.1.10.4	NA	Caltrans Office of Landscape Architecture			Completed for 100% PS&E	No toll readers on separate gantries

Task and Description	Source	SSP/NSSP	Responsible Party	Task Complete	bd	Action to	Remarks/
	oouree			Name	Date	Comply	Due Date
Aesthetic Treatments. Incorporate aesthetic treatments to retaining walls, barriers and bridges.	EIR/FONSI Section 2.1.10.4	SSP	Caltrans Office of Landscape Architecture			Completed for 100% PS&E	
Cultural Resources	·						
Demarcate Archaeological Monitoring Area. Ensure that the Archaeological Monitoring Area (AMA) for site CA-ALA-656 is clearly described and illustrated in the plans, specifications and estimates (PS&E) for the project. Confirm mapping of Archaeological Monitoring Area. All responsible parties	Post-Review Discovery and Monitoring Plan Post-Review	SSP 14- 2.03B NA	Caltrans Office of Cultural Resource Studies Caltrans Office of			See 100% PS&E sheets L-8 and L-9 Completed for	
will review the PS&E package to ensure that it includes the AMA.	Discovery and Monitoring Plan		Cultural Resource Studies			100% PS&E	
Post-Review Discovery and Monitoring Plan. Include Post-Review Discovery and Monitoring Plan (PRD & MP) in ECR.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies			The PRD & MP is incorporated by reference.	
Geology/Soils/Seismic/Topography							-
Perform Geotechnical Investigations. The investigations will include site- specific evaluation of subsurface conditions at the location of proposed structure footings and proposed retaining walls as well as investigations for earthquake-induced liquefaction, soil expansion, soil corrosivity, and compaction settlement. An evaluation of construction dewatering will be included as a part of the field investigation program to provide the basis for construction dewatering plans used for final design.	EIR/FONSI Section 2.2.3.4	NA	Caltrans Design and Office of Geotechnical Design West			Completed for 100% PS&E	
Paleontology		•			_	1	
Update Paleontological Mitigation Plan. Update and finalize the Paleontological Mitigation Plan once project design is nearly complete.	EIR/FONSI Section 2.2.4.4	NA	Caltrans Design and Office of Geotechnical Design West				
Hazardous Waste/Materials			Doolgii Woot				
Perform Preliminary Site Investigation.	EIR/FONSI Section 2.2.5.4	SSP	Caltrans Office Of Environmental Engineering			PSI approved February 2019	
ADL and other regulated materials.	EIR/FONSI Section 2.2.5.4	SSP	Caltrans Office Of Environmental Engineering				
Biology	1	1	1	1	-	ſ	1
Environmental Permits. Caltrans will include a copy of the all relevant permits within the construction bid package of the proposed project. The Resident Engineer or their designee will be responsible for implementing the Conservation Measures and Terms and Conditions of the Biological Opinion.	Biological Opinion. Page 12, Item 1	SSP	Caltrans Office of Biological Sciences and Permitting				
Preconstruction							
Cultural Resources			0 1 0 1 1	1	1	1	1
Construction Alert Handout for Cultural Materials. Consultant archaeologist will prepare construction alert illustrating cultural materials likely to be present. Alameda CTC Project Manager and AECOM Project Engineer will ensure distribution of construction alert sheet to all construction contractors working in AMA.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Complete	ed	Action to	Remarks/
· · · · · · · · · · · · · · · · · · ·				Name	Date	Comply	Due Date
Preconstruction Cultural Resources Meeting. Consultant archaeologist and Alameda CTC will identify a time and location for a preconstruction meeting and ensure attendance of all construction contractors. At preconstruction meeting, archaeologists and Native American monitors will discuss nature of archaeological resource, legal obligations, provisions of the PRD&MP, and procedures to follow in the event that artifacts are found.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies				
Field review of AMAs at least one week prior to construction.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies				
Water Quality and Storm Water Runoff		•				•	I
Prepare SWPPP. The General Construction Permit will require the Contractor to submit a storm water pollution prevention plan (SWPPP). This plan must meet the standards and objectives to minimize storm water pollution impacts set forth in Section 13.37 of the Caltrans Standard Specifications. The SWPPP must also comply with the goals and restrictions identified in the RWQCB's Basin Plan. Any additional measures included in the Water Quality Certification will be implemented.	EIR/FONSI Section 2.3.2.4	SSP	Caltrans Design and Office of Stormwater Coordination				
Water Diversion Plan. A Water Diversion Plan will be submitted to the appropriate regulatory agencies for approval at least 30 days prior to construction.	404 application, Section 4.3	SSP	Caltrans Design and Office of Stormwater Coordination				
Paleontology							
Paleontological Monitoring. Include contract requirement stating that paleontological monitoring will occur in accordance with the Paleontological Mitigation Plan.	EIR/FONSI Section 2.2.4.4	NA	Caltrans Design and Office of Geotechnical Design West				
Biology							•
Environmentally Sensitive Area (ESA) Fencing. Before the start of construction, ESA fencing will be delineated on site to prevent construction encroachment into the sensitive habitats adjacent to the project footprint. The final project plans will outline how the fencing will be installed. The bid solicitation package special provisions will specify acceptable fencing material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within ESAs.	Biological Opinion. Page 4, Item 1	SSP	Caltrans Office of Biological Sciences and Permitting				
Wildlife Exclusion Fencing. Prior to the start of construction in individual construction areas, wildlife exclusion fencing will be installed along the project footprint in all areas where the Central California tiger salamander, California red-legged frog, or Alameda whipsnake could enter the active site. The fencing will remain in place throughout the duration of the construction activities within the individual work areas and will be regularly inspected and fully maintained. Repairs to the fence will be made within 24 hours of discovery. Upon completion of activities within the given area, the fence will be completely removed; the area cleaned of debris and trash, and returned to natural conditions.	Biological Opinion page 11, item 12	SSP	Caltrans Office of Biological Sciences and Permitting				
Threatened and Endangered Species	-					•	
Biological Monitors. At least 15 days prior to the onset of any ground- disturbing activities, including vegetation removal, Caltrans will submit to the Service, for approval, the name(s) and credentials of proposed biological monitors.	Biological Opinion page 9, item 3	SSP	Caltrans Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Complete	d	Action to	Remarks/
				Name	Date	Comply	Due Date
Responsibilities of Biological Monitors. The approved biologist(s) will be on- site during initial ground-disturbing activities, including vegetation removal, and thereafter as needed to fulfill the role of the approved biologist as specified in project permits. The approved biologist(s) will keep copies of applicable permits in their possession when on-site. Through the Resident Engineer or their designee, the approved biologist(s) will be given the authority to communicate either verbally, by telephone, e-mail or hardcopy with all project personnel to ensure that take of listed species is minimized and permit requirements are fully implemented. Through the Resident Engineer or their designee, the approved biologist(s) will have the authority to stop project activities to minimize take of listed species or if they determine that any permit requirements are not fully implemented. If the approved biologist(s) exercises this authority, the Service will be notified by telephone and e-mail within 24 hours.	Biological Opinion page 10, item 7	NA	Caltrans Office of Biological Sciences and Permitting				
Compensatory Mitigation. Caltrans will provide compensation for Central California tiger salamander, California red-legged frog, and Alameda whipsnake habitat loss at 1:1 for temporary habitat loss and 3:1 for permanent habitat loss. Compensation for temporary habitat loss will be satisfied with successful onsite restoration. Compensation for permanent habitat loss will be satisfied through purchase of credits at a Service-approved conservation bank or through other Service-approved off-site compensation options.	Biological Opinion. Page 12, Item 2 EIR/FONSI Section 2.3.1.3	SSP	Caltrans Office of Biological Sciences and Permitting				
Permanent impacts to USACE jurisdictional wetlands will be mitigated at a minimum 3:1 ratio, and temporary impacts at a minimum 1:1 ratio. Stormwater features that are waters of the State will be replaced on-site at a minimum 1:1 ratio. Impacts to riparian habitat will be mitigated through a combination of on-site enhancement of existing habitat and restoration of land within riparian corridors, through the planting of native riparian tree, shrub, and forb species.							
A Tree Protection Plan will be implemented to minimize damage to native trees during construction.	EIR/FONSI Section 2.3.1.3, Vegetation Restoration Plan	NA					Vegetation Restoration Plan
Wetlands and Other Waters of the United States Protection of Vallecitos Creek. ESA fencing will be installed along the length of Vallecitos Creek within the Project footprint. Best management practices (BMPs) will be implemented along the ESA fencing, and will include, but are not limited to, the installation of straw wattles or silt fencing to prevent disturbed soils or construction debris from entering the creek.	ITP application, Section 2.3.3	SSP	Caltrans Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	SSP/NSSP Responsible Party	Task Complete	d	Action to	Remarks/
· · · · · · · · · · · · · · · · · · ·			,	Name	Date	Comply	Due Date
Threatened and Endangered Species		·					
Nest Protection. All clearing and grubbing of woody vegetation will occur by hand or with hand tools between September 1 and October 15, outside of the bird nesting season and prior to the rainy season. If for any reason this schedule cannot be met, surveys for nesting migratory birds will be conducted before clearing begins. All nest avoidance requirements of the MBTA and California Fish and Game Code will be observed. If active nests are discovered, a buffer will be set up around the immediate vicinity of the nest to keep construction activities from disturbing the nest. Vegetation clearing will resume only when the hatchlings have fledged. An approved biologist(s) will be present during all grubbing and vegetation clearing activities.	Biological Opinion page 5, item 2	SSP	Caltrans Office of Biological Sciences and Permitting, Caltrans Resident Engineer				
Preconstruction Bird Surveys. Preconstruction surveys for migratory birds, raptors, other special-status bird species, and appropriate nesting habitat will be conducted within 50 feet of the construction area no more than three days prior to ground disturbing activities. If preconstruction surveys indicate the presence of any migratory bird nests where activities will directly result in bird injury or death, a buffer zone of 50 feet will be placed around the nest. In the event that an active nest is found after the completion of preconstruction surveys and after construction begins, all construction activities within a 50-foot radius will be stopped until an approved biologist(s) has evaluated the nest and erected the appropriate buffer around it. If an active raptor or special-status species nest is found, CDFW will be consulted to determine the appropriate buffer area to be established around the nesting site and the type of buffer to be used, which typically is ESA fencing. An approved biologist(s) will delineate the buffer using ESA fencing, pin flags, and/or yellow caution tape. The buffer zone will be maintained around all active nest sites until the young have fledged and are foraging independently. If establishment of a buffer is not feasible, CDFW will be contacted for further avoidance and minimization guidelines. A biological monitor will be present during the raptor nesting season.	EIR/FONSI Section 2.3.3.4	SSP	Caltrans Office of Biological Sciences and Permitting				
Preconstruction Surveys for Threatened and Endangered Species. Preconstruction surveys for the Central California tiger salamander, California red-legged frog, and Alameda whipsnake will be conducted by the approved biologist(s) no more than 20 calendar days prior to any initial ground disturbance, including vegetation removal, within habitat identified for the species in the July 2017 BA and the November 26, 2019/April 7, 2020 revision. These efforts will consist of walking surveys of the project limits and, if possible, accessible adjacent areas within at least 50 feet of the project limits. The approved biologist(s)will investigate potential cover sites when it is feasible and safe to do so. This includes thorough investigation of mammal burrows, rocky outcrops, appropriately sized soil cracks, tree cavities, and debris. Native vertebrates found in the cover sites within the project limits will be documented and relocated to an adequate cover site in the vicinity.	Biological Opinion page 9, item 4	NA	Caltrans Office of Biological Sciences and Permitting				
The approved biologist(s) will also survey and monitor for signs of San Joaquin kit fox. If a kit fox or its sign is observed, the Service will be contacted to determine the available options and if reinitiation is appropriate.	Biological Opinion page 10, item 6						

Task and Description	Source	SSP/NSSP	Responsible Party	Task Complete	d	Action to	Remarks/
	o o un o o			Name	Date	Comply	Due Date
Preconstruction Surveys for Special-Status Plants. Prior to the commencement of construction activities, a qualified biologist shall conduct appropriately timed surveys for big tarplant, round-leaved filaree, Congdon's tarplant, and California alkali grass. To correspond with these species' blooming period, the surveys shall include botanical inventories during March through May (the blooming period of round-leaved filaree and California alkali grass) and July through September (the blooming period of big tarplant, and Congdon's tarplant). If listed plant species are discovered within the construction area, protective measures will be established. These protective measures will include setting a temporary protective buffer around the plant and conducting appropriate agency coordination, which may result in moving the species to another location within Caltrans ROW and then replanting the species during the restoration phase of the project.	EIR/FONSI Section 2.3.3.4	NA	Caltrans Office of Biological Sciences and Permitting				
Surveys for Threatened and Endangered Species Immediately Prior to Disturbance. The approved biologist(s) will perform a Central California tiger salamander, California red-legged frog, and Alameda whipsnake clearance survey immediately prior to the initial ground disturbance or vegetation removal. Safety permitting, the approved biologist(s) will investigate areas of disturbed soil for signs of the listed species within 30 minutes following the initial disturbance of that given area.	Biological Opinion page 10, item 8	NA	Caltrans Office of Biological Sciences and Permitting				
Preconstruction Surveys for Special-Status and "High Priority" Bats. Focused preconstruction surveys will be conducted for all areas that provide suitable bat roosting habitat, including human-made structures, snags, rotten stumps, mature trees with broken limbs, exfoliating bark, and dense foliage. Sensitive habitat areas and roost sites will be avoided to the maximum extent practicable. To avoid mortality and reproductive loss, Caltrans may limit tree removal between September 1 and April 14, outside the breeding season, so as not to disturb maternal colonies or roosts. If potential roost sites (e.g., trees, snags) are to be removed or trimmed, limbs smaller than 3 inches in diameter will be cut and the tree will be left overnight to allow any bats using the tree/snag for roosting time to leave and find another roost. A biological monitor will be present during the trimming or removal of trees/snags. If occupied sites are observed in the BSA, Caltrans will contact CDFW to report occurrences for the agency's database. Caltrans will provide an appropriate buffer between any occupied roost and construction activities. In addition, nighttime construction will be limited.	EIR/FONSI Section 2.3.3.4	NA	Caltrans Office of Biological Sciences and Permitting				
Bat Day and Night Roost Avoidance. If deemed necessary, specific day and night bat roost avoidance and minimization measure will be developed through technical assistance with CDFW and bat specialists.							

Task and Description	Source	SSP/NSSP	Responsible Party	Task Complete	d	Action to	Remarks/ Due Date
				Name	Date	Comply	Due Dale
Western Pond Turtle: Training and Pre-Disturbance Surveys. Before any construction activities begin, an approved biologist(s) shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the western pond turtle and its aquatic and upland nesting habitat, the general measures that are being implemented to conserve the western pond turtle as they relate to the project, and the boundaries within which the project may be accomplished. An approved biologist(s) shall survey the work site no more than 48 hours before the onset of activities for signs of western pond turtles and/or western pond turtle nesting activity (i.e. recently excavated nests, nest plugs) or nest depredation (partially to fully excavated nest chambers, nest plugs, scattered egg shell remains, egg shell fragments). Preconstruction surveys to detect western pond turtles should focus on suitable aerial and aquatic basking habitat such as logs, branches, rootwads, and rip-rap, as well as the shoreline and adjacent warm, shallow waters where pond turtle mesting activity should be concentrated within 402 meters (1,319 feet) of suitable aquatic habitat and should focus on areas along south- or west-facing slopes (Jennings and Hayes 1994; Holland 1991) with bare hard-packed clay, silt soils, or a sparse vegetation of short grasses or forbs. If western pond turtles or their nesting sites are found, the biologist shall contact CDFW to determine whether relocation and/or exclusion buffers and nest enclosures are appropriate. If CDFW approves of moving the animal, the biologist shall be allowed sufficient time to move the western pond turtle(s) from the work	EIR/FONSI Section 2.3.3.4	NA	Caltrans Office of Biological Sciences and Permitting	Name			
site before work activities begin. Preconstruction Surveys for Tule Elk. Focused species surveys will be conducted to determine the presence of tule elk in the project area, prior to the start of construction. If tule elk are observed within or immediately adjacent to the project area during construction, a stop work order may be issued until the individual, or herd, has moved away from the site.	EIR/FONSI Section 2.3.3.4	NA	Caltrans Office of Biological Sciences and Permitting				
Preconstruction Surveys for San Francisco Dusky-Footed Woodrat. Potential Trapping and Relocation. If suitable habitat is not available for relocation of the woodrats in the project vicinity, offsite locations will be identified. Trapping of the woodrats will be conducted by an approved biologist(s) with a current CDFW collection permit to trap and relocate the species. Ideally, the trapping will occur outside of the breeding period, between September and December.	EIR/FONSI Section 2.3.3.4, Woodrat Avoidance and Mitigation Plan	NA	Caltrans Office of Biological Sciences and Permitting				
Preconstruction Surveys for American Badger. Preconstruction surveys will be conducted within the project footprint in areas of suitable habitat to identify dens or signs of American badger. These surveys will be conducted no more than 30 days before the start of ground-disturbing activities and will be phased with project build-out. If an American badger is detected on site at any time during these surveys, CDFW will be contacted to discuss ways to proceed with the project and to avoid take to the maximum extent practicable.	EIR/FONSI Section 2.3.3.4	NA	Caltrans Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Complete Name	d Date	Action to Comply	Remarks/ Due Date
Onsite Construction Personnel Education Program. All construction personnel will attend an environmental education program delivered by the approved biologist(s) prior to working on the project site. The program will include a brief summary of the vernal pool fairy shrimp, Central California tiger salamander, California red-legged frog, Alameda whipsnake, and San Joaquin kit fox life histories, identification, and the conservation measures relevant to their tasks. Personnel will be briefed on the animals' legal protection under the Act and the personal penalties and other consequences that could be associated with noncompliance. Attendees names will be logged on a sign-in sheet which will be kept on file and available to the Service upon request.	Biological Opinion page 10, item 10	NA	Caltrans Resident Engineer, Caltrans Office of Biological Sciences and Permitting	Hume			
Removal of Aquatic Exotic Wildlife. The approved biologist(s) will kill any aquatic exotic wildlife species, such as bullfrogs and crayfish found in the project footprint, to the extent possible.	Biological Opinion page 11, item 15	NA	Caltrans Office of Biological Sciences and Permitting				
Inspection by Resource Agency Personnel. If requested, before, during, or upon completion of groundbreaking and construction activities, Caltrans will allow access by Service personnel into the project footprint to inspect the project and its activities. Vegetation Communities	Biological Opinion page 15, item 37	NA	Caltrans Resident Engineer				
Vegetation Preservation. Native vegetation will be cleared only when necessary and will be cut above soil level except in areas that will be excavated, such as for utility relocation or structure footing installation. This will allow plants that reproduce vegetatively to resprout later.	Biological Opinion page 5, item 2	NA	Caltrans Resident Engineer, Caltrans Office of Biological Sciences and Permitting				
 Tree Preservation. Caltrans will make an effort to reduce impacts to trees in temporary impact areas and along the edge of the project footprint to the greatest extent possible during construction by designating trees on plan sheets and marking protected areas (the CRZ) around trees with high visibility polypropylene ESA fencing. Only those trees requiring removal will be cut down. Whenever possible, trees will be trimmed rather than removed. To avoid potential damage to retained trees, trees will be safeguarded during construction through implementation of the following measures as applicable: No construction equipment, vehicles or materials shall be stored, parked or staged within the CRZ; and Work will not be performed within the CRZ of remaining trees without consultation with an ISA-certified arborist. If trees are damaged during construction and become unhealthy or die, the damaged tree(s) will be removed and replaced. 	EIR/FONSI Section 2.3.1.2	NA	Caltrans Resident Engineer, Caltrans Office of Biological Sciences and Permitting				
Fenced Tree Buffers. Protected trees will be fenced around the drip line to limit construction impacts to the canopy and root zone. The buffer size may be adjusted on a tree-by-tree basis to ensure survival of protected trees.	Biological Opinion, Page 5, Item 1	NA	Caltrans Resident Engineer, Caltrans Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Complete Name	d Date	Action to Comply	Remarks/ Due Date
Vallecitos Creek Riparian Corridor. As many trees and as much brush as possible will be retained along the Vallecitos Creek riparian corridor, emphasizing shade-producing and bank-stabilizing vegetation. Prior to construction, equipment access points through Vallecitos Creek riparian corridor will be established to minimize riparian disturbance. Pre-existing access points will be used whenever possible.	1602 Permit Application, Page 13	NA	Caltrans Resident Engineer, Caltrans Office of Biological Sciences and Permitting				
Tree Replanting. Tree removal will be mitigated through planting at a 3:1 ratio on-site, to the maximum extent possible given space available, for all native species within riparian areas, and for coast live oaks and valley oaks in oak woodlands (including uplands). For other tree species removed in upland areas, Caltrans will provide tree replacement on-site at a minimum 1:1 ratio in the space available. A 3:1 ratio is standard for replacement of impacted oak trees on Caltrans projects. The need for some off-site upland and riparian tree planting is anticipated. Replanted areas will be monitored for success for up to 10 years. The performance criteria for replacement of tree plantings is 60 percent survival of all plantings at the end of the monitoring period (3 to 10 years). If survival drops below 60 percent during the monitoring period, the project sponsor will replace plantings to bring survival above this level. Precise planting locations will be identified during the final design phase. Potentially suitable locations have been selected based on soil types, existing drainage patterns, and surrounding habitat types. Riparian habitat removed along Vallecitos Creek will be offset by planting trees in locations where there are currently gaps in the riparian overstory. Planting of trees will occur within the Caltrans ROW. Details for off-site planting and riparian tree planting success criteria will be determined during the project permitting process with CDFW (1602 Streambed Alteration Agreement) and RWQCB (401 Certification).	EIR/FONSI Section 2.3.1.2 Vegetation Restoration Plan	NA	Caltrans Resident Engineer, Office of Landscape Architecture				
Construction Visual/Aesthetics							
Avoid Root Damage from Trenching. When trenching for utilities, avoid trenching within drip lines of trees and screening shrubs. Directional drilling that would avoid damaging root systems of established plant material shall be used, when reasonable, as opposed to open trenching to install new conduit in places where work within the drip line would be required. Trees and screening shrubs shall be protected from damage during construction.	EIR/FONSI Section 2.1.10.4	NA	Caltrans Resident Engineer, Design, and Office of Landscape Architecture				
Cultural Resources Tribal Monitor for Ground Disturbance in Holocene Soils. A tribal monitor from the Northern Valley Yokuts shall be present for ground-disturbing activities in Holocene-age soils. Monitoring of work in modern fill, soils greater than 12,000 years old, or bedrock is not necessary. Once the tribal monitor determines that there is not danger of encountering archaeological or sacred resources in the project area, you may continue work without a monitor.	404 permit	NA	Caltrans Office of Cultural Resource Studies				
Implement Post-Review Discovery and Monitoring Plan. During project construction, implement the monitoring protocols, discovery procedures, chain of command, and treatment and analysis protocols set forth in the Post-Review Discovery and Monitoring Plan.	EIR/FONSI Section 2.1.11.4	NA	Caltrans Office of Cultural Resource Studies				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Complet	ed	Action to	Remarks/
				Name	Date	Comply	Due Date
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.	EIR/FONSI Section 2.1.11.4	SSP	Caltrans Resident Engineer, Office of Cultural Resource Studies, and Project Contractor				
If human remains are discovered, California Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains. The Caltrans Branch Chief of Archaeology shall be notified, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the Branch Chief of Archaeology so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.	EIR/FONSI Section 2.1.11.4	SSP	Caltrans Resident Engineer, Office of Cultural Resource Studies, and Project Contractor				
Archaeologists and Native American Monitors will monitor all construction activities within the AMA.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies				
Noise		1					I
Noise minimization and monitoring.	EIR/FONSI Section 2.2.7.4	SSP	Caltrans, Alameda CTC, Construction contractor				
Natural Communities			0011100001				
Minimize Night Work. To the extent practicable, nighttime construction will be minimized. Light, glare, and construction noise and vibration impacts will be addressed through the following measures: Use lighting in areas only where necessary for safety and signage. Eliminate all lighting in other areas. All lighting should be downcast to minimize lighting of natural areas, particularly in riparian areas and adjacent to drainages. Limit operation of vibration causing equipment such as pile drivers, dozers, large excavators to daylight hours when working in areas adjacent to open space. A biological monitor shall be present to observe activities of wildlife during nighttime construction adjacent to open spaces. If activities are noted to affect wildlife, biological monitor shall stop construction activities as necessary.	EIR/FONSI Section 2.3.1.3 Biological Opinion, Page 8	NA	Caltrans Resident Engineer and Office of Biological Sciences and Permitting				
Maximum Wattage Etc. for New Lighting. To avoid casting of light beyond the outer edge of pavement, all safety lights will be fitted with factory installed house-side shielding to reduce backlighting and glare. The bulbs used in the new fixtures will be no greater than 150 Watt Light Emitting Diodes with a color temperature no greater than 2,000 lumens.	Biological Opinion Amendment	NA	Caltrans Resident Engineer and Office of Biological Sciences and Permitting				

Source SSP/NSSP Re		Responsible Party	Task Completed		Action to	Remarks/
oouree		Responsible Fully	Name	Date	Comply	Due Date
EIR/FONSI Section 2.3.2.4	SSP	Caltrans Resident Engineer and Project Contractor				
404 application, Section 4.3	SSP	Caltrans Resident Engineer and Project Contractor				
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Task and Description	Source SSP/NSSP	Responsible Party	Task Completed		Action to	Remarks/	
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Dust Reduction. Caltrans Standard Specifications include the requirement to minimize or eliminate dust during project construction through the application of dust palliatives (water, dust suppressant, or dust binder). The following dust control measures will also be considered during development of Plans, Specifications, and Estimates for the project construction contract: Water active construction areas as needed. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard. Stabilize access areas (i.e. temporary access roads or entrances/ exits) with rock material and maintain as needed. Keep dust to a minimum during street sweeping activities. Use a vacuum whenever dust generation is excessive or sediment pickup is ineffective. Apply hydromulch, hydroseed, or soil stabilizers to disturbed areas if inactive for at least 14 days or prior to a forecasted rain event. Minimize stockpiles at jobsite. Cover active and inactive soil stockpiles and surround with a linear sediment barrier if inactive for at least 14 days or prior to a forecasted rain event. Water soil stockpiles as needed. Limit traffic speeds on unpaved roads to 15 mph. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.	Biological Opinion page 14, item 35	SSP	Caltrans Resident Engineer and Project Contractor	Name	Date		
Replant vegetation in disturbed areas as quickly as possible. Construction Discharges. All grindings and asphaltic-concrete waste will be stored within previously disturbed areas absent of habitat and at a minimum of 150 feet from any aquatic habitat, culvert, or drainage feature. No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the United States or drainages. No discharges of excessively turbid water will be allowed, and all equipment will be well-maintained and free of leaks.	Biological Opinion page 14, item 33 EIR/FONSI Section 2.3.1.3	SSP	Caltrans Resident Engineer and Project Contractor				
Erosion Control. Temporary erosion control and slope stabilization BMPs will be installed before the start of the wet season (October 15 through April 15). Erosion control measures may include silt fencing, straw wattles, straw bales, coir blankets, sediment traps, and other protective measures to minimize the potential for erosion of sediment beyond the work area or degradation of water quality in adjacent aquatic habitats.	EIR/FONSI Section 2.3.1.3	SSP	Caltrans Design and Office of Stormwater Coordination; Caltrans Resident Engineer and Project Contractor				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Complete	d	Action to	Remarks/
				Name	Date	Comply	Due Date
Rain Events. To mitigate for potential discharges from rain, the project contractor and Caltrans staff will monitor the forecast for qualifying storm events. This is defined as a 50 percent probability of 0.1 inch or greater precipitation. Before a qualifying storm event occurs, a qualified Caltrans stormwater practitioner will conduct a pre-event site inspection of the project erosion control and water quality BMPs to insure that SWPPP measures are installed and adequately maintained. The inspector will provide recommendations for repair/replacement of or additional BMP, which may include: Silt fence, fiber rolls, and gravel bags to capture sediment; Tarps, straw or other cover for disturbed slopes; or Tarps, fiber rolls or gravel bags to stabilize or contain stockpiled soils/ fill materials. Before a qualifying storm event, all materials and equipment will be removed from stream channels or waterways. If practicable, creek or stream diversions will be removed before the event. In addition, runoff will be monitored and sampled for sediment loads to determine if a discharge has accurred.	Biological Opinion page 12, item 21	SSP	Caltrans Office of Stormwater Coordination, Caltrans Resident Engineer				
 occurred. Creek Diversions. Temporary water diversions will be installed to exclude construction activities from adversely impacting the water quality of Vallecitos Creek while maintaining flow through the project area. The following measures will be implemented to avoid and reduce adverse environmental effects of the temporary diversion systems to jurisdictional waters: A Water Diversion Plan will be submitted to the appropriate regulatory agencies for approval at least 30 days prior to construction. A qualified biologist will be present to monitor all activities involving the placement of fill in the drainage, including any diversion system installation. Discharge from dewatering operations, if needed, and runoff from disturbed areas will be made to conform to the water quality requirements of the waste discharge permit issued by the Regional Water Quality Control Board. A filtering system will be used on pumps to collect the water and return clear water to the creek. All pump intakes shall be fitted with fish exclusion devices. After in-channel work completion, any temporary structures placed in the channel will be removed in a way that minimizes disturbance to drainage flows and water quality. All temporarily impacted channel areas will be restored to preproject conditions. Existing dense giant bulrush (Schoenoplectus californicus) vegetation will be trimmed while leaving the rhizome structures in place, to allow the bulrush to grow back after diversion removal. For areas where the rhizomes have been disturbed by heavy equipment, replanting may be conducted using donor stock (source plant material) harvested from collection sites within Vallecitos Creek or the same watershed, or nursery-grown stock. 	404 application, Section 4.3	SSP	Caltrans Design and Office of Stormwater Coordination				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to	Remarks/
				Name	Date	Comply	Due Date
Threatened and Endangered Wildlife							
Implement Biological Opinion Conditions for Central California tiger	Biological	NA	Caltrans Resident				
salamander, California red-legged frog, and Alameda whipsnake.	Opinion		Engineer and				
			Office of Biological				
			Sciences and				
			Permitting				
Discovery of Western Burrowing Owl. Appropriate avoidance, minimization,	EIR/FONSI	NA	Caltrans Resident				
or protection measures shall be determined in consultation with the CDFW in	Section 2.3.3.4		Engineer and				
the event an active burrow is located in an area subject to disturbance, or			Office of Biological				
within the typical setback (i.e., occupied burrows or nests within 150 feet of			Sciences and				
an area subject to disturbance during the non-breeding season, or within 250			Permitting,				
feet of an area subject to disturbance during the breeding season).			-				
Invasive Species							
In areas of particular sensitivity, extra precautions will be taken if invasive	EIR/FONSI	SSP	Caltrans Resident				
species are found in or next to the construction areas. These include the	Section 2.3.6.4		Engineer, Office of				
inspection and cleaning of construction equipment and eradication strategies			Biological				
to be implemented, should an invasion occur.			Sciences and				
			Permitting				
Post-construction							
Visual/Aesthetics				•			
Replace vegetation and irrigation. Any roadside vegetation and irrigation	EIR/FONSI	SSP	Caltrans Resident				
systems that are damaged or removed during project construction would be	Section 2.1.10.4		Engineer and				
replaced according to Caltrans policy and highway landscaping standards.			Office of				
Highway planting would be installed under a separate contract and within two			Landscape				
years following the completion of the highway construction, with a three-year			Architecture				
plant establishment period. The highway planting would be funded by							
Alameda CTC.							
Cultural Resources		1		1	1		
The Resident Engineer will inform the consulting archaeologist and Caltrans	Post-Review	NA	Caltrans Resident				
Environmental Branch Chief when construction is complete.	Discovery and		Engineer, Caltrans				
	Monitoring Plan		Office of Cultural				
			Resource Studies				
The Consulting Archaeologist will prepare a final Monitoring Report within 30	Post-Review	NA	Caltrans Office of				
days after completion of monitoring, and a Technical Report summarizing	Discovery and		Cultural Resource				
archaeological data found (if any) within 90 days after completion of	Monitoring Plan		Studies				
monitoring.							
Water Quality and Storm Water Runoff				1			
Permanent erosion control measures will be implemented upon completion of	404, Section 4.3	SSP	Caltrans Resident				
construction. For steep slopes rolled erosion control netting and fiber rolls will			Engineer,				
be placed after compost placement to provide further slope stabilization. All			Construction				
disturbed areas will be revegetated with appropriate native, non-invasive			Contractor				
species or non-persistent hybrids that will serve to stabilize site conditions.							

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to	Remarks/
			Responsible Failty		Date	Comply	Due Date
Natural Communities		•		н – н			
Restoration/Vegetation. Upon project completion, all temporarily disturbed areas will be restored to pre-construction conditions. Appropriate native species will be used to the maximum extent possible, and trees, shrubs, and groundcover will be selected for drought tolerance and disease resistance. Mulch will be applied to planted areas to reduce weed growth, conserve moisture, and minimize maintenance operations. Revegetation will take place under a separate landscape contract after completion of the roadway construction contract. The landscape contract will be funded by the parent project and will include a 3-year plant establishment period.	ITP application, Section 2.3.3 EIR/FONSI Section 2.3.1.3	NA	Caltrans Resident Engineer, Office of Biological Sciences and Permitting				
Tree Replacement. Post-construction measures will include revegetation of temporarily impacted areas by the planting of trees where appropriate, selecting sites based on existing topography, hydrology, and surrounding habitat. An arborist will work with CDFW to select the most suitable locations for mitigation for trees removed from the riparian corridor of Vallecitos Creek.	EIR/FONSI Section 2.3.1.3	NA	Caltrans Resident Engineer, Office of Biological Sciences and Permitting				
Determination of Need for Additional Mitigation. Compensatory mitigation for temporary impacts to sensitive vegetation communities or natural communities of concern, including valley oak woodland, red willow thickets, Fremont cottonwood forests, and riparian scrub and forest will be provided through the on-site restoration of habitat by planting native species that are typical to that habitat. The restored vegetation communities will be monitored for success. If enough space is not available for on-site mitigation, off-site like-habitat providing these species habitat requirements will be preserved through the purchase of mitigation bank credits.	EIR/FONSI Section 2.3.1.3	NA	Office of Biological Sciences and Permitting				
Post-Construction Compliance Reports. Caltrans shall submit post- construction compliance reports prepared by the Service-approved biologist to the Service within 60 calendar days following completion of each construction season or within 60 calendar days of any break in construction activity lasting more than 60 calendar days. This report shall detail (1) dates that relevant project activities occurred; (2) pertinent information concerning the success of the project in implementing avoidance and minimization measures; (3) an explanation of failure to meet such measures, if any; (4) known project effects on the Central California tiger salamander, California red-legged frog, and Alameda whipsnake; (5) occurrences of incidental take of any listed species; (6) documentation of employee environmental education; and (7) other pertinent information.	Biological Opinion, Page 42, Item 6	NA	Office of Biological Sciences and Permitting				